Culminating Experience Empirical and Theoretical Research Projects,
University of Tennessee at Chattanooga, Spring, 2005

Edited by
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Abstract

This document represents a sample collection of master’s theses from the University of Tennessee at Chattanooga’s Teacher Education Program, spring semester, 2005. The majority of these student researchers were simultaneously student teaching while writing their theses. Studies were empirical and conceptual in nature and demonstrate some ways in which University of Tennessee at Chattanooga graduate students are working to improve the lives of children and adolescents in and beyond the Chattanooga metropolitan area. William Bowen begins this volume with a review of literature that examines 40 years of data related to chronic disruptive students in American classrooms. Amy Bufkin explored the influence of a balanced literacy curriculum on student achievement on state standardized tests. Anthony Goad discussed classroom discussion as a measure of achievement and how it relates to gender. Margaret Green conducted an action research project in which she explored creative dramatics in middle grades literature. Andrew Hampton investigated the influence of the use of tutorial software on Latin achievement in a beginning Latin class. Jeremy Henderson explored the attitudes and knowledge of current events held by 8th grade social studies students. Margaret Hicks researched the effects of purposeful writing activities on handwriting in two kindergarten classes. Lindsay Howard investigated the effects of various review methods on student science achievement. Jessica King investigated the relationship between student achievement and parental involvement. William Littlejohn researched disciplinary actions before and after dress code enforcement at one school. Donna LoCicero explored the use of hands-on activities to teach about significant American presidents and American symbolism to kindergartners. Barbara McGirl explored the impact of hands-on activities in physics on the attitudes of girls toward science. Kimberly Moore evaluated the effects of a visit to a local artist’s studio on the learning and retention rates of a select group of high school art students. Angela Pickett investigated the use of computer based programs with struggling readers. Rachel Pons explored the perceptions of educators regarding the role of parental involvement in children’s academic achievement. Kristi Raines explored teachers’ opinions of standardized testing. Veronica Scates investigated the relationship between student behavior and academic success. Angela Tuttle compares using stories and TPR to teach kindergarten French. Lisa Ward discussed literacy instruction for emergent learners. Susan Whitfield explored the relationship between parental involvement and student success in urban middle schools.
Introduction

As a part of the teacher licensure program at the graduate level at the University of Tennessee at Chattanooga, the M.Ed. Licensure candidate is required to complete a master’s thesis project during a 3-semester-hour course that coincides with the 9-semester-hour student teaching experience. This course, Education 590 Culminating Experience, requires the student to engage in empirical or theoretical research. The resulting final research projects are presented in their entireties in this document.
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Chronic Disruptive Students in Public Schools:
Forty-Five Years on a Downhill Slide
A Review of the Literature
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Abstract

This review of literature examined 40 years of data related to chronic disruptive students in American classrooms and found that the issue is epidemic. The research found that even with immediate policy changes requiring the prompt removal of offending students will not remedy the problem in this decade; and removing those students complicates the issue out of concerns of litigation. Research concludes that disagreement among researchers whether or not punishment is an option to prevent and discourage chronic disruptive behavior contributed to the longevity of the issue and that many educators no longer attempt to discipline offenders. The research concludes that the behavior of chronic disruptive students adversely impacts the quality of education provided to students by educators.
Introduction to the Problem

My objective in writing this literature review is to increase my understanding of the broad issue of chronic disruptive students in public schools classrooms. In order to accomplish this objective, the following questions will be the immediate focus.

Focus of the Literature Review

1. How extensive is the problem of chronic disruptive students in public education?
2. To what source can the problem be attributed?
3. What is the most appropriate course of action that would best benefit students identified as being chronic disruptive students?

Initially, my research began as a personal quest while on active military duty, stationed in Louisiana. When I began my quest I simply wanted an explanation from my son’s elementary school teacher, why he was consistently given two to three hours of home work four out of five days a week. In the fall of 1993 I began discussing my concerns with other military families and accepted many opportunities to share those concerns with the teachers and principals of two local elementary schools, and one middle school, in Plaquemine Parish, Louisiana. What I discovered from frequent conversations with these educators was that the teachers were not able to remain on task because of misbehaving students, and unfinished class assignments became homework. Frequent visits to classrooms convinced me that the beleaguered teachers and principals were not exaggerating.
At the outset of this quest it was merely a personal inquiry rather than a research project, therefore I took no notes and made no recordings. In retrospect, I believe, because I did not take notes or make recordings, the discussions were more candid and the participants were more at ease and less guarded during conversations. During one of my conversations with an elementary school principal, I was issued a challenge. She suggested that if I thought I could do better a better job than her teachers, I should become a teacher. After serious thought over several weeks, I accepted the challenge; I enrolled in the teaching college at the University of New Orleans in Louisiana.

That is where my interest in classroom discipline began and continued as I transferred from one military base to the next. Although subsequent duty stations were in different geographic locations, I found similar circumstances in each school visited.

*Discipline is a Family Issue*

It is worth mentioning that a common variable noticed at each location was the significant number of military personnel, their families, and military related support industries; although the military population did not comprise a majority in the overall population. In a military environment, it was common for either the father or mother to be absent from the family for several months out of a 12 month period. Those separations often caused serious family issues that became issues at school. In a military environment, family concerns are rarely independent of the demanding professional aspects of military life. Consequently, serious problems with children in their school environment often translated to issues of great concern at the military member’s command (place of employment) out of concern for the member’s professional performance and personal safety. In such circumstances, albeit infrequent, his or her
supervisor could be compelled to help resolve a serious issue in order to ensure the 
member’s professional demeanor and safety did not affect the good order and discipline 
of the command.

The supervisor’s involvement inadvertently provided one more echelon of 
authority as well as a potential source of encouragement for the military member to 
ensure a timely resolution to difficulties at school. While on active duty, I frequently had 
conversations with subordinates regarding similar issues; issues that rarely required more 
than one conversation. That common variable; that nearly invisible link between the 
member’s children in the school environment and the member’s professional 
responsibility to his or her command, was an external element of discipline. Military 
personnel know well that when personal discipline fails, higher authority must intervene 
and restore discipline. I believe, in the public school classrooms that I visited, where 
chronic disruption was an issue, the missing variable was discipline.
Description of the Problem

Society’s Cost

Greater than Dollars and Cents

An important current issue in American public education is the burdens that chronic disruptive students inflict upon public school systems. Research shows that students are unhappy with classroom environments due to disruptive students. According to a 2004 Public Agenda pole, 70% of school students indicated that unruly students distract them and disrupt classes, and 53% believed they would learn more if the disruptive students were removed from the classroom, while 88% of the student respondents wanted the disruptive students removed (Gaustad, 1992; Public Agenda, 1997). In 1989, six Charleston, South Carolina middle schools, in one school year, lost an equivalent of 44 years of instructional days to both in school and out of school suspension (Gaustad, 1992). North Carolina’s 1992 Task Force on School Violence found more the half of the school systems reported an increase in violent incidents, but those incidents were greatly out numbered by patterns of disruptive misbehavior, threats, and disrespect (Hood, 2004). Parents and the public expect public schools to provide quality education for students, but they realize that cannot be accomplished in disorderly classrooms where students cannot concentrate due to constant disruptions (American Teacher, 1997). Philadelphia Federation of Teachers (PFT) President, Ted Kirsch reported that national surveys found teachers spend 20% of instruction time disciplining disruptive students. Of the teachers polled in the PFT study, 98% wanted disruptive students removed, with 82% of the student respondents in agreement (Kirsch, 2005). Teaching Interrupted reported that of non-violent incidents in public schools, 44% of
respondents indicated that bullying and harassment was somewhat serious (on a scale from very serious to not serious). When asked about cheating, 40% indicated it was somewhat serious. Forty-percent of the respondents said disrupting the class by talking out and horseplay was somewhat serious, and 34% said showing up late to class was somewhat serious. Thirty-three percent indicated that students treating teachers with a lack of respect was somewhat serious (Teaching Interrupted, 2004). When considered separately, these behavior traits may only somewhat impact learning; but each type of misbehavior was measured as one occurrence that took place in the classroom. In my opinion, the aggregate of the offensive behaviors constitutes a greater degree of importance in the overall quality of the teaching and learning environment, than when measured as a single infraction.

Another serious consequence of permitting chronic disruptive students to remain in the classroom is that many teachers with the greatest potential quit the profession earlier then would otherwise occur (Dworkin, 1987; Public Agenda, 2004). In the 2004 Teaching Interrupted survey, 34% of the respondents indicated that teachers in their schools, over a period of several years, had been asked to leave, or had quit because student discipline and behavior was a significant problem. While, one response to this problem may be the prompt removal of offending students (Kirsch, 2005), removal is the catalyst that complicates this issue due to potential law suits. And whereas budgetary concerns of litigation may not be the most formidable hurdle to settling on a fix for this epidemic, financing a legal defense is a significant impediment. An additional impediment, stemming from conflicting and inconsistent research data, is the persistent disagreement among researchers, administrators, and teachers, on whether to remove the
chronic disruptive students, to punish or not (Hood, 1994) and what level of authority is responsible for discipline.

Review of the Literature

Federal Laws and Courts Caused the Problem

*Teachers Get the Blame*

The Individual’s with Disabilities Act (IDEA) passed in 1975, and decisions of the United States Supreme Court in the 1960s and 1970s made enforcing discipline in schools difficult (Hymowitz, 2000, in *School Safety News*). The willingness of a few non-conformist students to defy traditional values adopted by society is also attributed to those landmark decisions of the U.S. Supreme Court that extended constitutional protections to public school students (Arum, 2003; Hood, 1994; Hymowitz, 2000). In his dissenting opinion in the 1969 Tinker v. Des Moines School District Justice Black wrote that the decision “subjects all public schools in the country to the whims and caprices of their loudest-mouthed, but maybe not their brightest students” (Hymowitz, 2000, in *School Safety News*, p.1).

The fact that classroom discipline and chronic disruptive students have been research topics for decades evinces the longevity of this epidemic, and suggests that a focal point for determining a resolution would be more appropriately directed upon chronic disruptive students. Instead, researchers suggest that teachers must better manage unmanageable students using classroom management strategies and schemes (Blaum, 1996; Hood, 1994; Jones, 2001). Hood (1994) noted that this tactic may have untended negative consequences for public education given that educators are frequently unable to provide proper discipline. Today’s public schools in America cannot develop a realistic
response to school violence because “…administrative decisions, court rulings, and legislative actions have created such a maze of regulations that school principals and teachers are unable to exercise meaningful control over their schools” (Hood, 1994, p.3). Instead of heeding the warnings and responding decisively to remove and therefore discourage future offensive behavior, the focus was diverted from the offenders as an expedient out of fear of litigation; litigation that research suggests was often based upon wrong interpretations of court decisions as those decisions applied to school related litigation (Arum, 2003; Lufler, 1998).

Over the past 40 years, historical traditional values and views of acceptable student behavior and appropriate punishment have been systematically eroded. “There is unquestionably an increase in disrespectful and even violent behavior in school. What is happening outside the schools is spilling into the classrooms. Schools mirror society at large” (Blaum, 1996, p.1).

Discipline Not Taught Here

Nowhere is the adage “an ounce of prevention is worth a pound of cure” more appropriate than in disciplining young people in educational settings” (Cotton, 2001, p.2). Citing a report of the *Annual Gallup Poll of the Public’s Attitudes toward the Public Schools*, Cotton stresses a lack of discipline as the most serious problem facing the public education system. Hood (1994) discussing public school research in North Carolina, referenced statistics showing a significant increase in juvenile crime between 1960 and 1994, noting that in North Carolina the educational issue most often mentioned by teachers was school violence and that school boards and lawyers protect students from punishment. Hood also noted that public perception demonstrated a great concern about
public school related discipline issues; more specifically, discipline is not as predictable as in the past and rules are not uniformly enforced. According to Gaustad (1992), the two main goals of discipline are to ensure the safety of staff and students, and to provide a classroom environment conducive to learning, but *Teaching Interrupted* (2004) reported *that* 78% of responding teachers indicated that today’s school discipline policies may not be working. Teachers complain that students are more difficult to keep quiet, harder to teach, and generally lacking in basic personal and behavioral attributes that help make a classroom orderly (Blaum, 1996; Hood, 1994; Gaustad, 1992). Blaum (1996) suggested that gone are the days when teachers commanded respect simply by being the teacher. Researches and teachers noted that in the last 30 years student behavior suffered a dramatic decline (Hood, 1994; 2000). Foley cited research published in 1979 that characterized disruptive students as persons whose aggressive behavior interrupts the school's instructional program, challenges our justice system, our social institutions, and the philosophy of education itself (Foley, 1982). Moreover, disruptive students were said to have a negative impact upon teachers' health and sense of professionalism. That depth of concern 33 years ago is reflected in the following statement by Foley:

> We must respond to these students if for no other reason than that studying Shakespeare under an English teacher wearing boxing gloves is the very antithesis of learning. I do not look forward to the day when certification in self-defense is a criterion in faculty selection (Foley, 1982, p.93).

Behavior Isn’t what it Once Was

_Schools Mirror Society_
When students complain about chronically disruptive students in their classrooms, their complaints should make it obvious to observers that the point of crises has arrived and that needed changes are overdue. A Public Agenda research study (1997) found that 70% of public school teenagers recommended the removal of unruly students from the classrooms. According to Public Agenda, parents and teachers agreed that removal of disruptive students would improve learning. However before removal becomes necessary, researchers suggest that effective discipline strategies should be employed to encourage responsible behavior and provide students with a satisfying educational experience as well as to discourage misconduct (Blaum, 1996; Gaustad, 1992; Smith, 2001).

The issues of classroom discipline are in national news reporting. Syndicated Columnist Walter Williams, in School Safety News (2005) reported the following:

According to a report by the National Center for Education Statistics, during a one-year period there were: 4,000 incidents of in-school rape and sexual battery; 11,000 incidents of physical attacks or fights in which weapons were used; 7,000 robberies in schools; 190,000 fights or physical attacks not involving weapons; 115,000 thefts; and 98,000 incidents of vandalism. These statistics understate the true magnitude of the problem, because not all school violence is reported. Times have changed. Behavioral problems years ago were: students passing notes; chewing gum in class; running in the hallways; jumping in or out of line; and smoking in the bathrooms or fire escapes. That's a far cry from today's problems of school rapes, murder, theft, and assaults and threats to both students and teachers (School Safety News; 2005, pg. 1.).
While not directly attributed to chronic disruptive students, there can little doubt that the students committing the offenses noted by Williams are the same students causing the majority of classroom disruptions. “What is happening outside of the schools is spilling into the classrooms. Schools mirror society at large. The more violence in society, the more violence in the schools” (Blaum, 1996, quoting Nolan, pg.1).

Williams said it started in the 1960’s; what was considered behavioral norms became inconvenient and inconsistent with various social agendas. Williams said, “Traditional values were discarded without an appreciation for the role they played in creating a civilized society, and now we’re playing the price” (Williams, School Safety News, 2005, p.1).

The problems associated with classroom disruptive behavior have reached epidemic proportions in this country (Hood, 2003). Imagine the response from the American business community if statistics clearly demonstrated that, due to work place disruptions, employees lost the equivalent of 7,932 business days (44 years) in one year, (Gaustad,1992). This comparison to classroom distractions may not be sufficient to convince readers that current levels of classroom disruptions and violence are at epidemic proportions, but that is precisely how Hood referred to the situation when he wrote, “…to address the epidemic of school violence in America, we will have to reconsider the governance of schools themselves” (Hood, 1994, p6). In the same writing, Hood suggested that efforts to discipline will not be effective until schools are released from political constraints.

U.S. Supreme Court & Non-Academic Students

Discipline Went Downhill
Searching for a root cause of the current epidemic proved quite challenging, but the most often cited link to an original cause is the U.S. Supreme Court. According to Weusi, (Russo, Harris, & Sandidge, 1994), the Supreme Court handed down its most important decision in the 20th Century’s history of the court in their unanimous opinion in Brown vs. the Board of Education which “…became the catalyst for the Civil Rights Movement of the 50’s and 60’s and for a challenge to Public Schools for equal educational opportunities that continues to this day” (Weusi, 2004, p.2). While this statement should not be construed to impart the beginning of disruptive student behavior in public education, the timeframe is consistent with William’s viewpoint in School Safety News (2005); and the total context of Weusi’s publication does present a very useful and historical perspective of the grip that current courts hold on America’s public school systems.

Searching for an identifiable cause or specific era as the genesis of this issue revealed some interesting data. Don Bourgeois (1979) wrote that discipline continued to be at the top of the list of major concerns of the general public about schools. Bourgeois put the spotlight squarely upon what he called the “make up” (Bourgeois, 1979, p. 69) of the student body of public schools. He wrote that prior to Public Law 94-142, schools catered strictly to the college preparatory student and programs and curriculum were designed to entice and retain these students. Additionally, changes in welfare laws provided financial incentive to families of students who previously were not interested in an education to remain in school (Bourgeois, 1979; Lufler, 1982). Bourgeois stated that discipline in the classrooms quickly went down hill relative to the population of non-academic students who remained in school. In order to properly address the cause of
increased discipline problems in the classroom, public school officials need to become more acquainted with the history of the 1968 Fortas court cases that extended due process rights of students (Lufler, 1982). According to Lufler (1982), “The legal situation of individual administrators became more difficult following the Supreme Court decision in Wood v. Strickland, 402 U.S. 308(1975)” (Lufler, 1982, p.3). “Furthermore, extending civil-rights to unruly students has created an unworkable, and sometimes absurd, situation in public schools” (Hood, 1994, p.4).

Research is replete with suggestions regarding the cause of the current epidemic of chronic student disruptive behavior but the truth is, the results are inconclusive and at best provide only very strong suggestions. Nevertheless, Arum (2003) seems to support that position in a 2003 Common Good article:

Pro-student court rulings of the early 1960s granted students important individual rights, particularly in the area of free expression and due process. While limiting school authority may have curtailed certain abuses, it also had unintended consequences or reducing the powers teachers had to shape the classroom and school environment in a ”positive manner” (Arum, in Judging School Law, 2003 p.6).

Students Send Distress Signals

A 2004 Public Agenda pole (Teaching Interrupted) showed that both teachers (85%) and parents (73%) said the school experience of most students suffers at the expense of a few chronic offenders. Most teachers (78%) report that students who are persistent behavior problems and who should be removed from school grounds are not removed. In the same report, 55% of the teachers responding said the cause of classroom discipline problems was due to school districts backing down from assertive parents.
Who is to blame, and precisely where the spotlight of accountability is most appropriately directed is open to speculation, but Smith (2001) believes the students are the cause of the majority of the behavior problems, and the teachers themselves cause most discipline problems. Smith cites research (Elm, Rose, & Gallup, 1993) that credits poor classroom management, and personnel who have not been charged with establishing and enforcing behavior guidelines as the reason why classroom disruption issues are such a concern. The blame game in this issue of chronic disruptive behavior in the classroom is quite complicated; but it is certain that Arum (2003) saw problems with the courts when he wrote the following statement:

Contemporary court climates hostile to school authority have contributed to eroding both student and school personnel confidence in the legitimate right of a teacher or administrator to exercise discipline. It is this hesitation, doubt, and weakening of conviction which have partially attributed to the hostile court decisions that has undermined the effectiveness of school discipline (Arum, in Judging School Law, 2003, p.1).

Regardless of fault and blame, there must come a time and place where researchers agree that for the benefit of those most affected (students and teachers) the blame game should stop and appropriate corrective measures be put into place. According to Wadsworth, cited in Public Agenda (1997):

Students are issuing a distress signal, and it’s time for us to stop the blame shifting from parents to teacher to administrators to the media and focus our energies on addressing their plea for order, structure and moral authority in their lives (Wadsworth, in Public Agenda Research Highlights, 1997, p. 3).
Fear of Litigation

Research indicates that teachers and administrators are reluctant to punish out of fear of litigation (Lufler, 1982; Public Agenda, 1997). Johnson and Duffett (2003) found that teachers commonly express anxiety about false accusations and possible legal confrontations brought about by disgruntled parents. The report cited one veteran teacher who no longer responds so readily to break up a fight without first considering the potential of litigation. Public Agenda (2004) found that 78% of teachers say that students readily remind them of their constitutionally protected rights, and they (the teachers) can be sued by parents who too often take the side of students. Johnson & Duffett, citing Public Agenda research said, “Litigation and the threat of litigation often take a personal toll on professionals in education. An unwarranted charge and/or the prospect of dealing with litigation can create enormous anxiety and anguish, sometimes enough to derail a career” (Johnson & Duffett, 2003, p.3).

Educators’ Lack Proper Legal Training

More Detrimental Then Non-Academic Students!

Research indicates that a lack of teacher training aimed at explaining the actual meaning and intent of the Supreme Court’s findings has had a more significant and detrimental impact upon classroom management than has the increased population of nonacademic students mentioned earlier in this text. It is also a lack of training that has contributed to legal uncertainty of educators and the resulting increase in litigation (Lufler, 1982). Opposing views of literature suggest that it is not specific landmark due process cases, or subsequent litigation that made disciplining students perilous for educators. The perils are often due to unclear knowledge of the intent of the law (Arum,
2003; Lufler, 1998). While much of the available literature does suggest that professionals are increasingly concerned about the potential for personal liability litigation, contrasting law reviews suggest a more encouraging picture. *Yearbook of School Law* compared the rulings in litigation of student due process actions and, in most of those cases, when administrators followed the rules established by their respective schools or school districts, the courts sided with that school or school district. The 1982 *Yearbook of School Law* revealed that courts’ decisions involving exclusionary discipline were more often determined by the adequacy of the due process hearing received by students before they were suspended or expelled. Various 1981 cases called into question a student’s right to call witnesses or to cross-examine school personnel during expulsion hearings, while other litigation presented issues of substantive fairness as students challenged the reasonableness of rules under which they were removed from school. Courts in 1981 continued the trend of previous cases in refusing to find school rules unreasonable, or to characterize some penalties as cruel and unusual punishment under the Eighth Amendment. In the few cases where school disciplinary decisions were overturned, the decision was based upon the failure of the school systems to follow their own clearly written policies, or because personnel had ignored controlling state statutes governing suspension and expulsion (*Yearbook of Law Review*, 1982).

Literature further suggests that in many instances school principals and other administrators are developing discipline policies based upon a poor interpretation of Supreme Court decisions; a situation which to some degree exists because the Justices of Supreme Court left interpretation of their rulings to other persons (Lufler, 1982). Arum stated, “Teachers’ and administrators’ implementation of school practices related to due
process is informed by their uncertain knowledge of case law; their contradictory, convoluted, and confused prior experiences of due process applications…” (Arum, 2003, p7).

The concerns of personal litigation expressed by teachers and administrators are more than mere expressions of their fears. On January 8, 2002, the Elementary and Secondary Education Act (the ACT) Public Law 107-110 was signed by President George W. Bush. Section 2366 of the Act offers limited protection to teachers, school officers, and employees for certain acts of omission on behalf of the school or governmental entity under specific conditions. The signing into law of the Act signaled an obvious concern for potential law suits. Again, while chronically disruptive students are in the minority compared to the total student population, the distress they inflict upon the public education system, including emotional stress for students and teachers, is enormous. The next question is; what should be done about it?

Alternative Schools

A Viable Alternative

“Ideally, chronically disruptive students should be placed in high-quality alternative education settings where they can receive long-term, intensive interventions” (American Educator, 2003-2004, p. 1). The United States Departments of Education, Justice, and Health and Human Services in 1994 reported that disruptive students caused more then 150,000 students to stay home from school because of a fear of violence. These students typify the thousands of chronic disruptive students across America that cost the nation’s school systems $23,429 per class, per day (or $5,623 per student) for each one hour of lost instructional time (American Teacher, 1997). However, according
to the American Federation of Teachers (AFT), cited in an article from the Missouri Center for Safe Schools, from the money spent to provide alternative education programs for disruptive students, “the public annually gains $14,000 in student learning time that would have been lost, $2,800 in reduced repetition costs, $1,750 in reduced welfare costs, and $1,500 in reduced prison costs” (Management Schools: Alternative Education Programs for Disruptive Student, 2000, p.1). If financial loss vs. financial gain is not persuasive in a discussion to remove chronic disruptive students from the classroom, consider this strong statement:

Children in special need of a teacher’s attention are particularly hurt by the time lost to disruption and disorder. Teachers and other school staff may recognize that a student is in desperate need of some special academic help or a few words of encouragement. But a disruptive environment may make finding the proper time or place to meet this need impossible. When disorder prohibits this type of exchange from taking place, students seeking help may turn in less positive directions and become unruly influences themselves or drop out of the system entirely (AFT, Discipline and School Safety 2000, p.1).

In the process of this research, numerous sources were reviewed and compared and it appears that researchers, with few exceptions, express greater concern for the offending students than for those students who follow established rules; even legal writings typically demonstrate a greater concern for the offender’s property rights to an education then to the overall student body. A review of states’ legislative reports, available on individual state web sites, indicated that interest and debates regarding discipline in the classrooms have been ongoing for several years; affording hopes of
renewed vigor at the state level. In the concluding remarks of the Georgia General Assembly (2003-2004) Legislative Assembly, a senate study committee hearing on discipline in public education stated that; for Georgia, the provision of an adequate public education for the citizens is a primary obligation. The statement further declared that; “…discipline policies and procedures have a tremendous impact on the quality of education Georgia’s children receive. If school discipline policies and procedures are not effective, the result is a classroom environment in which learning does not take place. If on the other hand discipline policies and procedures are unfair, or do not address the underlying reasons why children misbehave, they simply result in our neediest children being deprived of the right to the education which can improve their lives…” (Georgia General Assembly Committee Report, p. 7, 2004).

The participants in this committee announced clearly that the issue under review was not extreme violence, but instances described as disrespect and disruption. The report further stated that the rights of behaved students who want to learn must also be protected and enhanced, and that more options should be available for children who misbehave; which may indicate a departure from an historic emphasis on the rights of the chronic disruptive student. The report recommends that regarding chronic disruptive students “…the emphasis should be on working with parents, teachers, and administrators so that a student’s behavior will not disrupt either the education of other children or their own education” (Georgia General Assembly Committee Report, 2004, p. 2).

The state of Georgia, as well as other states, makes records of various legislative reviews and inquiries available on the World Wide Web for interested persons to
consider. Legislative records made available on the web, related to classroom discipline, indicate an emphasis on improving the quality of education offered in alternative settings. Kraemer and Ruzzi (2001) found that alternative education programs are being encouraged to meet higher standards and greater accountability. They stated that “…more states have begun to require students in alternative education to pass the same high-stakes exit exams as those in regular programs” (Kraemer & Ruzzi, 2001, p. 1). In advocating for greater funding and improved programs in alternative settings, Kraemer and Ruzzi also advocate (albeit indirectly) for the rights of the remaining student body; “Students come to alternative education for many reasons, but all need more support and encouragement than regular school can offer” (Kraemer & Ruzzi, 2001, p.2). This sentiment seems to affirm that chronic disruptive offenders are often better served in alternative settings. The American Federation of Teachers recognizes the special needs of chronic disruptive students, as well as the well-being of the better behaved students. Their argument for removing the offending students from the regular classroom setting is compelling precisely because AFT does express the group’s concern for the needs of the chronic disruptive student without ignoring the other side of the classroom. Consider the following statement from AFT:

Students who are consistently disruptive or violent need to be placed in an environment where they can receive special assistance with their behavior problems and continue to receive academic instruction. Regular schools are not able to provide that intensive, specialized help and simultaneously continue to meet the needs of the majority of students (AFT, American Teacher, 1997, p.2).
Given the purpose of this study, the most appropriate approach was an analysis of available literature. Design and implementation of an original research instrument was not practicable, nor would such an instrument have proven as reliable as current data made available from on-line sources. The case study method was not selected for this research due to the scope of the questions and breadth of the issues regarding the impact that chronic disruptive students inflict upon the education system.

This review of literature is based upon selected literature published in the late 1950s, and referenced material through 2005. I used text books assigned as required readings in graduate courses, periodicals from libraries, and numerous online sources such as: university research resource sites, online journals, and electronic publications. Search parameters, key words, and phrases such as disruptive behavior in public school classrooms, school violence, chronic misbehavior, teacher burnout, legal issues and student behavior, and various combinations of the same words and phrases were used.

This effort served both to confirm and dispel personal biases developed beginning in 1993 when my informal observations began. During my research, I visited approximately 35 classrooms, in six separate school districts, located in four different states in this country. I conducted personal observations as an invited guest in 3 elementary schools, 5 middle schools, and 5 high schools located in Louisiana, Georgia, Virginia, and Tennessee. All of my visits were announced and no clandestine measures were utilized. In two classrooms I was a student teacher; a requirement for completion of a master’s degree in secondary education. During visits in several classrooms, I was fulfilling field placements required by departments of education at two universities in which I was enrolled at the time of the visits. However, my initial observations took place
prior to enrolling in a graduate program and prior to beginning formal research, and were conducted as a parent observer in schools attended by my children, as well as other local schools.

While I did not conduct formal focus groups, I did have frequent informal discussions with teachers, school board members, students, and parents, regarding our shared interests in classroom behavior, or more accurately stated; misbehavior. In most instances, no recordings were made during discussions or conversations. During the course of this research, I attempted to avoid particular bias, and therefore offer a higher degree of credibility during discussions of pertinent issues related to chronically disruptive students and the impact of that misbehavior upon public education. This paper takes a wide swing at many contributing factors in the ensuing discussion of the extensive nature of the problem of chronic disruptive students in public education, and to the questions of; to whom or what can the problem be attributed, and what actions should be taken to best benefit chronic disruptive students while still considering the needs of the overall student body.

Conclusions

Researchers Provide a Wealth of Information

Lack of Consensus is Problematic

The problem of chronic disruptive students in public education is pervasive throughout the United States. While research indicates that U.S. Supreme Court decisions in key landmark cases and federal law may be the geneses of the problem, the underlying cause is a diminished capacity or willingness of educators to discipline disruptive students commensurate to the particular offense (Arum, 2003). Even in classrooms with
effectively enforced discipline policies, a few students may be less capable of practicing self-discipline and consistently cause disruptions that interfere with the teachers’ ability to provide a quality education experience for the remaining student body. For chronic disruptive students, academic and social failure is common. Therefore, intervention is essential if they are to become productive adults; for that reason, alternative education settings are a viable and appropriate choice.

Recommendations

Researchers and Educators Need Consensus

I believe that the problem as stated will not be resolved in this decade; and this sad realization is due in part to the polarized view of researchers. One side of the research coin insists that classroom management is the key to solving the challenges associated with chronic disruptive students (Jones, 2001; Smith, 2001), while the other side tends to focus more on past decisions of activists courts. I conclude that available research has not been used effectively to significantly improve the issues as stated in this paper. Research clearly demonstrates that none of our students are best served by ignoring the needs of the overall student body in favor of the rights of disruptive students. I have heard it said on too many occasions that there is no easy answer to this very costly issue that has plagued the nation’s schools for greater than forty years; but research does not support that evasive stance. Research does, however, provide strong and recurrent documentation that some students do not fare well in the mainstream of American classrooms; and in fact, are more likely to graduate if allowed to attend an alternative education setting.

An Appropriate Decision
There can be no doubt that any decision to remove a chronic disruptive student from the mainstream classroom setting is charged with emotion; as it should be! Never should it be easy to remove a disruptive student from the public school where his or her friends attend, since doing so, will, no doubt, be a significant life’s event for the student.

I believe educators should be loath to shy away from difficult decisions out of fear of litigation, the ire of parents, or the scorn of the general public, when the long term interests of all of our students is the price that must, and shall, eventually be paid. Indeed, the aforementioned fears certainly come into play in the process of determining an appropriate course of action. However, in order to ameliorate concerns of litigation, discussions to remove a student from the mainstream must include the participation of parents well in advance of a removal hearing. During parent and teacher discussions regarding a student’s undesirable behavior, the subject of alternative placement should be discussed as a possibility. Research has shown that early parental intervention in discipline issues precludes many subsequent removal actions.

School districts with a need for alternative schools, in my estimation, would better serve the community by ensuring a highly effective public relations mechanism is in place to inform parents of positive aspects of an alternative placement. A parent’s willingness to authorize transferring their student to an alternative setting may very well depend upon their perception of alternative schools. Therefore, the public’s perception of alternative schools must be one of acceptance, fostered by trust that an alternative school is designed to improve the student’s opportunities for success in life; and that the teachers, principals, and school districts are dedicated to their child’s success while out of the mainstream.
I recommend that educators and parents who may be reluctant to offer a potential drop-out an additional opportunity in an alternative school, review testimonies of students who attended, or are attending, alternative settings. While some for-profit alternative schools advertise the benefits experienced by their students, statistics of non-profit sources are also available for review. I urge interested persons to research thoroughly; and I caution them to be vigilant before accepting the information as fact.

Finally, and most importantly, placing a child in an alternative school does not mean that we are throwing him or her out - and this should be absolutely clear and convincing to all students; not just those students who are considered candidates for alternative placements. I recommend that educators work diligently to negate any negative stigma attached to the concept of alternative schools and never use alternative schools as a threat of punishment. When it seems that all efforts have failed, before educators throw up their hands in frustration, I recommend they consider the following statement: When disciplining kids eats up too much time, the teacher has to ask, ‘Am I causing the problem?’ If the student is indeed the problem, then the teacher has to take into account the whole group and begin to consider removal of the student. The right of the student has to be balanced with the rights of the whole group” (Blaum, quoting Nolan, 1996).
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Balanced Literacy and State Testing

Does the use of Balanced Literacy curriculum help to raise student scores on state standardized tests?

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EDUC 590
Spring 2005

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INTRODUCTION AND PROBLEM STATEMENT

For as long as I can remember, being able to read has been an acquired skill that I have for the most part taken for granted. Although I use it on a daily basis for a myriad of activities and reasons, the importance of reading is not usually a topic of my own conversations or a subject for my analyzation. Instead, it is just something I, as the majority of the American population, just do while not realizing the disadvantageous effects of not being able to simply fill out a job application or figure out the road signs to a destination due to the inability to read. However, if the tables were turned, if there really was that analyzation, one would probably be taken by surprise at how the simple skill of reading is an essential component to living a successful life in the United States of America.

During the last ten to twenty years, society has been bombarded by a stream of statistics relating the lack of literate adults in the United States. According to the United Nations, the United States is ranked 49th among the 156 United Nation member countries in its rate of literacy, (California Literacy, 2004). As reported by the American Medical Association, 46% of American citizens cannot read the labels on their own prescription bottles (California Literacy, 2004). Unfortunately, the problems of an illiterate nation pervade into other societal areas in addition to the travesty of the individual person’s inability to read. According to the National Academy on an Aging Society, the estimated annual cost of low literacy skills in the form of longer hospital stays, emergency room visits, increased doctor visits, and increased medication results in $73 billion dollars in costs (California Literacy, 2004). It can be inferred that an illiterate public, of which our
country has a substantial population, has the potential to be detrimental to both success and progress.

The growing trend of illiteracy in America has turned society’s attention toward the public education system. Many questions have been raised regarding the substantial numbers of high school graduates who have little or no reading skills. A large amount of both time and effort has been applied to understand what exactly is being done to guarantee that the future of the American workforce is more literate. As a result, the American public education system has made strides to make literacy more of a priority throughout the K-12 learning process. One curriculum strategy that has been adopted throughout the United States is Balanced Literacy. Balanced Literacy allows educators to teach and reinforce the importance of reading through modeled reading and writing, shared reading and writing, guided reading and writing, and independent reading and writing, (Daniels and Zemelman, 2004). In implementing these strategies, Balanced Literacy provides and cultivates the skills of reading, writing, thinking, speaking and listening for all students (Daniels and Zemelman, 2004). This approach is instilled by educators within the curriculum, across all disciplines areas, and throughout the K-12 learning process - hopefully providing students with a complete understanding of what reading actually is while developing an appreciation for the acquired skill (Daniels and Zemelman, 2004).

For the purpose of this research project, I have taken on the task of looking at the implementation of Balanced Literacy – its importance in regards to literacy instruction and its application in the classroom, as well as if there is an evidence of a connection between its implementation and the procurement of increased achievement on state
I will then compare the researched information to a case study derived from test score data from students at Orchard Knob Middle School, which has also been a balanced literacy subscriber for the past three years.

**REVIEW OF LITERATURE**

Even though the United States is currently espousing a deep focus on reading in American schools, literacy has always been a subject that has pervaded professional education circles. The skill of reading is a foundational necessary for education, and as a result, there have been major avenues of research regarding its root. Research on proper literacy strategies gained major prominence in the United States as a result of published information on models of reading instruction done by the U.S. Office of Education’s Cooperative Research Program in First Grade Reading Instruction in the mid-1960s, (Samuels & Kamil, 1982). The professional education community began to thoroughly investigate the role of reading instruction in the classroom. The two main approaches to instruction that surfaced from the studied application of reading processes were the skills-based approach which involves the use of phonics and the meanings-based approach which focuses more on reading comprehension and enrichment.

The skills-based approach to reading was documented in 1967 by Jeanne S. Chall in her work, *Learning to Read: The Great Debate*, in which she writes about how to identify effective reading instruction processes in the classroom. Chall concluded that there are “consistent and substantial advantages to programs that include systematic phonics,” (Snow, Burns, & Griffin, 1998). Phonics is a method of teaching elementary reading and spelling based on the phonetic interpretation or letter-sound relationships of ordinary spelling by having the readers “sound out” words. In 1990, Marilyn J. Adams...
provided fuel for the phonics-led argument through her review of research, *Beginning to Read: Thinking and Learning about Print*. Adams wrote that effective reading instruction is based on, “direct instruction in phonics, focusing on the orthographic regularities of English,” in addition to dedicating lengths of practice time to multiple challenging reading sources, (Snow, Burns, & Griffin, 1998).

When using skill-based learning in the classroom, phonic skills are taught in isolation with the expectation that students will grasp meaning of words once the sound-letter relationships are first learned, (Smith, 2003). Children will first learn the sound-letter relationships such as letter sounds, consonant blends, and long and short vowels, through sounding out words. Skill-based learning frequently uses reading programs that offer stories with controlled vocabulary made up of the same sound-letter relationships currently being taught and/or studied in the classroom (Smith, 2003). Writing instruction also follows the same model in that students are asked to write according to the basic spelling skills they have mastered or a correct model that has been provided by the teacher. This type of instruction was introduced and widely accepted during the 1960s and 1970s, and today it is being promoted as a part of the back-to-basics movement in education (Smith, 2003).

The meaning-based approach to reading instruction was also highly influenced by a professional educator, Kenneth S. Goodman. He helped to develop the psycholinguistic perspective in which students learn to read by relying on the meaning of language, and that literacy development parallels with language development, (Samuels & Kamil, 1982). Goodman’s research along these lines helped to develop the whole-language approach to reading which became popular in the 1980s and progressed into the 1990s.
In contrast to the skills-based approach, which focuses on the letter-sound relationships of phonics, the meaning-based approach focuses more on reading comprehension and deriving whole meanings in texts. Students concentrate on the wholeness of words, sentences, paragraphs, and entire books to grasp meanings, and as a result, develop their reading comprehension skills, (Daniels and Zemelman, 2004). Educators that advocate this method promote the use of reading challenging literature and using language in ways that will relate to students’ lives such as letter writing, journaling, book clubs, etc. It is believed that grasping meaning in the text, according to the meaning-based approach of teaching reading, promotes better comprehension than mere decoding of words through phonics, (Daniels and Zemelman, 2004).

These two theatres of thought in education circles have stood at stalemate when it comes to the most effective way to teach reading in the classroom. For the most part, educators have taught from either a skills-based approach or meaning-based approach without an integration of the two, until recently. Current research provides that the teaching of reading requires solid skill instruction, including phonics and phonemic awareness, in addition to offering a focused array of enjoyable and pertinent reading and writing experiences with whole texts in order to facilitate the construction of meaning, (Snow, Burns, & Griffin, 1998). As a result, balanced reading instruction, which assimilates phonics instruction into the whole-language approach, has become a classroom dominator in reading instruction. Within this balance, “children are explicitly taught the relationship between letters and sounds in a systematic fashion, but they are being read to and reading interesting stories and writing at the same time,” (Diegmueller, 1996).
This correlation of both the skills-based approach and the meaning-based approach to reading instruction allows for a more studied look at the individual learning needs of each student, (International Reading Association, 1998). For this goal to be reached, however, educators must ensure that a “balance” is truly attainable. Teachers should admonish students that phonics is just one tool used to develop reading comprehension, and learners need to see the relevance of phonics for themselves within their own reading and writing, (Sherman, 1998). In addition, educators should also promote reading for meaning through the use of literature for enrichment. As a result, students will develop a love for reading and learning that will carry over in life. Novick writes,

The challenge for teachers is to help children build a solid literacy foundation in the primary grades, one that provides not only basic skills, but also multiple opportunities to ‘get lost in a story,’ to reflect and reason, create ‘possible worlds’ through stories and dramatic play, and to share experiences, ideas, and opinions, (Sherman, 1998).

In order to procure lifelong learners in students, it is important for schools to offer a balanced literacy program. This type of program includes the use of read alouds, shared readings, guided readings, independent readings, modeled/shared writings, interactive writings, and independent writings, (Daniels and Zemelman, 2004). These strategies are built upon a foundation in basic phonics but also provide the enrichment of a whole-language approach, (Daniels and Zemelman, 2004). The teacher instills the strategies by first modeling their importance in his or her own reading comprehension, and then the
students have a foundation from which they can build their own understanding of individual literacy, (Daniels and Zemelman, 2004).

In *Learning to Read and Write: Developmentally Appropriate Practices for Young Children*, the International Reading Association and the National Association for the Education of Young Children (International Reading Association, 1998) outline comprehensive recommendations for proper literacy instruction. Schools that implement a type of balanced literacy program must allow for continued focus on proper curriculum, assessment, and professional development for educators. In light of current research, it is important that curriculum be designed according to the individual needs of students and that a classroom-wide assessment be adequate in attaining the correct information for proper changes to instruction, (Daniels and Zemelman, 2004). Also, progressing professional development for educators is always important to allow for a continued effort towards quality literary instruction (Daniels and Zemelman, 2004). Schools that implement these details will provide students with the best reading instruction that is, “based on a coherent integration of the best of differing bodies and types of research and a theory of reading that puts meaning at the heart of reading from the very beginning, rather than as some distant goal,” (Sherman, 1998).

**METHODOLOGY**

**PARTICIPANTS**

The sample of middle school state student test scores have been accumulated from sixth, seventh, and eighth grade students who have attended Orchard Knob Middle School in Hamilton County, Tennessee. Orchard Knob Middle School is located in an impoverished area and serves mostly students from a lower class and a predominately
African American parental background in Chattanooga, Tennessee. The school has approximately 355 students, 92.6% of which are economically disadvantaged. Orchard Knob is also classified as a Title 1 restructuring school according to the No Child Left Behind Act. According to NCLB legislation, Title 1 schools have access to funds and programs that aid students in reaching proficiency levels on state standardized tests due to low poverty demographics and/or previous low proficiency levels in the past, (United States Department of Education, 2001). According to Orchard Knob’s previous performances and demographics, the school is currently on improving status and is up for reevaluation following the 2005 Tennessee Comprehensive Assessment Program (TCAP) test results. As a result, school curricula has integrated the use of Balanced Literacy for the past three years in order to improve achievement.

DATA COLLECTION

The collected data comes specifically from the 2004 Tennessee Value-Added Assessment System Report (TVAAS) for Orchard Knob Middle School in Hamilton County regarding sixth, seventh, and eighth grade Tennessee Comprehensive Assessment Program (TCAP) Reading and Language Criterion Referenced Test (CRT) scores. Students in grades 3-8 take the TCAP each spring in the state of Tennessee. The Achievement Test is a timed, multiple-choice assessment that measures Reading, Language Arts, Mathematics, Science, and Social Studies. Student results are reported to parents, teachers, and administrators. The results used for the purpose of this study have been taken from the past three years of published accumulated scores for Orchard Knob Middle School. All information was derived from the 2003 and 2004 published TCAP
Report Cards and can be found on the State of Tennessee Department of Education website.

DATA ANALYSIS

The data recovered from the TVAAS report on Orchard Knob Middle School was analyzed in two significant ways. The collected state assessment scores was be compared by delineating the progression of student achievement in Reading and Language comprehension. This delineation was assessed from both a year-to-year perspective as well as through grade progression allowing for a definitive correlation between the application of Balanced Literacy and the students’ TCAP scores. The results of the assessment of the student test scores from Orchard Knob Middle School then allow for a further studied application of the achievement rates of students by comparison to the 2003-2004 TVAAS culminating report for all of Hamilton County, Tennessee, which includes average scores for all sixth through eighth grades throughout Hamilton County.

DATA COLLECTION AND RESULTS

As previously stated, all data regarding TCAP test scores from Orchard Knob Middle School students were taken from the state of Tennessee Hamilton County Report Card 2004 compiled by TVAAS, (Report Card, 2004). For the purpose of this project, there will be a studied focus of the Reading/Language portion of the scores.

The first set of collected data relates the cumulative scores of all three grades of students for the past three years. The Criterion Referenced Test (CRT) score for Orchard Knob students grades 6-8 in the Reading/Language portion of the test based on a three-year average was 30. According to the national grading scale, this score translates to an F, and it can be compared with the State of Tennessee’s average score of 50, which
translates as a C. The Norm Referenced Test score (NRT), for the entirety of the school and based on a three-year average, placed Orchard Knob Middle School’s grading as an F.

The second set of collected data focuses on subgroup disaggregation, giving percentages of students who gain proficiency in each content area. For the purpose of this study, all percentages of proficiency in this context will be in regards to the Reading/Language CRT. In 2003, 45% of all Orchard Knob Middle School students were below proficiency in Reading/Language, 47.8% were proficient, and 7.3% were advanced, (see Table 1). In 2004, 29% of all Orchard Knob Middle School students were below proficiency in Reading/Language, 71% were proficient, and 63% were advanced, based on a two-year average, (see Table 2). From 2003 to 2004, there was a drop in students who scored below proficiency of 16% - from 45% to 29%, (see Table 3). Orchard Knob students who gained proficiency raised by 23.2% - from 47.8% to 71%, (see Table 3). Finally, from 2003 to 2004, there was a gain of 55.7%, from 7.3% to 63%, in students who had advanced scores, (see Table 3).

These percentages can be compared to an average of the same results for Hamilton County. In 2003, 18% of Hamilton County students in the same subgroup disaggregation were below proficiency in Reading/Language, 50.4% were proficient, and 32.4% were advanced, (see Table 1). In 2004, 14% of Hamilton County students in the same subgroup disaggregation were below proficiency in Reading/Language, 86% were proficient, and 84% were advanced, based on a two-year average, (see Table 2). From 2003 to 2004, there was a drop in students who scored below proficiency of 4% - from 18% to 14%, (see Table 3). Hamilton County students who gained proficiency raised by
35.6% - from 50.4% to 86%, (see Table 3). Finally, from 2003 to 2004, there was a gain of 51.6%, from 32.4% to 84%, in students who had advanced scores, (see Table 3).

When comparing the percentages derived from Orchard Knob Middle School to the average percentages from Hamilton County, certain specific correlations can be drawn. Both groups of scores dropped in students who scored below proficiency from 2003 to 2004, although Orchard Knob’s number of students below proficiency decreased at a higher rate of volume (16%) than of Hamilton County (4%). Both Hamilton County and Orchard Knob also gained in the area of students who were proficient from 2003 to 2004, but Hamilton County’s number of proficient students increased by a higher rate (35.6%) than that of Orchard Knob (23.2%). When compared, both groups of data also had gains in students who scored in the advanced range on the TCAP, and Orchard Knob Middle School procured a higher gain at 55.7% when paralleled to Hamilton County’s gain at 51.6%.

TABLES

TABLE 1

2003 TCAP Data for Reading/Language

<table>
<thead>
<tr>
<th></th>
<th>% Below Proficient</th>
<th>% Proficient</th>
<th>% Advanced</th>
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</thead>
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<td><strong>Orchard Knob MS</strong></td>
<td>45.0</td>
<td>47.8</td>
<td>7.3</td>
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<tr>
<td><strong>Hamilton County</strong></td>
<td>18.0</td>
<td>50.4</td>
<td>32.4</td>
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TABLE 2
2004 TCAP Data for Reading/Language

<table>
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<th>% Below Proficient</th>
<th>% Proficient</th>
<th>% Advanced</th>
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<tbody>
<tr>
<td>Orchard Knob MS</td>
<td>29.0</td>
<td>71.0</td>
</tr>
<tr>
<td>Hamilton County</td>
<td>14.0</td>
<td>86.0</td>
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TABLE 3
2003 to 2004 TCAP Data for Reading/Language Comparison

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<th>Orchard Knob MS</th>
<th>Hamilton County</th>
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<tr>
<td>% Decrease in Below Proficient Students</td>
<td>16.0</td>
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<tr>
<td>% Increase in Proficient Students</td>
<td>23.2</td>
</tr>
<tr>
<td>% Increase in Advanced Students</td>
<td>55.7</td>
</tr>
</tbody>
</table>

IMPLICATIONS

The implications of this research will be important to educators, students, parents, schools, and all others who are seeking to discern the best applied approach to reading instruction. The results of this study will be beneficial to all educators in addition to any others who wish to seek information regarding the benefits and/or disadvantages of using Balanced Literacy to promote reading success in the classroom. As a result, schools can then be better able to understand if the application of Balanced Literacy would or would
not be beneficial to their curriculum and students. Also, students, parents of students, members of society, etc., will be able to consult this study if they desire to understand the usage of Balanced Literacy in a Title 1 school like Orchard Knob Middle which is overcoming superfluous odds such as vast poverty in addition to the categorization of the No Child Left Behind Act.

LIMITATIONS

I believe it might be pertinent to allow for other types of student reading assessment across all grade levels in addition to state standardized tests. Although the TCAP tests are good assessment tools, it might be in the best interest of schools and/or educators to specify whether or not Balanced Literacy only helps students prepare for standardized tests, as is the case with this study. A cross-section of assessment tools will allow a better understanding of the implementation of Balanced Literacy in the classroom. Steps are being taken in that direction as already there has been set into effect an annual eighth grade reading and writing assessment throughout the state of Tennessee.

CONCLUSIONS AND RECOMMENDATIONS

According to the data, there was a definitive increase in student reading and language achievement on the TCAP test at Orchard Knob Middle School from 2003 to 2004. Students who gained proficiency and advanced status gained in number while students who scored below proficiency plummeted. Even when comparing percentages to Hamilton County scores, Orchard Knob students amassed a higher percentage of decreased numbers of students who scored below proficiency and a higher percentage of increased numbers of students who attained advanced status. It can be inferred from this data that Orchard Knob TCAP test scores in Reading/Language indicate that students
have achieved a higher level of knowledge and comprehension from 2003 to 2004 while learning from Balanced Literacy curriculum.

From the time of the application of the 2003 and 2004 TCAP, Orchard Knob Middle School was also implementing a Balanced Literacy curriculum throughout all grade levels and content areas. Balanced Literacy at Orchard Knob allows for educators to first model specific reading strategies to students before giving them the opportunity to put them into practice. Because of the school’s strict adherence to the program across grade and content levels, the same Balanced Literacy strategies, such as modeled reading and writing, shared reading and writing, guided reading and writing, and independent reading and writing, become extremely familiar to all the students. As a result, Orchard Knob Middle School students applied the reading strategies to their performance on TCAP tests. It is my conclusion that their applied implementation of this curriculum helped to raise student test scores in Reading/Language on the TCAP from 2003 to 2004.

According to the current TVAAS data, Orchard Knob Middle School, and other similar schools that are in parallel situations, only have room for improvement when it comes to literacy. Because of the strong effects Balanced Literacy has on Reading/Language scores at this particular school, I believe it would be best to keep a strict adherence to the curriculum in order to procure even better scores in the future.
REFERENCES


Discussion As a Measure of Achievement: The Gender Variable

(A Literature Review and Intervention Plan)

Anthony Goad
Discussion As a Measure of Achievement: The Gender Variable

Introduction

Standing in front of a class on the first day of the school year a teacher is heard to announce, “participation in class discussions and discussion groups will count as twenty percent of your grade.” The boys in the class issue a loan groan, the girls in the class stare numbly at their desks. The thoughts running through their minds begin with “why is she picking on us” and “she doesn’t care what we think anyway.”

There are many ways of measuring student achievement. The federal and state governments have standardized tests, local school systems give six-weeks and semester tests, and most teachers are equipped with a plethora of quizzes and unit or chapter tests. While the practice of testing is wide spread, it may not be a true measure of knowledge for all students. Some students simply do not test well. One reason may be gender. Shakeshaft (1995) reports that girls continue to lag behind males in tests of science achievement. Boys outperform girls on physical science questions and higher-level science questions on standardized tests (NAEP, 2000; Strauss, 1991; Welding, Fulani, & Bain, 1994). As the accountability movement continues it becomes more and more crucial that students do well on tests. This makes it apparent that female students cannot be allowed to lag behind their male counterparts; some course of action must be taken. As it is impossible for one teacher to affect the entire educational testing structure, each teacher should strive to do his or her best to equalize this performance in his or her classroom. The question then becomes, how do I make my classroom instruction equal for male and female students? What course of action should I take that the students will follow? Students themselves have given us the answer.
The Review

Guzzetti and Williams (1996-a) state that true discussion occurs when students’ voices dominate, when students interact with each other, and when students talk “I phrases” and sentences. They further state that students themselves report classroom discussion to be an activity that contributes most to learning science. In a study by Didion (1995) discussion was the activity chosen by students as the most useful to learning in science. If students think that participating in discussions help them learn, then equalizing discussion for male and female students is an endeavor that should be pursued. The purpose of this literature review is to cite some of the causes of gender differences in classroom discussions and determine ways of counteracting these discrepancies so that classroom discussions can be made “equal” for male and female students.

The immediate thought may be: the teacher is responsible for gender inequality in the classroom. This may not be true. Guzzetti and Williams (1996-b) report that fellow students are the major contributors to gender discrepancy. Boys volunteer their thoughts and opinions more than girls; boys talk more in class, answer more questions, and voice their opinions more often than girls (Shakeshaft, 1995). Male and female students have different conversational styles during class discussions. Girls ask more questions of each other and the teacher, while boys are more self-reliant (Guzzetti and Williams 1996-b). A study conducted by Rop (1998) suggests that males see discussion as a competition, a win or lose situation. Guzzetti and Williams (1996-a) have placed a lot of discussion inequalities on female students reporting that, “males are enabled by females to dominate discussion because females respond to social pressures that women be good listeners.
This contrast in discussion was perceived by male students to be an indicator that girls did not understand the material as well as boys” (p. 41).

While students may be a major contributor to inequalities in discussions, the teacher plays a critical role in breaking gender inequality patterns in the classroom (Jones, 1989). The problem is that teachers may be the biggest facilitators of gender inequalities in classroom discussions. Blake (1989) reports that calling directly on male students but not on female students discourage female students’ participation. When teachers call on male and female students alike boys receive more positive, reinforcing feedback from teachers than girls do (Shakeshaft, 1995). Guzetti and Williams (1996-b) report that boys are spoken to and are asked higher level questions more frequently, science teachers elaborate more on male responses that on female responses, and teachers take a student’s arguments on a position more seriously when it comes from a male. A landmark study by Greenfield (1997) reinforces the conclusions of the other authors and gives further examples including: boys’ call out answers were accepted more frequently than those of girls; boys created more procedure-related interactions than girls did; and boys were asked more process questions than girls. If an effort is to be made to use discussion as a measure of student achievement these inequalities must be addressed.

**The Intervention**

Jones (1989) suggests the teacher plays a critical role in addressing gender differences in classroom discussions. If the literature supports the opinion that students and teachers alike play major rolls in supporting these gender differences, then where should the responsibility for changing the inequality rest? The answer is, of course, the classroom teacher.
Allen (1995) and Rop (1998) share the view that the teacher should call the students’ attention to gender inequalities in the classroom. Others do not support this view, implying that by calling attention to the problem is to amplify it (Guzzetti & Williams 1996-a, b). The best way for teachers to promote female participation is to encourage them by calling on them more often (prompting), restating or elaborating on females’ remarks, and by giving positive reinforcement for their comments and questions (Allen, 1995; Blake, 1993; Guzzetti & Williams, 1996-a, b; Shakeshaft, 1995). Allen (1995) states that when females realize that they are expected to know answers, they will begin to ask questions before the teacher does. To assist teachers in dealing with gender problems, gender training for all classroom teachers should be incorporated into their college studies (Allen, 1996; Greenfield & Feldman, 1997; Allen, 1996).

The literature supports the view that what girls think of themselves affects their participation in discussions. Decker and Nelson (2000) report that girls express gender stereotyped beliefs about science classes. They also view science classes as more difficult than boys do (Huffman, Lawrenz, & Minger, 1997). Also, female students have been found to be less confident about their abilities in science than male students (Decker & Nelson, 2000). Shakeshaft (1995) advises that to involve girls in science classroom discussions teachers must adopt strategies that recognize and confront male dominance and female reticence. Guzzetti and Williams (1996-b) and Debacker and Nelson (2000) both suggest that by keeping males from talking they are encouraged to learn in a new way. To quote from Guzzetti: “when males are not socialized to listen to others they are denied a strategy that enables learning through collaboration, by talking with rather than to others” (p46). Another solution adopted by Shakeshaft (1995) is that of coaching girls
into competitive practices and helping them learn aggressive argumentation so they will be able to talk with the boys.

Rop (1998), Allen (1995), and Blake (1993) all state that by providing role models for female students the stereotype of a male scientist can be dispelled. This can be done by assigning appropriate reading articles and by inviting successful female scientists into the classroom. Blake (1993) indicates that girls are more comfortable when they understand the relevance of a science topic to an actual life experience. Using the informal experiences of females as a bridge to science in the classroom is a necessary step in increasing female participation (Shakeshaft, 1995). Relating science discussions to female students’ activities and interests will make them more confident in their abilities to do science and participate in classroom discussions. Through all discussion interventions conferred here it should be noted that in no way are male students treated unfairly. The purposes of the interventions are simply to “level the playing field.”

Only when the classroom teacher has thoroughly established the interventions can discussion be used as a measure of student achievement. When this is done the question then becomes: How do I record this as a number? One way is to write every student’s name on a card and, after shuffling the cards, call on each student as his or her name appears in the pile (Shakeshaft, 1995). By requiring a certain number of responses from each student per week, per chapter covered, or other increment of time, a grade can easily be given. Another way would simply be to use a seating chart and make appropriate notations on it. A further way would be to write each student’s name, initials, or seat number on a poker chip and put in a bag. This would give discussions a more “lottery” feel and may make students see themselves as “winners.” The lottery chips could be laid
down or put in the teacher’s pocket till they could be recorded. Care should be given to ask a limited number of yes and no type questions and to respond to male and female students alike. No matter how you record discussion as a “number” it should always be remembered that the purposes of the interventions are not to provide advantages to male or female students. The purpose is to balance discussion so that all students have an equal chance of success.

As teachers search for ways to equalize performance in their own classrooms, discussion should not be overlooked as a measure of student achievement. As stated earlier, even students themselves report discussion to be an activity that contributes most to leaning science (Guzzetti & Williams, 1996-a; Didion, 1995). When given an environment that is consistently equal in which to participate in discussions, female students most assuredly will.
References


Might Students Increase their Understanding and Enjoyment of the Poem “Paul Revere’s Ride” through Role-Playing or Creative Dramatics?

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University of Tennessee at Chattanooga
Spring 2005
**Problem Statement**

Reading *The Great Gatsby* in eleventh grade English class was the first time in twelve years of experiencing public education that I realized some of my fellow students disliked the stories we read in class. I was a very passive student in school who thought school would only teach me what was worth knowing and somewhat enjoyable. Every story was interesting to a certain extent and had some value to me, a naïve honors student who liked school. My bubble popped when I read *The Great Gatsby*.

Students around me discussed how much they hated reading Fitzgerald’s literary masterpiece, and I realized I hated it, too. I had nothing in common with anyone in the story, was not romanticized by the setting and timeframe of the world the characters lived in, and understood none of the fierce tones of the story that compelled older readers’ fascination with the book. Why should I be reading something so boring and pointless? My distaste for Gatsby caused me to misunderstand the novel. I could not stay focused on the material which left me with no understanding of the novel and the literary concepts the class was studying in the novel. Relating to my fellow students’ woes concerning *The Great Gatsby* I unearthed a problem as old as education itself. How might students understand reading material that they consider impertinent to their lives and personal experiences? Is there a way for students to like a boring story?

I believe the answer lies in the presentation of the story and the engagement in the text. Students love television shows, games and movies. A common practice of many teachers is to conclude the study of a book by showing the video version of it after the class finishes reading the story. For a generation in which “a picture paints a thousand words” seeing real people playing out a story demystifies book plots, themes, tones and conflicts. However a lot of kids have lost hope of understanding a difficult piece by the time a class finishes reading the book, and many video versions of stories do not closely follow the original story line losing the meaning of the book. Johnson writes the following about classroom creative dramatics; “It enables students to step inside a story, or to interact with a concept, character, or idea. In this way, creative dramatics promotes
a greater understanding of material and enhances students’ comprehension of texts” (1998, p.3).

In order to help kids who do not grasp subject-matter from reading a text, listening to teachers’ lectures, or participating in class discussions, role-playing in class with students acting out characters, reading the author’s words, and pantomiming action could open up a world of reading comprehension for kids. Zigo writes in the Journal of Adolescent & Adult Literacy that “when teachers encourage students’ natural inclinations toward narrative forms of meaning making, in conjunction with text based lessons, the students appear more engaged with textual content and demonstrate less resistance to reading material that might otherwise be challenging or frustrating” (2001, p. 64). When kids make stories from content, they understand the content better then if they only heard or read about the content. Role-playing in the classroom may help students to regard a boring, unrelated story as a real moment that they can take something from that is their own little bit of enlightenment. Students might understand a vague story; they might “get it.” Studies are beginning to explore “how the dramatic arts … can improve student engagement in learning as well as higher-order thinking skills” (Horn, 2002, p. 29).

Possibilities are limitless for the ways in which role-playing could be used in a classroom. For middle school English classes I plan to adapt the poem, “Paul Revere’s Ride,” into a simple script eighth graders may perform for each other in their normal classroom environments (See Appendix A). The class will pick roles, such as “Narrator” and “Paul Revere” and read the poem from the script version that is wholly divided into lines and sections for specific characters. I believe when the students hear the poem and see aspects of the poem’s action, they will better understand the story and like it better. They will better appreciate Paul Revere’s story and the craft of the playwright. Part of the skit will be vague allowing for students to interpret for themselves the characters’ actions and what is pantomimed during the skit. This is the role-playing or creative dramatics aspect of the project.

Students actively participate in the action or “doing” part of the skit, engaging with the storyline of the text. A class discussion follows in order to direct student understanding of what happens in the poem as it is reflected through the role-playing. “Understanding” may include but is not limited to plot, characters, theme, mood, tone,
point-of-view, conflict, and overall meaning. Role-playing induces a more relaxed classroom approach to boring material hopefully causing students to have fun and enjoy the story they are studying.

The problem of students understanding required middle school English reading material that is difficult, complex and boring leads me to wonder if visual skit performed by students would help the problem. Robbins writes, “the literature on classroom drama suggests that there is considerable untapped potential for using drama as a teaching method” (1988, p.1). Which leads me to ask whether or not students can increase their level of understanding and enjoyment of poetry by role-playing a selected poem?

Review of Literature

The Community of Researchers Examining Drama in the Classroom

Role-playing during class time improves learning in a variety of ways and occurs more and more frequently since the 1960s. Students pretend to be punctuation marks, tadpoles turning into frogs or Nora leaving her home in A Doll’s House. Though there is limited research on specific effects of role playing in the classroom, there are speculations from a variety of different researchers that role playing improves reading fluency, comprehension, listening skills and relevance of literature to children’s lives. Some studies believe drama in the classroom increases attendance and may serve as a substitute for a lack of content background for students from low socioeconomic backgrounds. This review discusses literature pertinent to the topic of classroom drama as it may positively affect student’s comprehension of reading texts.

Creative dramatics is the use of role-playing and skits to help a learner grasp a concept studied in the classroom. Drama is not learned but instead helps students to learn (Robbins, 1988). There are many ways to apply dramatic techniques in the classroom: creating an imaginary world the class enters along with the teacher or “expert character,” simulating a particular literary moment, or reading a script. Deeper textual understanding begins with the construction of a literary world and prolonged exposure to the central issues studied in that world. Clift’s research with high school students revealed that students enacting pieces of studied literature perform on the same level as students learning by traditional modes of lecture and discussion (Robbins, 1988). Clift discovered students in dramatic modes of learning have more instances of higher-order thinking and
topic-specific emotions then students in traditional modes of learning. The teacher who uses drama in the classroom is a guide for students who lay the course for the exploration of a topic themselves. By constructing their own meaning students better understand curriculum concepts (Robbins, 1988).

The REAP report (Review Education and the Arts Project) studies the connection between academics and the arts in projects conducted over the last fifty years. Educators are involved presently in a vital dialogue to ascertain the nature of arts education. Interest in arts education creates an opportune time to integrate the arts with academic disciplines such as reading and writing. Curriculum reformers according to Palmarini call for a more thorough research into the relationship of various academic disciplines with theatre, art, and music (1988). The REAP report featured eighty studies working on the link between language skills and theater. Research found a strong link between drama and verbal skills. The report also found quantitative results that students who study the arts achieve higher SAT scores (1988).

The theatre researcher involved with the REAP report, Podlozny, concentrated on theatre used in class as part of the curriculum. From information collected by eight experimental studies, she concluded that theatre improves reading, writing, vocabulary and oral language development in children (2000). Podlozny calls for more research on practical questions about how to effectively implement drama in classrooms because research already concludes that drama is successful in the classroom.

**Measuring Outcomes While Working On the Problem**

Many small-scale projects in drama and language arts are conducted yearly by teachers in their own classrooms experimenting with innovated methods of teaching. Small action research projects focus on a variety of ideas using different methods of measurement gauging how students better understand reading and writing.

One study conducted by Horn in an inner city New York high school, features a class of seniors who wrote and produced their own plays. The most noticeable improvement during the yearlong project was increased attendance at school and increased library usage from twenty-five percent of the class to eighty-five percent (2002). Horn concludes that writing personal plays shows increased student engagement
in learning and higher-order thinking skills. Horn collected data through questionnaires given at the beginning and end of the projects (2002).

Wagner studied the impact of role-playing on a specific type of writing, persuasion. Two classes, one 4\textsuperscript{th} grade and one 8\textsuperscript{th} grade, enacted persuasive situations, while another pair of classes received direct instruction on persuasive writing and a final pair of classes received no instruction in persuasive writing but moved directly to the next step, writing a persuasive letter. Wagner measured effects of the three differing types of instructions by rating persuasive letters that all six classes wrote. Data collected revealed that the dramatic activity positively impacted the students’ ability to write persuasively. Students who participated in role-playing created more oral persuasive arguments than other students in the study (2002).

The connection between poetry and drama was explored in a study by Kassab focusing on building better communication skills. A voluntary six-week workshop consisted of twenty-seven tenth grade students and a researcher/teacher. Students wrote poems on a personal self-reflection and then rehearsed and presented an oral interpretation of their poem to fellow workshop participants. Data was collected from two assessments before and after the poetry study, four self-reports and profile questionnaires, and the researcher’s daily log of observations (2002).

The therapeutic community has long believed in reading poetry aloud to encourage oral communication, which further supports the positive effects of drama in the classroom. Though this study is limited it presents encouraging data that dramatizing poetry improves communication skills. Kassab’s study provides valuable information on the workshop format of a unit to effectively combine language arts and dramatic presentations (2002).

In the struggle to improve the gaps in science knowledge among elementary aged children, teachers are encouraged to supplement science and reading instruction. Students should read, write and talk about science (El-Hindi, 2003). The division between reading and science may mend itself through classroom activities like Readers’ Theatre. Children act out ecomysteries centering on an ecological problem revealed in a mystery while practicing reading skills (El-Hindi, 2003). A synthesizing of observation, data collecting and text understanding occurs in this particular type of Readers’ Theatre.
Readers’ Theatre, according to Worthy and Prater, is a growing instructional movement using scripts read by students to increase engagement with reading and literature. Students read a poem, script or story repeatedly and are encouraged to practice at home and then read or “perform” their piece in front of the class. The focus of the activity is on conveying meaning rather than performance. Repeated reading no matter what form it assumes allows students practice in understanding text material. The authors cite prior research that the ability to read fluently is connected with text understanding, but researchers are still questioning the exact nature of the relationship (2002).

**Research’s Next Step**

The next step is obtaining qualitative research examining what is learned in classes experimenting with drama (Palmarini, 2000). This kind of research should not feature teachers’ beliefs on what students learn but what is derived from the experience. Middle and high school students need to observe their own personal reactions and changes from drama and language experiments and enter their findings in journals for later qualitative analysis (Palmarini, 2000).

Johnson, an education professor, advocates drama in the classroom by having students write skits for stories they study. Students gain more meaning out of texts by creating scripts based on text (1998). Imagination reinforces academic objectives through creative dramatics. A more meaningful understanding of material is fostered when students enter a story through a character. Kinesthetic and emotional involvement with ideas through role-playing enhances comprehension of texts. Students are empowered when they assume active roles in learning (1998). Exploration of content and self-reflection on how students experience the content enhances learning.

**Conclusion**

Researchers are working on numerous problems concerning the impact of drama in the classroom from what life skills drama impacts to how to integrate different subjects together through drama. The possibilities of drama positively effecting students in the classroom are countless. One success story of Readers’ Theatre features a shy fourth grade boy reading two years below grade level. When introduced to Readers’ Theatre he changed. He loved pretending to be a character, read his scripts repeatedly at home and eventually improved in reading proficiency (Worthy & Prater 2002). This is just one of
many positive outcomes created by drama in the classroom and discovered through research. Through small action research projects, more stories are sure to surface affirming the place of drama in classroom.

**Method**

**Population**

An opportunity arose to test whether or not role-playing influences text enjoyment and understanding in an average middle school English class. The participating suburban classes consisted of twenty to thirty students. Most kids live in low to upper middle class families. The school is located in a middle class neighborhood where many houses have been built recently and are in subdivisions. Most people attend school, participate in church activities and shop for groceries all in this same area.

The school is in a large suburban neighborhood in the South, which is known for its upper middle class population. Many businesses near the school participate in school projects and fundraisers. The community is proud of its middle and high schools and plays a large role in the school’s excellent reputation. Two classes, one advanced and one average, participated in the role-playing research project with one other class participating as a control group.

**Measurement**

The best research is achieved through strong, reliable methods of measurement. I used two forms of measurement, assessments and participant surveys.

Assessments—Students took a pre-test, interim test, and posttest focusing on understanding and comprehending “Paul Revere’s Ride” (See Appendix B). The tests determined what information was learned during the experiment and if students gained a better understanding of the material after the role-playing skits. Students took one common test three times for the pre-test, interim test, and posttest. I created the test, which featured four short answer questions. Quantitative results helped determine whether or not the role-playing exercise improved text understanding. Repeated use of the tests in three classes ensured reliability of this method of measurement, while two middle school teachers, reviewing the test, determined its validity.
Survey—Students were given a survey made by the researcher concerning outcomes of the role-playing process (See Appendix C). Questions captured students’ opinions on how role-playing affected their learning process and how they benefited from the activity using a Likert scale. Reliability was gained through repeated use of the surveys. Two middle school English teachers reviewed the survey for validity’s sake.

**Intervention**

The intervention occurred during a poetry unit spanning a period of two weeks. The students read through the poem, “Paul Revere’s Ride,” completed activities to encourage reading comprehension of the poem, focused on figurative language found in the poem, and some students participated in an in-class skit adapted from the poem.

The intervention proceeded with the following steps. There was a short introduction, a pretest, and then the class read the entire text together. Students rotated around the room reading a stanza each. As we read students took notes on questions, predictions, and connections they made with the text. The researcher checked for student understanding by stopping after every few stanzas to ask comprehension questions to the class and answer any questions students may posed. A whole class discussion of the material intent on text comprehension and literary concepts followed the reading. Students then discussed in small groups their predictions, connections, and questions. Students worked in their small groups on finding imagery, alliteration, and personification within the poem. Students took an interim test.

The class discussed role-playing in the classroom, and participated in several acting exercises to help students’ comfort level in front of their classmates. Students volunteered for roles from a script adapted from the poem and read through the script several times. When everyone was comfortable with their role, the skit was performed for the class. The role-playing activity and how it relates to and reveals information about the short story was the topic of discussion prior to the concluding post-test and survey.

**Procedure**

The project occurred during my semester of student teaching. Prior to beginning my research project I sought permission from the Institutional Review Board at UTC to involve children under the age of eighteen in my research project. When I began student
teaching I sent a letter home with students informing their parents of my research project of which all results were anonymous.

One class of twenty-five students functioned as a control group for this research project. The class took the same pre-test, interim test, and post-test as the other classes in order to determine if all the classes began, proceeded, and finished at approximately the same levels of understanding. The control group responded to the same questionnaire as the other classes. During the time devoted to role-playing the placebo class completed a project to further explore the poem’s meaning.

Data Collection Analysis
Clift’s research with high school students revealed that students enacting pieces of studied literature perform on the same level as students learning by traditional modes of lecture and discussion. He discovered students in dramatic modes of learning have more instances of higher-order thinking and topic-specific emotions then students in traditional modes of learning (Robbins, 1998).

My research was not so conclusive. Working with three classes who I student taught with, the three classes scored an average score of five, six, and six on the pretest (See Table 1).
Table 1. Average student scores on pre-test, interim, and posttests.

<table>
<thead>
<tr>
<th></th>
<th>1st period</th>
<th>2nd period</th>
<th>3rd period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>low score</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>high score</td>
<td>50</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>average</td>
<td>5</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Interim test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>low score</td>
<td>70</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>high score</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>average</td>
<td>86</td>
<td>61</td>
<td>69</td>
</tr>
<tr>
<td>Post-test</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>low score</td>
<td>75</td>
<td>65</td>
<td>70</td>
</tr>
<tr>
<td>high score</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>average</td>
<td>90</td>
<td>82</td>
<td>86</td>
</tr>
</tbody>
</table>

The three classes began the project knowing nothing about the poem, “Paul Revere’s Ride.” However, once they read and were working with the poem, the classes made much higher scores on the interim test, but the regular, second period class and the control group, third period class made failing average scores on the interim test. The first period and advanced English class scored an eighty-six average on the interim test. All three classes improved greatly from the pre-test, but clearly needed more work with the poem.

Scores jumped dramatically in all three classes from the pre-test to the interim test, but results weren’t so dramatic between the interim test and the posttest (See Figure 1).
Figure 1. Participants’ scores improved more from the interim test to the posttest in 2nd and 3rd periods, the two average eight grade classes.

Students in first and second period took the interim test and then participated in the role playing project, so if the role-playing project increased student understanding of the test, the results should provide proof in the jump between students’ scores from the interim test to posttest. The first period advanced class showed very limited improvement; they scored an average of four points higher on the final posttest as compared to the interim test. The second period class who also participated in the role-playing jumped more drastically scoring an average of twenty-one points higher making an average score of eighty-two on the final test. The control group also showed improvement in their posttest scores, achieving seventeen points higher on their average scores.

With both of the average classes who participated in the role-playing jumping dramatically in their scores from interim to posttest, there was not a significant difference in scores to prove that the role-playing specifically helped students to better understand the text. It is interesting to note that of the two average classes participating in the project, the class who participated in role-playing improved its score four points more then the average class who did not participate in role-playing.
In search of whether or not role-playing improved students’ enjoyment of the poem, survey answers varied greatly (See Table 2).

Table 2. Survey response tallies.

<table>
<thead>
<tr>
<th>Survey questions</th>
<th>Scaled Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>I disagree.</td>
</tr>
<tr>
<td></td>
<td>I agree.</td>
</tr>
<tr>
<td></td>
<td>I strongly agree.</td>
</tr>
<tr>
<td>1. I normally enjoy reading poetry.</td>
<td>5 19 36 10</td>
</tr>
<tr>
<td>2. I enjoyed the poem the first time I read it.</td>
<td>9 34 27 0</td>
</tr>
<tr>
<td>3. I enjoyed the poem more after we discussed it in class.</td>
<td>18 23 27 2</td>
</tr>
<tr>
<td>4. I did not enjoy the poem.</td>
<td>15 34 7 14</td>
</tr>
<tr>
<td>5. I enjoyed the poem the most after the role-playing activity.</td>
<td>9 8 18 13</td>
</tr>
<tr>
<td>6. I enjoyed the poem only because our class did the role-playing activity.</td>
<td>9 20 11 8</td>
</tr>
</tbody>
</table>

Out of the seventy students who read the poem in all three classes studied, thirty-four students did not like the poem the first time they read it. After discussing the poem in class twenty-nine people enjoyed the poem more then from reading alone. The question that is most pertinent to this research study is whether or not role-playing increases student enjoyment of a text. On the questionnaire eighteen students agreed and
thirteen students strongly agreed that they most enjoyed the poem after the creative
dramatics activity (See Figure 2). Only eight out of the forty-eight students who
participated in the study did not enjoy the poem the most after the role-playing activity
then out of the entire learning experience with “Paul Revere’s Ride.”

The survey also included a statement that read, “I enjoyed the poem only because
our class did the role-playing activity.” Students mostly disagreed, but eleven students
agreed and eight students strongly agreed that they only liked the poem because of role-
playing.

Figure 2. Of the students participating in role-playing, thirty-one agreed that drama
improved their enjoyment of “Paul Revere’s Ride.”

Conclusions and Recommendations

Research is limited regarding the effects of role playing in the classroom, but
there are speculations from a variety of different researchers that role playing improves
reading fluency, comprehension, listening skills, and relevance of literature to children’s
lives. Worthy and Prater (2002) cited prior research that the ability to read fluently is
connected with text understanding, but researchers are still questioning the exact nature
of the relationship. This small research project sought to further explore the effects of
drama in the classroom, focusing on how it may improve students’ comprehension and
enjoyment of poetry. The interim test and posttest measured a relatively large jump in
student scores, but only in the two average classes, one of which did not participate in the role-playing activity. The advanced class’ scores did not significantly improve. The differences in score improvement lead me to believe that further exploration with the text and not specifically dramatic activities helped the average classes. More research is necessary to determine the impact that role-playing may or may not have on student comprehension of texts.

The results of the survey are positive steps in proving that creative dramatics increases students’ enjoyment of texts. More students agreed that role-playing improved their pleasure of reading “Paul Revere’s Ride” then those students who disagreed.

As do the professional organizations discussed in the review of literature, I recommend that more research is needed to determine whether or not role-playing impacts student understanding of texts. Such research should be long-term and cover several different texts and role-playing projects. In regards to improving the likeability factor of texts, I believe that whenever a person likes what she or he is reading, they are better able to glean meaning out of it. The results of this research project conclude that students appreciated “Paul Revere’s Ride” more because of creative dramatics.

In conclusion, let me urge classroom teachers to explore their options with creative dramatics. Language arts teachers should experiment with role-playing as a tool to increase comprehension of material and draw students into reading. Professional development is needed to discuss how to find and/or adapt texts into skits. Teachers need to instruct students in reading scripts out loud and adding improvisational elements to their reading interpretations. Drama teachers in schools could lead an improv workshop for other teachers. If teachers are hooked on an idea, they will positively influence their students, and in turn, their students will benefit from better reading comprehension and enjoyment. Grant money is available for all types of art in the classroom, and the Internet is an excellent resource to find script adaptations of materials appropriate for classroom curriculum.
References


Appendix A

Script Adaptation by Margaret Green

Paul Revere's Ride    By Henry Wadsworth Longfellow
Longfellow 1, 2, 3, 4, and 5

Paul
Friend
Woman
Man
Moon
Night Wind
Preamble
The Mystic
Clock
Map
Rooster
Dog
Windows
Sheep
Birds
Pigeons
1st Dead Man
British Soldiers
Farmers
Child 1 and 2
Sentinel
Listen, my children, and you shall hear
Of the midnight ride of Paul Revere,
On the eighteenth of April, in Seventy-five;
Hardly a man is now alive
Who remembers that famous day and year.

He said to his friend,

**Paul:** "If the British march
By land or sea from the town tonight,
Hang a lantern aloft in the belfry arch
Of the North Church tower as a signal light--
One, if by land, and two, if by sea;
And I on the opposite shore will be,
Ready to ride and spread the alarm
Through every Middlesex village and farm,
For the country folk to be up and to arm."

**Lond bang on door.**

**Soldier:** The redcoats! The redcoats!

**Woman:** Get up! It’s the alarm.

**Man:** What? What? I’m awake. What’s the noise?

**Woman:** Get the gun. The redcoats, you idiot!

**Longfellow 1:**

Then he said,

**Paul:** "Good night!"

**Longfellow 1:** and with muffled oar
Silently rowed to the Charlestown shore,
Just as the moon rose over the bay,

**Somerset:**

Where swinging wide at her moorings lay
The Somerset, British man-of-war;
A phantom ship, with each mast and spar...
Across the moon like a prison bar,
And a huge black hulk, that was magnified
By its own reflection in the tide.

**Longfellow 2:**

Meanwhile, his friend, through alley and street,
Wanders and watches with eager ears,
Till in the silence around him he hears
The muster of men at the barrack door,
The sound of arms, and the tramp of feet,
And the measured tread of the grenadiers.
Marching down to their boats on the shore.

Then he climbed the tower of the Old North Church,
By the wooden stairs, with stealthy tread,
To the belfry chamber overhead,
And startled the pigeons from their perch
On the somber rafters, that round him made
Masses and moving shapes of shade--
By the trembling ladder, steep and tall.
To the highest window in the wall,
Where he paused to listen and look down

Pause.

A moment on the roofs of the town,

**Moon:**

And the moonlight flowing over all.

**Longfellow 3: whispers.**

Beneath, in the churchyard, lay the dead,
In their night encampment on the hill,
Wrapped in silence so deep and still
That he could hear, like a sentinel's tread,
The watchful night wind, as it went
Creeping along from tent to tent,
And seeming to whisper,

**Night Wind:** whispering, repeat five times walking around circle.
"All is well!"

**Longfellow 3:** *still whispering.*

A moment only he feels the spell
Of the place and the hour, and the secret dread
Of the lonely belfry and the dead;

**Somerset:**

*For suddenly all his thoughts are bent*

*On a shadowy something far away,*

*Where the river widens to meet the bay—*

*A line of black that bends and floats*

*On the rising tide, like a bridge of boats.*

**Longfellow 4:**

Meanwhile, impatient to mount and ride,
Booted and spurred, with a heavy stride
On the opposite shore walked Paul Revere.
Now he patted his horse's side,
Now gazed at the landscape far and near,
Then, impetuous, stamped the earth,
And turned and tightened his saddle girth;
But mostly he watched with eager search
The belfry tower of the Old North Church,
As it rose above the graves on the hill,
Lonely and spectral and somber and still.
And lo! as he looks, on the belfry's height
A glimmer, and then a gleam of light!
He springs to the saddle, the bridle he turns,
But lingers and gazes, till full on his sight
A second lamp in the belfry burns!

A hurry of hoofs in a village street,
A shape in the moonlight, a bulk in the dark,
And beneath, from the pebbles, in passing, a spark
Struck out by a steed flying fearless and fleet;
That was all! And yet, through the gloom and the light
The fate of a nation was riding that night;

**Somerset -- say lines in bold simultaneously with Longfellow.**

Paul walks outside the circle opposite from friend.

Stomp feet.

Watch eagerly.

**Friend hangs lanterns.**

Paul makes a lap once around outside of circle.
**Preamble:** recite steadily first few words and fade out.

**Longfellow 5:**

And the spark struck out by that steed in his flight,
Kindled the land into flame with its heat.

**The Mystic:**

He has left the village and mounted the steep,
And beneath him, tranquil and broad and deep,
Is the Mystic, meeting the ocean tides;
And under the alders, that skirt its edge,
Now soft on the sand, now loud on the ledge,
Is heard the tramp of his steed as he rides.

**Longfellow 5:**

It was twelve by the village clock
When he crossed the bridge into Medford town.
He heard the crowing of the cock,  
Pause.
And the barking of the farmer's dog,  
Pause.
And felt the damp of the river fog,
That rises after the sun goes down.

It was one by the village clock,
When he galloped into Lexington.
He saw the gilded weathercock
Swim in the moonlight as he passed,

**Windows:**

And the meeting house windows, bland and bare,
Gaze at him with a spectral glare,
As if they already stood aghast
At the bloody work they would look upon.
Longfellow 5:

It was two by the village clock,
When he came to the bridge in Concord town.
He heard the bleating of the flock,
And the twitter of birds among the trees,
And felt the breath of the morning breeze
Blowing over the meadows brown.
And one was safe and asleep in his bed
Who at the bridge would be first to fall,
Who that day would be lying dead,
Pierced by a British musket ball.

(First Dead Man – sits up fast, as if having a bad dream. He gasps.)

Child 1:

You know the rest. In the books you have read,

British soldiers: recite in unison.

How the British Regulars fired and fled—

Farmer(s): in unison.
How the farmers gave them ball for ball,
From behind each fence and farmyard wall,
Chasing the redcoats down the lane,
Then crossing the fields to emerge again
Under the trees at the turn of the road,
And only pausing to fire and load.

Child 2:

So through the night rode Paul Revere;
And so through the night went his cry of alarm
To every Middlesex village and farm—

Paul Revere:
A cry of defiance, and not of fear,
A voice in the darkness, a knock at the door,
And a word that shall echo forevermore!

First Dead Man:
For, borne on the night wind of the Past,
Through all our history, to the last,
In the hour of darkness and peril and need,
Man, Woman, Preamble: *simultaneously.*
The people will waken and listen to hear
The hurrying hoofbeats of that steed,
And the midnight message of Paul Revere.
Appendix B

Name

“The Midnight Ride of Paul Revere”

Please answer the following questions to the best of your ability. This quiz is not to determine if you can answer the right question, but to determine how much meaning the class gained from reading the poem. There are many answers to each question, but you must answer each one in detail. Thank you.

1. Write two or three sentences summarizing the poem.

2. Why do you believe the author wrote about the ride of Paul Revere?

3. List two pieces of evidence from the story that show you this is a narrative poem.

4. Think of another story, movie, or TV show that has a hero. Give two ways that Paul Revere and your hero are alike.
Appendix C

“Paul Revere’s Ride”
Please place an X in the box that most closely reflects your response to the following survey questions regarding your experience with the poem. Thank you for your input.

<table>
<thead>
<tr>
<th>Question</th>
<th>N/A</th>
<th>I disagree.</th>
<th>I agree.</th>
<th>I strongly agree.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I normally enjoy reading poetry.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I enjoyed the poem the first time I read it.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. I enjoyed the poem more after we discussed it in class.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4. I did not enjoy the poem.</td>
<td></td>
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</tbody>
</table>

**Only answer 5 & 6 if your class participated in role-playing the poem.**

<table>
<thead>
<tr>
<th>Question</th>
<th>N/A</th>
<th>I disagree.</th>
<th>I agree.</th>
<th>I strongly agree.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. I enjoyed the poem the most after the role-playing activity.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I enjoyed the poem <strong>only</strong> because our class did the role-playing activity.</td>
<td></td>
<td></td>
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</tbody>
</table>
Integration of Software in the Beginning Latin Classroom: A Case Study

Andrew W. Hampton

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Educ 590
Abstract

In order to enhance the effectiveness of instruction in high school beginning foreign language instruction, instructors may decide to incorporate various computer software tutorial programs into their lesson planning. This type of software may be especially suited for use in beginning Latin classes, where drill-and-response and repetition have been traditional cornerstones of classroom instruction. Comparison of results between two groups of students, one of which received instruction using the *Artes Latinae* Latin software program, and the other of which received a traditional classroom lecture, did not reveal significant differences in performance between the two groups.

Nevertheless, for various reasons I believe that software instruction similar to the program in this study can be a valuable part of the beginning Latin learning experience.
Introduction

One of the key components of foreign language instruction and learning involves repetition. One researcher calls the component of language learning that involves repetition an “intrinsic systematicity” (Schulze, 1998, p. 216). Initially, instructors teach vocabulary and grammar concepts by stressing memorization and drilling, most often with the use of written assignments and tests. One researcher states, however, that “traditional methods of language teaching that treat language as a decontextualized object for linguistic analysis have increasingly come under attack as ineffective” (Blyth, 1999, 39-40). Though many would agree that immersion, speaking a new language and using it to communicate one’s needs, is the best way to become proficient in using the language, for several reasons this technique may not be practical in the beginning foreign language classroom. Grace notes that “(though in the 1970’s) it was assumed that second language words… did not have to be taught explicitly because one could learn words ‘incidentally’” (Grace, 1998, p. 533), over time this use of immersion has fallen out of favor with instructors who now stress vocabulary acquisition as a primary and not a secondary focus of foreign language classrooms (Grace, 1998). One pair of researchers has identified the varying ages of students (“at what age language classes start” Dylak & Kaczmarska, 2001, p. 35) and the variety of foreign language instructional methods (“how they should be taught” Dylak & Kaczmarska, 2001, p. 35) to be just two factors that can produce questions of feasibility for instructors. In most classrooms, the teacher will be the only individual present with any meaningful level of skill in the relevant foreign language, so, aside from repetitive call-and-response drills, engaging students
orally means interacting with each one on an individual basis, a time-consuming task that can prove to be an inefficient use of both teacher’s and students’ time. With factors such as “learning aptitude, age, learning styles, and environments” (Vitanova, 2000, p. 53) contributing to the somewhat overwhelming variety of instructional choices, teachers must choose carefully the best components of their instructional plans. With the introduction to grammar, syntax, and vocabulary so time-consuming, teachers may find simply that they do not have enough of this commodity to dedicate to immersive activities like engaging in conversation or introducing students to significant art, daily life, and other features of the culture in question. In order to enliven the classroom and enhance students’ level of interactivity with the subject matter, teachers would benefit from employing methods beyond the classic chalkboard drills and written homework assignments that facilitate the memorization and repetition processes. As one author has stated, “it is beneficial for teachers to have an appreciation of the range of options available… and what the learning curve and effectiveness of each option is likely to be” (Godwin-Jones, 2002, p. 10).

These constraints may be especially apparent in the teaching of beginning Latin. Since Latin is such a highly inflected language, there are many more forms to memorize than exist in most of the modern languages that instructors commonly teach at the middle- and high school levels. Also, since Latin is a defunct language that no modern culture speaks, immersion in this language, as teachers normally define the process, is quite unwieldy and artificial. In the beginning Latin classes I have attended and, observed, and taught, students often opt to seek extra help no matter how many quizzes they take during regular class or how many homework drills they complete and review;
though in many cases students seek this help on their own initiative, the process still can be a drain on the time and resources of both student and instructor. Although they may be earning high grades in the class, many students might not feel confident in their learning of the language and could be eager for even more feedback concerning their progress than an instructor already is providing. The absence of any learning experience outside of memorization no doubt bores some students to the point where they decide to forego further studies in Latin after their first year of the subject, even though they may have displayed proficiency and understanding through respectable coursework.

**Problem Statement**

One teaching tool that could prove beneficial in the foreign language classroom is computer tutorial software that tests students’ knowledge of vocabulary and grammar rules. In a prior study, researchers identified such factors as computer literacy levels, the user-friendliness and applicability of software, and the ability of the programs to diagnose specific user weaknesses and problem areas as primary points of concern when rating the usefulness of particular software (White & Palfreyman, 1994). Language software can create databases of students’ scores on various lessons so that they can quantify their own progress and relate potentially vague learning goals with scores that do not represent tests, but are still objective measures of each pupil’s progress.

Considering how to enliven the classroom experience for students and even make homework less of a burden than it may seem, instructors might decide that utilizing the computer is one method of enhancing the experience of learning for beginning Latin students and providing instructors with easily interpretable, immediate feedback on students’ progress. Of particular use is tutorial software that gives students the
opportunity to utilize a tool with which most of them are comfortable and some quite skilled. Such a program exists in software published by Bolchazzi-Carducci Publishing Company. The software, *Artes Latinae*, provides a program for learning first year Latin that emphasizes vocabulary and grammar drills in proportions similar to what instructors have traditionally taught in classrooms. The advantages for students would include ease of use, instant feedback, storing of results for future reference, and interaction with a tutorial program that relies not on pen and paper but on a medium with which the student has fond associations.

For the instructor, the use of tutorial software to complement and augment typical teacher-student instruction and interaction might prove beneficial in several ways. Just as the students could utilize the relevant program to obtain instant feedback on progress, the teacher could consult the collection of results that students compile to monitor what topics the students are mastering with ease and what areas need further classroom reinforcement and review. Furthermore, the teacher could save the results that the students accumulate from using the software and completing the computer-graded drills, in the process introducing some type of friendly competition among students that might be less objectionable than comparing various students’ in-class graded tests and assignments. In this fashion mastering course material might take on some of the aspects of a game, encouraging students to see that what they perceive as work has elements of fun and enjoyment. One researcher has published a brief “beginner’s guide” to incorporating web sites into the foreign language software experience (Lally, 1998).

As Karen Masters-Wicks points out in her article on the subject, “providing students with interactive, authentic materials in the target language enhances interest and
learning in the language” Masters-Wicks, The College Board, Postlewaite, Lewental, & The City University of New York, 1996, p. 221). With its ease of use, immediate feedback, and ability to make drills and testing of recall game-like (through presentation of running scores and complete records of students’ progress), this tutorial software could add excitement to the learning experience and enhance students’ motivation to master the subject. Utilizing teaching software such as the *Artes Latinae* program in the Latin classroom could represent a step towards instilling this appreciation of the manifold benefits of learning in students.

For adolescent students, memorizing words from a book over and over and then attempting to remember them for tests can quickly become an activity of mindless repetition. What one student works assiduously to memorize one week the same student may forget entirely soon after taking a test over the material. Using tutorial software on the computer, students would be able to complete lessons sequentially while also being able to navigate a menu of exercises that would allow them immediate access to subject areas and lesson topics that are presenting them difficulty.

Introducing variety to the process of memorizing and drilling through use of the computer could increase students’ retention of material. Exposure to this new type of instruction also could enhance their ability to recall words and grammatical concepts that they learn at the beginning of the school year on comprehensive final examinations that typically occur months after the original introduction of the material. With the ability of the software to save results and provide cumulative tallies of a student’s achievement level as coursework progresses, the teacher and the student can work together to emphasize particularly troublesome vocabulary lists such as those involving third
declension nouns or challenging grammatical and syntactic concepts such as the use of the subjunctive mood in contrary-to-fact conditions.

Privacy is another benefit of the use of the tutorial software. Students can access the program for purposes of unrecorded practice in which they may receive instant feedback from the computer concerning any wrong answers they give and the correct response, without feeling the pressure of receiving a graded test or homework assignment or dealing with peer pressure during in-class drills. Dylak and Kaczmarska (2001) found this flexibility one of the main attractive features of multimedia presentation of class material: “Multimedia allows children to learn by interacting with the environment. Depending on their abilities, skills, and interests pupils can choose their own level of interaction” Dylak & Kaczmarska, 2001, p. 36).

Ultimately, implementation of Computer Assisted Language Learning software in the high school Latin classroom may lead to increased learning on the part of the students. My hypothesis is that if students utilize this tutorial software in the course of their studies in beginning Latin, they will exhibit enhanced knowledge on the particular topic of Latin future-tense verbs as measured by mean test scores that are higher than those of students who receive traditional classroom instruction. To study this possibility, I will pre-test a group of students concerning the future tense forms of Latin verbs. Next, half the students will receive instruction using the Artes Latinae program, and half will receive traditional classroom instruction with lecture followed by drill and response exercises. Finally, the two groups will come back together to take a post-test over the relevant material. Statistical analysis will show whether either group meaningfully outperformed the other.
Review of Literature

Several types of studies reported in the literature are available concerning the use of Computer Assisted Language Learning, or CALL, software in the foreign language classroom. Some qualitative studies record observations of students’ behavior as they are using the software, and then these articles report on researchers’ observations as well as subjects’ attitudes concerning their experiences with the tutorial programs (e.g., Dylak & Kaczmarska, 2001). Also, a considerable number of reports in the literature exist dealing with the aspects of producing such software and the various concerns of students and instructors that software designers must strive to address (see Vitanova, 2000, for an example of this type of research). Other studies, such as that of White and Palfreyman, examine specific aspects of the software in question and attempt to ascertain how effective the program is in advancing students’ abilities to successfully learn and utilize the relevant second language (White & Palfreyman, 1994). Additionally, some of the literature reflects the opinion that CALL software is merely one aspect of computer technology that instructors can utilize to enliven the learning experience for students of foreign language and maximize retention of vocabulary and grammar concepts. Studies by Seedhouse and Hulstijn mention the question of integrating CALL software into the total language experience (Hulstijn, 2000, and Seedhouse, 1996). One theme that runs throughout much of the research is that neither software designers nor teachers in the foreign language classroom have begun to realize fully the potential of technology to enhance foreign language learning or most effectively implement this powerful tool in the educational process.
The use of the computer to reinforce traditional teaching methods and enhance the learning experience for student and teacher is becoming commonplace. One author predicts that even those instructors not planning to interweave computer-based learning into their curriculum will need to be well-versed in the use of computer-assisted learning materials in order to fulfill the requirements and expectations of superiors, professional peers, and most crucially, their students (Godwin-Jones, 2002). After deciding to implement computer-based learning techniques in their classrooms, teachers often have a choice of different types of software to use. Some programs are based on traditional drill-and-response, while others such as Rosetta Stone attempt to create the same immersive experience for Latin students that other programs in the same series accomplish for beginning speakers of French, Spanish, Italian, and other modern languages. Additionally, instructors with the requisite skills may decide to create their own programs to enhance language learning through use of the computer (Ariew, 1991).

One question related to the research of computer-assisted language learning concerns the manner in which students greet the prospect of using this medium to enhance their studies. While observing children and their friends using CALL programs on a computer or watching video tapes of instructors teaching the foreign language in question, researchers noted: “children easily learned new words and phrases and were very accurate in repeating them” (Dylak & Kaczmarska, 2001, p. 35). Students in a second semester French class “expressed unanimous enthusiasm for the intuitive, interactive nature of the lessons” (Masters-Wicks, 2001, p. 20). The students expressed enthusiasm for this type of supplemental study and registered surprise at the degree to which tutorial software could make doing language drills entertaining (Masters-Wicks,
Unfortunately, this study did not produce any empirical evidence to support the claim that the interactive software actually increased comprehension skills in students of French (Masters-Wicks, 2001). Still, these same students “demonstrated better understanding of some key concepts and increased cultural awareness and appreciation” (Masters-Wicks, 2001, p.20). This project was ongoing at the time of publication, with the author stating that eventually instructors would strive to integrate the interactive computer-based lessons fully into the course syllabus (Masters-Wicks, 2001). Without question, computer software cannot serve as a complete substitute for a traditional, live instructor (Vitanova, 2000).

Unlike the English language, Latin is highly inflected, or as one writer describes it, “modular” (Kershenbaum, 1987, p. 139). Another writer points out the “systematicity” (Schulze, 1998, p. 216) of forming Latin words and applying grammar and syntax rules. To form various words and parts of speech the Latin student applies different endings to bases. Although the permutations of possible bases and additions can seem overwhelming initially, the system of stems and endings that typifies the language lends itself well to organized, repetitive drilling (Kershenbaum, 1987). This practice and repetition is one type of exercise that the computer can simulate and present to the student.

In modern language classes, one technique for teaching vocabulary involves a sort of secondary introduction to vocabulary words. Instead of presenting the student with a list of words that the instructor expects the pupil to memorize and define on a test, the teacher attempts to engage the student in conversation using the subject language. Even if no actual dialogue occurs, the goal of this type of exposure to the subject language is to expose the student incidentally to important vocabulary items in the hopes that
experiencing the words in actual conversation will bolster the student’s tendency to effectively learn, or at least memorize, the vocabulary (Grace, 1998). Current foreign language textbooks, however, seem to place increasing emphasis on the direct learning of vocabulary through memorizable lists, with any reinforcement of the vocabulary being the responsibility of the student to complete as extracurricular work. (Grace, 1998).

For the beginning Latin student, the type of incidental exposure available through conversation-type exchanges is less important than the emphasis that instructors must place on learning inflections and understanding the modularity of Latin words as they change forms to reflect grammatical changes (Kershenbaum, 1987). Searching for a method to augment students’ exposure to the language while providing some form of variety to the often mechanical process of memorizing words from a traditional text, the teacher might very well look to computer-assisted language learning software. A CALL software program can mimic the type of verbal exchanges that introduce vocabulary incidentally, that is without explicitly providing the student with a translation of the second language into the readily recognizable first language. A tutorial program may grade a student’s work on a particular exercise while withholding a list of first-language translations, or the software may simply delay presentation of the answers until the student completes the entire set of exercises (See Blyth, 1999, for different evaluative methods in the available software).

If the drills incorporate vocabulary within the structure of a sentence or paragraph, “perhaps (the) CALL environment can bridge the gap (between memorization and inference) by promoting inferencing while providing translations” (Grace, 1998, p. 538). In fact, one of the primary benefits of CALL software is that it can encourage the
student not only to develop the ability to make correct guesses or inferences but also to verify the degree to which such inferences are appropriate or correct (Grace, 1998). Findings in Grace’s study suggest that “sentence-level translations may promote retention of correct word meanings” (Grace, 1998, p. 541).

One aspect of the tutorial software that could increase its usefulness to students as they advance in their studies of a particular second language is its scalability. As the researchers note, “as L2 (second language) learners develop their lexicon and knowledge of the structure of the (second language), they will become less reliant on the (first language) as a means of either accessing appropriate schema or of providing confirmation of meaning” (Grace, 1998, p.541). One aspect of the power of the CALL software is the ease with which instructors can modify how much access the student has at given levels of study to the native language translation: “it may be assumed that at higher levels of proficiency, (second language) learners can not only process the (second language) information more deeply, but can make correct inferences more easily as well” (Grace, 1998, p. 541). One concluding comment that accompanies this study is that researchers still wish to examine just how well the software does work with advanced students who may have little or no need of verification of their answers in their native language (Grace, 1998).

In designing CALL software, the research identifies several main areas of concern. First, the designer of CALL software should integrate the presentation of vocabulary and grammar with relevant facts about the traditional use of the language and at least introduce the inclusion of the vocabulary and grammar points in a presentation of increasingly complex sentence structure and thought formation (Hogan-Brun, 1998).
This aspect of the software should be adjustable so that beginning students or those pupils exhibiting difficulty with basic words and concepts do not feel overwhelmed by the amount of material they must process and the speed with which the tutorial program presents it. One technique that an instructor can use to enhance tutorial software is to create a web-page that augments the CALL program by compiling a list of obscure vocabulary and difficult grammar concepts, so that students can contribute some opinion concerning what aspects of the new language that they are learning provide the most difficulty (Lally, 1998). This type of a dual set-up between CALL software and course web page can “enhance language learning” (Hogan-Brun, 1998, p. 456) and provide students with an additional form of reference help to consult when they encounter stumbling blocks in the process of mastering the new language.

In order to maximize the ease of use of the tutorial program and consequently increase its effectiveness, the designer must emphasize order and present material in a logical progression. One researcher who designed CALL software for use in French classes created lessons consisting of “overview, practice, and guess meanings” (Masters-Wicks, 2001, p. 220), with a fourth segment that involved matching sentences in French with motion-captured video segments. The point of ordering material in this manner is to increase the comprehension of students, whether it be reading or listening (Masters-Wicks, 2001). According to Masters-Wick (2001), with the tremendous amount of choice potentially available within each lesson of the CALL software, along with the fact that teachers can assign CALL lessons in any order they deem appropriate, the software becomes a powerful tool “tailor made to specific classroom needs” (Masters-Wicks, 2001, p. 221) and “(that provides) students with interactive, authentic materials in the
target language (that) enhance interest and learning in the language” (Masters-Wicks, 2001, p. 221).

The instructor who decides to use CALL software in the foreign language classroom should choose what tutorial programs are appropriate using criteria such as the ones Bader sets forth (Bader, 2000). The software must reinforce relevant skills and competencies the instructor desires to foster while acknowledging the foundational knowledge that each student brings to the exercise (Bader, 2000). Also, the software must encourage and reinforce the cognitive processes that each student must develop in order to become proficient in the second language (Bader, 2000). Ideally, the tutorial software achieves this second function at the level of the interface, allowing students to interact with the software in a manner that encourages them to progress in their studies (Bader, 2000). Ultimately, the instructor will have to assess the utility of the CALL instruction by quantitative methods such as test scores while also interviewing students to discover to what degree they feel the tutorial programs are helpful (Blyth, 1999).

Method
Population: The population of this study consists of 26 students in a first year Latin class at a Hamilton County public high school in the city of Chattanooga, Tennessee. The students are boys and girls ages 14-15. At this particular school, all ninth grade students begin foreign language study, choosing between Latin, French, and Spanish. The Latin class that includes the population of this study meets four times a week, with three class sessions 50 minutes in length and the fourth meeting for ninety minutes. None of the students involved in this research had IEP’s or any physical disabilities that prevented them from participating fully in the study or required that they receive special accommodations to use the computer software or any other learning tool the rest of the
group might have used during the research. All students completed student assent forms and parental consent forms (see Appendix A for copies of these consent forms).

**Measurement:** In order to measure the effectiveness of software instruction versus traditional classroom lecture and practice, I administered a pretest covering the subject of formation of future tense of Latin verbs. The pretest instrument (instruments appear in appendix B) consisted of 15 Latin verbs that students had to translate to English and 15 English verb phrases that students translated to Latin. During the next class period after the pre-test, I used a random number generator to assign the students random numbers from 1 to 26, and with these numbers I divided the class into two groups of 13 students each. Various student absences during the three day research period forced me to reduce each group to its final size of ten students each.

I next gave ten of the students one hour of instruction on the topic of Latin future tense verbs using relevant materials from the *Artes Latinae* software program. Since the developers of the software divide the product into frames, or discrete screens of information, I was able to collect the most useful material for the topic in question, order the screens in the way I deemed most appropriate, and present it to the students as a self-contained lesson on the future tense. The other ten students received one hour of classroom lecture and practice using materials that I compiled from *Latin Via Ovid*, which was the primary textbook for this first year Latin course. I developed this one-hour lecture utilizing the students’ assigned textbook and exercises from the accompanying workbook. While I worked with the students who were using the software, the other ten students completed a written assignment; during the following class the
experimental group completed the written assignment while I delivered the lecture to the control group.

During the next class after the students received their respective future tense lessons, I post-tested the entire group using an instrument that was identical to the pre-test in every respect (Appendix B). In the case of both the pre- and post-test, students had precisely 30 minutes to complete the instruments. I did not allow students to turn in work early, and all students finished the instruments within the time I allowed. After I collected the tests, I graded them and compiled statistics that were relevant to the question I researched, whether or not the group that has exposure to the software would show meaningful difference in their level of mastery of the future tense forms than the group that received traditional classroom instruction.

Since the test instrument is usable by any Latin class, both pre- and post-tests should be reliable as indicators of student learning. In choosing which parts of *Artes Latinae* to use for this project, I recorded the numbers of the frames that I presented to the students, so other instructors could repeat this procedure if they choose. The test instruments are valid because the individual questions reflect material to which this particular group of students gained exposure, and the questions reflect information that is relevant to the focus of the research.

**Procedure:** Initially, I received consent for administering the pre- and post-tests and giving the various types of instruction from the classroom teacher with whom I was working as a student teacher. In order to secure permission for students’ participation in this project, I collected consent forms from the parents of the students and from the students themselves. I informed the students that their performance on these tests could
not hurt their grade, but that active participation in each class would result in meaningful extra credit for each student. Below is a timeline of the research procedures.

**Time Line of Procedures:**

**Week One:** Gain permission for study from classroom teacher and distribute various consent forms.

**Week Two:** Collect consent forms and inform students when the three day period of the study would start.

**Week Three, Day One:** Administer Pre-Test

**Week Three, Day Two:** Give software instruction and deliver classroom lecture to the two groups of students

**Week Three, Day Three:** Administer Post-test

**Data And Analysis**

In order to test the hypothesis that students receiving instruction with the *Artes Latinae* software tutorial program would have higher average post-test scores than students receiving traditional instruction, I used a t-test for equality of means. In this experimental situation, the null hypothesis was that students in the experimental group, the ones receiving the software instruction, would in fact **not** score higher on average than the students in the control group who remained in the traditional classroom for the hour-long instructional period. If the t-test statistic were less than or equal to .05, then I would reject the null hypothesis and conclude that in this instance there was a statistically significant difference between the mean performance of the two groups. All scores are
out of a possible 75 points. The full listing of individual pre-and post-test scores for the 20 students that formed the two groups is in the data table appearing in Appendix C.

The pre-test mean for the experimental group was 55.7, while the pre-test mean of the control group was 55.4. In order to measure whether there was some non-random relationship between scores within the two randomly chosen groups, I performed a paired samples test. The statistic that I obtained from this test was .05, indicating that there was no special relationship between scores within the two groups. This fact allowed me to assume equal variances within the two groups, so I was able to perform a conventional t-test for equality of means between the post-test averages of the two groups.

The post-test mean of the experimental group was 65.0, while the post-test mean of the control group was 68.4. Since the control group mean was actually higher than the experimental group mean, I concluded that I had to accept the null hypothesis, that the software users did in fact not score higher on average than the students who received the type of classroom instruction I term conventional. Performing the t-test for equality of means, I obtained a statistic of .510, well above .05, the threshold for rejecting the null hypothesis. Accepting the null hypothesis of the experiment, I concluded that the mean of post-test scores of the students who had access to foreign language instructional software was not better, significantly or otherwise, than that of students who got conventional lecture and blackboard practice in this situation.

**Conclusions and Recommendations**

The t-statistic of .510 indicates that there was not a significant difference in the means of the post-test scores for the two groups of participants. So in this instance, the use of tutorial software did not give participants studying formation of Latin future tense
verbs an advantage over those students receiving traditional classroom instruction concerning this topic.

Both groups of students as a whole scored much higher on the pre-test than I expected. I believe a larger population than the one to which I had access might have yielded different results. Also, the students all seemed to have a firm understanding of the concept of the future tense as it relates to English verbs, so translation was quite straightforward for them as long as they were familiar with the specific vocabulary items that each question contained. If I had tested them over the imperfect tense, the pluperfect tense, or perhaps the formation of passive voice verbs, I believe the pre-test scores would have been lower on the whole than the scores I obtained when evaluating the students’ mastery of the Latin future tense.

Also, time constraints forced the experiment to take place over several class periods, instead of several weeks or, ideally, a full semester. With an elongated period to expose students to the software, I may have been able to detect differences in aptitude and retention between members of the two groups of students. As I have studied the language over the last three decades, I realize that there is no substitute for memorization and repetitive practice of forms. Perhaps this software has not incorporated enough of this repetitive practice into its menus, and as a result the program may not have supplanted the traditional methods of classical language learning yet.

The students who had access to the software agreed that this type of study represented a welcome change from the daily routine of classroom lecture and drill-and-response practice. The positive comments that students made after they used the *Artes*
*Latinae* program would give me as an instructor additional incentive to integrate the software into a first year Latin curriculum.

One caveat concerning the use of this type of educational material is cost. In order to comply with the rules of the company who publishes *Artes Latinae*, I had to purchase a copy of the software for each student who used the program. Hopefully, schools that opt to try this type of software could obtain a better deal on the product than I did, or perhaps acquire some type of grant to test the software in particular classroom settings.

Since block-scheduling is increasing in popularity in the county in which the study took place, teachers will be looking for ways to vary classroom instruction and provide students with a variety of challenges that will engage them and prevent boredom within the learning environment. Provided that schools have the technological resources to present this type of instruction to students, I believe that the use of foreign language software tutorial programs can give instructors a valuable tool to enhance student learning and enrich the process of foreign language acquisition for students.
References


Appendix A
Parental Consent Form

Dear Parent or Legal Guardian:

My name is Andrew Hampton and I am a graduate education student at the University of Tennessee at Chattanooga in the College of Health, Education, and Professional Studies. I am currently working as a student teacher in Mr. McCall’s Latin class at Soddy Daisy High School.

As part of my academic requirements, I must conduct a research project designed to test different instructional methods in the classroom. Your child will be studying the exact same material and be tested in the exact same way as all other students; however, different instructional methods will be used for different groups of students in the class to convey this information. The test scores from each group will then be used to compare these instructional methods for purposes of this research. Your child’s name and any identifiable information will not be used, so privacy and confidentiality will remain intact.

Should you have any questions, please feel free to contact me at school at (423) 332-8828. You may also contact my university supervising professor, Dr. Sandy Watson, at (423)425-4237. or Dr. Helen Eigenberg, Chairperson for the Institutional Review Board for Protection of Human Subjects at the University of Tennessee at Chattanooga at (423) 425-4270.

Sincerely,

Andrew W. Hampton
Student Teacher, Soddy Daisy High School

Please return this bottom portion if you grant permission for your child’s participation in this research study.

I, _____________________________ give permission for my child
Please print parent/guardian’s name
_______________________________ to participate in a research project carried out by
Please print child’s name
Andrew W. Hampton, a student teacher from the University of Tennessee at Chattanooga.

THIS PROJECT HAS BEEN REVIEWED BY THE INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS AT THE UNIVERSITY OF TENNESSEE AT CHATTANOOGA.
Appendix A
Student Assent Form

We are doing a research project concerning the use of computer software in the foreign language classroom. A research study is a way to learn more about people. If you decide that you want to be part of this study, you will be asked to take a short test concerning Latin verb forms. Next, you will receive instruction on the specific topic covered on the test. Finally, you will take a brief examination to gauge the change in your knowledge level before and after the instruction. The entire process will take portions of three class periods, and you will not need to leave school grounds to participate.

There are some things about this study you should know. Although some of you will receive a different type of instruction from others, you all will receive the same amount. No one will be prevented from studying and receiving instruction upon subject matter that is a part of the course. There will be no risks to your health or causes of physical or emotional discomfort due to participation in the study.

There are potential benefits in the study that not everyone will receive. A benefit means that something good happens to you. However, every participant will receive instruction and every participant will earn a homework grade of 100 for participating in the study. If you do not want to be in this research study, we will make sure that you receive all the necessary instruction on the topic that is the focus of the course during the study.

When we are finished we will write a report about what was learned. This report will not include your name or that you participated in the study.

You do not have to be in this study if you do not want to be. If you decide to stop after we begin, that’s fine also.

If you decide you want to be in this study, please sign your name.

I, __________________________, want to be in this research study.
(print your name here)

__________________________ Date: __________________________
(sign your name here)

THIS PROJECT HAS BEEN REVIEWED BY THE INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS AT THE UNIVERSITY OF TENNESSEE AT CHATTANOOGA.
Latin One Quiz: Future Tense Forms

Instructions: for the following Latin verbs, provide the person, number, tense, and translate the verb:

1. amabit
2. narrabo
3. formabimus
4. monebitis
5. amabo
6. clamabis
7. laudabunt
8. dabimus
9. docebo
10. affirmabis
11. debent
12. habeбит
13. ambulabitis
14. monstrabunt
15. simulabo

Instructions: translate the following English verbs into Latin:

1. He will love:
2. We will have:

3. I shall form:

4. they will owe:

5. they will walk:

6. we shall teach:

7. I will affirm:

8. you (all) will have:

9. We will show:

10. You (sing.) will walk:

11. You (pl.) will love:

12. I shall give:

13. you (sing.) will strengthen:

14. I shall owe:

15. You (pl.) will love:
Appendix C

*Pre-Test and Post-Test Scores of Students Participating in the Software Tutorial Experiment*

Following is a table showing the grades that each of the twenty participants received on the pre- and post-tests:

<table>
<thead>
<tr>
<th>Participant Number</th>
<th>Pre-Test Score</th>
<th>Post-Test Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>60</td>
<td>66</td>
</tr>
<tr>
<td>2</td>
<td>69</td>
<td>75</td>
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<tr>
<td>3</td>
<td>49</td>
<td>61</td>
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<td>73</td>
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<tr>
<td>11</td>
<td>72</td>
<td>74</td>
</tr>
<tr>
<td>12</td>
<td>30</td>
<td>56</td>
</tr>
</tbody>
</table>
Comments: All scores are out of a total of 75 points. Bold numbers indicate members of the experimental group, the group that received the software tutorial.

Null Hypothesis: Students who receive software instruction instead of traditional classroom instruction will show no significant difference in the mean of their post-test scores.

Mean of Experimental Group Pre-Test Scores: 55.7
Mean of Control Group Pre-Test Scores: 55.4
Mean of Experimental Group Post-Test Scores: 65.0
Mean of Control Group Scores: 68.4
Level of Significance: .05

t-test for Equality of Means Statistic: .510
Result: Null Hypothesis must be accepted: no significant difference between the groups is apparent.

Legend:

Mean: total of scores divided by number of group participants

Level of Significance: statistical reference point selected to accept or reject the null hypothesis

t-test for equality of means statistic: 5% or .05 proposes that any event can occur due to chance more than 5% the time is probably due to sampling error and conversely, if the statistic can occur due to chance less than or equal to 5% of the time, it is probably not sampling error, but something real.
Attitudes and Knowledge of Current Events in a
Social Studies Classroom
Jeremy Henderson
University of Tennessee at Chattanooga
Abstract

This study tests student attitudes and level of student knowledge relating to current events and the news. The 37 participants are 8th grade students in a suburban school setting in Hamilton County, Tennessee. Data on current events knowledge and student attitude were measured with a printed survey and questionnaire. Results point to a severe lack of current events knowledge and attitudes that undoubtedly affect seeking out the news by these participants. The results of this study seem to require a reassessment of the features of a complete education and the role that current events should play in the education system.
Introduction

I remember a current events class offered at my high school. Unfortunately, I was never able to fit it into my schedule. During U.S. and World History lectures, I often thought how parts of the topic paralleled similar issues in a contemporary situation or developing news item. Rarely did the teacher or a student make these connections. I constantly thought that history was a more dynamic and more relevant subject than the manner in which it was presented.

Why are discussions and activities on current events not readily found in the history classroom? Lack of time? Lack of interest? Fear of delving into controversial topics? Regardless of the reasoning, my contention is that using current events as a tool in the history classroom is essential—essential to students’ understanding of history, essential to developing critical thinking, and essential to creating effective citizens who care about what is going on in the world because they know it is pertinent to their lives. The study of current events creates an active view of history—a view that events do not occur in a vacuum. Rather, events occur in an interconnected manner. The importance of helping students maintain this interconnected view cannot be underestimated, especially as globalization brings us into increasing contact with other cultures and nations. Unfortunately, I have regularly witnessed via formal and informal observation students struggling to understand and to see the interconnectedness of today’s world and of historical antecedents and events. Students must have opportunities to find the relevance of these historical events in terms of today’s experiences. This can be achieved more readily through the increased use of current events in the classroom.
A number of monographs and reports have addressed the efficacy of using current events in the classroom (Street, 2002; Anderman and Johnston, 1994; Holt, 1990; Ravitch and Finn, 1987). Something as simple as using the newspaper in the classroom is reported to increase achievement levels in mathematics, social studies, science, and art (Davey, 1985).

Using current events is undeniably an important part of the curriculum in certain subjects, particularly the social sciences. In reviewing Tennessee’s standards and benchmarks on History education, it is clear that the inclusion of current events by the teacher into the classroom is of extreme importance in meeting achievement goals. One of the Tennessee State Board of Education’s eighth grade performance standards is that the student is able to “interpret a historical event from multiple perspectives” (2001, standard 8.5.tpi.7). I propose that the use of current events fosters an increased ability to view and analyze situations from various perspectives. Similarly, the ability of students to be able to “recognize examples of stereotyping, prejudice, conformity, and altruism in early American history” (8.6.spi.3) can be increased when comparisons with contemporary examples are encouraged.

Tennessee standards for grades nine through twelve have even more examples where current events usage would be essential. Tennessee U.S. History standard 5.2 requires that a student “investigate domestic and foreign policy trends since 1968” while requiring students to “design a policy responding to a contemporary domestic or foreign issue” (2001). A sample task at this level is to write to government officials at local, state, and federal levels asking questions regarding major contemporary issues, compile the responses, and generate their own chart outlining the top 10 major issues. Students then
discuss and debate these issues. The Tennessee standards and benchmarks obviously necessitate the use of current events as a teaching tool in the history classroom. Review of other state standards reveal similar requirements, some more explicit in their use of news than others.

The primary research question for this study is what does a particular sample of students know about current events and what are student attitudes toward current events and the news? Other important questions include: What are the types of news media these students use? What are his or her news-seeking behaviors? How often do these students seek out the news?

Review of Literature

As with most academic issues, debate on the nature and the methods of teaching history has been raging for years. Is the study of history simply the study of people, places, and events that have had significant effects? Is historical interpretation and controversial issues to be avoided until college? Are teachers to stand at their podiums and spout off facts that students “should” learn? Despite disagreements, most people involved in the debate can agree that one of the purposes of studying history is to “prepare the citizen and to cultivate the person” (National Council for History Education [NCHE], 2002, p. 5).

Some studies point to the fact that American students lack basic knowledge related to governmental institutions and what has been labeled core civic principles (National Assessment of Education Progress, 1983; Ravitch and Finn, 1987). History cannot be studied in isolation if educators are to achieve the goal of making effective citizens (NCHE, 2002). History teachers have to show the ways in which we find the
connections between past and present. One of the best ways to achieve this is to give appropriate attention to current events, current issues, and the news.

In all the literature reviewed for this study it appears that integrating current events into the curriculum is a positive step. Some evidence suggests that integrating current events into the curriculum increases general interest in current events outside of school (Holt, 1990). On the other hand, a study by Johnston, Brzenzinski, and Anderman that compared 1500 students in grades 6 through 12 who watched Channel One at school with 1500 students who did not watch the daily programming found no difference in behavior deemed as “news-seeking,” which is defined as searching out news sources at home or talking about news with others (1994). Studies of Channel One, whether they have positive or negative results, should not be extended into the debate over using current events in general due to the highly contentious and politically charged nature of that particular news outlet.

In his book, *The Newspaper: A Reference for Teachers and Librarians*, DeRoche (1991) refers to research that indicates a number of trends:

1. students who use newspapers earn higher scores on standardized achievement tests, especially in reading, math, and social studies
2. students “overwhelmingly” support the use of newspapers in the classroom and have a positive attitude toward reading newspapers
3. awareness of and interest in current events has been increased through the use of newspapers in the classroom

Turner (1995) makes the following suggestion regarding general current events integration:
1. Develop student interest in and curiosity about the news so that they really want to be informed.

2. Help students identify those news media that they can best fit into their routines on a regular basis and that they enjoy and can learn from.

3. Develop students’ basic knowledge and understanding of the nations of the world and of national and world leaders so that students understand what is happening and the importance and relevance of events as they occur.

4. Empower students by giving them a sense of their own impact and responsibility.

Available literature also suggests a plethora of integration techniques exist for current events. Some are as simple as using the local newspaper for a multitude of activities (Street, 2002; Morse, 1981; Davey, 1985). Street suggests using the fishbowl strategy to model how conversations about current events should look (2002). The fishbowl strategy helps focus the attention of students not immediately involved in the conversation or debate. As the group discussing the current event sits center-stage (the "fishbowl"), other students observe the action from outside the fishbowl. To keep the observers engaged they are asked to evaluate the conversations in the fishbowl based upon some criteria. For instance, observers may keep a tally and description of new points made by those in the fishbowl. This technique provides a framework and model for classroom and cooperative activities that require conversation.

Other activities suggested by Street include “mapping” the sequences of a news story that is still developing. This group activity involves the inclusion of maps and ongoing additions to a timeline; the activity ends with a news “broadcast” by each group to
the classroom. This allows students to be active in seeking up-to-date news, make
decisions of what to include in their “broadcast,” consider the format of the student-
created media, write a script, and develop visual aids (2002).

More complicated activities include the living newspaper theater, which is based
on an actual government-funded program in the 1930s (Chilcoat, 1996). The Living
Newspaper Theater can emphasize social, political, economic, and scientific conflicts.
The theater project is intended to expose students to historical primary and secondary
sources as well as problem solving in current complicated issues (usually of national
significance). This method requires an extensive time commitment, making it practical as
a project among several educators and for satisfying objectives for multiple subjects
(1996).

In general, the available literature supports the integration of current events into
the classroom, especially in the social sciences. It seems that each educator must
determine whether or not current events have a place in his or her classroom and
determine his or her desired goals for such integration. As described in the introduction
of this paper, most state curricular guidelines and standards include using news media as
a vital part of history and social studies. Therefore, it behooves the educator to assess his
or her use of current events in the classroom.

Method

Participant Selection Criteria
The population for this study included 37 participants, all of whom were enrolled
in an 8th grade U.S. History course at the time of the study. Of the participants, 15 are
male and 22 are female. Of the 15 males, 3 are Hispanic, 4 are Black, and 8 are White. Of
the 22 females, 2 are Hispanic, 5 are Black, and 15 are White. This sampling constitutes
16.3% of the entire eighth grade in the selected school. The school is located in the Hamilton County education system in southeast Tennessee. The school is located in a suburban setting. The students receiving Free/Reduced Lunch Assistance in the 2004-2005 academic year school-wide is 46.91%. The population of the broader town community is 90% white at the 2000 census, but informal evidence (observation of community members I spoke to) suggests that minority populations have increased in recent years.

The sample of students was selected from two class periods. This group was chosen because they had average test scores in U.S. History for the first half of the 2004-2005 school year in comparison with other potential subjects. Classes at this school are unofficially grouped by ability due to the nature of the school’s inclusion program, so choosing individuals with similar ability was made simpler. I observed and instructed all potential participants over a 6 week period before selecting the sample. I found that the 2 classes from which the sample was drawn to be academically in between 2 other classes of potential participants. One was noticeably above the level of the eventually chosen sample and the other was noticeably below the level of the chosen sample. I wanted a sample of average or slightly above average participants for this study so that results would hopefully represent the “typical” 8th grade student in the county education system while avoiding results more consistent with higher and lower achieving students.

Data Collection Methods and Instruments

The current events survey included 18 statements of personal opinion regarding news media. Following each statement were the letters A, B, C, D, and E. This
instrument is categorized as an attitude survey based on a Likert scale. The instructions of the survey provided information as to what each letter indicated:

For each of the statements below, please indicate the extent of your agreement or disagreement by circling the appropriate letter next to the item. Circle “A” if you strongly agree with the statement. Circle “B” if you moderately or “sort of” agree with the statement. Circle “C” if you are not sure of your level of agreement or disagreement or if you cannot answer. Circle “D” if you moderately or “sort of” disagree with the statement. Circle “E” if you strongly disagree with the statement.

Letters were chosen over numerals to avoid possible confusion of the numbers having some hierarchical value, which would have had the potential of confusing the participants (see Appendix A for complete Current Events Survey).

The second instrument was a current events questionnaire. The current events questionnaire served two functions: to gauge the types of news the participants have knowledge of (whether political, sports, or entertainment news) and measure where the participants receive their news (see Appendix A for complete questionnaire). The length of both instruments was based upon the length of tests and quizzes this group of participants were generally accustomed to.

Listed below are the 17 questions posed to the sample group in the questionnaire:

1. Name one of the nations affected by the December 2004 tsunami.
2. Who administered the oath of office at this year’s Presidential Inauguration?
3. Give the estimated death toll of the tsunami.
4. Which ex-president died last summer?
5. Who was George W. Bush’s opponent in the 2004 presidential election?

6. Name a European country that was against the war in Iraq.

7. Who was the Iraqi dictator captured in Dec. 2003?

8. In which state did same-sex marriages become legal in May 2004?

9. Which European nation suffered a terrorist attack at a railway station in 2004?

10. In which nation was a school seized and over 300 hostages killed last year?

11. Just as its 20 year civil war seemed to be near an end, another conflict began taking place in this African country’s western region between Arabs and black Muslims.

12. The leader of this nation admitted to the pursuit of weapons of mass destruction and submitted to full UN weapons inspections in 2004.

13. This singer, pianist, and composer who died in the summer of 2004 was known for his tunes that combined gospel, blues, country, and jazz.

14. The head of the Palestine Liberation Organization (PLO) who died near the end of 2004.

15. This team made a surprising four game sweep in the 2004 World Series.

16. This team won the 2004 Super Bowl.

17. This performer was involved in a lip syncing controversy near the end of 2004.

Procedure

Some explanation of how correctness was awarded on the open-ended questionnaire is necessary. In the cases of proper names, the investigator accepted last names. First names were not counted as correct. The question of the estimated death toll of the December 2004 tsunami was counted correct if the response fell in between the
figures of 100,000 and 300,000. In the instance of a misspelling, the answer was considered correct if the investigator could decipher of the intentional answer.

Data was collected during two thirty-minute sessions in which the participants responded to both the current events survey and the current events questionnaire. Directions were given orally by the investigator and printed at the top front of the survey/questionnaire sheet. Every participant completed both the survey and questionnaire in the allotted time.

Results

Figure 1 shows the results of the current events survey (see appendix A). The total of those participants who either strongly agreed with the statement or moderately agreed with the statement were combined. Similarly, the total of those participants who either strongly disagreed with the statement or moderately disagreed with the statement were combined into one number.
Figure 1. Number of participants who agreed or disagree with each statement.

Figures 2 and 3 summarize the results from the current events questionnaire (see appendix A). Figure 2 gives the total number correct responses to the corresponding question. Figure 3 shows the percentage of the participants who correctly answered the corresponding question.
Figure 2. Number of correct responses for numbered item on questionnaire out of 37 participants.

Figure 3. Percentage of correct responses for each questionnaire item.
Figure 4 shows another set of results from the current events questionnaire (questions 18-21). The graph shows the total number of sources of news that each participant claimed he or she used in an average week and the source of that news.

Figure 4. Total news sources and type of news sources for each participant.

Discussion of Results

Generally, the results of this survey were not surprising. I observed and taught the participants of this study in the two U.S. History classes in which they were enrolled over a seven-week period prior to the survey. During lessons, I often mentioned current events or events that had happened in the past decade. Generally, these students appeared to have little or no knowledge of current events beyond sports and entertainment news. Most knew something about “big news” that had recently occurred or were ongoing (the tsunami, the 2004 presidential election, and other news in the past year that was given attention for extended periods), but they knew very few details of such events, as evidenced in the questionnaire results. Readers are directed to the appendix A for all statements on the survey, but a discussion of selected statements and findings follow.
First, statement # 4 is “I have conversations with friends about the news.” A majority of the participants disagreed with the statement. As the survey and questionnaire will show, most of these participants do not seek out news in the first place so having conversations relating to such topics would be difficult. Similar results were found regarding conversations with family about the news (statement # 5 on survey). Despite the evidence that a majority of this sample does not converse with other individuals about the news, a majority still thinks news affects their life (statement # 6 on survey).

Surprisingly, a majority of those surveyed do not receive their news from the Internet. Of the survey participants, only 13.4% reported they used the internet for their news. Of course, this does not account for other uses of the internet (entertainment, communication, etc.), but internet use in general, though untested, appears to be low among these participants. In comparison, data from the U.S. Census Bureau show that 68.3 percent of children aged 11-14 use the Internet, but there is a digital divide along demographic and socioeconomic line (Debell & Chapman, 2003). This discrepancy between the national average and the apparent lack of internet use can be accounted for by the low level of internet access within the school itself and perhaps at participants’ homes due to socioeconomic and demographic factors that affect internet use, namely education level of parents, as detailed by Debell and Chapman (2003). The computer lab at the participants’ school was closed after the 2003-2004 academic year due to funding issues. In an informal, undocumented survey of these participants during regular instruction, only about one-quarter responded that they had Internet access at home.

Sixteen of the 37 participants agreed that they were bored by the news (statement # 3). Regardless, a majority reported that they think they know what is going on in the
world (statement #12), and a majority said they thought the news was applicable to their life (statement #13). Unfortunately, 51% was unsure if the study of current events is necessary to study history.

The results of the current events questionnaire are rather surprising. Results show little knowledge of the news of the past year. The questions were nearly all selected from the “big events” of 2004; hearing about these events was nearly unavoidable in mainstream media sources at the time of their happening. Figures 2 and 3 summarize the results. Not surprisingly, the participants correctly answered the entertainment and sports related questions in higher numbers than those categorized as politics or world news. Only three questions were answered correctly by a majority of the participants. These three (# 5, 16, 17) related to the 2004 presidential election, the 2004 Super Bowl, and a lip syncing controversy on the popular late-night show Saturday Night Live. The highest percentage of any correctly answered question was just 64.7% of the participants, which were the results of the question about the victor of the 2004 Super Bowl.

Only five participants (13.5%) put the death toll of the 2004 tsunami, which was still a prime-time news story at the time the questionnaire was administered, between 100,000 and 300,000 (question # 3). About one-fifth (21.6%) of the respondents not only thought Osama Bin Laden was a leader in Iraq but also that he was captured in December 2003 (question # 7). Only one respondent correctly identified Massachusetts as the state that had legalized same-sex marriage in May, 2004. Nearly one-fifth (18.9%) believed that California had allowed for these marriages. Only four participants could identify the European country that had a railway station targeted by terrorists in 2004 (question # 9).
Some incorrect responses to this question were Iraq, Russia, and New York City. The question explicitly stated that the attack was in Europe.

Figure 4 summarizes the finding of questions # 18-21 on the questionnaire regarding the participants’ news sources. Television and radio were the overwhelming sources of news for these participants. The number of times per week the participants reported they used televisions as their source for news totaled 88 for all participants. Still, the average number of uses of television as a news source was 2.38 times per week. The total number of radio sources was 78 with an average use rate of 2.11 times per week. Newspapers and internet sources were reported at lower levels—31 uses per week for newspaper and just 20 Internet uses. That makes the average use rate per week 0.84 for newspaper sources and 0.54 uses per week for the Internet. The average of all types of news sources per week was 5.86. Three individuals reported their use of these news sources at 0 per week. Just six respondents reported the use of 10 or more news sources per week.

Conclusion and Recommendations

This particular study was obviously limited by the quantity and demographic characteristics of the participants. Studies using larger samples and different demographics should be conducted. In addition, the measurement instruments could be more diverse. Time did not allow for more extensive use of instruments. Other beneficial instruments in a longer study include student journals, pretests and posttests, and attitude surveys administered at regular intervals. Past and present student grades would be useful for determining comparability of potential subjects.
Further study may include a focus on how current events are being used in an entire education system (local or state), rather than at sample schools. Additionally, a study should be conducted in schools that include a period of intervention that makes use of the aforementioned techniques and strategies. Measurement should be taken of any change in student attitude, student interest, and student knowledge resulting from the intervention period. This sort of study could indicate whether positive changes regarding current events can be made through curricular measures alone or if factors not controlled within the school are insurmountable.

The results of this study point to a frightful reality: students in certain settings know little about current affairs and do not seek out the news regularly. The number of these news-seeking opportunities is, of course, dependent upon age, socioeconomic conditions, and priorities of the parents, priorities of the school and its teachers, and existing student attitudes about current events. As educators, we cannot change all these factors, but we can change our priorities of what we deem necessary for a proper education and then act on those priorities. Though this was a limited study of a specific sample, it is indicative of the situation that this investigator has informally observed time and again with middle and high school aged students in the Hamilton County education system. I suspect that similar results could be found in school systems in many parts of the state and country.

A number of recommendations can be made. Once an educator has decided that increasing current events use in their classroom is necessary, they need only do a basic Internet search to find a plethora of current events activities. Alternatively, many techniques already used by educators for regular lessons can be modified for use with
current events and news. Mock debate, mock trial, simulations, jigsawing, journal writing, drama, map activities, diagrams, graphic organizers, research projects, graphic displays, and general analysis of news items are just a few of the types of activities a teacher can use to integrate current events into his or her classroom. As discussed, the literature is very positive about the potential effects of these techniques.

Based upon the results of this research, the educator must find ways to engage student thinking and interest in current affairs. Before simply integrating current events and news, teachers in the social sciences should present a brief unit on how to read the news, how to assess the accuracy of reports, and why everyone should be interested in current events both in and out of the classroom. Some students may be “turned off” to the news and current affairs by the bewildering volume of news available and its multiple formats. Therefore, students should know that news must be “read” whether it’s from internet, radio, television, or print sources like everything else we read in our schools—finding the main points, discerning flaws, ignoring the extraneous.

An integral part of bringing current events into the classroom is regular readings and discussions; both students and teachers should decide the format of such discussion. Perhaps most importantly, the teacher should regularly integrate current events that are pertinent to each lesson. For example, if the teacher were teaching about the Black Hand’s connection to World War I, it would make sense to discuss the Al Queda organization and its role in current political and social events. Being able to interpret historical events from multiple perspectives is not only required by Tennessee state standards but it is an integral part of increasing analytical skills. Obviously, some lessons and units will have no relevant connection to current issues, or the educator simply lacks
the time for proper integration in certain lessons due to time constraints and the curriculum map. It is acknowledged that this may often be the case, but that does not allow us to dismiss current events in our classroom altogether.

To increase news-seeking behavior outside of class the educator should make appropriate homework assignments that use news media found at home or in the library. Teachers may consider having a current events reading area in their classroom, especially if opportunities and news resources are low at home or elsewhere in the school. To increase interest in current events generally, the educator should be as prepared as possible to relate how news items are connected to the particular lesson or unit of study. Increasing general knowledge of current events is an ongoing process not just for the individual educator but for the entire school community.

As mentioned, each educator must decide his or her level of commitment to integrating current events into their lessons. At the very minimum, some attention should be given to pertinent topics on a weekly basis as they are relevant to the curriculum. A teacher who can appropriately integrate current events into every lesson will be doing a great and much needed service for their students. Of course, appropriate integration takes work and thoughtfulness on the part of the educator, but this study demonstrated it is not only worth the challenge but also quite crucial for students’ education. Hopefully, the educator is supported by his or her school in the integration process. Regardless, it is apparently worth the effort if student knowledge, student interest in current events, and analytical proficiency are increased.
Appendix A: Instruments

Current Events Survey

Instructions:
For each of the statements below, please indicate the extent of your agreement or disagreement by circling the appropriate letter next to the item. Circle “A” if you strongly agree with the statement. Circle “B” if you moderately or “sort of” agree with the statement. Circle “C” if you are not sure of your level of agreement or disagreement or if you cannot answer. Circle “D” if you moderately or “sort of” disagree with the statement. Circle “E” if you strongly disagree with the statement.

1. Knowing about current events and keeping up with the news will help me in school. A B C D E
2. I hear, watch, or listen to the news every day. A B C D E
3. I am bored by the news. A B C D E
4. I have conversations with friends about the news. A B C D E
5. I have conversations with family about the news. A B C D E
6. I do not see how the news affects my life. A B C D E
7. I will need to keep up with the news and current events for my future career. A B C D E
8. I think the news is all bad news. A B C D E
9. I enjoy watching the news on television. A B C D E
10. I enjoy reading the news internet. A B C D E
11. I read news magazines to get my news. A B C D E
12. I think I know what is going on in the world. A B C D E
13. I do not think the news applies to my life. A B C D E
14. I think studying current events are an important part of education. A B C D E
15. I do not think that studying current events is necessary to study History. A B C D E
16. The news I watch, hear, or read is usually accurate. A B C D E
17. I am more aware of local news than I am of national and world news. A B C D E
18. I am more aware of national and world news than I am of local news. A B C D E
1. Name one of the nations affected by the December 2004 tsunami.

2. Who administered the oath of office at this year’s Presidential Inauguration?

3. Give the estimated death toll of the tsunami.

4. Which ex-president died last summer?

5. Who was George W. Bush’s opponent in the 2004 presidential election?

6. Name a European country that was against the war in Iraq.

7. Who was the Iraqi dictator captured in Dec. 2003?

8. In which state did same-sex marriages become legal in May 2004?

9. Which European nation suffered a terrorist attack at a railway station in 2004?

10. In which nation was a school seized and over 300 hostages killed last year?

11. Just as its 20 year civil war seemed to be near an end, another conflict began taking place in this African country’s western region between Arabs and black Muslims.

12. The leader of this nation admitted to the pursuit of weapons of mass destruction and submitted to full UN weapons inspections in 2004.

13. This singer, pianist, and composer who died in the summer of 2004 was known for his tunes that combined gospel, blues, country, and jazz.

14. The head of the Palestine Liberation Organization (PLO) who died near the end of 2004.

15. This team made a surprising four game sweep in the 2004 World Series.

16. This team won the 2004 Super Bowl.

17. This performer was involved in a lip syncing controversy near the end of 2004.

18. How many times a week would you say you read the newspaper?

19. How many times a week would you say you watch the TV news?

20. How many times a week would you say you listen to news on the radio?

21. How many times a week would you say you read the news on the internet?
Appendix B: Data Tables

Table 1. Current events survey results.

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<th>C</th>
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Table 2. Current Events Questionnaire results.

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Effects of Purposeful Writing Activities on Handwriting

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Introduction

As a parent of elementary age students, my children and I were excited at the beginning of the school year. My son and daughter had high hopes for the knowledge and skills that the year would bring. Throughout the year, we worked hard on our studies. Sometimes we faced problems, sometimes we did not, but we always faced them head on. But, the most consistent difficulty we have faced is with handwriting. My daughter is progressing with her beginning handwriting, but will face new additional challenges next year in first grade. On the other hand, my son and I quickly found out that spelling words and dictation sentences are not the most fun things to write.

As a school volunteer, I also noticed that my son was not alone when it came to handwriting difficulties. Many of the other children in his class were also struggling. Their journal entries were often hard to read and their weekly dictation sentences were not any better. Tests were hard to grade and papers sent home were hard to read. When I asked his teachers to recommend ways that I could help him with his writing, the only comment I received was to try writing for a purpose (ex: letter to friend or relative, signing card, and writing notes). After interviewing more teachers and receiving a few other suggestions, I became very interested in searching for ways to help students with their handwriting.

This interest in handwriting has peaked my curiosity and sent me exploring for ways to help students and teachers succeed in the handwriting endeavor. I have searched for creative ways to help students who are struggling with their handwriting. I have also searched for ideas that will fit into the everyday curriculum that can get the students excited about practicing their handwriting skills.
Description of the Problem

Handwriting has been an issue for many years, especially at report card time. Children often dread looking at their handwriting mark on their report card. Teachers often dread making negative comments on report cards. Even a search of recent educational literature confirms a lack of interest held in handwriting issues. If you look for magazines that are dedicated to handwriting, you probably will only find some that have articles on handwriting in them (occasionally). Over the last twenty years, handwriting interest has decreased and given way to a much more important aspect of education—written composition. The focus on composing has promoted important and positive changes in literacy acquisition.

The ability to write provides important advantages for a child. Children who complete handwriting legibly can have improved confidence and self-esteem and can more creatively express themselves. On the other hand, if a child is having difficulty they may become discouraged and feel frustrated.

Another issue to deal with is that manuscript is usually taught when children initially enter school. Within two to three years, it is gradually replaced by cursive handwriting. Children who are still mastering the manuscript skill often try to imitate the writings of older children and adults (who are using cursive). This can lead to confusion and frustration when the child can not write as they see others writing (why can’t I write like that or why do I have to learn this way?).

All of these issues and concerns have led me to my research on handwriting. I believe that research would add much needed information to this issue and would benefit
students and teachers. The hypothesis that I will test is that if I incorporate purposeful writing (letters to family or friends, stories with accompanying pictures, and creating poems) into the handwriting curriculum, then it will have a positive effect in my student’s handwriting.

**Review of Literature**

Learning handwriting is not an easy task for an elementary school student. It is not an easy task to teach. Many years ago, I experienced handwriting instruction for approximately twenty minutes daily. Traditionally, handwriting was taught as a separate subject. Today, the school day on the elementary level is already too overcrowded to make room for special time for handwriting instruction and handwriting is integrated throughout the curriculum.

Over the last twenty years, handwriting interest has decreased and given way to a much more important aspect of education—written composition. The focus on composing has promoted important and positive changes in literacy acquisition. Handwriting is a mechanical process that needs to be viewed in its role as supporting composition rather than an end in itself. It is time for handwriting to be viewed in its rightful position, as a support tool for writing. Once we understand the value of handwriting, it becomes clear that legibility in communication is the real purpose of handwriting (Spillman, 1994).

But why should handwriting be taught? Handwriting is a means of communication and a way to convey messages to others. Throughout history, the process of communication through handwriting has been altered according to the changing needs, values, and technology of society. Technology is also playing a role in handwriting. We
do not all have word processors, or if we do they cannot be carried around conveniently, or they need special arrangements for use. Handwriting needs to be taught so that we can effectively communicate to others and express ourselves. General legibility becomes a key objective in handwriting rather than a specific methodology to increase legibility as emphasized from a basal test (Ediger, 1999).

One comparison study of computer-based and traditional approaches to handwriting revealed that traditional approaches (pen and paper) demonstrated significant improvements and are more effective than computer-based approaches (Roberts & Samuels, 1993). Although the use of word processing has clearly increased in recent years, beginning writers still do most of their composing by hand.

Another study assessed the causal role of handwriting in early writing development. First grade children who were experiencing difficulty with handwriting were provided supplemental handwriting instruction and then were assessed in immediate and long term effects of the instruction. The findings indicate that handwriting is indeed causally related to learning to write. Students who received supplementary handwriting instruction outperformed their counterparts who received phonological awareness instruction on measures assessing not only handwriting, but writing skills as well. Handwriting gains were measured six months later and no change was found. Handwriting instruction resulted in immediate, as well as, more long-term improvements in students’ compositional fluency skills (Graham, Harris & Fink, 2000).

The ability to write provides important advantages for a child. A child who completes their handwriting legibly has improved confidence and self-esteem, increased concentration on content, improved academic performance and the increased ability to
express themselves creatively in social and cultural contexts. Millard & Marsh (2001) found that emphasis on technical accuracy and neatness in handwriting limits the role of drawing in children’s construction of text. They also suggest that this has adverse consequences for the development of pupil confidence, particularly boys.

On the other hand, a child who has difficulty with handwriting struggles with simple pencil-and-paper tasks and is likely to become discouraged when they attempt to complete more demanding assignments. This can also cause feelings of frustration. A significant correlation has been found between a child’s ability to perform in-hand manipulation tasks and handwriting performance. As the child’s ability to perform in-hand manipulation improves, their handwriting skills will also improve (Naus, 2000).

Possible causes of handwriting difficulties can be attributed to poor wrist stability, poor hand muscle development and pushing a child into handwriting before acquiring the necessary development skills. Using activities that are appropriate and motivating for each student is critical in facilitating successful handwriting. Teachers should be aware that procedures in the classroom can also influence the effectiveness of handwriting instruction. Simple things like good posture, positioning of the paper, displaying models of good writing, and providing immediate feedback can help increase handwriting success (Naus, 2000). Teachers who are informed about handwriting difficulties and prewriting skills can assist their students in many ways.

Classroom writing experiences can also serve affective purposes by fostering curiosity, alleviating anxiety and promoting confidence (Guillaume, 1998). Handwriting experience may be most successful when they address varied audiences, are of consequence to the writer, and take a variety of forms. By focusing on journal entries,
writing prompts, poems, brain writing, pictures with stories, and short stories you can build on the student’s knowledge and enhance their handwriting skills.

Other ways to inspire students and their handwriting is to ask students to draw pictures and write accompanying stories. Drawing pictures come naturally to children and can ignite the imagination of the child. Even if they start with a scribble, wonderful handwriting and writing can emerge (Cushman, 2002).

All children do not learn at the same pace. There will always be students who lag behind in their handwriting skills. The worst thing you can do is single them out for more dreary practice with tracing or copying worksheets (Power, 1998). Several contradictory studies debated the question of whether instruction should include copying handwriting models or tracing dots that gradually faded away, Askov & Gregg (1975) settled the issue with the finding that copying is superior to tracing for practice. Repetitious worksheets can cause children to develop negative attitudes and begin to hate writing in all forms. With a positive attitude, the teacher can change students’ attitudes and even encourage them to improve their handwriting. Children like to be challenged and try new ideas, it keeps their attention focused on the task at hand, can help to improve their handwriting, and with improvement comes children sharing their work (Power, 1998).

Teale & Martinez (1986) state that children connect things with the daily routines of the classroom or day-to-day activities like communicating with each other. They also found that writing for functional purposes is an important bridge into the forms and processes of writing to others. Examples of functional purpose writing would be writing
to pen pals, creating shopping lists and menus, writing notes to a family member or teacher, and signing greeting cards.

Meyer (1993) stated that teachers may see richer, more authentic, and more powerful student handwriting results if teachers allow them to write from their own agendas rather than from the teacher’s agenda. Creative writing time and activities including creating lists, captions, and journal writing can help the student be successful.

Cox (1985) states that the overall aim of a handwriting program is to guide children to develop a handwriting technique which enables them to easily produce a legible and fluent personal style. Children should be encouraged to develop a personal style that is both pleasing to themselves and easily ready by others. Children need a relaxed technique and style of handwriting that they can produce with confidence and sustain for increasingly longer periods of time. By practicing using appropriate materials, developing writers gain confidence and ability to produce a legible style that will help them communicate through writing. In order to do this, children must be taught the value and importance of handwriting as an effective tool for communication.

Research on the value of using blank or unlined paper is inconclusive. However, blank surfaces are probably best for beginners because it is not restrictive. Although some children may prefer lines, writing on blank paper is recommended for practice at all stages of development. Children should also be given the opportunity to experiment with a variety of writing implements (felt pens, color markers, color pencils and pens) at all development stages (Koenke, 1986).

Handwriting, even at its earliest form, is a means of communication. We convey messages to the receiver and hope that this person understands our true meaning. In
order for our true message to be received, the complete message must be readable. With the focus on handwriting in the elementary grades, and the introduction of purposeful writing activities, the children will be posed for greater success in school.

**Method**

*Measurement*: My research study population will be two Kindergarten classes in Hamilton County, Tennessee. Each class consists of nineteen students with an equal mixture of boys and girls. The students have no history of severe language difficulties, no severe attendance or behavioral problems, no diagnosed neuromotor disabilities, and have had previous instruction in handwriting. The students from the classrooms were selected for the study as a whole class and not because of their current handwriting abilities. Handwriting criteria will be the readability and legibility of the students’ work plus a comparison of work before, during, and after the study.

I worked closely with another Kindergarten teacher whose class is the placebo group. This class did not receive special handwriting instruction, but was asked to practice their handwriting on unlined paper with pencils, as regularly planned by the teacher. No special handwriting activities were assigned to this group. Unlined paper was chosen because the students currently use unlined paper in their classroom.

My class was the control group and received the handwriting treatment. Over a period of four weeks, the students were asked to complete letters to their family members, draw pictures and write accompanying stories, write recipes and shopping lists, write about a subject of their choice, write about what they would do with one hundred dollars, write their alphabet, write a Valentine poem, write the things they would do if they were President, write about when they grow up, and write about their favorite toy or
pet. We also used different writing utensils (markers, colored pencils, pens, pencils, and crayons) on lined and unlined paper. See Table 1 for specific tasks and utensils.

Both groups were asked to write their alphabet and story with accompanying picture before any of the above activities begin on lined paper with markers. These activities were used as a comparison for classes to verify that they are similar in abilities at the beginning of the project. At the end of the project, all students were asked to write a note to a family member or teacher on lined paper (with a choice of writing utensil). This activity was used to compare the improvements and similarities of both classes at completion of all other handwriting activities.

Time line of procedure

Week 1 Parental consent forms and survey sent home
Week 1 Parental consent forms and surveys returned
Week 2 Student assent forms signed
Week 2 All students write alphabet (lined paper with markers)
Week 2 All students write story with accompanying picture (lined paper with markers)
Week 2 Control group only, Valentine poem (lined paper and pencils with picture)
Week 3 Control group only, Story time (unlined paper and colored pencils)
Week 3 Control group only, Recipe and shopping list (construction paper and markers)
Week 3 Control group only, Alphabet (unlined paper with choice of writing utensil)
Week 3 Control group only, If I Were President (lined paper and pencils)
Week 4 Control group only, With $100 I Would (unlined paper and colored pencils)
Week 4 Control group only, It is Tuesday (lined paper and pencils)
Week 4 Control group only, My Favorite Toy Is (unlined paper and pencils)
Week 4 Control group only, When I Grow Up, I Want To (unlined paper and markers)
Week 4 All students write note to family member or teacher (lined paper with choice of writing utensil)

Instruments

Appendix A Parental Consent Form
Appendix B Student Assent Form
Appendix C Parental Handwriting Survey
Appendix D Rating Form
Table 1 Specific Tasks
Data Collection and Results

Data was collected throughout the time period above (four weeks) and between the hours of 9 a.m. and 10:30 a.m. at center time. After the data was collected, my cooperating teacher and I reviewed the work and graded the papers compared to previous work. The papers were judged (by two raters) based on any improvement made. The scores were averaged together and the determination was made if any improvement was made for the student during this activity.

The results for the placebo group did not vary, with little improvement made from the start of the project to the end. The results were mixed for the control group. Some students have shown improvement in some activities, but not in all activities. Other students did not show any improvement in any of the activities. However, there were seven students who consistently made progress through all of the activities.

There were three activities that consistently had the greatest improvement in handwriting by all of the students. If I Were President, the Valentine poem, and With $100 I Would were the activities that the students all had an improvement in their handwriting. Two of these activities were on lined paper and used pencils as the writing utensil. The other activity (With $100 I Would) was completed on unlined paper using colored pencils as the writing utensil. All three of these activities were rated as showing some improvement or higher. The Valentine poem activity was conducted in the second week and was very successful, with 68% of students showing improvement. I did not originally think this activity would yield high results because it was on lined paper with pencils. I believe the improvements were evident because this was a poem written for parents on Valentine’s Day.
The number of students whose handwriting improved on individual activities ranged from one to thirteen. There were thirteen (of 19) students that improved their handwriting during the Valentine poem activity. Twelve students improved on the activity With $100 I Would, and eleven improved on If I Were President. The next highest improvements shown were six students on the Recipe and Shopping List and the Letter to the Family Member. There were five activities with five or fewer students showing improvements and the activity receiving the fewest amount of student improvement was My Favorite Toy. My Favorite Toy surprises me with the low improvement percentage because I originally felt the students interest would be peaked with this activity.

Of the nineteen students in the control group, seven (three females and four males, 36.8% of the class) were consistently improving in handwriting during the activities. The rest of the class, twelve students, made no improvement overall in their handwriting. For a complete listing of activities and improvements made (if any) please see Table 1.

Conclusions and Recommendations

Although I had hoped that a higher percentage of the students would have made improvements in their overall handwriting, there was over one-third that did make improvements consistently over all the activities. There were also specific activities that helped the students make improvements in their handwriting. All of the students did like the variety of activities, as well as, the chance to use a variety of utensils and paper. Therefore, purposeful handwriting had a positive affect on my students handwriting.
I also took the work completed by the students and placed it in an individual student folder, starting with pre-project handwriting and continuing throughout the project. When looking through this folder, one can get an idea of activities that help the students make improvements in their handwriting. You also can view the overall improvement that the students have made throughout the entire project. Not all children learn at the same pace, and not all children can make improvements in all activities. There are activities that will peak some children’s interest, while the same activity will not interest another student. The key to continued improvement is to find the activity that will peak the individual student’s interest and to provide a wide variety of activities for all of the students.

My hope is that teachers use a wide variety of activities to help improve their student’s handwriting skills. This project has shown that a wide variety of activities, using a variety of utensils, can help students improve their handwriting skills.

I believe that there can be additional research completed on the use of purposeful handwriting in the classroom. The research could include any new, exciting activities and additional utensils to help peak student’s interest. The research must also be sensitive to the fact that students have a variety of activities throughout their day which limit the amount of time that additional activities can be introduced and completed. Additional research would be beneficial to all teachers at the elementary grade level.
References


Appendix A

Parental Consent Form

As a part of my graduate program and student teaching requirements at the University of Tennessee at Chattanooga (College of Health, Education, and Professional Studies), I plan to investigate the effects of incorporating purposeful handwriting activities into the handwriting curriculum with elementary grade students. During this research project the students will be asked to use various writing utensils (markers, pens, pencils), use lined and unlined paper, write stories with accompanying pictures, write journal stories, write menus and shopping lists, and write letters to family members and teachers.

Participation in this study is voluntary. There are no risks to your child associated with this investigation. All information will remain strictly confidential, and will be recorded without your child’s name or any identifier. Although the descriptions and findings may be published, at no time will your child’s name be used. You are at liberty to withdraw your consent to the study and discontinue participation at any time without prejudice. If you have any questions regarding this research, you may contact me at Lookout Valley Elementary School, 423-825-7370. My university sponsor is Dr. Sandy Watson and she may be contacted at 423-425-4237. If you have any questions after today, please feel free to contact Dr. Helen Eigenberg, Chairperson of the Institutional Review Board for the Protection of Human Subjects at the University of Tennessee at Chattanooga at 423-425-4270.

______________________  Principal Investigator

I, ____________________ affirm that I have read and understood the above statement and have had all of my questions answered.

Date: ____________________

Signature: ____________________

Witness: ____________________
Appendix B
Student Assent Form

I, ____________________, agree to allow my class work from class to be included in Mrs. Hicks academic work as required for student teaching by the University of Tennessee at Chattanooga (College of Health, Education, and Professional Studies).

This research will consist of incorporating various purposeful handwriting activities into the curriculum and studying the effects of the activities on the student’s handwriting.

Participation in this study is voluntary. I understand that all my work will remain private and that any date recorded will be non-identifying. All information will remain strictly confidential and your name will not be used. You can withdraw your consent and discontinue participation at any time without prejudice.

Student __________________ Date ______________
Witness ________________ Date ______________
Mrs. Hicks ________________ Date ______________

THIS PROJECT HAS BEEN REVIEWED BY THE INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS AT THE UNIVERSITY OF TENNESSEE AT CHATTANOOGA
Appendix C

Parental Handwriting Survey

Dear Parents:

Please take a few minutes and complete the survey below. We are working with our students on their handwriting and using different purposeful activities to aid their progress. This survey will help us in our handwriting study.

What writing utensil does your child like best? (circle one)

Markers  Colored pens  Pens  Pencils  Felt tip pens  Crayons

Does your child like to color and draw pictures? (circle one)

Yes  No

Does your child like to hear and tell stories?

Yes  No

Does your child have a favorite pet or toy? If yes, what is it?

__________________________________________________________________________________

Which type of paper does your child like to use best? (circle one)

Lined  Unlined
### Appendix D  Rating Form

<table>
<thead>
<tr>
<th>Activity</th>
<th>Writing Utensil</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date/Week</th>
<th>Rater 1</th>
<th>Rater 2</th>
<th>Average</th>
<th>Improvement Made?</th>
<th>Y or N</th>
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</thead>
<tbody>
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</tbody>
</table>

**Rating Scale:**

1. Work sloppy and not readable
2. No improvement made in work
3. Some improvement made
4. Significant improvement made

Rater 1

Rater 2


### Table 1 Specific Tasks and Improvement Percentage

<table>
<thead>
<tr>
<th>Activity</th>
<th>Paper</th>
<th>Writing Utensil</th>
<th>Group</th>
<th>** Improvement %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alphabet</td>
<td>Lined</td>
<td>Markers</td>
<td>All</td>
<td>*</td>
</tr>
<tr>
<td>Story With Picture</td>
<td>Lined</td>
<td>Markers</td>
<td>All</td>
<td>*</td>
</tr>
<tr>
<td>Valentine Poem</td>
<td>Lined</td>
<td>Pencils</td>
<td>Control</td>
<td>68% (13/19)</td>
</tr>
<tr>
<td>Story Time</td>
<td>Unlined</td>
<td>Pencils</td>
<td>Control</td>
<td>26% (5/19)</td>
</tr>
<tr>
<td>Recipe and Shopping List</td>
<td>Construction Paper</td>
<td>Markers</td>
<td>Control</td>
<td>32% (6/19)</td>
</tr>
<tr>
<td>If I Were President</td>
<td>Unlined</td>
<td>Choice</td>
<td>Control</td>
<td>16% (3/19)</td>
</tr>
<tr>
<td>With $100, I Would</td>
<td>Unlined</td>
<td>Pencils</td>
<td>Control</td>
<td>63% (12/19)</td>
</tr>
<tr>
<td>It is Tuesday</td>
<td>Lined</td>
<td>Pencils</td>
<td>Control</td>
<td>21% (4/19)</td>
</tr>
<tr>
<td>My Favorite Toy Is</td>
<td>Unlined</td>
<td>Pencils</td>
<td>Control</td>
<td>5% (1/19)</td>
</tr>
<tr>
<td>When I Grow Up</td>
<td>Unlined</td>
<td>Markers</td>
<td>Control</td>
<td>21% (4/19)</td>
</tr>
<tr>
<td>Letter to Family Member</td>
<td>Lined</td>
<td>Choice</td>
<td>Control</td>
<td>32% (6/19)</td>
</tr>
<tr>
<td>Letter to Family Member</td>
<td>Lined</td>
<td>Choice</td>
<td>All</td>
<td></td>
</tr>
</tbody>
</table>

**Improvement Percentage** = \[
\frac{\text{Number Students Improved}}{\text{Total Number of Students}}
\]

* All students completed these activities

** See graph below for Improvement Percentage
Improvement Percentage Graph
Effects of Various Review Methods on Test Scores of Science Students
Lindsay Howard

EDUC 590

April 12, 2005
Effects of Various Review Methods on Test Scores of Science Students

Literature Review

Classroom teaching methods vary widely among teachers and schools, and undoubtedly, many teachers get positive results and high test scores with many different methods. The methods used for reviewing students’ knowledge of specific subject matter also differ, and these methods, too, can produce varying degrees of test success. Methods used for classroom review include seatwork in the form of worksheets or question and answer activities, games, and cooperative learning activities (Alber, Brennan, & Nelson, 2002; Daft, 2001; Jones & Steinbrink, 1993; Liu & Taylor, 2002). Some of these methods have proved more successful than others; however, some studies have shown no significant difference in test scores after varying review methods. Daft (2001) found that although there was a very slight difference in test scores following the Jeopardy game and “seatwork” review methods, it was insignificant. It appears that, in some cases, the gains in student test scores come after a review that involves more detailed answers rather than those that involve short answer questions. Alber, Brennan, and Nelson (2002) found that a structured reading worksheet in which students were required to write their own fill in the blank questions based on the assigned reading resulted in higher quiz scores than answering standard fill-in-the-blank review questions at the end of each reading assignment. Additionally, cooperative learning exercises have been shown to significantly improve student performance, especially in average or below-average students, in part because “they enjoy the intensive review sessions where they interact socially and academically” (Jones & Steinbrink, 1993, p. 307). Other research has found that the interplay between understanding and rote learning, or memorization, is integral to
test success (Entwistle & Entwistle, 2003). Along these lines, Herbert and Burt (2002) found that student performance shifts from simple recall to deeper understanding with an increased number of review opportunities and varying types of review. Some methods, such as peer review, are used infrequently in the science classroom but can enhance the science learning experience (Liu & Taylor, 2002). Although there appears to be little research on the effects of varying reviews within the discipline of science alone, research does indicate varying results in student test scores following differing methods of review.

Researching the Effects of Review Method on Test Scores

Introduction

In my action research project, I attempted to answer the following questions:

• Do students benefit from varying types of review methods?

• Which of the review methods employed (seatwork or fill-in-the-blank worksheets, games, or group work) produces the highest test scores?

• Are the differences in following test scores between the review methods significant enough to discontinue use of the least effective methods or to exclusively use the method with the best resulting test scores?

Participants

The students in my 7th grade science classes (approximately 100 total, divided across four class periods) at Red Bank Middle School in Tennessee are the subjects of this experiment. Additionally, the cooperating teacher for these classes and the inclusion teacher participated as necessary.

Procedure
First, I developed the review methods to be used. In this action research project, the review method is the independent variable, and the resulting test scores of the students are the dependent variables. I predetermined that the three basic methods I would use are fill-in-the-blank worksheets (individual seatwork), whole-class games, and small group activities, as described below.

• Fill-in-the-blank worksheets
  This activity involves the students answering review questions on the material to be covered on their test. It was done individually as seatwork, and completed as homework if necessary. The answers to the review worksheet were given in class the day the activity is due, and any questions or discrepancies were answered at that time.

• Whole-class game – Review Basketball
  In this review activity, the class was divided into teams of four or five, depending on the total number of students in each class period. I (the teacher) posed each team a review question, and if the correct answer was given, the team had the opportunity to shoot a “basket” (using a small toy basketball net and Nerf ball. Each successful basket resulted in a point for that team; the team with the most points won the game and received a reward of candy.

• Group Work
  The class was divided into small groups of three or four, depending on class size. Each group was given a review packet to complete with questions and other activities related to test material. Like the seatwork activity, the answers were given following day, and additional questions were answered at that time.
Then, over the course of my seven-week student teaching placement at Red Bank Middle School, I implemented each one of these review methods at the end of a unit of study in science. I observed the students’ reactions to each review method and made anecdotal notes about them, and I kept track of the test scores that resulted from each type of review method. At the end, I compiled the test scores for each method into data tables and graphs showing the effect of the review method on the resulting scores. I used three unit tests to obtain the scores used in analyzing the review methods: photosynthesis (Appendix A), genetics (Appendix B), and chromosomes (Appendix C). I worked to ensure the validity and reliability of this experiment by making sure that I completed each review method with each class period in exactly the same manner and taught the unit material to each class in the same way. This helped to minimize the effects of students’ prior knowledge, difficulty of the material, and other factors that could influence test scores.

Potential difficulties and necessary safeguards

I informed parents of my intention to conduct this study and assured that any student who wanted or needed additional help would not be denied such because of the study. Parents were given the opportunity to consent to the study through a form I sent home with students, and students signed an assent form (Appendix D) indicating their knowledge of the experiment. Additionally, although test scores were analyzed, students’ identities remained anonymous for the purpose of the study and test scores were simply compiled into raw data, ensuring the privacy of each student. Although I did not anticipate any difficulties from parents, other teachers, or administration, the potential for hesitation on any of their parts could have arisen. However, I neither received parents
unwilling to consent to the study nor did I encounter difficulties with other teachers or administrators regarding the experiment.

Data analysis

The data is presented in the form of tables and graphs of compiled test scores for each type of review method. The average scores for each class period of approximately 25 students are given, followed by an overall average of all students tested following each review method. Next, I have included anecdotal data to enhance understanding of the numerical data. The averages of test scores for four classes of science students over three units following the each review method is reported in Table 1.

Table 1

Average Test Scores following Each Review Method

<table>
<thead>
<tr>
<th></th>
<th>2nd Period</th>
<th>3rd Period</th>
<th>5th Period</th>
<th>6th Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seatwork</td>
<td>80</td>
<td>77</td>
<td>75</td>
<td>71</td>
</tr>
<tr>
<td>Game</td>
<td>74</td>
<td>72</td>
<td>84</td>
<td>89</td>
</tr>
<tr>
<td>Group Work</td>
<td>74</td>
<td>75</td>
<td>76</td>
<td>65</td>
</tr>
</tbody>
</table>

A graph of showing overall performance for each class using all three review methods, based on class average for each test is reported in Figure 1.

Figure 1

Overall test scores for four classes following four different review methods
The average score across all classes (approximately 100 7th grade science students) for each review method is seen in Figure 2.
Discussion and Conclusions

Overall, I was not surprised by the results of this study. My hypothesis was that students would achieve higher scores on tests following review methods that were enjoyable and which kept their attention well. In this case, my hypothesis proved true. Students verbalized excitement about the “Review Basketball” game for the unit on genetics, which was likely the most difficult unit tested in this experiment. This indicated that the potential effect of the difficulty of the subject matter to be tested was, in fact, minimized, and reliability and validity ensured. However, the difference in average test scores for each review method was very slight; there was only a deviation of seven percentage points total from the lowest average score of 73% for the group work method to 80% for the review basketball game method. So, while this does indicate the potential for greater achievement using one method over another, the difference is so insignificant that there is no way to determine if it was truly due solely to the use of a “superior” review method. Other factors (such as prior knowledge, difficulty of material, etc.),
while minimized as much as possible given the short amount of time allotted for the study, may have influenced test scores in this case.

Recommendations

I feel that the topic of the effect of a specific review method on the resulting test scores of science students is one that, while worthwhile and interesting, is perhaps too complex to draw any generalizations from this one study. There is no prevailing school of thought on this topic by any professional organization; review methods in the classroom are a highly individualized area of teaching. I would, however, recommend professional development in the area of instructing teachers in new ways to review with their students; I feel that students are often “burned out” and bored with the same kinds of review, time and time again. I have found no sources of grant money specifically for further study in the area of classroom review methods; however, I do not doubt that a skilled grant writer could obtain a grant. Additionally, I think that technology could help both teachers and students review more effectively. Textbook software programs could be used to help teachers come up with review material, and teachers could create web quest activities for students as a form of review. Overall, I think that researching the effects of review methods on test scores was a valuable experience, although I do not feel that I garnered any conclusive data from my short-term study.
References


Chapter 4 Test: Photosynthesis and Respiration

Multiple Choice

1. Openings on the surface of plant leaves are called
   a. guard cells
   b. chloroplasts
   c. air spaces
   d. stomata

2. The substance in green plants that captures the sun's energy is
   a. chlorophyll
   b. carbon dioxide
   c. ATP
   d. oxygen

3. A waste product of photosynthesis is
   a. oxygen
   b. carbon dioxide
   c. chlorophyll
   d. glucose

4. Which of the following is a waste product produced by animals that is used by green plants?
   a. oxygen
   b. carbon dioxide
   c. chlorophyll
   d. glucose

5. Heterotrophs get their energy from
   a. chloroplasts
   b. chlorophyll
   c. carbon dioxide
   d. food

6. The process by which plants make their own food is called
   a. aerobic respiration
   b. fermentation
   c. photosynthesis
   d. anaerobic respiration

7. Photosynthesis takes place in the
   a. nucleus
   b. mitochondria
   c. chloroplasts
   d. ribosomes

8. The food produced during photosynthesis is
   a. protein
   b. ATP
   c. chlorophyll
   d. glucose

9. Organisms that produce their own food are called
   a. consumers
   b. animals
   c. heterotrophs
   d. autotrophs

10. A process in which glucose is broken down to release energy is called
    a. diffusion
    b. respiration
    c. photosynthesis
    d. osmosis

11. Aerobic respiration requires
    a. oxygen
    b. carbon dioxide
    c. ATP
    d. chlorophyll

12. Respiration occurs in the
    a. chloroplasts
    b. mitochondria
    c. nucleus
    d. ribosomes
13. A chemical substance used to store energy is
   a. chlorophyll
   b. glucose
   c. carbon dioxide
   d. ATP

14. One substance needed for respiration is
   a. ATP
   b. carbon dioxide
   c. glucose
   d. water

15. An organism that primarily uses anaerobic respiration is the
   a. human
   b. yeast
   c. dog
   d. plant

**True or False**

16. Chemical bonds link atoms together.
17. ATP is produced during photosynthesis.
18. ATP can be stored in a cell until it is needed.
19. The equation for photosynthesis is the same as the equation for respiration.
20. Oxygen produced by yeast cells causes bread to rise.

**Completion**

<table>
<thead>
<tr>
<th>carbon dioxide</th>
<th>mitochondria</th>
<th>respiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>fermentation</td>
<td>oxygen</td>
<td>stomata</td>
</tr>
<tr>
<td>glucose</td>
<td>photosynthesis</td>
<td>water</td>
</tr>
<tr>
<td>heterotrophs</td>
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<td></td>
</tr>
</tbody>
</table>

21. Plants make food through a process called _____________.
22. The food produced by plants is ________________.
23. Plants need sunlight, chlorophyll, water, and _____________ to make food.
24. The openings on the surface of plant leaves are called _________________.
25. Organisms that cannot produce their own food are called _________________.
26. Glucose is broken down to release energy during the process called _________________.
27. Aerobic respiration requires _________________.
28. Anaerobic respiration is also called _________________.
29. Respiration occurs in the _________________.
30. The substances produced during aerobic respiration are ATP, carbon dioxide, and _________________.

**Extra Credit**

Glucose + Oxygen → Carbon Dioxide + Water + ATP

a. (5 pts) What is this the formula for?
b. (5 pts) What does \( C_6H_{12}O_6 \) stand for?
Appendix B

Test: Chapter 1 – Genetics

Multiple Choice

1. The passing on of traits from an organism to its offspring is known as
   a. biology  b. heredity  c. chemistry  d. zoology

2. The units of heredity are called
   a. genes  b. cells  c. hybrids  d. traits

3. The visible characteristics of an organism are called
   a. cells  b. chromosomes  c. genotypes  d. phenotypes

4. Genes that mask, or hide, other genes are said to be
   a. recessive  b. hybrid  c. true breeding  d. dominant

5. The genetic makeup is an organism is called its
   a. hybrid  b. genotype  c. cells  d. phenotype

6. An organism that has genes which are alike for a particular trait is called a
   a. purebred  b. hybrid  c. mutant  d. crossbreed

7. The likelihood, or chance, that an event may or may not take place is known as
   a. probability  b. genetics  c. chemistry  d. heredity

8. When the genes in a gene pair appear to blend together, the genes are said to show
   a. probability  b. incomplete dominance  c. cross breeding  d. complete dominance

9. An organism that has different genes for a particular trait is called a
   a. crossbred  b. hybrid  c. mutant  d. purebred

10. If two purebred short plants are crossed, all the offspring will be
    a. purebred short  b. purebred tall  c. hybrid short  d. hybrid tall

11. If Y represents the gene for yellow seeds and y represents the gene for green seeds, which of the following represents a hybrid?
    a. Yy  b. yy  c. YY  d. none of these

12. Who studied the inheritance patterns of pea plants?

13. If genes for purple flowers mask genes for white flowers, the “purple” genes are
    a. recessive  b. hybrid  c. dominant  d. incompletely dominant

14. New generations of plants that always resemble the parent plant are called
    a. similar plants  b. complete plants  c. invariable plants  d. true-breeding plants

15. Which law states that one gene from each pair goes to each sex cell?
    a. law of independent assortment  b. law of segregation  c. law of probability  d. law of genotypes

16. A trait that is the “weaker” of two traits is called
    a. incomplete  b. dominant  c. hybrid  d. recessive

17. The symbol for a recessive trait is
    a. a capital letter  b. a lowercase letter  c. a capital letter and a lowercase letter  d. two lowercase letters
18. A characteristic of an organism can also be called a
   a. hybrid  b. gene  c. trait  d. purebred

19. The process by which pollen from the stamen of one flower is transferred to the pistil of another flower on a different plant is called
   a. cross-pollination  b. self-pollination  c. incomplete pollination  d. segregated pollination

20. The second generation of an organism is also called the
   a. parental generation (P)  b. first filial generation (F₁)  c. second filial generation (F₂)  d. third filial generation (F₃)

**True or False**

21. A genotype refers to the physical characteristics of an organism.
22. Crossing hybrid tall plants with each other produces only tall plants.
23. Dominant genes are represented by capital letters.
24. The law of segregation states that each gene pair is inherited independently of all other traits.
25. Probability can be used to predict the results of genetic crosses.

**Completion** – Use each word in the box only once.

| dominant genes | genetics hybrid | Mendel probability | Punnett square recessive | stamen trait |

26. In genetics, scientists use lowercase letters to represent a(n) ______________ trait.

27. The chart used by scientists to show possible combinations resulting from the cross of two organisms is the ______________.

28. ______________ genes mask the other genes in a gene pair.

29. ______________ is the study of heredity.

30. ______________ are the units of heredity.

31. ______________ is called the Father of Genetics.

32. An organism that has different genes for a trait is called a(n) ______________.

33. ______________ is the likelihood that a particular event will take place.

34. A characteristic of an organism is called a ______________.

35. The ______________ is the male reproductive structure of a plant.
Appendix C

Chapter 2 Test: Chromosomes

Multiple Choice

1. The rod-shaped structures in the nucleus of every cell of an organism are the
   a. chromosomes  b. traits  c. cell membranes  d. genes

2. Sex cells are produced by the process of
   a. meiosis  b. mitosis  c. fertilization  d. reproduction

3. A change in a gene or a chromosomes that causes a new trait to be inherited is called a(n)
   a. alteration  b. mutation  c. variation  d. hybrid

4. According to the chromosome theory, which are carried on chromosomes?
   a. sex cells  b. genes  c. X chromosomes  d. Y chromosomes

5. Maleness and femaleness are determined by the X and Y chromosomes. A female has
   a. 2 X chromosomes  b. 2 Y chromosomes  c. and X and a Y  d. 2 X and 1 Y

6. The number of chromosomes in a sex cell is
   a. double the number of chromosomes found in body cells
   b. triple the number of chromosomes found in body cells
   c. one-half the number of chromosomes found in body cells
   d. one-third the number of chromosomes found in body cells

7. The sides of the DNA molecule are made up of sugar molecules and
   a. nitrogen bases  b. acid bases  c. phosphate groups  d. carbon groups

8. Which of the following is a correct pairing of bases in a DNA molecule?
   a. cytosine-adenine  b. cytosine-thymine  c. cytosine-cytosine  d. cytosine-guanine

9. An example of a disease caused by a gene mutation is
   a. strep throat  b. the flu  c. sickle cell anemia  d. pneumonia

10. Substances that cause mutations are called
    a. proteins  b. mutagens  c. chromosomes  d. mutants

11. The scientists who received the Nobel prize for their discovery of the structure of DNA were

12. A DNA molecule looks like a(n)
    a. large ball  b. eight-sided ball  c. long, thin thread  d. twisted ladder

13. The main function of chromosomes is to control the production of
    a. mutations  b. proteins  c. genes  d. mutagens
14. The process by which DNA molecules form exact duplicates is called
a. replication  b. transcription  c. translation  d. protein synthesis
15. The substance that carries the genetic code of DNA from the nucleus to the cytoplasm is
a. thymine  b. deoxyribonucleic acid  c. RNA  d. a gene

**True/False**

16. Genes are located on chromosomes.
17. The X and Y chromosomes are sex chromosomes.
18. RNA is the basic substance of heredity in all organisms.
19. All mutations are harmful.
20. Radiation is an example of a mutagen.

**Completion**

| cytosine ✓ | mutagens ✓ | replication ✓ |
| DNA ✓ | mutations ✓ | sex |
| male ✓ | proteins | thymine ✓ |

21. The main function of chromosomes is to control the production of ________.
22. The process called ________ produces sex cells.
23. Factors that cause mutations are called ________.
24. The X and Y chromosomes are called ________ chromosomes.
25. An organism that has an X and a Y chromosome is usually a(n) ________.
26. A change in a gene or a chromosome is a(n) ________.
27. A(n) ________ molecule looks like a twisted ladder.
28. The process by which DNA molecules form exact duplicates is called ________.
29. In a DNA molecule, adenine always pairs with the chemical ________.
30. In a DNA molecule, guanine always pairs with the chemical ________.

Match up the following strand of DNA with its complementary **DNA** strand.

| DNA | A | G | C | C | T | A | A | G | T | C |
| DNA | 31. | 32. | 33. | 34. | 35. | 36. | 37. | 38. | 39. | 40. |

Match up the following strand of DNA with its complementary **RNA** strand.

| DNA | T | A | C | G | C | A | A | G | T | T |
| DNA | 41. | 42. | 43. | 44. | 45. | 46. | 47. | 48. | 49. | 50. |
Appendix D

Student Assent Form

I, ______________________, agree to allow my classwork and/or grades from science class to be included in Ms. Howard's academic work as required for student teaching at Red Bank Middle School. I understand that all my work and grades will remain private and that any data recorded will be non-identifying.

I understand that if I DO NOT wish for my grades to be included in Ms. Howard's study, I will still be required to complete all classwork and homework assignments.

Student Signature ______________________ Date __________

Witness ______________________ Date __________

Ms. Howard ______________________ Date __________
The Relationship Between Student Achievement and Parental Involvement

A Report of a Master’s Theses

By

Jessica Quincy King

Major: Masters of Elementary Education

University of Tennessee at Chattanooga

Spring, 2005
**Introduction**

I was raised in a home that valued the importance of a good education. My parents were closely involved in my education and made an effort to know what was happening at my school. As a student I adopted the attitude towards school that I saw modeled through my parents. My parents’ involvement in my education fostered my motivation to learn as well as my ability to learn. My mother’s persistence was an instrumental catalyst in having me tested for a learning disability in math. She was determined that I had a learning disability because her attention was heavily focused on my education and school environment. I believe that the reason I did so well in school was a result of the support and interest my parents took in my education as well as the education of my siblings. I feel that my parents’ involvement in my education had a direct effect upon my academic achievement in school. I also believe that the interest my parents took in my education fostered my desire to become a lifelong learner. Research shows us that when schools and families work together, children tend to succeed not just in school, but also throughout life. The most accurate predictor of a student’s achievement in school is not income or social status, but the extent to which that student’s family is able to: create a home environment that encourages learning, express high and realistic expectations for their children’s achievement, and become involved in their children’s education at school and in the community (San Diego Department of Education, 2003).

**Description of the Problem**

In the past 25 years, membership in the PTA programs nationwide has dropped by fifty percent, while school enrollment has nearly doubled. The question is why have
parents become less involved in the education of their children? One answer to this question might be because in the 1970’s most high school students came from a two-parent family with one income. In today’s society the family structure has changed, with more children coming from single-parent families or a dual income family, which makes it harder for parents to become involved in the education of their children (Kindred, 2003). Recent research published by the Southwest Educational Development Laboratory shows that students with involved parents, no matter what their income or background, are more likely to: earn higher grades and test scores, enroll in higher level programs, be promoted, pass their classes, earn credits, attend school regularly, have better social skills, show improved behavior, adapt well to school, and graduate to go on to post secondary education (Kindred, 2003). Schools are struggling to make ends meet with budget cuts in education and administrators are having a hard time finding enough money to purchase the basic needs of their students and faculty, such as computers, playground equipment, photocopiers, etc. Money is being cut short to support parent organizations, however, parent organizations are the first place many schools look to for help (Kindred, 2003). The current structure of public schools does not invite public involvement, but reinforces a hierarchal structure that gives neither students or parents a voice in education. Schools too often shut parents out of decision making and offer only limited participation such as volunteering, fund-raising and membership in under funded parent-teacher organizations (Fege, 2000). The term parental involvement can mean many things to many people. The National Education Association defines parental involvement as reading to your child, checking homework every night, discussing student progress with teachers, voting in school board elections, helping children set challenging academic
standards, limiting TV viewing on school nights, and becoming an advocate for better
education in the community and state in which you may live (www.nea.org).

When looking at some of the available research on parental involvement and
student achievement, it became clear to me that there is a concern about the relationship
between parental involvement and student achievement. Those that have done research
on the topic have found that there is a positive correlation between parental involvement
and student achievement and overall attitude towards school and life long learning. There
is also concern among teachers that they have not been properly trained to work and
communicate with parents due to the present structure of the school system. The Harvard
Family Research project is currently working with a large number of new teachers to
show, “pre-service teachers that working with parents is possible to do, that it might
make teaching easier, that it is important to do, and that it is doable.” (Jones, 2001).

After reviewing the literature, I decided that there is definitely a need as well
as a reason to foster parental involvement in our schools. The obvious reasons are spelled
out in the research; it improves students test scores, attendance at school, attitude towards
school and students’ desire to pursue a life full of learning.

**Problem Statement**

The hypothesis that I plan to investigate is that when students are sent home a
weekly newsletter, for the period of one month, student achievement across the subject
areas of: Math, Science, English and Social Studies will increase. I plan to look at
whether or not the weekly newsletter promotes parental involvement and in turn produces
positive student achievement in the areas of: test scores, school attendance, social skills,
and adaptation to the school environment. In the newsletter I will include weekly grades,
missing work, happenings throughout the week, tips on becoming involved in the education of students and what the research says about parental involvement and student achievement.

Plan of Action

The population I plan to study is elementary general education students at Foothills Elementary School in Maryville, Tennessee. I plan on having two groups of students. One group of students will be the control group and will not receive a weekly parent newsletter but will take a pre-test and post-test that the focus group will take. The control group will take the pre-test and post-test in order to compare results with the focus group. In the focus group, students will take a pre-test and a post-test to measure their achievement level prior to the weekly newsletter and after the weekly newsletter has been sent to parents for a one month period. I plan on distributing the pre-test to both the control group and the focus group during the spring semester of school. The control group and the focus group will be developed using one classroom in an elementary school setting. I will select my control and focus group from the same classroom in order to negate any differences in teaching styles, skills taught, length of skills taught, etc. I randomly selected the students that would be part of the control group and the focus group. In order to make the selection of my focus group random I placed the names of all research subjects in a opaque container and blindly drew out nine names to be included in the focus group. This research will most likely be of interest to all elementary school teachers, school administrators, parents, and the larger community. If the results of the study support the hypotheses in that parental involvement will improve student
achievement then the entire school and community would benefit from the information gathered from my research.

**Measurement**

In order to gain the results I need to test my hypotheses I plan on distributing four pre-tests to the focus group and the control group that ask specific questions related to grade level curriculum: English, Math Social Studies, and Science. The pre-tests and post-tests used in this study can be found in Appendix B of this document. The format of the pre-tests and post-tests will be multiple choice. The questions on the pre-tests will be very content specific and will be on target with grade level curriculum standards. The length of the pre-tests will be fifteen questions in order to gain enough information for a validated study while still being able to keep students’ attention. After receiving permission from the UTC review board, school principal, classroom teacher, students’ parents, and students, I will distribute the pre-test during the spring semester. I will collect the pre-tests one-week later to ensure that all students are given the opportunity to take the test in both the control group and the focus group. I have had experience using pre-tests and post-tests in many education courses and have been able to see clear results in using both types of tests. In order to obtain a clearer understanding between parental involvement and student achievement I also plan on interviewing the classroom teacher of the students who participated in the research study and the assistant principal of Foothills Elementary, the school where my research will take place. I intend to use the interviews as a way to gather more information about the problem I am investigating since the classroom teachers have more insight and information about each student then I will have as the researcher.
**Procedure**

I plant to distribute my pre-tests and post-tests to general education students using a time series design study. I plan to establish a base line using a pre-test and a post-test. The pre-tests will be given during the spring semester (the last week of March). Students will be given the same post-test during the last week of the month of April, post-intervention. Data will be collected weekly to reduce the chance of irregularities in research and maturation of subjects. I intend for the collection of data to take one month of the school year. During the first week of school I will schedule to meet with the principal and send home permission slips with students regarding the study. After I have distributed the pre-tests I will then begin sending parent newsletters home with the focus group. I will send weekly newsletters home with students as well as e-mailing newsletters to those parents that provide an e-mail address on the parent permission slip. During the last week of the study I will distribute the four post-tests. I will also interview the classroom teacher of my research group (control and focus) and the assistant principal of the school.

**Analysis**

After I have collected the data from the pre-tests and the post-tests I plan looked at the results from each set of data. For example, I compared the results from the first four pre-tests to the last four post-tests. When I have finished collecting the data I converted it into gain scores. I determined what percentage of the students in the control group showed achievement during the semester as well as what percentage of students in the focus group showed achievement.
When I looked at the data collected from the interviews I looked for any similarities that occurred in the data and the answers given by the classroom teacher and assistant principal. I used the data collected from the interview and compared it with the information that I received from the pre-tests and the post-tests so that I could gain a greater understanding of the problem.

**Further Investigation**

I would like to interview parents as well as teachers to find out reasons they see for the decline in parent involvement in schools. I would also like to talk to teachers that are in a variety of school environments to see whether or not socio-economic status and background play a role in parental involvement in schools. I would like to conduct a yearlong study on ways to effectively involve parents in schools and to establish what types, if any, of parental involvement determine the greatest achievement among students.

**Review of Literature**

Fege (2000) discussed the growing concern held by parents and the community towards public education. Fege states, “The taxpaying public is restless about public education and parents are becoming more vocal about being involved in education decision making” (Fege, 2000, pg. 42). With the growing rise in concern over public education it is necessary to take a closer look at the significant advantages parental and community involvement have on the educational system and the academic achievement of students. The school environment has traditionally been one of isolation, however, recent research supports parent and community involvement in decision-making, stating that it improves student performance in school, empowers parents, helps communities
grow stronger and improves teacher morale (NEA 2003, September 12). In order to fully understand the dynamics of this issue each of these four elements must be examined more directly.

Gonzalez (2002) researched the correlation between mastery goal and performance goal orientation in high school students to parent involvement in education. Students with mastery goals were defined as more interested in learning new skills and improving their understanding of a certain topic. Students with performance goals were more concerned with improving existing ability or avoiding negative judgment. Results from Gonzalez’s study showed that, “parental involvement was positively related to mastery orientation” (Gonzalez, 2000, ¶ 8). Gonzalez stated that when parents showed an interest in their child’s education students were more likely to pursue challenges, adopt a positive attitude towards academics and be more satisfied with their schoolwork. In Gonzalez’s study she also stated that students with strong parental involvement in their education reported, “More effort, concentration, and attention across four main subject areas: English, math, social studies and science.” Further research upon the topic shows that parental involvement is an investment that will pay off in, “higher test scores, better attendance, more homework completed, fewer special education placements, fewer discipline problems, better attitudes towards school, higher graduation rates, and increases college enrollment (Jones, 2001). In research published by The Southwest Educational Development Laboratory (1994) evidence is given that students with involved parents, across all income levels, are more likely to earn higher grades and test scores, enroll in higher level programs, be promoted, pass their classes, attend school regularly, have better social skills, adapt well to school, and graduate from high school to
go on to higher levels of education (Henderson, 1994). The National Education Association provides research that shows a strong correlation to parental involvement and academic achievement as well. The National Education Association’s research (2003) suggests that the earlier parental involvement begins in a child’s life the greater the impact will be on academic performance. Research done by this Association also points out that the more parents talk to their children about school, the better they will perform in school. Not only does research indicate that strong parental involvement has a significant impact upon student performance but so does the sense of community established within schools. Proponents for building a strong school community for students suggest that a good program targets the basic physiological needs of students, such as, emotional and physical safety, close supportive relationships and a sense of connection with their environment (Schaps, 2003). Schools that have been successful in creating a comfortable and safe community for students have reported a rise in academic motivation. The goal in good community-building approaches not only encourages a sense of community among students but also stresses a collaborative relationship between school and parents.

In recent years a shift in parent involvement has taken place. Parents are becoming increasingly concerned about the public education that their children are receiving (Fege, 2000). A shift in parental attitude has taken them away from the traditional volunteer roles such as bake sales and bulletin boards. Parents want to be involved in the decision making process of their children’s education. Fege (2000) compares parents to consumers, “Driven by outcomes and results, today’s parents often view schools in contractual terms…and often see their interaction with schools as a
marketplace relationship based on commerce and transactions” (Fege, 2000, p. 40). Fege suggests that parents want to see results in their child’s education and want to know why they should send their child to public school. It is the job of the school to answer this question. If a school is dedicated to improving parental/school relationships then they must put into place a well-designed family participation program. Research has shown that family participation can only be effective when the school has established a well-organized program that promotes collaboration between school and parent. Davies (2000) suggests that “ (Davies, 2000, p. 42). A comprehensive program of partnerships will include such elements as parent education, family support, volunteer activities, good communication, and strategies that foster learning at home and in the community.” Parent involvement is crucial to the academic achievement of children within in the school and research suggests that it is most effective when parents are able to assume four different roles in their child’s life. The four roles are teacher, supporter, advocate, and decision maker (San Diego Department of Education, 2003). By forming well-established and organized programs schools can promote these roles within the parents of their students. By strengthening the ties between school and parents, schools become less threatening and parents become empowered by the knowledge that they are helping make a difference in the education of their child. June Cavaretta (1998) is a parent volunteer with the Community Unit School District in Illinois. Mrs. Cavaretta helped establish a grassroots organization where more than 400 parent volunteers have been trained to participate in shared decision-making. Within this organization parents have participated on teams that have selected textbooks, set dress codes, developed technology plans, and redefined formats for parent-teacher conferences. Mrs. Cavaretta is an example of an
empowered parent and stated in her article, “My work counts. My voice is heard. I’ve made a difference for my children” (Caveretta, 1998, p.14)

In Henderson’s (1994) article he cites research conducted by Hart that discusses a national poll for the Public Education Network, completed in November, 1999, regarding community involvement and community opinion towards public education. Hart’s research shows, “An overwhelming commitment to public schools. Out of the respondents, 86% of them identified schools that provide a quality education as a very important community priority” (Henderson, 1994, ¶ 3). Not only is the education of children important to the parents of students’ but it is also important to the community in which they live. Communities are interested and dedicated to the education of their young citizens. It is important for schools to recognize this fact and develop effective partnerships with community organizations and community members. A well-established relationship between community and school will be beneficial to both parties. Recent studies show that community organizations have been responsible for upgrading school facilities, improving school leadership and staffing, implementing higher quality learning programs for students, providing new resources and programs in order to improve teaching and curriculum and providing funding for after-school programs and family supports (Henderson, 1994). Schools can also use organizations within the community to reach out to families from low-incomes or diverse cultures. Community organizations can provide the school with family support services through partnerships with organizations such as the Department of Human Services, youth-service organizations, and religious and civic groups (NCPIE, 2003). One example of strong community and school involvement can be seen in the Virginia Beach City School System. The Virginia Beach
School System is currently working with over 1300 business, military and community partners. Within this collaboration the Virginia Beach School systems receives services such as mentorships, donations, scholarships, workplace tours, classroom presentations, curriculum development, staff development and coordination of special events and groups (Virginia Beach School System, 2003). A key component in Virginia Beach City’s community involvement partnership is the partnership coordinator at each individual school. The partnership coordinator provides the community organization with an accessible contact therefore making the gap between school and community smaller (Virginia Beach School System, 2003). When establishing community partnerships schools should meet with community organizations to discuss the types of programs the organization can offer them and then compare these results to the needs of the school. The partnership between school and community should be based on the willingness to work towards a common goal. In the partnership formed with schools and communities the strengths of both can be maximized and the weaknesses minimized therefore resulting in better outcomes for the students. The partnership between school and community works to strengthen the community as a whole (Virginia Beach School System, 2003).

Working with parents is one part of a teacher’s job that he or she has not been properly trained to deal with. A University of Minnesota professor, Joe Nathan, asked 1,100 Minnesota principals how well new teachers were prepared for their work. Only 25% of the respondents said that new teachers were prepared to deal with parents. In the same study college professors and administrators responded that teaching parent involvement skills was not their job. Despite the fact that teachers are not being trained in school to deal with parent involvement, the reality is that it is a major part of their job
responsibilities. Students’ academic achievement weighs in the balance between the teacher and parent relationship. Jones (2001) reports on researcher, Amy Baker, who conducted a parental-involvement study on twelve focus groups of parents, teachers, and administrators. In her study she explains that she was surprised by the anger of many teachers, “You can’t believe how strongly and how negatively teachers feel towards parents. They don’t really enjoy interacting with parents, and partly because they are not trained “ (Jones, 2001, p. 39). Whether or not teachers are trained, however, they still must interact with parents, therefore, in order to effectively interact with parents teachers must be exposed to strategies and workshops that train them in the proper ways to deal with parent relationships. The Harvard Family Research Project (HFRP, 2003) offers workshops for teachers focusing on family-school-community partnerships. This is a resource that many schools could use to train their teachers for better parental and community relationships. The HFRP is researched based and contends that, “strong family partnerships depend on competent and committed teachers who reach out to families” (HFRP, 2003, ¶ 1). In order to be accessible to teachers the HFRP sponsors a national teacher network that supports educators in preparing teachers for parental involvement. HFRP also works with organizations within communities to help promote families, schools, and communities. As well as the HFRP’s concerns for parental-teacher relationships, The National Network of Partnership Schools has published six types of involvement that teachers can use to encourage a better relationship with parents. Type one suggests that teachers assist families with parenting skills. Type two encourages communication between parent and teacher about school programs and student progress. Type three focuses on volunteering and improving parental involvement in this way.
Type four encourages the teacher to provide learning at home activities that parents can actively help their children with. Type five addresses the importance of including families in the decision making progress of the school and their child and type six focuses on linking the family with community resources available to them.

Teachers should also be aware of and sensitive to each family’s different interests, race, religion, and educational status. Henderson (1994) suggests that teachers keep in touch with parents through parent-teacher conferences, e-mails, home visits, or talking after school. In the Hamilton County School System the Parent Teacher Association is working towards improving relationships with teachers. The PTA in Hamilton County is working on a Resource Depot for teachers where they can shop for free supplies. Hamilton County parents are working on meeting the needs of their teachers in a positive and helpful way. In this example it is evident that a positive relationship between parents and teachers can exist. Not only can a positive relationship exist but also the relationship can meet the needs of both the parents and the teacher. Parents become empowered because they feel they have a hand in their child’s education. By forming a positive relationship with parents, teachers can lessen the strain put upon them day by day in the classroom and in return raise their morale for teaching. It is crucial that schools focus upon the importance of parental and teacher relationships because both teacher and student success depends upon the relationship’s success or failure.

The rationale behind parental and community involvement is one that is heavily supported by research. It is evident that through parental involvement in schools student performance improves, parents become empowered, communities grow stronger, and teacher morale improves. The Harvard Family Research Project confirms this statement
by saying, “More than 30 years of research indicates that children benefit from family-school collaborations which provide parents with opportunities to shape their children’s learning” (HFRP, 2003, ¶ 1). Schools cannot argue with an approach that has such great impact upon student achievement, student sense of well-being, attendance, attitude, homework readiness, grades, and educational aspirations. Through parent involvement parents take an active role in school and demonstrate to their child their strong commitment to education. If parents are not involved with their child’s education then the child is more likely to fall into the trap of truancy and drug abuse, suffer from depression, demonstrate discipline problems and increase his/her chances of dropping out of school (Gonzalez, 2002). It is clear that parent involvement and community involvement not only impacts students but teachers and administrators as well. In light of the research over the past years schools must now begin to take a proactive stance towards improving parental and community involvement in schools in order that no child be left behind.

Results

Nineteen fourth grade students completed a series of curriculum based, content specific, pre-tests and post-tests. There were 10 students in the control group and 9 students in the focus group. At the beginning of the research the two groups were even and the total number of students participating in the study was twenty, however, one participant dropped out of the study. The sample size remained small due to the unwillingness of some students to participate in the study as well as the lack of parental consent forms returned with students. All students participating in this study were at or above grade level in all areas tested: Math, Science, English, and Social Studies. This
sample was made up of a diverse group of economic levels, ranging from students in middle to upper class families to students in lower to middle class families.

Each pre-test and post-test students received consisted of fifteen multiple choice, content specific, curriculum based questions. Pre-tests were given to students during the last week of March. At this point in the year students had been exposed to all questions that appeared on the pre-tests and post-tests. Post-tests were given to students at the end of April, thus allowing for a one-month intervention period to take place within the focus group. In tables one through four below results are shown for both the focus group and the control group for each of the four pre-tests and post-tests. The number of questions that students answered correctly out of fifteen is provided. Gains or declines made by the student within each test are also demonstrated. Students were randomly selected to be a part of either the focus group or the control group. A number appears next to each result in order to determine the identity of each student for the researcher’s purpose of keeping the identity of the subjects in the research anonymous.
### Pre-Tests and Post Tests Results

**Table 1** – Number of correct responses by students in control group and focus group for English pre-tests and post-tests.

<table>
<thead>
<tr>
<th>Student</th>
<th>Pre-Test</th>
<th>Post Test</th>
<th>Gains/Declines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1</td>
<td>11</td>
<td>14</td>
<td>+3</td>
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<tr>
<td>6</td>
<td>11</td>
<td>11</td>
<td>No gain</td>
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<td>9</td>
<td>11</td>
<td>11</td>
<td>No gain</td>
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<tr>
<td>10</td>
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<td>11</td>
<td>-3</td>
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<tr>
<td>12</td>
<td>13</td>
<td>13</td>
<td>No gain</td>
</tr>
<tr>
<td>14</td>
<td>11</td>
<td>14</td>
<td>+3</td>
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<tr>
<td>17</td>
<td>12</td>
<td>12</td>
<td>No gain</td>
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<tr>
<td>19</td>
<td>9</td>
<td>12</td>
<td>+3</td>
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<td>20</td>
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<td>18</td>
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<td>11</td>
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</tr>
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</table>
Table 2 - Number of correct responses by students in control group and focus group for Math pre-tests and post-tests.

<table>
<thead>
<tr>
<th>Student</th>
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<th>Post Test</th>
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<td>Control Group</td>
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</table>
Table 3 - Number of correct responses by students in control group and focus group for Science pre-tests and post-tests.

<table>
<thead>
<tr>
<th>Student</th>
<th>Pre-Test</th>
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<th>Gains/Declines</th>
</tr>
</thead>
<tbody>
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<td><strong>Control Group</strong></td>
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<tr>
<td><strong>Focus Group</strong></td>
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<td>-2</td>
</tr>
</tbody>
</table>
Table 4 - Number of correct responses by students in control group and focus group for Social Studies pre-tests and post-tests.

<table>
<thead>
<tr>
<th>Student</th>
<th>Pre-Test</th>
<th>Post Test</th>
<th>Gains/Declines</th>
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</thead>
<tbody>
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<tr>
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</table>

Control Group

Focus Group

<table>
<thead>
<tr>
<th>Student</th>
<th>Pre-Test</th>
<th>Post Test</th>
<th>Gains/Declines</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>11</td>
<td>11</td>
<td>No gain</td>
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<tr>
<td>18</td>
<td>9</td>
<td>7</td>
<td>-2</td>
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</tbody>
</table>

The charts above show the scores that each student of both the control group and the focus group earned on each pre and post test in the areas of: English, Science, Math and Social Studies. The charts also show the gains, declines, and no gains in each test. In order to compare the control group and focus group charts below show percentages of gains, declines, and no gains in each subject area test, post intervention. All percentages were figured using the control group number of 10.
Table 5 – Percentages of gains, declines, and no gains for control and focus group English test.

<table>
<thead>
<tr>
<th>% of Gain</th>
<th>% of Decline</th>
<th>% of no gain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50%</td>
<td>10%</td>
<td>40%</td>
</tr>
<tr>
<td><strong>Focus</strong></td>
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<td></td>
</tr>
<tr>
<td>60%</td>
<td>10%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Table 6 – Percentages of gains, declines, and no gains for control and focus group Science test.

<table>
<thead>
<tr>
<th>% of Gain</th>
<th>% of Decline</th>
<th>% of no gain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60%</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Focus</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10%</td>
<td>50%</td>
<td>30%</td>
</tr>
</tbody>
</table>
Table 7 – Percentages of gains, declines, and no gains for control and focus group

Math test.

<table>
<thead>
<tr>
<th>% of Gain</th>
<th>% of Decline</th>
<th>% of no gain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Focus</strong></td>
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<td></td>
</tr>
<tr>
<td>60%</td>
<td>10%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Table 8 – Percentages of gains, declines, and no gains for control and focus group

Social Studies test.

<table>
<thead>
<tr>
<th>% of Gain</th>
<th>% of Decline</th>
<th>% of no gain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td>10%</td>
<td>60%</td>
</tr>
<tr>
<td><strong>Focus</strong></td>
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</tbody>
</table>
Tables 5-8 above show the differences in percentage gains for the control group and the focus group. In the subject area of English the focus group had a 10% higher gain rate than did the control group. When comparing scores between the control group and focus group of students who scored ten or higher, eight students in the control group scored ten or greater whereas all of the focus group students scored at ten or higher. In the subject area of Science the control group had a 20% higher gain rate than did the focus group. The overall scores of those students in the control group scoring ten points or greater on the pre-test was lower than those students in the focus group. Only four students from the control group scored ten or greater on the science pre-test whereas six students from the focus group scored ten or higher on the pre-test. In the subject area Math the control group had a 40% higher gain rate than did the focus group. When examining math pre-test scores the number of students in the control group scoring ten or greater is less than the number of students in the focus group scoring ten or greater. In the control group eight students made a score of ten or greater with one student scoring a seven and one student scoring a 9. In the focus group, all students made a score of ten or greater on the math pre-test with 40% of the group making a score between thirteen and fourteen. In the subject area of Social Studies the focus group had a 30% higher gain rate than did the control group. In the control group nine students scored at ten or greater. In the focus group only two students scored at ten or greater in the area of Social Studies. When comparing percentages between the control group and the focus group each group had higher gain rates in two subject areas. The control group showed higher gain rates in the
areas of Math and Science whereas the focus group showed higher gain rates in the subject areas of English and Social Studies. When comparing all subject areas, however, the focus group consistently scored higher in all subject areas except Social Studies. The control group had a three-point higher scores margin in the pre-test at ten or greater. Both the control and the focus group showed students with no gains. In all subject areas combined the control group had an average of 27.5% all subjects who had no gain at all. In the focus group an average of 25% of all subjects had no gain. Results from the research show that the control group had an average of 2.5% less gain than the focus group in all subject area post-tests

**Conclusion**

The introduction of this thesis stated the importance of a sound education and the major role that my family had in fostering my desire to become a lifelong learner. In the description of the problem I posed the question, “Why have so many parents become less involved in the education of their children?” In the review of literature I clearly showed that the link research makes between parental involvement and student achievement is that it improves students tests scores, attendance in schools, attitude towards school and students’ desire to pursue a life full of learning. Although, my sample size was small, the results of this research are quite consistent with the review of literature.

Gonzalez (2002) researched the correlation between mastery goal and performance goal orientation of students to parent involvement in education. In Gonzalez’s study she stated that students with strong parental involvement in their education reported, “More effort, concentration, and attention across four main subject areas: English, Math, Social Studies and Science” (Gonzalez, 2002, ¶ 5). The research
done in this study supports Gonzalez’s research findings, with the focus group, the group which was sent home a weekly news letter to parents, reporting a lower percentage of no gains throughout the four subject areas looked at in Gonzalez’s study: English, Math, Social Studies and Science. The National Education Association (2003) provides research that shows a strong correlation to parental involvement and student achievement as well. The National Education Association’s research suggests that the earlier parental involvement begins in a child’s life the greater the impact will be on academic performance. The subjects in this study were all nearing the end of fourth grade. The results show that the students within the focus group did have a higher rate of gain over the control group. This finding supports the research that the earlier parents become involved and stay involved in their child’s education the greater the benefits the child will have throughout their middle and high school and college education. In research published by The Southwest Educational Development Laboratory (Henderson, 1994) evidence is given that students with involved parents, across all income levels, are more likely to earn higher test scores, enroll in higher level programs, be promoted, pass their classes, attend school regularly, have better social skills, adapt well to school, and graduate from high school to go on to higher levels of education (Henderson, 1994). Of the nineteen students participating in this study each were from a diverse economic background. As stated before students ranged in economic status form upper to middle class and lower to middle class. The control group and focus group contained students from all of these economic statues. Despite the fact that there were lower economic status students within the focus group, they still made greater gains in test scores, thus further substantiating the research on this topic. In an interview with Melissa Lafollette,
classroom teacher of research subjects at Foothills Elementary School, she stated that, “There is a clear difference in attitude, motivation, quality of work, and test scores among the students in my class who have parents who are active and involved in their children’s lives.” She also stated that the lack of parental involvement could be seen in the way students acted towards their teacher and performed in the classroom (M.B. Lafollette, personal communication, April 8, 2005). Foothills Elementary School assistant principal, Amy Vagnier, stated, “There must be a link between parents, schools, and the community. As educators we are responsible for providing children with an education that will prepare them for a constantly changing society, the link between parent and school and school and community is a crucial element in making this happen. We are all responsible for the education of our children, and we need the help of parents to make it happen” (A. Vagnier, personal communication, April 8, 2005).

The study conducted in this research was only for the period of one month. Within in the one period results show that parental involvement is indeed a factor in student achievement and student gains within the content areas of: English, Math, Science and Social Studies. Had this study been completed over a longer period of time the results would be even clearer and even more significant than the results presented in this study. The control group had 2.5% less gain in scores than did the focus group. Educators, parents, and the community should be concerned about those within the control group who did not make gains as they make their way through the educational system, or not, and as they enter society. The results of this study lead to the conclusion that we cannot afford even a 2.5% margin of difference in gains when the larger body of research is also
telling us that when parents are involved in their child’s education student performance improves, parents become empowered, communities grow stronger, and teacher morale improves. Schools, parents and the community cannot argue with an approach that has such a great impact upon student achievement, students sense of well-being, attendance, attitude, homework readiness, grades and educational aspirations (Gonzalez, 2002).

My purpose in writing this thesis is to raise awareness of the need for parental involvement in education. Research has clearly shown that all aspects of a student’s life improves when parents become involved in their education. My hope is that through the research done on this topic that we can meet the goal that we have set as a nation for the education of our children, that no child is left behind and that no parent be left behind either.
1. Which group of words is a sentence?
   a. Went to a picnic last week?  b. We went to a picnic last week.
   c. A picnic last week.   d. Last week.

2. Have you ever played silly games at a picnic?
   a. declarative   b. interrogative
   c. imperative   d. exclamatory

3. How is the mouse different from other _____________?
   a. mouses  b. mice
   b. mices   d. mouse’s

4. Writing that compares ____________.
   a. explains how to do something  b. convinces the reader to do something
   c. tells how things are alike and different   c. tell a made-up story

5. Cole asked to sit in the ____________ chair.
   a. teacher  b. teacher’s
   c. teachers   d. teachers’

6. Choose the sentence where commas are used correctly.
   a. I sat next to Brad Devon and Tamika at the concert
   b. I sat next to Brad, Devon and Tamika, at the concert.
   c. I sat next to Brad, Devon, and Tamika, at the concert.
   d. I sat next to Brad, Devon, and Tamika at the concert.

7. Garden Café has the __________ prices in town.
   a. lower   b. lowest
   c. most lower   d. most lowest

8. Choose the antonym for the underlined word in the sentence.
   Only part of the journey was easy.
   a. simple  b. long
   c. difficult   d. stormy

9. Which part of the story focuses on a problem that needs to be solved?
   a. the setting  b. the plot
   c. the conclusion   d. the dialogue words
10. Choose the sentence that uses quotation marks correctly.
   a. Guess who wrote us a letter, said Mrs. Thomas.
   b. “Guess who wrote us a letter, said Mrs. Thomas”
   c. “Guess who wrote us a letter,” said Mrs. Thomas
   d. “Guess who wrote us a letter”, said Mrs. Thomas

11. What are the people in a story called?
   a. the setting  b. the characters
   c. the plot      d. the dialogue words

12. Choose the correct word to replace the word or words in bold type.

   **Jo and his classmates** are writing a letter to the President.
   a. They  b. Their
   c. They’re  d. There

13. My mother _________ me some kind of green vegetable.
   a. given  b. have given
   c. gave    d. give

14. Choose the correct contraction for the underlined words.

   I would not mind having some more.
   a. wouldn’t  b. wouldn’t
   c. wouldn’t  c. wouldn’t

15. Which sentence shows the complete predicate underlined?
   a. I watched the baby bird.
   b. I watched the baby bird.
   c. I watched the baby bird.
   d. I watched the baby bird.
Math Pre-Test
15 questions

1. Write the number in standard form.
   - six thousand, seven hundred five __________________________

2. Order each set from least to greatest.
   11,632  11,649  11,610
   _______________________________________________________

3. Compare the numbers. Choose < or >
   1,012       998

4.  5,897
    4,977

5. Give the next number in the pattern.
   1,107; 1,207; 1307 ___________

6. Round to the nearest hundredth.
   1,366 _________________

7.  32
    x49

8. Which of the numbers is exact?
   a. The number of people in the theatre
   b. The time Jen arrived
   c. The amount of money collected.

9. Which might be a good estimate of the number of people at the show?
   a. 100
   b. 165
   d. 200

10. 21 days= ___________ weeks

   The 2:00 p.m. movie was almost sold out when Jen arrived at 2:09. Most of the 175 seats in the theater were full. About $1,000 was collected for the tickets to the show.
11. Books cost $1.35 each at a yard sale. Is $20.00 enough to buy 15 books?

12. \(600 \times 40 = \underline{_______}\)

13. If you bike for two hours and ten minutes and arrive at your destination at 1:20 p.m., what time did you leave? _________________________________

14. Write each time two ways, using words and numbers.

15. Solve for \(n\)
\[4 \times 316 = n\]
Science Pre-Test
15 questions

1. How are plants different from animals?
   a. Plants don’t need air
   b. Plants can make their own food
   c. Plants don’t need energy
   d. Plants can live in many different habitats

2. Which organisms in the food chain are consumers?
   a. sun, bird
   b. bird, grass
   c. plant, grass
   d. bird, insect

3. True or False An invertebrate does not have a backbone.

4. Which of the following is not a reptile
   a. a turtle
   b. a lizard
   c. a salamander
   d. a snake

5. ______________ are traits that help organisms survive.
   a. adaptations
   b. muscular system
   c. heredity
   d. metamorphosis

6. Which statement about rocks is not true?
   a. All rocks are made of minerals
   b. Rocks come in different shapes, colors, and sizes
   c. A rock is always made up of just one kind of mineral
   d. Scientists who study the physical properties of rocks are called geologists.

7. A break in Earth’s outer layer caused by the movement of rock is called________.
   a. pore space
   b. outwash plains
   c. fault
   d. seismic waves

8. The cycle of day and night is called________.
   a. Earth’s orbit
b. Earth’s rotation
c. the Sun’s rotation
d. the movement of the moon

9. ______________ means to spin around
   a. orbit                d. move
   b. rotate              c. axis

10. Waste from industry, farming, and humans are the main source of water ______
    a. pollution
    b. precipitation
    c. heat energy
    d. estuary

11. Which material is a good conductor?
    a. cotton
    b. metal
    c. wood
    d. plastic

12. Earth’s trip around the sun takes_______
    a. one day
    b. one year
    c. one month
    d. 24 hours

13. The measure of how much water vapor is in the air is ______________.
    a. air pressure
    b. atmosphere
    c. air mass
    d. humidity

14. True or False  The largest particles of an element are atoms.

15. Which of the following is not an element?
    a. gold
    b. oxygen
    c. rust
    d. carbon
Social Studies Pre-test
15 questions

1. What was the date of Columbus’ discovery of America?
   a. 1506
   b. 1492
   c. 1504
   d. 1498

2. Ponce de Leon was a ____________ explorer.
   a. French
   b. British
   c. American
   d. Spanish

3. A____________ is a journey for a certain purpose.
   a. adventure
   b. expedition
   c. voyage
   d. trek

4. True or False  Spanish explorer Hernando De Soto was in search of gold?

5. ____________ is the term for being treated less than human
   a. apprentice
   b. slavery
   c. Puritan
   d. Burgesses

6. The Boston Tea Party occurred because of a tax placed on _____________.
   a. cotton
   b. molasses
   c. tea
   d. coffee

7. The three branches of government are:
   a. Supreme Court, White House, Congress
   b. House of Representatives, Senators, President
   c. President, Vice President, Secretary of Defense
   d. Legislative, Judicial, Executive
8. These were farmers and other citizens who were ready to fight “with a minutes warning.”
   a. Sons of Liberty
   b. Green Mountain Boys
   c. Continental Congress
   d. Minutemen

9. Each state has _____ Senators
   a. 4
   b. 50
   c. 10
   d. 2

10. ______________ was Commander and Chief of the Continental Army.
    a. Thomas Jefferson
    b. Patrick Henry
    c. Benjamin Franklin
    d. George Washington

11. There are ______ amendments in the Bill of Rights.
    a. 10
    b. 14
    c. 5
    d. 100

12. A ____________ is a person who travels for religious reasons.
    a. Separatist
    b. Pilgrim
    c. Indentured servant
    d. Pioneer

13. The ____________ branch of government creates the laws and sees that they are carried out fairly.
    a. Executive
    b. Legislative
    c. Judicial

14. __________ is the Vice President.
    a. George Bush
    b. Dick Chaney
    c. Bill Clinton
    d. Al Gore

15. True or False  The British won the French and Indian War?
Circle the best answer for each question.

1. Which group of words is a sentence?
   a. Went to a picnic last week?  
   b. We went to a picnic last week.  
   c. A picnic last week.  
   d. Last week.

2. Have you ever played silly games at a picnic?
   a. declarative  
   b. interrogative  
   c. imperative  
   d. exclamatory

3. How is the mouse different from other _____________?
   a. mouses  
   b. mice  
   c. mices  
   d. mouse’s

4. Writing that compares ____________.
   a. explains how to do something  
   b. convinces the reader to do something  
   c. tells how things are alike and different  
   d. tell a made-up story

5. Cole asked to sit in the ____________ chair.
   a. teacher  
   b. teacher’s  
   c. teachers  
   d. teachers’

6. Choose the sentence where commas are used correctly.
   e. I sat next to Brad Devon and Tamika at the concert  
   f. I sat next to Brad, Devon and Tamika, at the concert.  
   g. I sat next to Brad, Devon, and Tamika, at the concert.  
   h. I sat next to Brad, Devon, and Tamika at the concert.

7. Garden Café has the ____________ prices in town.
   a. lower  
   b. lowest  
   c. most lower  
   d. most lowest

8. Choose the antonym for the underlined word in the sentence.
   Only part of the journey was easy.
   a. simple  
   b. long  
   c. difficult  
   d. stormy

9. Which part of the story focuses on a problem that needs to be solved?
   a. the setting  
   b. the plot  
   c. the conclusion  
   d. the dialogue words
10. Choose the sentence that uses quotation marks correctly.
   e. Guess who wrote us a letter, said Mrs. Thomas.
   f. “Guess who wrote us a letter, said Mrs. Thomas”
   g. “Guess who wrote us a letter,” said Mrs. Thomas
   h. “Guess who wrote us a letter”, said Mrs. Thomas

11. What are the people in a story called?
   a. the setting  
   b. the characters
   c. the plot  
   d. the dialogue words

12. Choose the correct word to replace the word or words in bold type.

   **Jo and his classmates** are writing a letter to the President.
   a. They  
   b. Their
   c. They’re  
   d. There

13. My mother _________ me some kind of green vegetable.
   a. given  
   b. have given
   c. gave  
   d. give

14. Choose the correct contraction for the underlined words.

   I **would not** mind having some more.
   a. wouldn’t  
   b. wouldn’t
   c. wouldn’t  
   d. wouldn’t’

15. Which sentence shows the complete predicate underlined?
   e. I **watched** the baby bird.
   f. I **watched** the baby bird.
   g. I watched the baby bird.
   h. I watched the baby bird.
Math Post-Test
15 questions

1. Write the number in standard form.
   - six thousand, seven hundred five __________________________

2. Order each set from least to greatest.
   11,632   11,649   11,610
   _______________________________________________________

3. Compare the numbers. Choose < or >
   1,012   998

4. 5,897
   4,977

5. Give the next number in the pattern.
   1,107; 1,207; 1307 ___________

6. Round to the nearest hundredth.
   1,366 _______________

7. 32
   x49

The 2:00 p.m. movie was almost sold out when Jen arrived at 2:09. Most of the 175 seats in the theater were full. About $1,000 was collected for the tickets to the show.

8. Which of the numbers is exact?
   e. The number of people in the theatre
   f. The time Jen arrived
   g. The amount of money collected.

9. Which might be a good estimate of the number of people at the show?
   a. 100
   b. 165
   h. 200

10. 21 days= __________ weeks

11. Books cost $1.35 each at a yard sale. Is $20.00 enough to buy 15 books?
12. \(600 \times 40 = \) _________________

13. If you bike for two hours and ten minutes and arrive at your destination at 1:20 p.m., what time did you leave? _________________________________

14. Write each time two ways, using words and numbers.

15. Solve for \(n\)
\[
4 \times 316 = n
\]
Science Post-Test
15 questions

1. How are plants different from animals?
   e. Plants don’t need air
   f. Plants can make their own food
   g. Plants don’t need energy
   h. Plants can live in many different habitats

2. Which organisms in the food chain are consumers?
   a. sun, bird
   b. bird, grass
   c. plant, grass
   d. bird, insect

3. True or False An invertebrate does not have a backbone.

4. Which of the following is not a reptile
   e. a turtle
   f. a lizard
   g. a salamander
   h. a snake

5. _______________ are traits that help organisms survive.
   e. adaptations
   f. muscular system
   g. heredity
   h. metamorphosis

6. Which statement about rocks is not true?
   e. All rocks are made of minerals
   f. Rocks come in different shapes, colors, and sizes
   g. A rock is always made up of just one kind of mineral
   h. Scientists who study the physical properties of rocks are called geologists.

7. A break in Earth’s outer layer caused by the movement of rock is called________.
   e. pore space
   f. outwash plains
   g. fault
   h. seismic waves

8. The cycle of day and night is called________.
   e. Earth’s orbit
f. Earth’s rotation
g. the Sun’s rotation
h. the movement of the moon

9. ____________ means to spin around
d. orbit
e. rotate
f. axis

d. move

g. the Sun’s rotation

10. Waste from industry, farming, and humans are the main source of water ______
et. pollution
f. precipitation
g. heat energy
h. estuary

11. Which material is a good conductor?
et. cotton
f. metal
g. wood
h. plastic

12. Earth’s trip around the sun takes_______
et. one day
f. one year
g. one month
h. 24 hours

13. The measure of how much water vapor is in the air is _____________.
et. air pressure
f. atmosphere
g. air mass
h. humidity

14. **True or False** The largest particles of an element are atoms.

15. Which of the following is not an element?
et. gold
f. oxygen
g. rust
h. carbon
Social Studies Post-test
15 questions

1. What was the date of Columbus’ discovery of America?
   e. 1506
   f. 1492
   g. 1504
   h. 1498

2. Ponce de Leon was a _______________ explorer.
   e. French
   f. British
   g. American
   h. Spanish

3. A_____________ is a journey for a certain purpose.
   e. adventure
   f. expedition
   g. voyage
   h. trek

4. True or False  Spanish explorer Hernando De Soto was in search of gold?

5. ____________ is the term for being treated less than human
   e. apprentice
   f. slavery
   g. Puritan
   h. Burgesses

6. The Boston Tea Party occurred because of a tax placed on ________________.
   e. cotton
   f. molasses
   g. tea
   h. coffee

7. The three branches of government are:
   e. Supreme Court, White House, Congress
   f. House of Representatives, Senators, President
   g. President, Vice President, Secretary of Defense
   h. Legislative, Judicial, Executive
8. These were farmers and other citizens who were ready to fight “with a minutes warning.”
   e. Sons of Liberty  
   f. Green Mountain Boys  
   g. Continental Congress  
   h. Minutemen  

9. Each state has _____ Senators  
   e. 4  
   f. 50  
   g. 10  
   h. 2  

10. ______________ was Commander and Chief of the Continental Army.  
   e. Thomas Jefferson  
   f. Patrick Henry  
   g. Benjamin Franklin  
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11. There are __________ amendments in the Bill of Rights.  
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   f. 14  
   g. 5  
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   g. Indentured servant  
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13. The __________ branch of government creates the laws and sees that they are carried out fairly.  
   d. Executive  
   e. Legislative  
   f. Judicial  

14. __________ is the Vice President.  
   e. George Bush  
   f. Dick Chaney  
   g. Bill Clinton  
   h. Al Gore  

15. True or False The British won the French and Indian War?
Jessica King

Dear Parents:

My name is Jessica King and I am a graduate student at The University of Tennessee at Chattanooga, completing my student teaching through Maryville College, in Mrs. Lafollette’s classroom. I am conducting a research project on parental involvement and student achievement. I am asking students to assist me in providing information about student achievement and parental involvement. I believe that the achievement of students could be improved with greater parental involvement in their child’s education. Your child’s participation in this study will contribute to the information needed to promote the awareness and assistance to schools and other parents regarding parent involvement in their child’s education.

Your child’s participation in this study will be completely anonymous. The pre-tests and posts the students will be given do not ask for their name. Completion of the pre-tests and post-tests will be during the 2005 spring semester. The tests consist of fifteen curriculum-based questions. The completion of these tests has no affect on your child’s grades in any way. Your child’s completion of the pre-tests and post-tests constitutes your informed consent to participate in this study.

Although, your child’s participation in this study is voluntary, their input and yours as their parents is very important. There are no risks to students participating in this study. You may withdrawal your child’s participation in this study at any time without penalty. Should you have any questions please feel free to contact me at anytime, 977-6564.

Thank you for your assistance in this study.

Sincerely,

Jessica King

_________________________________________________________________________

Please sign and return:

I hereby give permission for my child to participate in the research conducted by Jessica King. By signing this form I am giving my informed consent for my child’s involvement in this study.
Fourth Graders,

I am conducting a research project and I need your help. I am working on research to show that when your parents are involved in your education you do better in school. You are an important part of my study!

To help me find out whether or not your parents being involved in your education helps you achieve more in school, come to school more often, and score higher on tests I need your help. The way you can help in my research is by taking four tests. We will take one test a day until we have completed all four tests. Each test has 15 questions. There is a test for English, Math, Social Studies and Science. These are not test that you will have to study for, all I ask is that you do your personal best. These tests will not be taken for a grade. The only people who will know your scores are Mrs. Lafollette and myself.

After you have taken the test I will then send a note home with some of you to your parents each week letting them know what you did in school throughout the week. I will also let them know of ways that they can help you do better in school.

Your participation in my research is voluntary, however, by taking the test you will help give me very important information for my research. There is no punishment if you choose not to participate in this study and you can withdrawal at anytime without punishment.

Thank you for your help

Ms. King

If you agree to help me in my research, please sign your name below:

<table>
<thead>
<tr>
<th>Student</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Jessica King</td>
<td>Date</td>
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References


Documented Discipline Problems at Tyner Middle Academy

William Robert Littlejohn

University of Tennessee at Chattanooga
Introduction to the Problem

The problem I chose to address deals with documented discipline problems at Tyner Middle Academy in the Hamilton County School System of Tennessee. I wanted to explore the number of documented discipline problems before and after the school became a magnet school. I selected this school because I was going to have my first student teaching placement at Tyner Middle Academy and did not have any idea as to what I would find.

Since I would be at Tyner Middle Academy for eight weeks, I would have the opportunity to search the records regarding disciplinary documentation and compare data prior to becoming a magnet school and to data after Tyner Middle Academy became a magnet school. I have lived in the Chattanooga area all of my life. When the concept of forming magnet schools began in Chattanooga, it was presented to the public that more learning takes place in magnet schools rather than “neighborhood” or comprehensive schools.

As I thought about this “selling” point, I reasoned that if more learning was taking place in magnet schools then discipline problems would decrease because the students were engaged in the learning process more and had less time to get into trouble. In other words, the more time a student is engaged in learning, the less disciplinary action that must take place.

Over the last ten years, the formation of magnet schools has become the main method of “improving” schools in Chattanooga. This has also been the trend nationally
even longer because many people believe the product of a magnet school is increased learning by the student.

The subject of documented disciplinary action is not a benchmark or standard of the school curriculum as most individuals know, but it may shed some light on the amount of learning by the students and teaching being done by the teachers. If teachers are spending less time carrying out disciplinary action, it should leave more time for actual teaching. The idea here is that the more time teachers spend teaching students, the more students are able to learn. This leads us back to the concept that if students in magnet schools learn more, then discipline problems will decrease.

Tyner Middle Academy became a magnet school in the 2000-2001 school year. Therefore, I will present the data, which I have obtained on documented disciplinary actions for Tyner Middle prior to and after becoming a magnet school to determine if documented discipline decreased.

Documented disciplinary actions for Tyner Middle Academy fell into three main categories. The first category is suspension. Suspension could be “in-school” or out of school for no more than 10 days per offense. The second category is expulsion. Expulsion is removing the student from the school grounds for up to a period of one calendar year. Expulsion may have stipulations that include no attendance of any school in the system or it may be as lenient as not being able to attend the school expelled from with the opportunity to attend another school in the system provided no more offenses occur. The third and most serious levels of documented disciplinary action are remandments. Remandments involve removal from the school and having legal authorities involved.
This could include jail time, public service or whatever the courts deem as necessary (See Graph 4).

Review of Literature

As I reviewed the literature, I discovered the history of magnet schools. Most were developed in large urban centers in the 1970s primarily as an aid in preventing, eliminating or reducing racial isolation in elementary and secondary schools (Halquist, 2003). This was a way to accommodate school desegregation mandated by Brown v. Board of Education of Topeka Kansas, which was ruled on by the courts in 1954.

Ornstein and Levin (2003) define magnets schools as types of alternative schools that attracts voluntary enrollment from more than one neighborhood by offering special instructional programs or curricula; often established in part for purposes of desegregation. This appears to be an acceptable definition by many authors who define magnet schools. Ornstein and Levine (2003) use the term voluntary enrollment, while most of the other authors use the word “choice” when discussing who attends magnet schools.

The term magnet gained popularity in the 1970s when policy makers were designing desegregation plans in an effort to make them more attractive to parents, educators and students (Goldring & Smrekar, 2002). In many areas, the inner city schools with predominately black students became magnet schools in hopes of convincing white parents to enroll their children into the inner city magnet schools. This would take care of desegregating many schools. The method used to attract people from outside the zoned area for the magnet schools was often presented as a “choice” the parent or student could make regarding the student’s education.
One component many magnet schools have in common with one another is parent involvement. Magnet schools often require parental support in the form of mandatory service hours for parents. Tyner Middle Academy requires 18 hours of parental service and attendance of at least two parent/teacher conferences. If the parental commitment is not fulfilled, the student can no longer attend the Tyner Middle Academy.

Magnet schools are also designed for youngsters who have different learning styles and differing interests. Magnet schools that focus on music and art, vocational education, the humanities, science and mathematics, or on any number of other areas make good sense, both pedagogically and socially (Doyle & Levine, 1984). The different programs many magnet schools offer include math and science, technology, arts and performing arts, and vocational to mention a few. According to a poster circulated by the Hamilton County Department of Education (2005), the magnet school course work is offered in service learning, fine arts theme, museum magnet theme, math, and science and technology theme.

Since parents and students have the choice to attend a magnet school, their level of achievement and sense of ownership of their own education should also rise. Gamoran (1996) found that students in magnet schools did score higher on science, reading, and social studies tests than did students in comprehensive schools. Likewise, Blank (1984) reported that 80% of the magnet schools in a study sample had average achievement test scores in reading and mathematics above the district averages in the same tests.

There have not been many studies conducted concerning an increase in learning resulting in a specific trend in discipline action. The studies that mentioned discipline or behavior were usually directed at how effective the magnet schools are in terms of
learning (Halquist, 2003). The authors who mentioned discipline alluded to the idea that magnet schools had lower disciplinary problems than comprehensive or neighborhood schools (Halquist, 2003 & Potter, 1995). Magnets may offer unique instructional approaches, like individualized continuous progress, open education, or behavior modification (Barr, 1982). Some data indicate that there is a surprising reduction in violence and vandalism in magnet schools especially those designed for delinquent or disruptive youth (Barr, 1982).

Students at magnet schools often have behavior improvements compared to neighborhood and comprehensive schools. Magnet schools have an ambiance that has a positive effect on personal behavior (Doyle & Levine, 1984). If students who attend magnet schools have a more positive behavior, then the documented disciplinary actions should decrease in a magnet versus non-magnet school. The magnet programs have been viewed as successful due to increased test scores, better school climate, higher grades, higher number of college admissions from magnet schools, better attendance, and lower number of behavior problems (Potter, 1995).

Other authors have noted similar findings regarding a decrease in discipline problems in magnet versus non-magnet schools (Doyle & Levine, 1984). According to Blank (1984) the magnet school study produced consistently higher attendance rates, fewer behavioral problems, and lower suspension and dropout rates than comparable non-magnet schools.

The characteristics of magnet school programs are predictable, an orderly and humane learning environment, high expectations for students and teachers, required
homework, a low incidence of absenteeism, and virtually no vandalism, truancy, or general incivility (Doyle & Levine, 1984).

As I searched the literature, the reasons I found being attributed to the successfulness of magnet schools according to Blank (1984, p.271) “it is due to two interrelated factors – student self-selection and the unique characteristics of both the school and the magnet program.” The self-selection is referring to the fact that the student has made the choice to attend the magnet school.

Due to this opportunity of choice, many parents and students decide to attend magnet schools. There are also other appealing characteristics of magnet schools, which include (1) a specialized core curriculum or specialized pedagogy, (2) the school’s focus on an occupation or field of study gives students a sense of direction and lets them justify to themselves, their parents, and their peers the effort they put into schoolwork, (3) a sense of shared enterprise and a committed, enthusiastic faculty and student body, (4) a strong commitment to parent involvement, (5) a committed, charismatic principal, and (6) an association with reform measures such as a contextual teaching, cooperative learning, teacher collegiality and an absence of tracking (Halquist, 2003, p.4).

Data Collection and Results

The method I used to collect the data included contacting the central office and after talking to several people by way of email. I was eventually given the name of the information specialist. The information specialist is responsible for collecting and maintaining data from the principals of the schools in Hamilton County. It took nine weeks to work my way through the bureaucracy to obtain the data. If you will refer to the data table (Table 1) you will see all of the documented disciplinary actions for each
school year it was available. The second table includes the average number of
documented disciplinary actions for the school years consisting of 2000/2001 to
2003/2004. At the time this project was completed, the 2004/2005 school year was
currently in session therefore the data was incomplete and unavailable.

As you look at the data from Table 1, notice that school year 1999/2000 is
included, but it is not included in calculating the means of documented discipline actions
in Table 2. This is the only school year with data of documented disciplinary actions prior
to Tyner Middle Academy becoming a magnet school. The reason the Hamilton County
Schools central office did not have data for school years earlier than 1999/2000 was due
to the fact that Hamilton County Department of Education took over the running of many
schools during a transition when the City of Chattanooga decided to “get out of the
school business because it was too expensive on the city budget” according to the city
commissioners at the time. Hamilton County Department of Education did not have data
going back to the years when the City of Chattanooga was managing Tyner Middle
Academy.

With that in mind, the data only shows one school year worth of documented
discipline actions prior to Tyner Middle becoming a magnet school. Table 1 does contain
four years worth of data for disciplinary actions.

During the 1999/2000 school year there were a total of 134 documented
disciplinary actions taken at Tyner Middle Academy. Since this is the only school year
with data prior to Tyner Middle Academy becoming a magnet school, I used this data, as
baseline data to compare all years after the school became a magnet school. As you will
greater number of total documented disciplinary actions.

The school year Tyner Middle Academy became a magnet school (2000/2001)
had the highest number of documented disciplinary actions of 226. The school year of
2003/2004 had the lowest number of documented disciplinary actions with 140, which is
six more documented cases than the baseline year 1999/2000 with 134 cases.

You will also notice the mean calculated for all of the school years after Tyner
Middle Academy became a magnet school in Table 2. The mean for those years is 180
documented cases, which is 46 more cases than the baseline school year of 134 cases
recorded. The data reflects that all years after Tyner Middle Academy became a magnet
school, the number of documented disciplinary actions were higher than the individual

Figure 1 is a pictorial representation of the total documented disciplinary actions
for the school year prior to and the school years after Tyner Middle Academy became a
magnet school. Figure 2 is a pictorial of the total suspensions for the school year prior to
and the school years after Tyner Middle Academy became a magnet school. Figure 3 is a
pictorial representation of the total expulsions including the school year prior to and the
school years after Tyner Middle Academy became a magnet school. Figure 4 represents
the remandments recorded for the school year prior and the school years after Tyner
Middle became a magnet school.

Figure 3 only has two columns because the school years of 2002/2003 and
2003/2004 were the only years with expulsions recorded. These two years are after Tyner
Middle Academy was a magnet school. The baseline year when Tyner Middle Academy was not a magnet school, there were zero expulsions recorded.

Figure 4 contains the number of remandments that has occurred at the school between school years 1999/2000 and 2003/2004. The school year of 2000/2001 had zero remandments and this was the year Tyner Middle Academy became a magnet school. The highest number of remandments occurred during Tyner’s second year as a magnet school with a total of 13 followed by school years 2003/2004, 2002.2003, and 1999/2000 with a recorded number of 11, 7, and 5 respectively.

Overall, the results show that the greatest number of documented disciplinary actions carried out at Tyner Middle Academy was after the school became a magnet school. The mean number of documented cases for the school years after becoming a magnet school was 180 with a standard deviation of 36.84. Compared to the baseline year, when Tyner Middle Academy was not a magnet school, all years that followed after become a magnet school were higher in the number of documented cases of disciplinary problems.
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Tyner Middle Academy Mean and Standard Deviation Data with Yearly Totals

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Mean after becoming a Magnet School (Years 2000-2004) 180

Standard Deviation for Years 2000-2004 36.842005
Figure 1. Yearly Totals of Documented Disciplinary Actions

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Figure 2. Yearly Total Suspensions

School Years

Documented Discipline Cases

- 1999/2000
- 2000/2001
- 2001/2002
- 2002/2003
- 2003/2004
Figure 3. Yearly Total Expulsions

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Figure 4. Yearly Remandments

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Conclusions, Limitations and Recommendations

Based the data I obtained from Hamilton County, I would conclude that the number of documented disciplinary actions taken at Tyner Middle Academy increased after the school became a magnet school. This is opposite from what I thought would have occurred after reviewing the literature on other magnet schools. The literature suggests that magnet schools have increased learning and greater achievement along with a decline in disciplinary problems.

I cannot conclude that learning and achievement went down in this study because I did not look at any state mandated testing data from Tyner Middle Academy covering the year prior to becoming a magnet school or the years after becoming a magnet school. I also would be skeptical to claim the overall discipline problems increased after the school became a magnet school simply because I only had one years’ worth of data to use as a background comparison. One year worth of data is not sufficient in a study of this nature to make scientific based conclusions.

The year that I used for my background comparison may have been an extremely low year for discipline documentation compared to prior years as a non-magnet school. If this is true then my data is skewed. The prior years data as a non-magnet school may be even lower than my data I worked with for background data. If this is true then the results may be valid. I would not classify this as a valid study due to the lack of background data as a non-magnet school.

Other factors may also account for the higher number of documented discipline cases after Tyner Middle Academy became a magnet school. I do know that school discipline rules became stricter with a “no tolerance or zero tolerance” policy being
enacted. This may account for the higher number of documented cases after becoming a magnet school.

Other factor(s) that could have resulted in the higher number of documented discipline cases are the rules of the magnet school itself. When Tyner Middle Academy became a magnet school, along with that change came a dress code. As a non-magnet school, the students could wear whatever type of clothing they wanted to. As a magnet school, the students must wear specific clothing. For example: the students must wear shirts with a collar, they must wear a belt, and they cannot wear blue jean pants.

If a student is caught out of dress code, he or she is sent to the principal’s office. If they are sent to the principal’s office three times on dress code violations, he or she receives a suspension. This would be documented and turned in to the central office. As a student teacher, I observed many dress code violations and students being sent to the principal’s office due to the infraction. This may explain an increase in documented cases of discipline problems.

Many factors could have influenced increased documentation of disciplinary actions according to some of the teachers there. Since becoming a magnet school, there are few teachers there that were present when the school was a non-magnet school. The “newer” teachers may have a lower tolerance for behavioral problems, or behavioral problems may be classified in a broader definition, which may have resulted in more documented discipline problems when the number has not actually increased.

The consensus found in the literature suggests that discipline problems decrease when a school becomes a magnet school. As for comparing Tyner Middle Academy as a non-magnet and magnet school, I would not draw definitive conclusions due to the
limited data I obtained when the school was a non-magnet school. I would recommend much more study in this area before drawing definitive conclusions. I would also recommend looking at many schools instead of limiting a study of this nature to one school.

Another recommendation to this type of study would be to compare documented discipline actions along with the state mandated testing scores and try to determine if there is a statistical correlation between the two. One can then compare possible learning or achievement to discipline in non-magnet and magnet school. I would also try to compare schools that have students from the same socioeconomic status, schools with roughly the same number of students, same number of students per classroom, etc. I would recommend having as many common factors as possible among the schools being studied.

Upon comparing schools, I would also recommend comparing schools with similar or the same discipline policies and expectations from the students, parents and teachers. A study of this nature would take a great deal of time and money to carry out correctly.

The results of a study of this nature would be beneficial to teacher professional development if the study were valid. If schools were identified where learning/achievement increased and discipline problems decreased, teachers from other schools may find it beneficial to learn more about the school showing this type of trend. Teachers may be able to use the same methods in order to increase the level of achievement in their own school while at the same time have the discipline problems decrease.
There are possibilities for grant writing in this area to perform research of this nature. One organization I heard about while gathering my research information was Magnet Schools of America. In order to access their information though, you have to be a member. At the time of this research, I was not able to subscribe and learn all of the benefits this organization has to offer.

I have also been told that many school systems are still looking at magnet schools as a school reform method in terms of increasing achievement. If this is the case, many of them may have funding available to use for this type of research.

Technology could be used in the form of a collection storehouse for data comparing non-magnet schools to magnet schools in the same geographical areas with similar socioeconomic populations. The technology could make it possible for any researcher interested in this area to gather data rapidly and much more efficient than the method I utilized (having to locate individuals in the school system with access to this data). A central storage location, like a server on the Internet, could allow instant and up to date access to the data.

The technology could possible be set up like many Geographical Information Systems (GIS) used in a variety of communities. Most GIS are constantly being updated and having a greater range of information input to allow demographic studies, socioeconomic class studies, etc. This could be used to identify schools that are similar for a study of this nature to occur and result in useful data that could offer valid conclusions.

Drawing a valid conclusion, from the data I obtained would be a major flaw in this research due to only; 1) looking at one years’ worth of non-magnet school
documented cases and using the data as all of the background history, 2) looking at one school, 3) not considering all of the outside factors that can contribute to an increase in documented cases (dress codes, stricter magnet school rules, etc.), 4) not considering the possibility of new teachers entering the school with lower tolerance levels regarding disciplinary action being taken, and 5) not considering the governing body that operates the school system changing very close to the time the school became a magnet school.
Reference List


Hamilton County Department of Education. (2005, January) *Common questions and answers about Hamilton County Magnet School Fair*, Chattanooga, TN.


American Symbols

and

Significant American Presidents

Donna Elizabeth Tolar LoCicero

April 15, 2005

EDUC 590

University of Tennessee at Chattanooga
Introduction to the Problem

There are many different methods of instruction that can be incorporated into the classroom; however, a hands-on approach seems to be the most developmentally appropriate approach for young students. In a developmentally appropriate classroom the curriculum is based on how young children think, as well as learn. “Teachers who maintain a developmentally appropriate classroom believe that young children learn in an active, not passive, way” (Marion, 2003, p. 156). These educators believe that young children construct meaning or build knowledge through their interaction with people and things.

Hands-on instruction may be defined as active participation, by the student, in activities directly related to the topic or subject (of curriculum) being studied. Teachers who engage in hands-on instruction allow each student to actively participate in learning by using a variety of senses, such as visual, auditory, and touch. Students are allowed to manipulate objects and/or materials directly related to the topic or subject (of curriculum) being studied. Young children, ages 3 through 8 years “learn best from concrete, manipulative, sensory, and firsthand experiences” (Eliason & Jenkins, 2003, p. 45). Young children do not think or learn in the same way older children or adults learn. Young children, ages 3 through 8, “absorb information through concrete experiences involving smelling, tasting, hearing, seeing, and touching” (Eliason & Jenkins, 2003, p. 48).
This particular topic was selected for study because hands-on instruction is an approach used in many classrooms throughout the nation. As a student-teacher, learning whether hands-on instruction is an effective method for teaching social studies curriculum to kindergarten students, will allow for more effective lesson preparation in the future. Specifically, this project allowed the researcher to determine if hands-on instruction of American symbols, the Liberty Bell, the Statue of Liberty, the Bald Eagle, and the American Flag and instruction of significant presidents George Washington, Abraham Lincoln, and Theodore Roosevelt, would increase the kindergarten students’ identification, knowledge and comprehension of required social studies curriculum. This study also allowed the researcher to gain information regarding hands-on instruction while meeting the kindergarten standards set forth by the county school system where student-teaching occurred.

Review of Literature

Hands-on activities incorporate the use of a variety of senses which are an essential ingredient for learning in the primary grades. “The use of manipulatives and corresponding hands-on/minds-on, developmentally appropriate activities has been advocated since the late 1950’s” (Frederick & Shaw, 1999, p. 4). “Young children are in a unique period of development and need learning experiences that match their level of development” (Eliason & Jenkins, 2003, p. 45). Effective instructional models allow students to become active participants in the learning process (Gunter, Estes, & Schwab, 2003). Hands-on learning is an instructional model that specifically allows students of any age to become active participants in the learning process by utilizing the senses.
While hands-on learning is a method frequently used in the classroom, research indicates that the majority of studies performed with hands-on instruction have been conducted in the fields of math, science, and technology. According to a study conducted by Harvey, Sirna, & Houlihan (1998), the students in a middle school where teachers experimented with hands-on teaching methods scored significantly higher on Standard Achievement Tests than students in other school districts. A study by Butta (1998), compared the academic achievement of students that were taught science by traditional methods versus hands-on methods. This particular study suggested that the use of “hands-on science in the classroom significantly improved the academic grades of students” (Butta, 1998, p. 31).

“An underlying assertion made by researchers is that hands-on, concrete experiential science instruction inherently involves multi-sensory learning (multi-modal experiences, including sight, sound, touch, and taste), which provide multiple opportunities for differentiated instruction” (Klemm & Plourde, 2003, p. 2). This type of approach is especially crucial for the learning experiences of young children. Helm and Gronlund (2000) stated that children in the primary grades learn best through active, engaged, meaningful experiences. The object of teaching, as well as learning is that everyone must be an active participant (Alamaki, 1998).

In 1990, Korwin and Jones conducted a study to determine the effectiveness of hands-on technology based activities in a geodesic dome concept. They wanted to ascertain whether technology based activities would enhance learning by reinforcing cognitive knowledge and retention. The researchers used two groups of students in the study; one group of students participated in reading and hands-on assignments while the
other group of students participated in reading and lecture activities. They found, through pretest/posttest results that organized hands-on activities not only increased learning, but also increased retention of technological concepts.

Another type of hands-on learning includes participatory exhibits found in museums. Eldridge (1995) found that hands-on exhibits were particularly valuable for providing context in the study of history. Unlike science, math, and technology exhibits that provide hands-on experiences for learning a specific process or skill, hands-on history exhibits must teach a particular subject matter. Utilizing a variety of interactive techniques allow history exhibits to come alive which makes the subject matter memorable.

Social Studies is a complex curriculum; not only must specific skills and/or processes be mastered, but facts must be remembered. Since previous research suggests the learning of skills and processes are enhanced through hands-on learning and facts are remembered when subject matter comes alive, further research should be conducted to determine if a hands-on approach to social studies would increase identification, knowledge and comprehension with the curriculum based information taught in the area of social studies.

Method

Population

The population of students who participated in this study were enrolled in a kindergarten at a suburban elementary school in the southeastern United States. The socioeconomic status is considered middle class and 22% of the total students receive free/reduced lunches. The school educates approximately 593 students from kindergarten
through fifth grade in any given year. Approximately ninety-eight percent of the student population enrolled at this elementary school is Caucasian, one percent is African American and one percent is Hispanic, Asian, and Indian. The student teacher ratio is about 17 to 1.

Currently, there are approximately 112 kindergarten students enrolled at this particular elementary school. The students who participated in this study were students of opportunity enrolled in the class where the investigator participated in student-teaching. An informed consent was obtained from the parents/guardians of the students participating in the study prior to implementation.

The populations that will be most interested in the results of this study include educators trying to determine if hands-on learning is an effective method to use for teaching the American symbols and significant American presidents. Furthermore, educators trying to determine if hands-on learning is an effective method to use with subjects other than math, science, and/or technology may also be interested in the results of this study.

Materials

The pre-test (see Appendix A) measure was used to determine prior knowledge of the following American symbols: the American Flag and the Statue of Liberty and the following significant American presidents: George Washington and Abraham Lincoln as outlined in the Social Studies Curriculum Standards for kindergarten students enrolled in this particular county school system. The pretest consisted of the American Flag and Statue of Liberty, as well as, George Washington and Abraham Lincoln. The pretest also included two the American Symbols, the Bald Eagle and the Liberty Bell and a third
American president, Theodore Roosevelt. The pretest allowed the researcher the opportunity to measure the level of knowledge of the select group of kindergarten students regarding American symbols and significant American presidents.

Procedure

After the pretest was administered, the student-teacher began teaching the pre-determined American symbols and significant American presidents through hands-on activities. The students engaged in the hands-on activities in small groups at designated center stations. Each topic that was addressed consisted of four to five center stations where the students engaged in the manipulation of objects and/or materials. The students were able to create arts and/or crafts related to each topic, as well as a book of the American symbols and significant American presidents. Some of the center projects the students created a stove pipe hat, cherry tree, log cabin, statue of liberty crown and statue of liberty torch. The student-teacher modeled each center station and what was required at each center station prior to the students engaging in an activity at that particular center station.

The posttest (see Appendix A) measure was identical to the pretest measure and was given to each student who participated in the study at the completion of the intervention. The posttest data allowed the investigator to gain information to determine if the hands-on social studies instruction was an effective method to use with the kindergarten class.

Data Collection Time Line:

Day 1: The researcher obtained informed consent from the parents/guardians of the students that participated in the
study. The student-teacher gave the students, in attendance that particular day, the pretest to determine each student’s prior knowledge regarding American symbols and significant American presidents.

Day 2 through Day 8: The student-teacher incorporated hands-on instruction with the students regarding the following American symbols, the American Flag, the Liberty Bell, the Statue of Liberty, and the Bald Eagle, as well as the following significant American presidents, George Washington, Abraham Lincoln, and Theodore Roosevelt. During day 2 through day 8, students engaged in hands-on activities through activity centers directly related to each topic being addressed on that particular day.

Day 9: The student-teacher gave the students a posttest to be used to gather final data to assess and to determine if the unit on American symbols and significant American presidents taught through a hands-on approach proved to be an effective strategy for teaching social studies to kindergarten students.

Data Analysis

Data was collected on fifteen kindergarten students. The pretest and posttest included pictures of American symbols (American flag, Statue of Liberty, Liberty Bell, and Bald Eagle), as well as the significant American presidents (George Washington,
Abraham Lincoln, Theodore Roosevelt) that would be presented in the social studies unit. The pictures were listed on the left side of the page and corresponding words were placed on the right side of the page in random order (see Appendix A). The students were required to match the written word with the corresponding picture by drawing a line from one to the other. There were a total of seven questions and the same test was used for both the pretest and posttest. After completion of the pretest, the student-teacher taught the unit on American symbols and significant American presidents and following the unit teaching, students completed a posttest. The results were analyzed on thirteen of the fifteen students because two of the students who took the pretest did not take the posttest and two of the students who took the posttest did not take the pretest. The two students who took the pretest and the two students who took the posttest were all different individuals.
Results

The results of the pretest (see Figure 1) indicated the level of knowledge regarding American symbols and significant American presidents was low. The mean score was 32.97%; the mode and median were the same at 28.57%.

Figure 1. Pretest data.

![Pre-Test Data](image)

The results of the posttest (see Figure 2) indicated significant improvement in scores regarding identification of the American symbols and significant American Presidents. The mean score of the posttest was 85.71%; while the mode and median were the same at 100%.
Table 1 shows individual student improvement and the overall mean improvement of 52.75%. There was a significant increase in the posttest scores when compared to those of the pretest scores.
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Pretest/Posttest Results

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<td>14.29</td>
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Mean 32.74 85.71 52.75

Conclusions and Recommendations

The pretest indicated an overall lack of knowledge regarding the identification of American symbols and significant American presidents; however, the posttest showed a marked improvement of student achievement. Overall, the posttest suggests identification of American symbols and significant American presidents can be increased through hands-on instruction; however, further research would need to be performed to determine if overall knowledge and knowledge and comprehension could be increased, as well.

The consensus of the professional organization of educators would agree that hands-on instruction is a viable method to use in the primary grades; however, there is limited information regarding the implementation of hands-on learning in subjects other than math, science, and technology. Technology can be used to enhance hands-on
learning experiences through social studies webquests. Webquest on social studies can be found on the World Wide Web or an educator could design one to meet the specific needs of any given class. Scholastic has developed a social studies webquest on Abraham Lincoln (http://teacherscholastic.com/webquest/ushist/uslinc.htm).

Professional development is needed regarding the effectiveness of hands-on approaches in the classroom. While many teachers utilize hands-on learning in many subjects, hands-on learning is a method that can be applied across the curriculum and teachers need more information on how to implement hands-on methods in subjects other than math, science and technology.

The National Council for the Social Studies (NCSS) established a grant program in 1994 called the Fund for the Advancement of Social Studies Education (FASSE). This program was designed to provide support for research and classroom application projects that improve the education in the field of social studies. One award program that falls under the FASSE is The Christa McAuliffe Reach for the Stars Award for $1,500. This award is available to help social studies educators develop and implement imaginative, innovative and illustrative social studies teaching strategies. Additionally, award supports student implementation of innovative social studies, citizenship projects, field experiences, and community connections (http://www.socialstudies.org/fasse/).
References


Pretest/Posttest

Directions: Draw a line from the picture to the correct word.

- Statue of Liberty
- American Flag
- Bald Eagle
- Liberty Bell
- George Washington
- Teddy Roosevelt

Name: ________________________________
Abraham Lincoln
Does Teaching Using Hands-On Activities Positively Increase Middle School Girls’ Attitudes Towards Physics?

Barbara A. McGirl

University of Tennessee at Chattanooga
While pursuing my undergraduate degree in chemistry and biology in the early eighties, I was one of a minority of females in most of my classes. My husband had very few females in his undergraduate engineering classes during the same time period. While the trend has improved in the biological and life sciences, there are still noticeably fewer females than males graduating college with physical science and engineering degrees. According to the U.S. National Center for Education Statistics in 1998, females earned 55.1 percent of all biological and life sciences bachelor’s degrees, 38.4 percent of all physical sciences bachelor’s degrees and 16.9 percent of all engineering bachelor’s degrees in the United States (Statistical Abstract of the United States, 2001).

The literature shows that girls’ attitude toward science generally declines beginning in the middle school years. As a result, the number of girls continuing to study science in high school and college is less than the number of boys. Consequently, various fields of science have a fewer number of females than males working in them. As a middle school science teacher, it would be beneficial to know what I could do to increase my female student’s attitude toward science, including physics. Increasing girls’ attitudes towards science and physics during middle school could encourage them to pursue various scientific interests in the future.

Description of Problem

Studies show that fewer high school girls are enrolled in science courses than boys (AAUW, 1992). Yet, girls have been shown to be academically equal to boys in this area
(AAUW, 1992; Catsambis, 1995; Meece & Jones, 1996). Since science courses during the later years in high school are generally chosen by the student, why are more boys than girls enrolling in them? It has been suspected it is because of a lack of interest by girls in the science courses, rather than a lack of ability.

Researchers have completed several studies to identify the reasons for this lack of interest toward science by girls. In fact, research pinpoints the middle school years, grades 5-8, as the time when a decline in interest towards science occurs for girls; the decline in interest does not occur with boys (AAUW, 1992; Catsambis, 1995; Jones, Howe & Rua, 2000; Peltz, 1995). Researchers have identified several factors. These factors include socioeconomic status and race (AAUW, 1992; Catsambis, 1995; Kennedy & Parks, 2000), the lack of scientific female role models in both the curriculum and in real life (AAUW, 1992; Baker & Leary, 1995; Jones et al., 2000; Joyce & Farenga, 2000; Lee & Burkam, 1996; Kennedy & Parks, 2000), behavior of girls in the classroom (AAUW, 1992; Baker & Leary, 1995; Lee & Burkam, 1996; Meece & Jones, 1996), and involvement in science-related activities outside of school (AAUW, 1992; Catsambis, 1995; Conwell & Prichard, 1992; Jones et al., 2000; Joyce & Farenga, 2000; Lee & Burkam, 1996; Weinburgh, 2000).

As a result, researchers have studied the effect of implementing various teaching strategies in order to increase middle school girl’s interest in science, particularly physical science. These teaching strategies include the use of student’s verbal skills, the use of student’s problem-solving skills, same-sex classrooms, relation of material by instructor to the “real-world”, and instruction incorporating hands-on activities (AAUW, 1992; Gabel, 1994; Gavin & Reis, 2003; Kennedy & Parks, 2000; Lee & Burkam, 1996,
Pollina, 1995). This case study focuses on using hands-on activities to teach a physics unit with the objective of increasing middle school girls’ interest in science and physics.

_Review of Literature_

It is recognized that there are significantly fewer women working in science-based jobs. Statistics show that in the United States in 2000, 9.9% of all engineers are female and 33.5% of all natural scientists are female (U.S. Census Bureau, Statistical Abstract of the United States, 2001). In order to hold these types of jobs, science, math and engineering degrees are necessary. Women who study science in college must take several science courses in high school. It has been shown that for girls to choose science courses in high school, they must have a positive attitude toward science in middle school (AAUW, 1992; Weinburgh, 2000). In fact, several studies show girls’ attitudes towards science decreases in the fifth through eighth grades (AAUW, 1992; Catsambis, 1995; Jones, Howe & Rua, 2000; Peltz, 1995). What accounts for the increasing negative attitude towards science by girls as they proceed from the fifth to the eighth grades? What can be done in the classroom to change the trend to a more positive attitude?

A number of factors contributing to middle school girls’ negative attitude towards science have been identified in the research. Factors include socioeconomic status and race (AAUW, 1992; Catsambis, 1995; Kennedy & Parks, 2000). The lower a girl’s socioeconomic status, the lower her attitude towards science will be. Girls who are members of a minority group generally have a more negative attitude towards science than Caucasian girls. It should be noted, however, that girls in the higher socioeconomic groups and girls who are Caucasian still have lower negative attitudes towards science than boys.
Girls’ negative attitudes toward science are also affected by their behavior in the classroom. While boys, in general, are competitive, more confident, and encouraged to try a problem again in the classroom, girls are generally more reserved, internally feel like a failure and give up if they encounter a problem they cannot solve (AAUW, 1992; Baker & Leary, 1995; Lee & Burkam, 1996; Meece & Jones, 1996). Teachers should be sensitive to the fact that middle school girls are not as confident in answering questions out loud in class, especially when faced with new concept (Peltz, 1990). Rodrick & Tracy (2001) propose that same-sex science classrooms can be beneficial to girls. It is also suggested that science teachers should focus more on cooperative learning to promote a non-competitive atmosphere. Including hands-on activities in a lesson provides an opportunity for students to work together, too (AAUW, 1992; Gavin & Reis, 2003; Kennedy & Parks, 2000; Meece & Jones, 1996).

Because middle school age girls also place a high priority on relationships, role models in science have a direct affect on girl’s attitudes toward science. Girls who have a family member who works in a science-related field are more interested in science. In fact, it could be a main reason they study science in later years (Baker & Leary, 1995; Peltz, 1990). Having female role models in science has been shown to positively affect girls’ attitudes, too, either by learning about them in the curriculum or going to female scientist mentoring programs or career days (AAUW, 1992; Jones, et al., 2000; Joyce & Farenga, 2000; Lee & Burkam, 1996). Connecting science and math to the “real world” exposes girls to the lives of people and provides a “powerful hook for girls” (Pollina, 1995). A way to reach more middle school age girls on a daily basis would be to have more female science teachers (AAUW, 1992; Kennedy & Parks, 2000). It is interesting to
note, too, that girls choose to study the life sciences more than the physical sciences. It is proposed that this is also relevant to middle school age girls high priority on relationships: the life sciences generally relate to “helping” people or animals (AAUW, 1992; Baker & Leary, 1995; Catsambis, 1995; Lee & Burkam, 1996; Jones, et al., 2000; Joyce & Farenga, 2000). Increasing hands-on activities in the science classroom can contribute to decreasing the negative attitude of girls towards science, particularly physics (Lee & Burkam, 1996).

Many studies using various survey instruments show that a middle school girls’ attitude towards science can also be related to her personal out of school experiences. Generally, more boys than girls are exposed to science-based activities such as working with engines and batteries, taking objects apart to see how they work, using tools, exploring nature and handling creatures, etc. As a result, middle school boys are more interested than girls in many of the concepts of science, especially physical science (AAUW, 1992; Catsambis, 1995; Conwell & Prichard, 1992; Jones, et al., 2000; Joyce & Farenga, 2000; Lee & Burkam, 1996; Weinburgh, 2000). Parents have a direct affect in this area: they should expose their children to various science-based activities, and promote positive attitudes toward science for their girls as well as for their boys. Jones, et al., 2000, has gone so far as to say that school may be the only place to change this factor. As a result, this study focuses on teaching a unit of physics, the laws of forces and motion, in order to increase the positive attitude of middle school age girls towards science and physics.
Method

Population
The population is the eighth grade students at St. Jude School in Chattanooga, Tennessee. The population includes both boys and girls from a range of socioeconomic backgrounds, the majority being middle class. The majority of students are Caucasian.

The eighth grade is composed of 48 students, with 28 being female and 20 being male. I teach science to all of the eighth grader population at St. Jude School every day. The students are assigned to their classes by the principal. All students in the eighth grade were asked to participate in the study, and received student assent and parent consent forms to sign in order to participate in the study. No students were excluded from the study unless they did not have both student assent and parent consent forms signed as required by the Institutional Review Board of the University of Tennessee at Chattanooga.

Measurement
Initially, the level of interest in science and physics, specifically the study of forces and motion, needs to be measured. An attitude questionnaire was created following guidelines established in the research (Goglin & Swartz, 1992; Simpson & Oliver, 1985; Simpson & Troost, 1982). The attitude questionnaire contains a four point Likert scale that the students used to rate ten statements regarding their attitude towards math, science, the study of force and motion, and various teaching strategies used in the study of force and motion. The student’s attitude towards the desire to learn more about forces and motion was also measured. The scale is written as follows: a score of 4 indicates the student strongly agrees with the positive statement, a score of 3 indicates the student agrees with the positive statement, a score of 2 indicates the student disagrees with the
positive statement, and a score of 1 indicates the student strongly disagrees with the positive statement. Therefore, a higher score reflects a more positive attitude, and a lower score reflects a more negative attitude.

One attitude questionnaire was created as a pre-test to the physics unit of study, Appendix A, and one attitude questionnaire was created as a post-test, Appendix B. Because the attitude questionnaire was given both before and after the physics unit of study, a difference in the attitude towards physics can be measured. The attitude questionnaires were given to both the boys and the girls in the class in order to avoid the girls from feeling singled out. In fact, the girls did not know their attitudes were the ones being researched in this study. In order to maintain confidentiality, the subjects were assigned a number to be written on the attitude questionnaire instead of their name.

Procedure
Before teaching the two-week physics unit of study on forces and motion, the pre-test attitude questionnaire was given to the students at the beginning of class. Papers were collected facedown to maintain confidentiality of student’s answers. All students, whether they completed the questionnaire or not, was required to participate in all classes during the two-week period of study. The physics unit on forces and motion was developed in compliance with the Tennessee Science Content Standards for Grade 8 for forces and motion standards 8.11.1a, 8.11.1b, 8.11.2, 8.11.3a and 8.11.3b. Various resources were consulted in order to incorporate several hands-on activities within the unit. These activities included a rotation through learning stations within the classroom, flight of balloons indoors, miniature catapults outdoors, and a competition to design, build and race a balloon-powered vehicle.
The majority of the lessons during the two-week unit were dedicated to hands-on activities. Few lessons involved teacher lecture, worksheets and calculations. The balloon-powered vehicle competition was used to assess the learning of the physics concepts instead of a traditional pencil and paper test. Once the unit of study was completed, the post-test attitude questionnaire was completed by the students and again collected facedown to maintain confidentiality of answers.

Data Collection and Results

Twenty-six eighth grade girls and thirteen eighth grade boys participated in all physics activities for the two-week period, and completed both attitude questionnaires. All raw scores were recorded and analyzed using Microsoft Excel software. The raw scores were analyzed for each student’s answer for each statement on the attitude questionnaire, in addition to each gender group.

The results of the data show that no significant change occurred in the attitudes of both the girls and the boys, with the average difference in attitude after the post-test being 0.12 and 0.05, respectively, out of a possible high score of 3. The average median of the pre-test scores for the girls is 2.5, and for the boys is 2.7 out of a possible high score of 4. The average median of the difference in attitude scores after the post-test for the girls is 0.05, and for the boys is 0. The average mode of the pre-test scores for the girls is 2.6, and for the boys is 2.7 out of a possible high score of 4. The average mode of the difference in attitude scores after the post-test for the girls is 0.1, and for the boys is 0.

When the data is broken down and analyzed by statement on the attitude questionnaire, additional observations can be made as shown in Figure 1 and Figure 2. For instance, the
average median and mode of the pre-test attitude by statement show that both girls and boys like performing experiments on the laws of motion and forces (statement 8). In fact, the girls rated this statement the highest of all of the statements on the attitude questionnaire with a score of 4 for both the median and the mode of the pre-test attitude. The girls also rated liking science (statement 1), class discussions on the laws of motion and forces (statement 7), and wanting to learn about the laws of motion and forces (statement 10) with a score of 3 for both the median and the mode of the pre-test attitude, Table 1.

The boys rated liking math (statement 2), having a good feeling towards studying the laws of motion and forces (statement 3), and feeling at ease in class when studying the laws of science and motion (statement 4) with a score of 3 for both the median and the mode. The girls rated the same statements with a score of 2 for both the median and the mode. It is interesting to note that both the boys and the girls rated the statements of liking to read about the laws of motion and forces (statement 5) and liking to complete worksheets on the laws of motion and forces (statement 6) with a score of 2 for both the median and the mode of the pre-test attitude, Table 1.

Conclusion and Recommendations

The results obtained did not show that using hands-on activities increased the attitude of middle school-aged girls nor boys toward science or physics. These results could be attributed to many factors. As stated in the literature (Goglin & Swartz, 1992; Simpson & Oliver, 1985; Simpson & Troost, 1982), a shortcoming of measuring attitudes toward science is the lack of available attitude questionnaires or inventories with high reliability.
and validity. The attitude questionnaire created for this study can be used as a preliminary questionnaire upon which to build further studies of attitude toward physics.

Another reason the results did not show an increase in the attitude towards science or physics is because the girls and boys of this population already agreed or strongly agreed with some statements on the pre-test attitude questionnaire before the hands-on intensive unit of study even began. Therefore, there was not much room for improvement. In addition, the question must be asked if two weeks of hands-on activities is sufficient time to change a student’s attitude towards any science concept? Further studies should include a longer time period of using the teaching strategy before measuring the attitude again. The ideal situation would be to develop a curriculum that is entirely hands-on for the semester or school year in order to try to increase the attitude of middle school aged girls toward science and physics.

Along this train of thought, the results of this study show some notable points. The breakdowns of the results by statements on the attitude questionnaire indicate that both girls and boys like and want to perform experiments on the laws of motion and force. The results also show that both girls and boys do not like to read about or complete worksheets on the laws of motion and force, which is the more traditional way of teaching science. What the results of this study do not show is the enthusiasm observed of the girls and the boys as they designed, built and raced balloon-powered cars, and as they shot marshmallows from mini-catapults. Perhaps further studies of girls’ attitudes toward science and physics should include the study of the increase of the girls’ knowledge of science and physics as a result of this enthusiasm generated by hands-on activities. The
need to continue developing and including hands-on activities within a middle school science curriculum is highly recommended as a result of this study.
References


Appendix A

Attitude Questionnaire, Pre-Study of Physics Unit (Pre-Test)

Participant Number__________________________________________________________

———————————————————————————————————————————————————

Read each of the following questions carefully. Using the scale for responses listed below, circle the number that best matches your answer. Remember that there are no right or wrong answers. This questionnaire is not graded; the results are only used for a research project. It is important that you answer each question truthfully.

Scale for responses:
1= STRONGLY DISAGREE  2= DISAGREE  3= AGREE  4= STRONGLY AGREE

1. I like science.
   1 2 3 4

2. I like math.
   1 2 3 4

3. I have a good feeling towards studying the laws of motion and forces.
   1 2 3 4

4. I feel at ease in science class when studying the laws of motion and forces.
   1 2 3 4

5. I like reading about the laws of motion and forces.
   1 2 3 4

6. I like completing worksheets on the laws of motion and forces.
   1 2 3 4

7. I like class discussions on the laws of motion and forces.
   1 2 3 4

8. I like performing experiments on the laws of motion and forces.
   1 2 3 4

9. I would like to solve problems involving the laws of motion and forces.
   1 2 3 4

10. I would like to learn about the laws of motion and forces.
   1 2 3 4
Appendix B

Attitude Questionnaire, Post-Study of Physics Unit (Post-Test)

Participant Number

---

Read each of the following questions carefully. Using the scale for responses listed below, circle the number that best matches your answer. Remember that there are no right or wrong answers. This questionnaire is not graded; the results are only used for a research project. It is important that you answer each question truthfully.

Scale for responses:
1= STRONGLY DISAGREE  2= DISAGREE  3= AGREE  4= STRONGLY AGREE

1. I like science.  
2. I like math.  
3. I have a good feeling towards studying the laws of motion and forces.  
4. I feel at ease in science class when studying the laws of motion and forces.  
5. I like reading about the laws of motion and forces.  
6. I like completing worksheets on the laws of motion and forces.  
7. I like class discussions on the laws of motion and forces.  
8. I like performing experiments on the laws of motion and forces.  
9. I like to solve problems involving the laws of motion and forces.  
10. I would like to learn more about the laws of motion and forces.
Table 1

Data of Attitude Questionnaires

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Figure Caption

*Figure 1.* Graph of medians of pre-test attitudes of girls and boys of each statement in the attitude questionnaire.
Figure Caption

Figure 2. *Graph of modes of pre-test attitudes of girls and boys for each statement in the attitude questionnaire.*
Mode of Pre-Test Attitude Scores

Mode of Scores

1 2 3 4 5 6 7 8 9 10

Questionnaire Statement Number

Girls
Boys
Evaluating the Effect Visiting a Local Artist’s Studio Has on Learning and Retention Rates of High School Art Students

Kimerlen Moore

EDUC 590

Dr. Watson

April 15, 2005
Introduction

Much research has been conducted in the field of art education, most of which has shown the positive results of implementing a more inclusive approach to artists and art forms; this research has increased the quantity and quality of artists and artworks studied. Gallucci (1996) states in the article *Closing Arts Educations Cultural Gap* A recurrent theme in art education research of the past decade or so has been a call for replacing the old stereotype of art as a separate, somewhat marginal discipline with a new, more centrally located, paradigm that exploits art's potential to promote interdisciplinary connections and cross cultural dialogue and understanding in a time of ever increasing cultural diversity(p11). In contrast to research conducted on the subject of including nontraditional and nonwestern examples of art into the visual culture of arts education, little research has been conducted to determine the effect of taking students out of the classroom and into a local artist’s studio.

As an art educator I think it is important to demonstrate to students that art is not just something that exists in textbooks and museums, but can also be found within local communities. I believe this is just as important as including examples of multicultural works of art into the classroom dialog for study and understanding. The intended result of this being that students will have a higher retention rate of information learned as a result of making a connection to an artist and artwork in their own community.

Review of Literature
Community based arts education is described as projects that are responsive to the relationships that already exist and relationships that can be formed between a community (group of people) and learning in the arts (Bastos, 2001). Currently, the art education field is seeing research on community-based arts education in non-traditional settings such as prisons, recreation centers, long term care facilities, and amusement parks (Jeffers, 2004; Skelly, 1992). While this type of community-based arts education is relevant to education and advocacy for the arts at the state and local level, organizers seems to forget that k-12 students are also a part of the “community.”

Projects that involve students working with and alongside other community members in the planning and creation of artworks generate a richer learning environment, not just for the students but for all involved (Jeffers, 2003). When adults such as teachers, parents and grandparents participate in art centered learning projects, students witness as members of their own communities engage in life long learning activities. This reinforces the notion that learning does not stop once you leave the classroom (Schwarzman, 2002). Research indicates that when students see their teacher in the learning role it reinforces their own positive risk taking in the classroom. This also has positive benefits for teachers by reminding them what students experience everyday in the classroom (Stevenson, 2004).

An art curriculum that utilizes local artists and local art resources as a supplement to regular classroom instruction can have far reaching effects on students by connecting learning to students lives outside the classroom (April, 2002). Not only will students be exposed to a wider range of art forms and mediums but they will also have an opportunity to explore and make connections within their own community.
Current literature in the field of art education focuses on instances where artist are invite into the classroom to work with students in the creation or sharing of artwork. This approach to community based arts education makes sense for public schools. After all, it is easier to transport one artist into the classroom than it is to transport thirty students into an artist studio. Unfortunately, when the artist and their artwork are presented in the classroom they are devoid of their richly visual environment and the context of artistic creation (Cultural Arts Resources for Teachers and Students, 1997). When students visit and interact with a local artist in his or her studio, they see a professional within his or her proper context surrounded by the tools of the trade. This experience enriches both prior and future classroom learning. More research is needed to evaluate the effect taking students into a local artist studio has on learning versus the traditional method of inviting an artist into the classroom. That is the attempt being made with this research. It is my belief that students who visit a local artist’s studio will be more engaged with the information being presented. Students will be able to make clear connections to information learned in the classroom before and after the interaction with the artist. With this research I intend to provide support for the theory that students who visit an artist’s studio will have a higher retention rate of information learned and perform better on a post-test than students who do not visit the artist in his or her own environment.

Data Collection and Results

Data was collected from twenty-four high school art students ranging in age from fourteen to eighteen years old. Students were randomly assigned to the investigator upon entering the school as a student teacher. Because of scheduling the class was offered as a two-day session after school hours. The students were randomly split into a control group
(12 students) and an experimental group (12 students). The control group consisted of students who could only attend one class session. The experimental group was made up of students who could attend two sessions.

Data was collected during the first session while both groups were present. Students completed the pre-test without any outside assistance, materials or sources. The pre-test consisted of nine short answer questions and six matching questions (see appendix A).

Classroom instruction was then given for two hours to all students. Students were introduced to the history of glassblowing, detailed descriptions of the process and tools used were described, value of the craft and medium as an art form in contemporary culture were discussed, and students also watched videos of glass artists at work.

The next two-hour class session took place at a local glassblowing studio. The experimental group watched as the artist worked and explained in detail what he was doing and why. Students were able to ask questions while the artist was working and took great advantage of this opportunity.

The next day all students met once more for a short post-class meeting. All students completed the post-test without any outside assistance, materials or sources. The post-test also consisted of nine short answer questions and six matching questions (see appendix B).

Analysis of Results

The pre-test shows that the level of prior knowledge on the subject of glassblowing was not high. Table 1 and figure 1 show the pre-test scores for all students in both the experimental and control groups. The highest possible score was 100. The
mean score for students in the control group was 11.33. The mean score for students in the experimental group was 15.50. This indicated that students needed a basic understanding of the process, tools and vocabulary associated with the art of glassblowing. The fact that students in the experimental group scored higher on the pre-test is interesting. One explanation is the fact that most students in the experimental group (those who could attend both class sessions) were advanced art students. It is possible that, as advanced art students, they have seen glassblowing on TV or in videos. Students were asked if they had ever seen glassblowing in person, no one had. Students were not asked if they had seen glassblowing on TV or in videos.

The results of the post-tests were dramatically different between the control group (those who did not visit the artist studio) and the experimental group (those who did visit the artist studio). The mean score on the post-test for the control group was 58.33. The mean score for the experimental group was 88.83. Table 2 and figure 2 show the post-test scores for all students in both the control and experimental groups. The experimental group had a higher mean score by 30.50. Both Table 3 and figure 3 show the improvement rate for the control and experimental groups. The improvement rate for the control group was 47.00. The improvement rate for the experimental group was 73.00.
Table 1

*Pre-test results*

<table>
<thead>
<tr>
<th>Student</th>
<th>Control</th>
<th>Experimental</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>27</td>
<td></td>
</tr>
<tr>
<td>2</td>
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</tr>
<tr>
<td>12</td>
<td>7</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

Average 11.33 15.5 4.17
Figure 1

Pre-test results

![Bar chart showing pre-test results for students. The chart compares scores of control and experimental groups for students numbered 1 to 13. The X-axis represents students, and the Y-axis represents scores.]
Table 2

*Post-test results*

<table>
<thead>
<tr>
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<th>Experimental</th>
<th>Difference</th>
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</thead>
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<tr>
<td>12</td>
<td>47</td>
<td>93</td>
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</table>

**Average** 58.33 88.83 30.5
Figure 2

*Post-test results*
Table 3

*Increase results*

<table>
<thead>
<tr>
<th>Student</th>
<th>Control</th>
<th>Experimental</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
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<td>47</td>
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<tr>
<td>12</td>
<td>40</td>
<td>80</td>
<td></td>
</tr>
</tbody>
</table>

Average 47 73 26
Figure 3

*Increase results*

![Bar chart showing increase results for different students. The chart compares control and experimental groups.](image-url)
Conclusions and Recommendations

Comparison of post-test results between the control group and the experimental group reveal a dramatic difference between information learned and retained. The pre-tests showed a basic lack of prior knowledge of the subject matter in both groups. After instruction and the visit to the studio, the experimental group demonstrated a larger retention rate and gain in knowledge than the control group. These findings illustrate that in-class learning can be improved when combined with the unique opportunity of visiting a local artist studio.

In most states the arts commission should have a listing of local artists who are qualified and willing to work with students. Several state arts organizations, commissions, and agencies across the country have started local artist registry programs that list artists who are interested in teaching workshops and offering demonstrations to the public. For more information contact your local or state arts organization.

Professional development opportunities exist for art instructors in most communities. For a small fee, most art museums offer instructors a chance to participate in a “teacher’s night.” This is an opportunity for instructors to join the curator of the museum for an in depth tour of the collection. As the production component of the program museums often offer workshops lead by local artist. This type of professional development demonstrates the importance of meeting and making connections with local artist. Grant money is available at the state and local level in most areas. Some professional organizations also offer grant money for visiting artist programs and for students to visit local artist studios. Two such organizations are the Glass Arts Society which can be accessed at the following site http://www.glassart.org, and the Society of
North American Goldsmiths http://www.snagmetalsmith.org. Grant resources information is also available from the National Art Education Association and local chapters.

As mentioned before, some states have started local and area artist registry programs. The use of technology in this initiative is vital. Information needs to be published and updated on a regular basis. It is also important that instructors record and catalog their own involvement with local artists that can be shared with others easily. The more results that are shared the more it will reinforce the need for local art instructors to utilize resources that exist within their own communities.

Classroom learning is strengthened when students have the opportunity to make connections within their community, as demonstrated with this study. Implications of this study show positive benefits for teachers as well as students. Teachers have an opportunity to extend in class activates, make their own connections within the community, and to participate in new learning activates. Overall, this type of community interaction makes for a more connected and supportive local, state, and global community.

Scheduling and time allotment were the two major limitations of this study. If possible the class periods would have taken place during regular school hours and extended to 3 days for both groups. Fortunately, students were able to provide and pay for their own transportation to and from the artist’s studio, otherwise transportation cost would also have been a limitation.

Future studies on this subject are highly recommended. This type of research is beneficial to the visual arts as well as other subject areas. The importance of connecting
k-12 education to local communities is imperative. This is especially true of art programs in areas where art appreciation levels are low. If community members do not understand the important role that the arts play in human culture and history, how can they understand the importance of art in the classroom?
Appendix A

Glassblowing Pre-test

Name ______________________________

1. What is the most basic tool a glassblower uses?

2. Briefly describe the process involved in creating an object out of glass.

3. What is the temperature at which glass is held in a molten state in the furnace?

4. What is the average working temperature of glass?
5. What is the one major deference between working with glass and clay?

6. What is the one major similarity between working with glass and clay?

7. How does a glassblower add color to glass?

8. What does annealing do to glass?

9. Who is the glassblower responsible for the Studio Art Glass Movement in America?
Please match the following items to their definitions:
A. Marver
B. Punty
C. Glory hole
D. Jacks
E. Blowpipe
F. Block

_______ 1. Hollow tubes made out of stainless steel about 5 feet in length. Allows the glassblower to blow and inflate the glass.
_______ 2. Used to “neck” the bubble and cut lines into the work. Also used as a sculpting tool.
_______ 3. This is a large smooth steel surface on which hot glass may be rolled back and forth to shape and cool the glass.
_______ 4. A solid rod used to transfer glass, either the object being made or for adding “bits” or drops of glass.
_______ 5. These wooden, carved, ladle looking tools enable the glassblower to shape fresh hot gathers into a usable symmetrical form.
_______ 6. A drum shaped chamber used for heating and reheating glass on the blow pipe or punt
Appendix B

Glassblowing Post-test

Name ______________________________

10. What is the most basic tool a glassblower uses?

11. Briefly describe the process involved in creating an object out of glass.

12. What is the temperature at which glass is held in a molten state in the furnace?

13. What is the average working temperature of glass?

14. What is the one major difference between working with glass and clay?
15. What is the one major similarity between working with glass and clay?

16. How does a glassblower add color to glass?

17. What does annealing do to glass?

18. Who is the glassblower responsible for the Studio Art Glass Movement in America?
Please match the following items to their definitions:
G. Marver
H. Punty
I. Glory hole
J. Jacks
K. Blowpipe
L. Blocks

1. Hollow tubes made out of stainless steel about 5 feet in length. Allows the glassblower to blow and inflate the glass.

2. Used to “neck” the bubble and cut lines into the work. Also used as a sculpting tool.

3. This is a large smooth steel surface on which hot glass may be rolled back and forth to shape and cool the glass.

4. A solid rod used to transfer glass, either the object being made or for adding “bits” or drops of glass.

5. These wooden, carved, ladle looking tools enable the glassblower to shape fresh hot gathers into a usable symmetrical form.

6. A drum shaped chamber used for heating and reheating glass on the blow pipe or punty.
References


Computer Based Programs and the Struggling Reader:
An Action Based Research Project

Angela Y. Pickett
Education 590
Spring 2005
Introduction to Problem

When I was in elementary school, I was taught how to read in the traditional manner of instruction. There were lessons in phonics, grammar, decoding, and round robin reading groups. The reading groups were based on reading ability and each student was well aware whether he or she was considered an excellent, average, or poor reader. As an emerging reader, I distinctly remember being placed in the average reading group and the feelings that went along with being average. I hated reading aloud in class especially if an expert reader had just read. When the poor readers had to read aloud, I always felt sorry for them. They seemed to struggle with every word. It appeared that so much effort was placed on trying to decode the word that they had no idea of what they had just read. I believe that I was as relieved as they were when they finally finished their sentence and the teacher moved on to the next student.

Thirty-three years have passed since I was in first grade and our world has gone through a number of drastic changes but our instructional methods of teaching children how to read has remained virtually the same. Teachers today are still faced with the same problems my first-grade teacher had thirty-three years ago. Results from the National Center for Education Statistics, 2000 revealed that 37% of the nearly 8,000 fourth-grade students assessed in reading achieved below the ‘basic’ reading grade level, a figure that has remained relatively unchanged since 1972. (National Center for Education Statistics, 2001). In addition, longitudinal study data suggest that those who are poor readers at the end of first-grade are likely to still be poor readers at the end of fourth grade (Juel, 1998). I believe that it is time that we begin exploring innovative instructional strategies in reading such as the use of computer technology in the classroom.
Research on students who struggle with reading show that one-to-one tutoring is an extremely effective form of instruction because tutors are able to respond to individual children’s needs and provide instant feedback on their progress (Nunnery, J., Ross, S., Smith, L., Slavin, R., Hunter, P., & Stubbs, J. 1999; Ross, Smith Casey, and Salvin 1995). The problem with this approach is that the tutors must be highly trained and qualified and most schools cannot afford this type of support to all children who need tutoring. An alternative approach to one-to-one tutoring is to use computer software such as electronic storybooks to help provide the support that struggling readers require. Computer based programs usually have components that can provide support. For example, children hear the pronunciation of a word and see the word while looking at graphics, which should aid in improved comprehension. It provides immediate feedback, which can help in teaching students how to monitor their own progress. In addition, technology appears to motivate and increase the time students are willing to spend practicing important academic skills (Morrow, 2002). I believe the Chinese proverb, “I hear and I forget, I see and I remember, I do and I understand” helps in explaining how computer technology can foster the learning needs of struggling readers.

From my research, I have learned that children are motivated and enjoy using computer technology but its primary use in the classroom is not as a learning tool but as a reward. There seems to be little research on how technology can specifically help struggling readers move from emergent to competent readers. As a pre-service teacher, I believe that my research would be beneficial in helping me develop new instructional strategies on how to better serve the diverse learners in my classroom. My hypothesis is
as follows: computer-assisted programs such as electronic storybooks can have a positive impact on students’ decoding abilities and word recognitions skills.

The computer-assisted programs that I will use to test my hypothesis in this action research will be lionspbs.org and starfall.com. The computer-assisted components I plan to use in my research will be a supplement to the student’s regular language art lessons. The computer-assisted web-sites stories will correspond as much as possible with the daily language art lessons taught in class. This will help to reinforce the struggling reader’s skills in decoding and word recognition.

Review of Literature

Introduction

How can teachers insure that the children they teach will become successful readers? This question has plagued the educational system for years. Recently, with the 2001 Federal Act, No Child Left Behind (US Department of Education, 2001), this question has surfaced in the media almost daily. This issue is so important that the National Institute of Child and Human Development (NICHD) conducts and supports research in reading. This agency researches basic biomedical science and health-related issues. In Lyon’s (1999) words:

Learning to read is critical to a child’s’ overall well-being. If a youngster does not learn to read in our literacy-driven society, hope for a fulfilling, productive life diminishes. In short, difficulties learning to read are not only an educational problem they constitute a serious public health concern. (p. 14)
In reviewing multiple pieces of literature, it is apparent that there is a common theme among struggling readers. These children come to school with limited experiences with books, stories, or print. They have difficulty developing phonemic awareness, phonic skills and reading fluency (Lyon, 1998; Allington, 1994). Allington (1994) stated:

It is time to move away from the cult of the normal bell-curve and reject the notion that only a few children can learn to read and write well. It is time to work toward creating schools where all children achieve, not just children with the “right” parents. (p. 15)

Benefits of Computer-Assisted Programs

As educators how can we provide the individualized support that struggling readers need in the classroom? The use of computer-assisted reading instruction in the classroom appears to have promising results. Several studies show support for the role that computer technology can play in helping struggling readers attain the skills that they need in order to become fluent readers and writers (Boling, Martin, & Martin, 2002; Chambers, Abrami, McWhaw & Therrien, 2001; McNabb, 1998).

Most computer-based programs can be tailored to meet students’ individual needs. This allows students to find success in their literacy needs and gives them some control over their own learning. Boling (2002) and Ganskie (2003) found that the adaptive features of computer programs could be modified to meet individualized needs of a particular reader helping to provide meaning to words. Chambers (2001) stated:

The feedback of the computer supports a constructivist view of learning, with the active engagement of students who can control and monitor their learning. In addition, the children liked working on the computer and said they felt happy when
they used the computer software. (p. 233)

Howell, Erickson, Stanger, and Wheaton (2000) believe that computer-based programs can help struggling readers make the transition from emergent to conventional literacy. They stated:

The type of reading instruction that children with disabilities often receive is narrow in focus and lacking in contextualized direct instruction and other types of instructional approaches which research suggest struggling readers need in order to learn to read and write. (p. 6)

Boling, Martin, and Martin (2002) found in their research that students in the experimental group who used computer storyboards learned vocabulary words at a faster pace and with greater accuracy than their peers in the control group. “Students recognized the word on sight, remembered the word through association and phonemes, and quite a few could use the word as a part of their spoken and written vocabulary” (Boling, 2002, p. 86).

Several studies point to the fact that the multi-sensory concept aids the struggling reader in comprehension skills. McNabb (1998) found that the animation feature in electronic books helped students comprehend stories who could not understand print. She stated, “The readers’ ability to manipulate the electronic book to their level of comfort appeared to enhance self-efficacy that could, in turn improve overall reading comprehension” (McNabb, 1998, p. 412). Cuddeback and Ceprano (2002) found that Accelerated Reader contributed to the students’ reading comprehension improvement as well as serving as a motivating tool to the students. Labbo and Reinkling (2000) found
that electronic storybooks provide a visual picture as the printed words take on sight, sound and action.

Safe Learning Environment and Motivation

Allington (1983) suggests that teachers must allocate more instructional time to poor readers in order for them to “catch up” with their classmates. He states, “Struggling readers must be provided with daily opportunity to read easy material to help increase their self-confidence and fluency” (Allington, 1983, p. 555). In addition, Allington suggests that teachers should emphasize self-monitoring skills. The problem with this approach is that students who have repeated bad experiences in the classroom with reading and writing may appear to be unmotivated in the classroom (Ganske, 2003). Juel (1988) found from her research:

A vicious cycle seemed evident among struggling readers. Children who did not develop good word-recognition skills in first grade began to dislike reading and read considerably less than good readers, both in and out of school. They thus lost the avenue to develop vocabulary, concepts, ideas and so on that is fostered by wide reading. (p.14)

Computers can play a valuable role in providing a safe learning environment and motivating students. In a study conducted by Helt (2003), students who were reluctant to participate in literature class discussions willingly participated in online discussions. The computer allowed the students to freely express their ideas in a non-threatening environment.

In a 1997 study, computer software was used to help struggling readers in middle school develop their reading and writing skills. This type of approach was used to create
a risk free environment for the students. By using the computer, they were not embarrassed in front of their peers and were able to improve their self-concepts. The students’ reading and writing skills improved significantly during this study as well as their self-esteem, school attendance and grade point average (Hasselbring, 1997). A student who participated in the study said, “The computer corrects me without making me feel ashamed.” “Students don’t pick on me anymore.” “I will succeed” (as cited in Hasselbring, 1997, p. 32).

Boling, Martin and Martin (2002, p. 87) stated, “Computer-assisted instruction has a positive influence on students’ motivation, interest and learning.” Labbo and Reinking (2000) provided that electronic stories’ main advantage is that they are immediately attractive and engaging to most children. Liang and Johnson (1999) state clearly that computer enhancements are motivating to young readers. “The colors, pictures, songs, and animations are stimulating and enjoyable (p. 60).” In addition, often children will write more when using computers because it is easier to type words than write by hand.

In conclusion, today’s educational system has become a national priority. Our goal as educators is that every single student we teach be successful readers and writers. In order to obtain this goal we must strive to find innovative techniques that will meet the needs of all students. It is clear that computer technology motivates students and provides them with a safe learning environment. In addition, recent research indicates that computer-assisted technology can enhance learning among struggling readers. With this in mind, there is a need for more research in the general classroom in order to expand our knowledge of how and to what extent computer assisted technology can aid our struggling readers.
Data Collection and Results

Sample

The study was conducted during the spring of 2005 at an elementary school in Hamilton County, Tennessee. The students participating in this study were all kindergarten students who I worked with on a daily basis during my student teaching. The subjects were in the second half of their second grade year in a full inclusion classroom. Subjects were from mixed backgrounds, with varying economical statuses. Subjects were approximately 99% Caucasian and all were 100% English proficient. After obtaining administrative and parental consent, students were randomly selected to be placed in the experimental group or the control group. The students in the experimental group received their regular reading instruction with their class along with the three week, computer-assisted instruction as a supplement. Students in the control group received the placebo intervention of thirty minutes of literacy based learning centers each day.

The sample of students in the experiment consisted of 14 students. Over the course of the intervention, four of the students became ill and missed an entire week of the interventions, two from each group. The final sample consisted of 10 students.

Measurement

The pre-test and post-test instrument was a written, teacher-made oral test that assessed letter recognition, letter sounds, and sight words. The pre-tests and post-tests were conducted in individual sessions and took approximately 20 minutes to administer. The pre-test and the post-test were identical tests to ensure that the data being assessed
was the same. All results were compared to determine the effect the treatment had on the subjects. The timeline for collecting data from both the experimental and control group was as follows:

**Week 1**
- Receive Administrative and Parent Consent

**Week 2**
- Students take Pre-Test (T1) and intervention occurs for both groups

**Week 3**
- Intervention occurs for both groups

**Week 4**
- Intervention occurs for both groups

**Week 5**
- Students take Post-Test (T2)

Students in the experimental group received an intervention in weeks two through four and spent approximately six hours working on educational technology sites that were developed for emerging readers. The educational sites allowed the students to work on beginning sounds, vowel sounds, sight words, and words that they had been previously exposed to in their language art classes. The students in the control group spent thirty minutes a day after their language art lesson in a variety of literacy centers. The literacy centers consisted of a variety of activities such as silent reading, buddy reading, computer games, and listening to stories read by the teacher. In week one and in week five there was not an intervention due to testing and gathering of student information. Neither of the
groups were aware that they belonged to the experiment group, nor the control group because both received an intervention.

Data Analysis

Students’ progress was compared based on numerical data from the pre-tests (T1) and the post-tests (T2). Numerical data for both tests was collected by group and compared using the mean of each group. Forms T1 and T2 are contained in the Appendix.

A pre-test was given to the experimental and control group during the second week of the study. A post-test was given after all interventions were complete. Both tests were identical and covered letter recognition, letter sounds, and sight words. The mean pre-test score for the experiment group was 65.2 out of a possible 100 points. The mean post-test score for the experiment group was 72.6 out of 100 possible points. The mean pre-test score for the control group was 64.4 out of a possible 100 points. The mean post-test score for the control group was 67.2 out of a possible 100 points. The data from the experimental and control group is shown in Figure 3 and 4 below.
Figure 1. Experimental Group – Pre and Post-test Scores. Pre-test Mean: 65.2 and Post-test Mean: 72.6
Both groups at pre-test were very similar in their mean score. Both groups made progress throughout the study in the areas of letter recognition, letter sounds and sight words. The experimental group showed greater improvement overall than the control group. The experimental group saw an overall positive change of 7.4 points from pre-test to post-test. The control group saw an overall positive change of 2.8 points from pre-test to post-test.

Discussion

The results of the three-week intervention are very encouraging and help to provide support for the use of computer technology as an added teaching strategy in the classroom. The computer-based programs that were used in the study were tailored to help meet the needs of the individual learners. In addition, the subjects were able to control and monitor their own learning (Chambers, 2001). All of the subjects were actively engaged and were motivated to use the computer-based programs (Helt, 2003; Hasselbring, 1997). The findings of this study were very similar to Boling (2002) and Ganske (2003). Both studies found that the adaptive features of computer programs could be modified to meet individualized needs of a particular reader helping to provide meaning to words.

Limitations and Implications For Further Research

The study did have several limitations that must me considered, including a small sample, short duration of time, and the natural maturation process that occurs in kindergartners. Overall, the findings of the study were very encouraging. The students in
the experiment group showed overall academic improvement and were excited to have
the opportunity to work on the computer each day. This was evidenced by the students’
request to spend more time working on the computers. Additional investigations of
longer duration of this study are needed to validate the potential benefits that computer
assisted programs can aid readers in the classroom.

This study should be of relevance to other elementary school teachers of children that
are from a mixed socio-economic background and are experiencing difficulty in reading
and writing. This study should help provide information on new strategies that can
individualize instruction in order to provide support for struggling readers.
Appendix

Kindergarten Oral Assessment
Pre/Post Test

Name: _______________________________ Date: _________________

Recognizes Letters:
N   A   E   B   O   R   W   C   L   J   I
G   F   Y   V   P   M   X   Q   Z   H   T
U   D   K   S
e   c   i   t   f   g   u   y   a   j   d
p   r   v   b   n   q   h

Sounds:
M   S   T   C   H   R   B   G   N   D   J
P   K   F   L   Y   V   W   Z   Q
A   E   I   O   U

Sight Words:
red   blue   green   orange   purple   brown   black   pink   yellow
one   two   three   five   seven   nine   two   four   six   eight   ten   like
I   A   the   that   my   and   are   said   is   are   you   we   have   at   am   an
it   cat   dog   sat   hat   Nat   he   she   sit

Recognizes first and last name   ______(yes)    ______(no)

Form: T1 and T2
References


National Center for Education Statistics. (2001). *National assessment of educational*
progress. Retrieved February 21, 2004, from

http://nces.ed.gov/nationsreportcard/reading/


Parental Involvement and Academic Motivation: Educators’ Perceptions

Rachel A. Pons

University of Tennessee at Chattanooga
Abstract

Motivation, an essential aspect of academic motivation, may improve the performance of students. The actions of teachers and parental involvement are the driving forces behind students’ motivation. The lack of academic motivation among high school students is a constant problem that teachers face. This paper investigates the attitudes and actions of middle school teachers toward parental involvement using a Likert scale survey. The research concludes that parental involvement is lacking in sub-par students and evident in successful students.
Parental Involvement and Academic Motivation: Educators’ Perceptions

Introduction to the Problem

Motivation plays an essential role in academic achievement. Due to the fact that many students lack motivation to achieve in school, teachers may be able to improve the performance of their students by motivating them.

It is clear to me that many students do not think about how their motivation will affect the next stage of their education, career, or life. Declining achievement scores and escalating dropout rates due to lack of motivation are a general concern for many educators (Karsenti & Thibert, 1995). I believe that an important goal for educators is to be aware of what influences a student’s motivation, both positively and negatively. Teachers can utilize their awareness of students’ motivation to develop and foster it. Many parents are nonchalant and uninterested in what their child is learning in school. These parents offer little encouragement to their child. This lack of involvement greatly hinders students’ motivation (Karsenti & Thibert, 1995). Parents who are involved in their child’s scholastic program, and want to promote success in his or her academic career, positively affect their child’s motivation. This project will shed light on another perspective on student motivation. My goal in this research project is to investigate the attitudes and actions of middle school teachers toward parental involvement.

Review of Literature

The lack of academic motivation among high school students is a constant problem that teachers face. Trying to motivate students is a challenge in the classrooms
of American schools as well as schools around the world. There are many factors that influence motivation; however, it is important to first understand the different types of motivation: intrinsic motivation, extrinsic motivation, and finally amotivation.

Intrinsic motivation refers to being engaged in an activity and receiving pleasure and satisfaction from participating in those activities. In other words, intrinsically motivated behaviors are behaviors driven by the satisfaction one receives from engaging in those activities. An example of intrinsically motivated behavior is: attendance resulting from a student’s desire to learn. Three types of intrinsic motivation have been identified: intrinsic motivation to know (IMTK), intrinsic motivation to accomplish things (IMTA), and intrinsic motivation to experience stimulation (IMTES) (Cokley, Bernard, Cunningham, & Motoike, 2001; Karsenti & Thibert, 1995).

In contrast to intrinsic motivation, extrinsic motivated behaviors are not performed because of an interest to participate in an activity. Instead, extrinsic motivation is defined by a variety of behaviors in which the goals of action go beyond the activity itself. This type of behavior is a means to an end and not for its own sake. There are four types of extrinsic motivation: external, introjected, identified, and integrated regulation (Karsenti & Thibert, 1995). According to Karsenti and Thibert, external regulation is action regulated through external means such as rewards and constraints (1995). For example, students going to school to get a reward from their parents or to simply avoid punishment would be external regulation. Introjected regulation occurs when students internalize the external means regulating their actions. Students who attend school because they would feel guilty staying home is an example of this kind of extrinsic motivation. Identified regulation occurs when students value their behavior and
believe that it is important. An example of this is if students elect to take a more advanced math course because they feel it is important for their future even though they dislike it. The final type of extrinsic motivation is integrated regulation. This occurs when a student’s action is perceived as personally valued and freely performed, usually involving more commitment than identified regulation. For example, students exhibit this behavior when they choose a program of study and commit themselves to meet all academic requirements in order to obtain their career goal (Cokley et al., 2001; Karsenti & Thibert, 1995).

Amotivation is the lowest level of motivation. Students who are amotivated are neither intrinsically nor extrinsically motivated. They do not see a link between their actions and the outcomes. They believe their actions are a cause of something that is beyond their control (Cokley et al., 2001; Karsenti & Thibert, 1995).

Students’ motivation has proven to have a large positive influence on academic achievement. Therefore it is essential to know what characteristics academically motivated students possess in order to develop those characteristics in less motivated students. Students themselves have identified the following characteristics in academically motivated students: to complete their school work, to do their best in school, to get good grades, to have good work habits, and to do what they are supposed to in school. Teachers have also identified particular characteristics in more academically motivated students. They perceive students to be motivated when students believe school is important, students work hard in school, students have high educational aspirations, and students have positive attitudes about school while enjoying learning (Keith, Wetherbee, & Kindzia, 1995).
Level of student motivation correlates with characteristics of the classes in which they are enrolled. Students who perceived that their classes emphasized learning and participation, showed effort and self-improvement in their academics. They participated in the class activities for the fun and enjoyment of learning and to improve their skills. In addition to this, students who perceived that their teacher was flexible and allowed them to set goals and organize their own activities viewed themselves as having choices in the class and were therefore motivated to do what was best for their academic career. Therefore, the way in which teachers conduct their classes plays a significant role in students’ academic motivation (Ferrer & Weiss, 2002). Furthermore, learning climate and task-orientation play a role in students’ motivation. Structuring a classroom environment that promotes individual learning, effort, and improvement can improve and promote motivation as opposed to a classroom that advocates competition and social evaluation (Ferrer & Weiss, 2002).

Parental involvement in students’ academic careers plays a significant role in students’ motivation and achievement. However, research on the effects of parental involvement has shown inconsistent effects on achievement (Keith, 1993). A study conducted by Gonzalez shows parental involvement to be positively related to high school students’ motivation and achievement (2002). Additionally, parental involvement was positively related to students’ time spent on homework, favorable attitudes towards school, likelihood of staying in school, and educational aspirations beyond high school level (Gonzalez, 2002). Studies have also shown that during the middle grades, students show a downward direction in motivation that declines over time. Positive parental involvement can avoid this downturn. Parents involved in helping with homework,
attending school programs, watching the student participate in sports and other extracurricular activities, helping the student to select courses, and monitoring the student’s progress in school have a positive effect on students’ motivation. When parents are more involved in their child’s schooling, the child performs better academically and is more involved in school. It is even more likely that students’ motivation is positively influenced when the parenting style is authoritative (Gonzalez, 2002; Keith, 1993).

There is also research on the relationship between parental involvement and the mastery and performance goal orientations of high school students (Keith, 1993). Mastery goals are identified as learning new skills and improving understanding and competence. Performance goals are identified as proving abilities or avoiding negative judgments of competence. Students with mastery goals seek challenges, face difficulty with persistence, view errors as opportunities to learn, and are usually intrinsically motivated. Students with performance goals avoid challenging tasks, are usually less intrinsically motivated, and believe that errors equal failure (Gonzalez, 2002). Parental involvement is positively related to mastery goals. When parents are interested in their child’s education and are actively involved, students are more likely to look for challenging tasks, persevere through academic challenges, and feel satisfaction in their academics. Parents convey their commitment to the importance of education through their involvement, therefore encouraging students’ motivation and achievement (Gonzalez, 2002).

Research has helped to answer questions concerning the effects of parental involvement, but it still remains inconsistent. Some research indicates that parental involvement has little or no effect on students’ academic motivation (Keith, 1993).
Further research is needed in order to determine the true effect of parental involvement on students’ academic motivation. Actual parental involvement, as reported by parents, verses perceived parental involvement, as reported by students, is one particular area that could be researched in the future. Another area for research is exploring what specific components of parental involvement positively affect students’ academic motivation. Most importantly, there is a need for research on how to increase parental involvement and to examine that effect.

Data Collection and Results

My goal in this research project was to investigate the attitudes and actions of middle school teachers toward parental involvement. The teachers of Red Bank Middle School were asked to complete an anonymous survey (see Appendix A). The responses to the survey were measured using a Likert scale.

The survey consisted of two sections of questions. The first section acquired demographic information such as: certifications held by the teacher, grade level and subject(s) that the teacher currently is responsible for, and how many years of actual teaching experience the respondent has. The second section of the survey asked questions that relate to the respondent’s attitude toward parental involvement and the correlating levels of student motivation. Respondents were given ample time to gather information for completion of the survey. Responses to the second section of the survey were analyzed in relation to the requested demographic information. This cross referencing of the gathered information reveals trends in teacher perspectives on parental involvement relating to student motivation.
Fifteen teachers at Red Bank Middle School returned completed surveys. Teachers were asked to respond to each statement of the survey by choosing the level at which s/he identified with the statement (on a scale of 1-10). Their responses to questions were recorded and then averaged, as shown in Table 1 and Figure 1.

Results from responses to question one and two indicate that teachers at Red Bank Middle School observe a correlation between parental involvement and students’ academic motivation and academic performance. Averaged results to questions three and five suggest that the majority of respondents prioritize efforts to increase parental involvement in their students’ scholastics, due to the improvable level of parental involvement in their students. Similarly, responses to question four revealed that the bulk of teachers use motivational techniques to improve their students’ academic performance. According to the teachers’ responses to question six, parents of Red Bank Middle School’s students are not incredibly concerned about their child’s schooling.

Participants’ survey responses were then placed in three categories based on their years of teaching experience: 1-9 years, 10-19 years, and 20+ years. Responses to the six survey questions were averaged within the three categories, as shown in Tables 2, 3, and 4, and Figures 2, 3, and 4. The average responses across the three categories for questions one, two, three, four, and six remained relatively consistent with the average responses of the participant group as a whole. However, the average responses for question five appear to have an inverse relationship with the years of experience. This means that teachers with more years of experience see less evidence of parental involvement in their students.
Conclusions and Recommendations

Based on the results of this study, I can generalize that most teachers believe parental involvement in their students’ academics is directly related to students’ academic motivation and academic performance. Most educators believe that making efforts to motivate their students is a priority in their classrooms at Red Bank Middle School. These efforts are being put into practice in order to improve academic performance at Red Bank Middle School. I feel that all students can genuinely benefit from their teachers’ prioritization of motivational techniques. Although teachers agree that parental involvement positively influences student motivation and academic performance, they also agree that parental involvement can be increased. Similarly, educators agree that the amount of parental concern for their child’s schooling should also be increased.

The consensus of educators with regard to parental involvement and academic motivation is quite simple: more parental concern and involvement would positively benefit student motivation and academic performance. In many cases, parental involvement is evident in students with above average academic motivation and performance. Although it may not be true in all cases, teachers observe this characteristic in above average students at Red Bank Middle School. I feel that children benefit from parental involvement in all of their endeavors, especially those that are academic.

Teachers are continuously engaging in professional development to improve and revise curriculum for students. Encouraging parental involvement in students’ schooling is definitely an area that should not be overlooked. With the technology available today, parents can be involved with little effort. Email is encouraged, and has become a primary source of communication between teachers and parents. Furthermore, many schools are
encouraging or even requiring teachers to put their assignments on the school’s web page so that parents can readily see what their child is responsible for in each class. Taking advantage of technology is a practical way for busy parents to be involved in their students’ academics.

It is common for exceptional schools to require parents to voluntarily participate in school activities each school year. Although some parents may only complete the required number of hours, others may gain increased interest in their child’s education as a result of that experience. Parents who benefit from participation in school activities have the propensity to positively affect their child’s scholastic experience. Only so much can be done to encourage parental involvement with regard to academic motivation. Teachers, however, can consciously make efforts to motivate their students in the classroom. Although intrinsically motivated students are ideal, teachers can extrinsically motivate those students who show no signs of interest in learning. Extrinsic motivation can, therefore, create ideal students.

The aforementioned conclusions derived from my experiment indicate great opportunities for future research in these areas. Future researchers may be able to access federal grants for continuing research in parental involvement from the funding allocated by the No Child Left Behind Act.
References


planning school-wide interventions. (ERIC Document Reproduction Service No. ED414543)

Keith, T. (1993). Does parental involvement affect eight-grade student achievement?

Appendix A

Teacher Survey

Please do not list your name on this document

Demographic Information

1. Level of education:  Associate’s degree _____ Bachelor’s degree _____
   Master’s degree _____ Doctorate _____

2. Teaching certification(s): ___________________________________________

3. Grade level(s)/Subject(s) currently responsible for: ______________________

4. Years of teaching experience: ______________________

Instructions:
Please respond to the following statements by circling the level at which you identify to the statements. The possible levels are 1-10; 1=lowest; 10=highest. For example: My favorite food is ice cream. If your favorite food is ice cream, circle 10. If you do not care for ice cream, circle 1. If you enjoy ice cream, but it is not your favorite food, circle a number between 2 and 9.

1. Parental involvement in my students’ academic endeavors is directly related to the students’ motivation.
   1  2  3  4  5  6  7  8  9  10
   lowest          highest

2. Parental involvement in my students’ academic endeavors is directly related to the students’ academic performance.
   1  2  3  4  5  6  7  8  9  10
   lowest          highest

3. Increasing the level of parental involvement in my students’ scholastics is a priority.
   1  2  3  4  5  6  7  8  9  10
   lowest          highest
4. To improve my students’ academic performance, I motivate them.
   1 2 3 4 5 6 7 8 9 10
   lowest highest

5. Parental involvement is evident in my students.
   1 2 3 4 5 6 7 8 9 10
   lowest highest

6. The parents of my students are concerned about their child’s schooling.
   1 2 3 4 5 6 7 8 9 10
   lowest highest

THIS PROJECT HAS BEEN REVIEWED BY THE INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS AT THE UNIVERSITY OF TENNESSEE AT CHATTANOOGA.
Red Bank Middle School Teachers,

As part of my graduate program at the University of Tennessee at Chattanooga, I am required to complete a research project relevant to work in the educational field. I will be conducting a simple study concerning teacher attitudes toward parental involvement and academic motivation. The participants in this study will complete a short, simple survey that inquires about teachers’ experiences with parental involvement and students’ academic motivation. The surveys will be analyzed quantitatively using the Likert scale, a rating scale for measuring the strength of agreement with a clear statement.

Participation in this study is strictly voluntary. All information will remain strictly confidential and will be recorded without your name or any identifier. Although the descriptions and findings may be published, at no time will your name be used. Refusal to participate and/or withdrawal from participation will involve no penalty or loss of benefits to which you are otherwise entitled.

If you have any concerns, questions, or comments about the survey or research project, please feel free to contact Rachel Pons directly or my UTC faculty sponsor. Dr. Sandy Watson can be contacted at the University of Tennessee at Chattanooga department of Education at (423) 425-4237.

Sincerely,

Rachel A. Pons
Student Teacher
Red Bank Middle School Room 211

I, _________________________, understand the information provided above and grant the researcher permission to use my responses to the survey. I furthermore agree to participate in the research project as a respondent.

THIS PROJECT HAS BEEN REVIEWED BY THE INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS AT THE UNIVERSITY OF TENNESSEE AT CHATTANOOGA.
## Survey Results

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Figure Captions

*Figure 1.* Graphic representation of survey results.

*Figure 2.* Graphic representation of survey results from teachers with 1-9 years of experience.

*Figure 3.* Graphic representation of survey results from teachers with 10-19 years of experience.

*Figure 4.* Graphic representation of survey results from teachers with 20+ years of experience.
1-9 Years Experience

Average Response Level

Question 1  Question 2  Question 3  Question 4  Question 5  Question 6

Question Number
10-19 Years Experience

Average Response Level

Question Number

Question 1  Question 2  Question 3  Question 4  Question 5  Question 6
20+ Years Experience

Average Response Level

Question Number

Question 1 | Question 2 | Question 3 | Question 4 | Question 5 | Question 6
Teachers’ Opinions of Standardized Tests

Kristi Raines
EDU 590
Dr. Watson
April 21, 2005
Introduction

During the 1980’s standardized testing was conducted to see how well a student was progressing but was not the only factor used to determine how a student was doing or how well a teacher was teaching. Today, this idea has changed. Because of the No Child Left Behind Act (2002), and the desire for accountability, standardized tests are being used to determine how well a student is progressing, and if the student is not progressing as well as he/she could then it is the fault of the teachers. Because of this it is necessary, I believe, to know the opinions of the teachers. The teachers ultimately are the ones who have the most at stake if the testing scores fall below what is desirable. They are the ones who are held accountable and have the most to lose. This reason prompted me to do a study about the opinions and attitudes of teachers with regard to standardized testing. In making the choice of what questions to ask teachers on a survey, I began by thinking about the questions that have been posed throughout my educational career. In addition, fellow student teachers were asked their opinions about standardized testing. This information was used to compile questions about what I wanted to know from teachers who are already teaching.

The first criterion that was considered was the accuracy in which standardized testing is able to measures a student’s ability and achievement. I also want to ascertain whether or not standardized tests should be used to determine a teacher’s ability to teach and if the information should be used to determine tenure. Another question to be answered was if there was a correlation between a teacher’s subject matter and the years of teaching experience, as well as his or her opinion about standardized testing. Also I wanted to
determine if teachers believe that there was a bias relative to State Progress Indicators or SPIs, and whether or not teachers teach to standards or the test. These are important questions because the teachers are the ones who have a lot to lose if there is no progress made using the results of the standardized testing.

Literature review

In 2002, President Bush signed into law the *No Child Left Behind Act* (2002). This law was designed to close the achievement gap among students of different economical backgrounds. This law mandates that schools work to close this gap, and they have a five year window to make marked improvements. If improvements are not made within the allocated time period then the state will impose sanctions on schools that have not met the expectations.

Initially, each state had to determine which standards they wanted students to learn. After the standards were determined then the state created a test that measured these standards. The type of test that is used is a standardized test. These standardized tests, according to Mertler (2002), should be only one part of the assessment, but can be helpful in developing individual curriculums.

Another point concerning standardized testing was that it only is able to measure a small amount of knowledge (Newell, 2002). This limited amount of data could be dangerous to use because there are many factors that are outside a teacher’s control that can affect the outcome of the test (Newell, 2002). However, teachers believe that these tests should be used to promote students (Curriculum Review, 2002). The pressure to do well on standardized test has unfortunately led teachers to help students cheat on tests (Business Week, 2004).
Linn (2000) believes that standardized testing should be only a small part of the assessment procedure, and there should many tests that show the achievement of students. Also, he states that the uncertainty of the tests should be made public.

With all of this, educators are the ones who must teach the standards and administer the tests that have been designed by the state. Although teachers have some positive things to say about tests, there have been no studies that look in depth into the opinions that teachers have about standardized testing.

Methodology

Instruments: The method used to collect data was a survey. The survey was designed by the author of this paper and was distributed to each teacher. Anonymity was used to ensure honesty and maximize participation. It was voluntary, and the principal gave permission for this survey to be given out. Every teacher was given a survey without regard to the subject matter or grade that the teacher taught. The teachers returned the surveys in three days. When the teacher had completed filling out the survey, it was put into a manila envelope and returned to a designated place. This ensured privacy and allowed more control of data. The surveys were taken and translated into a predetermined Likert scale. The Likert scale took the opinions of the each of the teachers and translated it into numbers. These numbers were used to find the trend in the answers given. The Likert scale used was the scale that is shown below.

**Strongly Agree  Strongly Disagree  Neutral  Slightly Disagree  Strongly Disagree**

1  2  3  4  5

The participants were asked to circle which best described their opinion. The use of the number values was not listed on the survey, but was used to analyze the data.
When all of the surveys were returned, the results were manipulated using Microsoft Excel. The average numerical score was determined. The scores were also sorted into the following categories:

- Education
- Length of teaching career
- Subject area
- Grade taught

When the scores were sorted in the above categories, they were analyzed to see if there were any trends or associations among the variables. The surveys were then destroyed to maintain privacy.

Participants:

The participants in the survey were middle school teachers. Middle school is defined as grades 6 – 8. The survey was not just limited to one grade, but all grades participated. The participants were all from one school located in Hamilton County. The school is not a Title I school, nor does it receive extra funding from any private sector. The teachers were a mixed of female and male. Also, there was a mix of all grade levels, teaching experiences, subject taught, and professional education levels.

Results

There was no correlation between years of teaching, level of professional education, subject, grade level, and opinions expressed in the survey.

Table one contains the questions asked to the participating teachers and the average opinion for each question.
### Table 1

*Teachers’ opinions of Standardized Testing*

<table>
<thead>
<tr>
<th>Question</th>
<th>Average Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Standardized testing is beneficial for students.</td>
<td>Neutral</td>
</tr>
<tr>
<td>2. Standardized testing is beneficial to teacher.</td>
<td>Neutral</td>
</tr>
<tr>
<td>3. I use the information from standardized test to plan my lesson</td>
<td>Neutral</td>
</tr>
<tr>
<td>4. Standardized tests are an accurate measurements</td>
<td>Slightly disagree</td>
</tr>
<tr>
<td>of a student’s progress</td>
<td></td>
</tr>
<tr>
<td>5. Standardized should be the only tests used in determining</td>
<td>Slightly disagree</td>
</tr>
<tr>
<td>whether or not a student is advanced to the next grade.</td>
<td></td>
</tr>
<tr>
<td>6. Students should have to pass a standardized test to</td>
<td>Slightly disagree</td>
</tr>
<tr>
<td>graduate high school.</td>
<td></td>
</tr>
<tr>
<td>7. Standardized tests are a way in which a teacher’s ability</td>
<td>Slightly disagree</td>
</tr>
<tr>
<td>to teach is measured.</td>
<td></td>
</tr>
<tr>
<td>8. Teachers teach what is on the standardized test and not necessarily</td>
<td>Slightly agree</td>
</tr>
<tr>
<td>standards set by the county.</td>
<td></td>
</tr>
<tr>
<td>9. Standardized testing is in line with standards set by</td>
<td>Neutral</td>
</tr>
<tr>
<td>the county.</td>
<td></td>
</tr>
<tr>
<td>10. Standardized testing encourages students to work harder.</td>
<td>Slightly disagree</td>
</tr>
<tr>
<td>11. Standardized testing is able to measure all aspects of a</td>
<td></td>
</tr>
</tbody>
</table>
student’s intelligence.

12. Tests scores are a valid way to test a student’s ability to

Strongly disagree

13. I teach the information on the standardized test and

not necessarily to standards.

Slightly disagree

14. The test questions on standardized tests are non biased.

Slightly disagree

15. Test questions on standardized tests are easy to understand.

Slightly disagree

16. I see the value in giving standardized tests.

Neutral

17. My students are prepared to take the Terra Nova.

Neutral

18. I believe that the public should know how each teacher’s class does on standardized tests.

Slightly disagree

19. I am concerned that my students’ test scores will reflect on my ability to teach.

Neutral

20. Students test scores should be used to determine a person’s ability to become tenure.

Strongly disagree

21. A person should be able to use the scores on standardized test to determine which teacher they want their child(ren) to be placed with in.

Strongly disagree

22. Parents completely understand the information that is determined by the scores on a standardized test.

Slightly disagree

23. There is too much pressure put on teachers to perform well on standardized tests.

Slightly agree

24. There is too much pressure put on students to do well
on standardized test. Slightly agree

Conclusion

The purpose of this study was to determine the opinions of a select population of teachers about standardized testing. The results were not overwhelmingly against standardized testing, but teachers only see a slight benefit of standardized tests.

Teacher participants also feel that there is some pressure to put on students to do well on standardized tests. This pressure is due to the fact that there is great concern about the scores of schools and meeting the requirements of *No Child Left Behind* (2002). Having this type of pressure on both the students and the teachers is not the correct way in which to improve schools. It seems that the idea of *No Child Left Behind* (2002) was a good idea that is not resonating well with teachers.

The teachers are not necessarily teaching what standards have been set by the county, but what is on the test. This leads one to believe that they are not the same, which is what was expected from *No Child Left Behind* (2002). This can also lead one to believe that students are not benefiting from a curriculum that has many parts but limited to being able to do well on a standardized test. Standardized tests can only show a limited amount of knowledge, which means that students are being taught a limited amount of information.

Though students and teachers have a lot to lose if the scores are not acceptable, there is not much research on the opinions of teachers or students with regard to standardized testing. This topic needs to be researched and explored. This needs to be accomplished because the information can be used to help policymakers change the direction of legislation that controls educational standards.
References


Teachers want standardized tests linked to promotion even though they're flawed. (what the numbers say) (2003). *Curriculum Review*, 43, 8C
Appendix A

Teachers’ Opinions of Standardized Tests

The first part of this survey is demographic in nature. Please do not put your name on this survey.

1. **Sex**  
   Female    Male

2. **Highest level of Education:**  
   Bachelor’s  Master’s  Ed.S.  Ph.D

3. **Years Taught:**  
   0-2  3-5  6-8  9-11  12-14  Over 15

4. **Grade Level Taught:**  
   6    7    8

5. **Subject Area (If applicable):**  
   Language Arts  Math  PE  Science  Social Studies  Inclusive  Special Education

6. **Do you, personally, have any child(ren) under the age of 18?**  Yes  No

The remainder of this survey is in relation to standardized testing. Circle the answer that is closest to your opinion.

7. Standardized testing is beneficial for students.
   Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree

8. Standardized testing is beneficial to teachers.
   Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree

9. I use the information from standardized tests to plan my lessons.
   Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree

10. Standardized tests are an accurate measurement of a student’s progress.
    Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree
11. Standardized tests should be the only tests used in determining whether or not a student is advanced to the next grade level.

Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree

12. Students should have to pass a standardized test to graduate high school.

Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree

13. Standardized tests should be used to evaluate a teacher’s ability to teach.

Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree

14. Standardized tests are a way in which a teacher’s ability to teach is measured.

Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree

15. Teachers teach what is on the standardized test and not necessarily standards set by the county.

Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree

16. Standardized testing is in line with standards set by the county.

Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree

17. Standardized testing encourages students to work harder.

Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree

18. Standardized testing is able to measure all aspects of a student’s intelligence.

Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree

19. Tests scores are a valid way to test a student’s abilities.

Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree

20. I teach to the information on the standardized test and not necessarily to standards.

Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree
21. The test questions on standardized tests are non biased.
Strongly agree   Somewhat agree   Neutral   Somewhat disagree   Strongly disagree

22. Test questions on standardized tests are easy to understand.
Strongly agree   Somewhat agree   Neutral   Somewhat disagree   Strongly disagree

23. I see the value in giving standardized tests.
Strongly agree   Somewhat agree   Neutral   Somewhat disagree   Strongly disagree

24. My students are prepared to take the Terra Nova.
Strongly agree   Somewhat agree   Neutral   Somewhat disagree   Strongly disagree

25. I believe that the public should know how each teacher’s class does on standardized tests.
Strongly agree   Somewhat agree   Neutral   Somewhat disagree   Strongly disagree

26. I am concerned that my students’ test scores will reflect on my ability to teach.
Strongly agree   Somewhat agree   Neutral   Somewhat disagree   Strongly disagree

27. Student test scores should be used to determine a person’s ability to become tenured.
Strongly agree   Somewhat agree   Neutral   Somewhat disagree   Strongly disagree

28. A parent should be able to use the scores on standardized tests to determine which teacher they want their child(ren) to be placed with.
Strongly agree   Somewhat agree   Neutral   Somewhat disagree   Strongly disagree

29. Parents completely understand the information that is determined by the scores on a standardized test.
Strongly agree   Somewhat agree   Neutral   Somewhat disagree   Strongly disagree
30. There is too much pressure put on teachers to perform well on standardized tests.
Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree

31. There is too much pressure put on students to do well on standardized tests.
Strongly agree  Somewhat agree  Neutral  Somewhat disagree  Strongly disagree

Thank you again for your time. If you are interested in the results of the survey, please let me know. Again, thank you.
Managing Student Behavior is Necessary for Academic Success

Veronica E. Scates

Education 590

Dr. Sandy Watson
Literature Review

Teachers typically rank classroom or behavior management as one of the main challenges they feel ill prepared to deal with after graduating from college (Maag, 2001; Weiner, 2003). For many new and experienced teachers, this is an area in which they desire more training and education. This is especially true when working with underachieving students and students from culturally, socially, and ethnically varied backgrounds (Maag, 2001). Student behavior in the classroom has become one of the greatest issues in the public school system. Common concerns expressed by teachers is the lack of respect and complete disregard expressed by students toward their peers and teachers alike; the amount of time spent on discipline rather than instruction; and the reality that student disruptions during instruction have become the accepted norm (Rosenberg & Jackman, 2003). These kinds of disruptions pose a problem for educators since the public views the effectiveness of schools and teachers based upon how well students perform academically (Simplicio, 1999).

Who is to blame for academic failure when it appears to be the student’s behavior that halted any chance of success? To better answer this question, the focus of school type will be narrowed down to address only urban schools where much research has been conducted on the difficulties and challenges that present themselves. There are many different notions as to what being an urban school entails. An urban school is the one place where diversity exists in the rawest of forms. They are the schools located in cities that represent small densely populated areas (Weiner, 2003). Most
are located in ethnically diverse areas populated with immigrants, people of poverty, and higher crime rates (Brown, 2003; Weiner, 2003).

Knowing the location of the urban school is only a step in the process of rectifying student behavior. Understanding the environment and the people is the next step. There are several issues plaguing urban schools. They are often places where new and inexperienced teachers are hired, and in some cases, employees without any formal teacher training (Weiner, 2003). Many of these inexperienced teachers are white and middle-class, and have not had the opportunity to master the art of teaching, much less know how to effectively adapt to and address students with radically different backgrounds (Brown, 2003). Immediately, the teacher’s workplace has become his/her first crash course on behavior management (Weiner, 2003).

So, the question still remains, who is to blame for academic failure when students misbehave? Weiner (2003) explains that some educators are products of the “deficit paradigm.” That is, they blame students, their families and communities for lack of academic success. An opposing view is that teachers are to blame for students’ academic failure (Weiner, 2003). Many educators distance themselves from and frown upon the opposing view. They see themselves as educators, not behavior specialists or managers for students (Maag, 2001).

Regardless of who is to blame, it is apparent that disruptive student behaviors persists in the school place. Lane and Wehby (2002) regard any behavior that continues to present itself as socially unacceptable as antisocial. Most antisocial students perform at low academic and cognitive levels and often are at risk of becoming school dropouts, criminals, substance abusers, or recipients of social or
welfare services (Lane & Wehby, 2002). They present a problem and a challenge to even the most experienced teacher because most of their antisocial behaviors are externalized in forms of physical aggressions, poor interpersonal skills, threats, verbal outbursts, and noncompliance (Lane & Wehby, 2002).

Inexperience teachers in urban schools are often overwhelmed when dealing with externalized antisocial behaviors combined with behaviors of others who are culturally and socially different than their own (Brown, 2003). Perhaps, herein lies one of the greatest problems and challenges surrounding disruptive behavior in the urban school. One recommendation for accomplishing successful classroom management and decreasing the occurrence of disruptive behavior is to implement teaching practices that are culturally responsive (Weinstein, Curran, & Tomlinson-Clarke, 2003). The first step to designing a culturally responsive classroom environment requires recognizing that most schools are established utilizing rules and behaviors that are culturally normal for white, middle-class America (Weinstein et al., 2003). In a sense, this is a form of cultural discrimination as it doesn’t recognize or give allowance to anything different.

Teachers who practice culturally responsive teaching are successful in gaining students’ cooperation in the classroom (Brown, 2003). These teachers are willing to familiarize themselves with and respect the cultures and communities of their students. They find ways to encourage students to adopt some of society’s mainstream behaviors, but are careful to never devalue or imply that one is better than the other (Weinstein et al., 2003). Another method used in culturally responsive management is creating a caring environment. This is accomplished by initiating
conversations with students about their lives outside of school, and the teacher sharing stories about his/her life (Brown, 2003). This relationship acts as a model of trust and respect, and creates an atmosphere of safety and community in the classroom (Weinstein et al., 2003).

Effective communication is vital in the culturally responsive classroom. Teachers must learn to realize that how they communicate verbally and audibly plays a significant role as to how students will behave in the classroom (Weinstein et al., 2003). They are cautioned not to stereotype, but to realize that cultural norms of other ethnic and social groups sometimes require different methods of management. One example is that of African American students using call-response, where they tend to be assertive with their responses, interrupt the teacher, and speak loudly (Brown, 2003). Teachers who have not familiarized themselves with this cultural difference, may view this as disrespectful and inappropriate behavior, but culturally aware teachers will find ways to utilize it and at the same time teach what is the dominant social normal behavior.

Brown (2003) recommends being assertive and using authority when dealing with urban children. This is part of being culturally aware and knowing that urban children usually need directed verbal commands and clearly stated expectations (Brown, 2003). For most African Americans, respect and authority is given to the one who demands it, not to one who simply thinks s/he rates it because s/he is a teacher (Brown, 2003). Knowing this in advance will enable the teacher to provide effective instruction that promotes academic success.
Weiner (2003) recommends embedding classroom management skills and techniques into every assignment and aspect of the classroom. This requires prior planning and practice, but is effective in maintaining order. In a sense, the teacher is an illusionist who keeps his/her classroom management so hidden in the instruction that it is invisible (and appears effortless). Examples of this style of management involve teaching social skills when having group discussions, learning about the students’ lives outside of class and making connections inside the classroom, and continuing to model and reinforce social norms (Weiner, 2003).

Another approach to controlling and managing student disruptive behavior involves the implementation of positive reinforcements. This technique uses B.F. Skinner’s method of classroom management. Skinner believed that students would repeat behaviors that were rewarded and stop those behavior that were unrewarded (Bucher & Manning, 2001). These positive reinforcements often promote rule compliance and even motivate students to behave appropriately (Rosenberg & Jackman, 2003). One reason positive reinforcements is not commonly practiced among educators is because it works against the teacher’s paradigm that punishment is the most effective way to end an unwanted behavior, and it contradicts society’s view that punishment is the best means for controlling its members (Maag, 2001). The most common applications of punishment for student disruptions are removal from classroom, detentions, in-school and out-of-school suspensions, and expulsions (Maag, 2001). But what about those five-percent of the cases where punishment does not work? Aren’t those the students who pose the most challenging behaviors? Maag (2001) says it is ridiculous to keep giving punishments if they don’t work. A better
choice might be to teach the appropriate behavior and implement positive reinforcements for success. A successful program would be one that acknowledges accomplishments and increases good behavior. Also called an intrinsic strategy, rewards could be presented in the form of prizes, compliments, homework credits, group work versus lecture method, or more interesting assignments (Maag, 2001; Traynor, 2003).

All classroom management approaches addressed thus far have placed the burden of controlling disruptive behavior solely on the teacher. It does not seem fair and one might hypothesize or speculate that there must be a better way. There is. Rosenberg and Jackman (2003) discuss the PAR (Prevent, Act, and Resolve) method as the best alternative to implementing what they call school-wide management. The first step in PAR is to prevent the unwanted behavior from taking place. The second step is to act consistently in all cases of rule noncompliance and compliance. The last step is to resolve any and all issues that are causes of the behavior (Rosenberg & Jackman, 2003). The premise of this management theory is conceding that all students, school personnel, and families make up the school composition. Therefore, all must work together with the same goal of promoting and supporting a school-wide behavior management program (Rosenberg & Jackman, 2003).

PAR is designed to allow all members of the school community to implement behavior management strategies that are unique to the school’s needs. This allows creativity and flexibility while assigning responsibility to those involved (Rosenberg & Jackman, 2003). If PAR is working, then families are proactive and positive student behavior becomes more apparent. One of the unique characteristics of PAR is
that it recognizes its limitations in resources and makes plans to address those deficiencies. By doing so, the members are able to draft and agree upon set guidelines, stages of intervention and prevention, and a realization that some students will require more effort (Rosenberg & Jackman, 2003).

In recent PAR data collection, 12 schools were tracked that had implemented this approach. Of those, 10 had shown significant decreases in office referrals and suspensions. In a single year, they had also reported an “improvement in the overall school climate, a decrease in teacher attrition and turnover, and a modest increase in state-mandated testing” (Rosenberg & Jackman, 2003, p. 21). The collaborative efforts of students, parents, administrators, and teachers in the PAR process demonstrate that disruptive behavior can be managed and academic achievement can be improved.

The purpose of this (study/research) is to demonstrate and determine if student behavior and classroom management have a negative effect on academic performance. If it can be proven using quantifiable measurements, perhaps administrators, teachers, students, and parents may feel compelled to join together and find the best solution for their academic community. With the continuance of high stakes testing and the federal requirements of the No Child Left Behind Act of 2001, all persons involved in educating children, in and out of the classroom, should give heed to this research and act with such proactive initiative that all students are given opportunity to academically succeed.

Method

Subjects
The research involved a group of 18 middle school teachers who taught on a block schedule. The teachers surveyed taught core curriculum courses such as English,
history, math, and science. All teachers had a teaching license, and their teaching experience levels ranged from 44% being new to teaching, 33% having taught 4 to 10 years, and 20% having taught 11 to 25 years. The ethnic makeup of teachers was 19% African-American, 78% Caucasian, and 2% other. The selected middle school (East Lake Academy of Fine Arts) was a Title I, inner city, urban school in Hamilton County, Tennessee, with 414 students and a student teacher ratio of 1:15. The ethnic composition of the student body was 74% African-American, 24% Caucasian, and 2% Hispanic. Ninety-six percent of the students qualified for the free and reduced lunch program. The choice of school was determined by the assigned location of my first student teacher placement. The involved individuals were selected because they were the teachers who taught core curriculum subjects which are assessed on state and national levels.

A notable variable is that the subjects used in this study came from one inner city school. This may distort some of the data because there is none to use as a comparison (i.e. a rural school). As a result, only selected parts of the subjects’ data collected will be reported and will be used as a comparison to Tennessee’s state TCAP scores.

Materials
A questionnaire using the Likert scale was developed to capture and determine the teachers’ opinions and attitudes on the relationship between student behavior and academic success based upon their own experiences in their current school environment. This questionnaire was comprised of 18 total questions addressing types of disruptive behavior, loss of teaching time, use of incentives and rewards, and causes of disruptive behavior (see Appendix A). Teachers were also provided a space for additional comments. Another source of information came from Tennessee’s Department of
Education’s website. Test scores and other details for the school year 2003 to 2004 were utilized from this material.

Procedures
A copy of the questionnaire was first given to the head administrator of the middle school for review and approval of content. A liaison teacher was then selected to distribute the approved questionnaire to the team leaders of each grade. This liaison teacher was given three manila envelopes. Each envelope had inside it the exact number of questionnaires, instructions, and blank white envelopes for each member of each team to receive one. The team leaders issued each team member a questionnaire packet with instructions on what to do should they decide to participate. Those who chose to participate were asked to complete the questionnaire and return it in the sealed white envelope to a designated drop box the liaison teacher would check. These procedures were established in hopes that teacher anonymity would produce honest and valuable responses.

Initially, the cooperating school was to assist in the remaining data collection. They were to provide a breakdown of previously collected data that addressed recent Tennessee Comprehensive Assessment Program (TCAP) scores and the number of reported behavior incidences in a school year. Due to school computer glitches, this information was not available as originally planned. Therefore, the rest of the data collection process took the form of an Internet search using Tennessee’s Department of Education. The data reviewed and compared included the TCAP scores and suspension rates of East Lake Academy of Fine Arts and of Hamilton County, Tennessee.
Results

To measure the subjects’ attitudes in this study, the responses from the questionnaire were broken down and grouped as follows: agree, undecided, and disagree. Strongly agree (SA) and agree (A) data were collected and tallied as one. As were strongly disagree (SD) and disagree (D) data. Using the information from the Tennessee Department of Education, a percentage difference of those who tested proficient and not proficient on TCAP scores was calculated and applied to East Lake Academy of Fine Arts and Hamilton County, Tennessee. An analysis of the questionnaire responses and the TCAP scores were then conducted to determine if there was any evidence that a parallel exists between student disruptive behavior and academic achievement.

The questionnaire was the most telling piece of information. One-hundred-percent of the teachers who responded to the questionnaire believed there was a correlation between student behavior and student achievement. One-hundred-percent of those same teachers believed that the disruptive behavior of one student could have a negative impact on many students in a classroom. Over 60% of the teachers believed that students were disrespectful to teachers and peers.

Over 78% of the teachers surveyed agreed that the most prevalent behavioral problems of students in their classrooms included talking to others, not listening to instructions, grandstanding or defiance, and threats or harassment. Even more interesting was the notion of “Who is to blame?” for such disruptive behavior. While the axiom that many teachers do not see themselves or the administrators as part of the cause (or solution) of disruptive student behavior appears to be evident in Table 1, it is notable that 72% of the teachers did think that rewards and incentives were helpful when dealing with student behavior.
Table 1

Possible Causes for Disruptive Student Behavior

<table>
<thead>
<tr>
<th>Cause</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>School administration</td>
<td>0.33</td>
<td>0.56</td>
</tr>
<tr>
<td>Inexperience teachers</td>
<td>0.33</td>
<td>0.28</td>
</tr>
<tr>
<td>Parents/guardians</td>
<td>0.94</td>
<td>0.0</td>
</tr>
<tr>
<td>Student’s choice</td>
<td>0.89</td>
<td>0.0</td>
</tr>
</tbody>
</table>

The most drastic and eye-opening finding during the analysis was the loss of teaching time due to student behavior and classroom management issues (see Table 2). Fifty-six-percent of the teachers reported they lost 25 minutes during a 90-minute block class. The time lost was mathematically converted to represent the time lost during a school calendar year of 180 days and equated to 28% of the school days being lost.

Table 2

Loss of Teaching Time Equated to Loss of Teaching Days

<table>
<thead>
<tr>
<th>Minutes lost per class</th>
<th>Teachers affected</th>
<th>Minutes lost per day</th>
<th>Days lost per school year</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>0.56</td>
<td>75</td>
<td>50 or 0.28</td>
</tr>
<tr>
<td>20</td>
<td>0.22</td>
<td>60</td>
<td>40 or 0.22</td>
</tr>
<tr>
<td>10</td>
<td>0.22</td>
<td>30</td>
<td>20 or 0.11</td>
</tr>
</tbody>
</table>
East Lake Academy of Fine Arts (ELAFA) does not mirror Hamilton County, Tennessee in student body diversity. In fact, it is reversed. In the 2003-2004 school year, ELAFA had a student body of 65% African American, 33% Caucasian, and 2% Hispanic. Hamilton County’s numbers were 63% Caucasian, 33% African American, 2% Hispanic, and 2% other. Nonetheless, in the 2003-2004 school year, ELAFA had 24% fewer students than Hamilton County score proficient in math, and 20% fewer students than Hamilton County score proficient in reading and language arts (see Table 3).

Table 3

*Comparison of TCAP (Criterion Referenced Scores)*

<table>
<thead>
<tr>
<th>School system</th>
<th>Math</th>
<th>Reading/Language</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below</td>
<td>Proficient</td>
</tr>
<tr>
<td>ELAFA</td>
<td>0.42</td>
<td>0.58</td>
</tr>
<tr>
<td>HCDE</td>
<td>0.18</td>
<td>0.82</td>
</tr>
</tbody>
</table>

Discussion

I must confess that it has been my belief for many years that the academic failure of a student is the fault of the student and the parent. My opinions changed after I spent eight weeks in an inner city, urban school. In urban schools, it is initially easier for the teacher to blame the student or parent. The real awakening occurs when one asks the educator what s/he is doing to rectify the situation. What is s/he doing, other than punishment, to decrease disruptive behavior and increase overall learning? One might be surprised to learn that some teachers are complacent, some are bitter, and some just do
not care anymore. There are a handful making a difference and striving for sheer efficacy. I applaud them, for they are the few.

Disruptive student behavior has become an increasing concern for many teachers (rural and urban), but what works in a rural school does not necessarily work in an urban school. The real success story is born when all in the school community can define the problem and create and implement a solution. This requires more than teachers and classroom management. This requires the effort and support of the students, families, teachers, and administrators. Those who are affected by management programs are more likely to produce the desired result, if they are part of the solution. No two schools or communities are the same nor do they have the same resources. They may experience the same problems: low achievement, poor attendance, a problem with acceptable student behavior, but the cause and solutions will vary. Teachers and administrators must be willing to try new approaches when the ones they are comfortable with are not working. This may include using positive reinforcements, creating a culturally responsive classroom climate, or utilizing a PAR approach.

Conclusion

In the future, it would be interesting to continue the study using two low and two average performing schools of the state or local school district. This would allow for a more accurate comparison of data. It would also allow for a follow-on analysis by implementing PAR in one of the low performing schools and in one of the average schools. All four schools would address and attempt to incorporate basic classroom management techniques, cultural responsive teaching where applicable, and positive reinforcements, but the two PAR schools will be working with parents and students in
addition to school personnel. Tracking the successes or failures of all four schools and documenting the steps taken in each process would be interesting to calculate. Hopefully, the results would show an improvement in academic achievement and overall attitude of all involved.

Because the results of the present study are not compared to another school, they are somewhat skewed and not as reliable as I would have hoped. Still, the obvious point rears its head and demands to be noticed: there is a correlation between student behavior and academic success. If teachers are spending copious amounts of time addressing, correcting, punishing, and losing the battle against disruptive behavior, then they are losing valuable teaching time. It is a scary and disturbing realization to learn teachers are losing 50 school days, 10 weeks, or 28% of the school year to disruptive behavior. That is an enormous loss of instructional time, especially when one tries to calculate the number of lesson plans not taught, objectives not met, or the performance indicators cast aside.

In this country of high-stakes testing, all who care about education should be alarmed and concerned at the amount of teaching time lost. This should serve as a call to action for teachers and administrators alike. Schools should feel compelled to pole their teachers (without penalty) and acquire an honest teacher perception of time lost in the classroom due to student behavior. To complete the survey, schools should compare their suspension and expulsion data, test scores, and promotion rates with the local and state data. With all the information in hand, schools could quantify and justify the need to take action if a problem does exist. Administrators could present the results in a manner that makes sense, is not accusatory, and excites teachers about the possibility of rectifying the issue.
The PAR (Prevent, Act, Response) method is a unique approach in that it creates a team that represents the entire school community. This community includes all those involved in a student’s success inside and outside the school: teachers, students, parents, school assistants, and administrators. All would take ownership of the problem and more importantly, the solution. The plan devised would be unique to the school’s characteristics and resources. While it is true that a program such as PAR take more time on the front end, it has documented proof of overall success in the classroom, student performance, and teacher retention. Many educators believe students and their families have just as much influence in a student’s academic success, but for some reason when enforcements and guidelines are established to correct student behavior or improve academics, students and their families are not involved in the process. It is time to start looking for answers inside and outside the classroom. By using all assets and influences of the entire school community, students could benefit and succeed academically. Is not that the goal?
References


Using TPR and stories to teach kindergarten French: A comparison

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Introduction

Interest in foreign language education programs in elementary school has both increased and decreased in the United States during various periods in the past 100 years, but currently, Americans generally approve of foreign language instruction in elementary school (Lipton, 1998). Unfortunately, tight budgets have recently led to the elimination of many foreign language programs -- even at the secondary level. This study developed out of the beliefs that children should begin learning a foreign language as early as possible and that a foreign language program is not an “extra” that can be cut when budgets get tight, but rather is an essential part of the curriculum.

As a teacher of French to kindergarten students, I had used a variety of methods, including Total Physical Response (TPR), songs, games and stories, to teach the language. I saw evidence that the children were enjoying themselves and learning the language, however, I continued to wonder which methods were most effective. I had used TPR extensively because I wanted to use a method that would allow me to conduct the class mostly in French. As Ray and Seely (2002) state, “when the first language is being spoken, acquisition of the target language is not taking place” (p. 20). TPR as defined by Asher (2003), delays production of the language by students at first by having them listen to and respond physically to commands given to them in the target language. The teacher first models these commands, which allows the students to internalize meaning without being immediately forced to speak. When the students are ready, speech will naturally begin to appear, usually after about ten to twenty hours (Asher, 2003).

Kindergartners are unique because they cannot yet read, so foreign language instruction necessarily focuses on listening and speaking. One activity kindergartners universally love is having a storybook read to them, so I experimented with having the students act out some of the stories I had read to them in French. This method seemed to
hold the children’s attention longer than any other method, including TPR so I wondered if they actually could learn and retain more using this method rather than TPR.

The purpose of this study was to compare the impact of two different strategies for teaching French in kindergarten on students’ oral production, listening comprehension and retention of vocabulary. The two methods used were TPR and the use of children’s books in the target language. Research questions addressed were:

- With which method are students able to comprehend more vocabulary?
- With which method are students better able to orally produce the vocabulary learned?
- Which method results in better long-term vocabulary retention by students?

Interventions and Method

This study was conducted in two kindergarten French classes. A total of 18 students participated. Each class was taught the same food-related vocabulary. One class was taught using TPR while the other class was taught using the children’s storybook *La Chenille Affamée (The Very Hungry Caterpillar)* by Eric Carle (1992). The students in the class being taught with TPR physically manipulated objects or pictures to learn the vocabulary based on commands given by the teacher. (The teacher is also the researcher who conducted the study.) The students in the class being taught with the story listened to the story while looking at the pictures and then were encouraged to act out the story with guidance from the teacher. Each class met for 30 minutes, three times a week. Students were taught using the above methods for two weeks.

Literature Review

Traditional language teaching methodology focusing on grammar and translation developed in the late 19th and early 20th centuries principally to teach classical Latin and Greek (Fryer, 2001). In the early 1960’s, this grammar-translation method began to lose favor and a number of methods were introduced from the 1960’s through the end of the twentieth century including:
• Audio-lingual approach (emphasized memorized dialogues)
• Cognitive-code approach (elements of both the grammar-translation and audio-lingual approaches)
• Humanistic approaches (concern was for reducing anxiety; affective approaches such as *Suggestopedia* and *Silent Way* focused on emotions, relaxation and concentration techniques)
• Communicative and Proficiency Approaches (emphasized oral proficiency, ability to communicate actively, authentic and realistic tasks)
• Standards-driven approaches (concern for cultures and other disciplines; brought about the National Standards in Foreign Language Project which produced standards relating to communication, cultures, connections, comparisons and communities)

(Fryer, 2001)

While foreign language programs in elementary schools (FLES*) have been influenced by the above approaches throughout the last century, they also have some unique aspects. From 1898 to the early 1950s, little information about methodology is available specific to elementary school foreign language programs. In the early 1950s, guidelines from the Modern Language Association Foreign Language Program Advisory Committee recommended a “delay of two to three semesters, or a hundred clock hours of audiolingual instruction before reading and writing activities were introduced” (Lipton, 1998, p. 77). The National Defense Education Act of 1958 increased interest in FLES* and provided more money for teacher training although the training programs focused on “methodology dogma, insisting on all kinds of pattern drills and memorization of dialogues” (Lipton, 1998, p. 78).

From 1958 to 1978, a long period of listening and speaking continued to be recommended by the Modern Language Association in spite of some research studies showing that reading and writing should be introduced earlier (Lipton, 1998). Since
1978, a wide range of approaches has been recommended but all proponents of FLES* agree on “an emphasis on communication and culture, as well as interdisciplinary and total physical response [TPR] activities” (Lipton, 1998, p. 83). Lipton (1998) and Fryer (2001) both point out that all foreign language programs, FLES* or otherwise, are now driven by standards with methods being left to the teachers. Lipton (1994) summarizes twelve major approaches to teaching FLES* including communication and drama-based approaches and TPR.

**Total Physical Response**

Dr. James J. Asher, a professor of psychology, began research into second language acquisition in the early 1960’s. His research eventually led to the development of Total Physical Response. In describing the basic characteristics of TPR in *Learning Another Language Through Actions*, Asher (2003) explains that it is based on the premise that students can learn a second language in much the same way they learned their first language, by first listening to the language, then responding to it and finally speaking. Although the original edition of the book was published in 1977, research by Asher and others continues to be published showing the effectiveness of TPR.

Most of the literature agrees with Asher’s research about the ability of TPR to increase vocabulary retention (Davidheiser, 2001; Ray & Seely, 2002; Skala, 2003; Terrell, 1982). As summarized by Davidheiser (2001), Asher found substantial improvements in long-term retention of the language when TPR was used and that the physical responses demanded in TPR provided input to the right hemisphere of the brain, which improved second language learning. Concurrent and subsequent research by Krashen and Terrell also support Asher’s findings. Terrell (1982), inventor of the Natural Approach, another communicative approach, agrees with Asher that speech production should be delayed. Krashen and Terrell both concur that speaking too early hinders second language learning and that comprehensible input is the foundation for language learning (Davidheiser, 2001). When production begins, students will go through various
stages from one-word answers to connected dialogue. TPR teaches vocabulary quickly and in chunks; students remember language taught through TPR long after the class ends (Ray & Seely, 2002). Skala (2003) also agrees that TPR produces effective language learning.

There are criticisms of TPR. Davidheiser (2001) notes that his students demanded grammar instruction, while Ray and Seely (2002) state that “only a small percentage of words in a language are truly TPRable” (p. 13). Abstract concepts are especially difficult to teach using TPR (Ray & Seely, 2002; Skala, 2003). Grammar and abstract concepts are probably not a concern at the kindergarten level, however another criticism of TPR is that it has “serious limitations” because of its primary focus on the imperative mode resulting in students that fail to learn other forms of the language and learn only passive language skills (Marsh, 1999). Asher (2003), however, quite clearly explains how students move into producing the language and explains how various grammatical items can be taught using TPR. Grubbs (2003) notes that although “initial instruction through TPR consists of short, basic commands, the level of complexity will increase in relation to the aural/oral proficiency of the students.” (p. 13)

With regard to young children and TPR, Asher (2003) found the method to be equally effective for teaching both children and adults. In particular, children have the opportunity to begin thinking in the target language from the very beginning because there is no translation. Children also internalize the language very quickly in this manner so an instructor must be well prepared (Asher, 2003). Several of his laboratory studies showed that it was important that testing be conducted in the same way as the training or instruction. In other words, students will perform better on tests that allow them to respond to the language by acting it out if they either acted or observed acting during instruction (Asher, 2003). Marquez (1990) specifically addresses the issue of preschool children in her book L’Enseignement par le Mouvement (Teaching through movement), and reinforces the fact that children learn their first language by listening before speaking
and reacting with their bodies. She also emphasizes that pushing a child to speak before he or she is ready “will not necessarily accomplish speech faster and may psychologically develop negative experiences connected with learning the language” (Marquez, 1990, p. 3). Omari (2001) conducted a study involving kindergartners which compared TPR with songs and chants. When comparing the results for vocabulary recognition, both methods were found to be effective for kindergarten students, but there was no significant difference in the results for the two methods.

Communication and drama-based approaches

The use of role-play in FLES* is both a communication approach and a drama approach to instruction (Lipton, 1994). Role plays require that students take on the role of someone other than themselves in order to simulate a real-life or imaginary experience. According to Purcell (1993), role play has several benefits for young students besides being an interesting way for a teacher to present a lesson. Children love to pretend and when they are playing a role, they are much more motivated to learn the new language; they want to communicate and experiment with fantasy or real life situations. They forget about problems from outside the classroom and lose their inhibitions and shyness allowing their “character” to make mistakes. In addition, their self-esteem improves as their verbal skills increase (Purcell, 1993). Omari (2001) agrees that “play-based” instruction in kindergarten, including songs and story dramatizations, is especially important in developing language and narrative skills. Kindergartners are making a transition from a world of play to a structured school environment. Anything that seems like play will motivate them to learn and many times they will not even realize they are learning.

A variety of role-play activities are recommended by Purcell (1993) specifically for kindergarten through third grade including making animal masks, celebrating animal birthdays, pretending to be a child (or adult) in a country where the target language is spoken and dramatizing any children’s story. In dramatizing stories, children can also
develop endings for stories that are stopped short or they can create new stories. Even kindergartners “can do surprisingly well [with role-play] using props or puppets if they have dialogue that involves a relatively few structures and a good deal of repetition” (Purcell, 1993, p. 915). Because Lipton (1994) advocates a combination of various approaches, she mentions role-play in the context of other approaches used in FLES*, including the thematic approach (focus on a theme) and the cross-cultural approach (activities to promote cultural understanding).

When Ghosn (1996) was advising teachers in Lebanon on ways to teach English as a foreign language to kindergartners, she observed that none of the available books and materials were appropriate for the typical 4 or 5-year-old kindergartner and were written with an assumption of cultural awareness or focused more on fragmented vocabulary and grammar than on communication. “Because language is an interactive process, children learning a language need ample opportunity to interact in a meaningful, interesting context and play with the language while developing vocabulary and structures” (Ghosn, 1996, p. 2). In order to create such an environment for language learning, she advocates the use of children’s literature because it allows the children first to develop listening skills in the new language and gradually to begin to use the words they hear in the story. She gives several examples of communicative activities, based on the children’s storybook *The Very Hungry Caterpillar*, which were used in one kindergarten classroom in Lebanon. Various activities are outlined including some dramatic play activities. She cautions that strategies and results might differ in other classrooms.

**Conclusion**

Elementary school educators utilize a variety of methods for teaching foreign language and most of the literature gives information but offers few comparisons between methods. Lipton (1994) states that teachers should combine approaches in any given lesson “to deliver exciting lessons with a high degree of student appeal” (p. 878), but she does not advocate any particular method over another. Indeed, she sees the need for
research that will help teachers choose the best approaches for their students. Beyond the elementary school level, there are comparisons of TPR to other methods, with TPR usually credited with improving students’ oral language production and increasing student retention of the language through physical movement. In most cases, however, TPR is compared to more audio-lingual or grammar-translation methods, which do not apply to kindergarten. No other methods used by FLES* educators have been researched as much as TPR and very little research has been published specifically comparing foreign language methods used with kindergarten students. While Omari (2001) conducted a study comparing the use of TPR and songs with kindergarten students, she focused on vocabulary recognition and did not assess the students’ production ability. There appear to be no studies comparing TPR and the use of children’s stories to teach foreign language to kindergartners.

Data Collection and Results

Study Participants

This study was conducted with students in two different kindergarten classes in the same school during the months of February and March 2005. The students had been receiving French instruction since August 2004 and had been taught by the same teacher conducting this study; however, they had not had any previous exposure to the vocabulary used in this study. During the study period, each class received instruction for thirty minutes a day, three times a week, for two weeks -- a total of six lessons. Initial assessment occurred the following day. Class A had ten students and was taught sixteen different food vocabulary items using the children’s storybook La Chenille Affamée (The Very Hungry Caterpillar) by Eric Carle (1992). Class B had eight students learning the same sixteen food items using Total Physical Response activities.

Sequence and Progression of Classes

The following information is from a detailed log kept by the teacher of activities used in each class as well as variables or unusual circumstances that occurred.
Class A
Day 1  Students listened to *La Chenille Affamée*.

Because of the large colorful pictures and some previous knowledge of the book on the part of the students, the story was readily understood.

Students colored pictures of food items to use in dramatization tomorrow.

Day 2  Teacher showed student-colored pictures that corresponded with the book and pronounced the word in French.

Teacher explained (in English), the difference between sausage (la saucisse) and salami (le saucisson).

Teacher chose one student to be the caterpillar and then distributed the pictures to the other students. Each student had 3-4 items (pictures).

Teacher took picture of sun and moon. A sheet was provided for the cocoon.

Teacher read the story and as items were announced in the story, the student with that picture held up his picture for the student playing the caterpillar to eat.

Teacher simplified some of the French in the book.

One student has been absent both Day 1 and Day 2.

Day 3  Spread pictures out on floor and asked students to name as many as they could. Most students could name at least 3-4 items. Teacher held up and pronounced those that were still unknown.

Dramatized the story two times in the same way as on Day 1.

Students very engaged and attentive.

Day 4  Late start today because of schedule confusion. Class only 20 minutes today.

Spread pictures out again and had students take items as they could name them.
Dramatized story one time in same way as before.

Asked students to help narrate (since some phrases repeat), but most not ready to do so.

Day 5  For variety, began this class with a song about previously learned vocabulary - not related to the food vocabulary in this study.

Dramatized story one time in same way as before.

Teacher asked students to name items as she pointed to them in the book, but only a minority of students could do this.

Moved to a brief TPR activity for variety again: Laid pictures on the floor and students touched the picture named by the teacher. Teacher then asked students to call out an item; time for each student to name only one item.

Four students absent today.

Day 6  Students created their own story based on La Chenille Affamée with teacher guidance. The student story followed much the same line as the original story but was instead about a butterfly eating various foods and then landing on a flower at the end. Students mostly spoke in English to make up the story, but their comments were reflected in French by the teacher.

Teacher then told the students’ story while the students dramatized it in the same manner as before.

Dramatized the new story a second time, but with more student participation. Teacher put students in three groups of three, with one student being the butterfly. Each group had three to five food items and were asked to work together to tell the story by naming their items as the butterfly came to them. Most groups were able to name the correct items.
Class B

Day 1  Introduced 8 food items (half of the items in the story being used by Class A)

Some items were plastic fruits and other items were color pictures.
Students spontaneously tried to repeat the words after the teacher.
Teacher gave commands to manipulate the items while students were sitting.

Introduced 5 items first and then 3 more after the students were comfortable.

Spread the items around the room and then gave a basic command to touch items. Students ran to touch the correct item.

Day 2  Reviewed 8 items from Day 1 with TPR commands.

Integrated food items with previously learned numbers, used TPR commands.

Introduced 4 new food items (from the story being used by Class A), using TPR commands. Some items were plastic, some were pictures.

Students then gave commands by naming a food and having another student stand up if they had it. Those who had difficulty naming an item on their own were given choices by the teacher.

Day 3  Due to a schedule change, this class was combined with another kindergarten class (of 8 students) not participating in this study. Although the added class was studying the same vocabulary, they were at least a day behind Class B because of scheduling.

Reviewed first 12 items with TPR commands, integrating with colors previously learned. Class B students were paired with the students from the added class.
Introduced 4 new items (pictures) with TPR commands. (All 16 items have now been introduced.)

Explained in English the difference between sausage (la saucisse) and
salami (le saucisson). Also explained la brioche.

Day 4  Three students absent.

Teacher held up food items for students to name. Teacher spoke the
names of the few as yet unknown by the students.

TPR commands combining food items with body parts.

Students gave commands using food items and body parts.

Played a memory game in French after teaching the phrases for “I’m
hungry; I’m eating”. Students had to say the phrase and then add a food
item. Items were lined up as the students named them so other students
could see the order. Each student had to add on.

Day 5  Two of the students absent on Day 4 also absent today.

Repeate memory game from Day 4.

Reviewed other things not related to the food items.

Day 6  Two students absent again.

Began with review of other things not related to food vocabulary.

TPR commands with food items.

Students gave commands using food items. All students doing well.

TPR commands combining food items and classroom objects.

Relay game with food items; students in two teams raced to get the correct food
item named by the teacher.

Assessment

Both classes were assessed on the same sixteen food items. The initial assessment
was held on Day 7, the instructional day following the sixth lesson. For Class A, two
days had elapsed since the sixth lesson; for Class B, only one day had elapsed. Both assessments were oral in order to match the instructional methods. Assessments were conducted individually while the rest of the class was engaged in another activity.

For the initial assessment for Class A, the teacher spread the pictures used to dramatize the story, on the floor. Students were asked if they would like to be “la chenille” (the caterpillar) or “le papillon” (the butterfly) and then asked to tell the teacher what they would eat. Although the items were laid out in the order of the story, students could do them in any order and none of them did them in the exact order of the story. The Class B initial assessment utilized the same objects and pictures that had been used in class. The students used the phrase from the memory game to tell what they were eating. They could choose the items in any order they wished.

In his book, *Learning Another Language Through Actions*, Asher (2003), noted that in both first and second language learning experiences, listening comprehension occurs before speaking ability. Other researchers concur. Therefore, this researcher assumed that students able to name items would also understand those same items if the test were simply listening comprehension. In both assessments, when students had named all of the items they could remember, the teacher then said the names of the items missed and asked the students to point to the correct item. In this way, both oral production and listening comprehension skills were assessed. The teacher used a simple form for recording the students’ responses during the assessment. (See Appendix)

A second, unannounced assessment to test long-term retention of the vocabulary was conducted two weeks after the initial assessment. The students did not have any review of the food items during that time. The second assessment also tested oral production skills and listening comprehension and the teacher utilized the same recording instrument. Students were again assessed individually while the other students engaged in another activity. There were slight differences between the formats of the first and second assessments. The smaller items and pictures originally used for Class B were
used in the second assessment for both classes. The larger pictures originally used in the story dramatization for Class A were not convenient because the assessments were conducted in a different area with less space than during the first assessment. In addition, during the second assessment, students were simply asked to name the items, rather than use the game or story as a premise. As in the first assessment, when students had named all the items they knew, students were then asked to point to the items named by the teacher.

Results

Scores for both assessments in both classes are shown in Table 1 and Table 2 below. In the initial assessment, the ten students in Class A, who received instruction based on dramatization of a children’s storybook, achieved an average score of 70% in listening comprehension, correctly identifying 11.2 items out of 16. Oral production, as expected, was considerably less. On average, the students in Class A were able to state the names of 7.4 items, or 46.25%. In comparison, the eight students in Class B, who received TPR-based instruction, achieved much higher listening comprehension scores, an average of 93.75% or 15 items. Again, oral production was much lower, an average of 63.28% or 10.13 items, but still considerably higher than for Class A. The variance in scores was much wider for Class A than for Class B. Class A scores for listening comprehension in the initial assessment varied from 2 to 16; the median score was 12.5. Class B scores for listening comprehension ranged from 13 to 16 with a median score of 15.5. For oral production, initial assessment scores in Class A ranged from 1 to 13 and from 6 to 15 in Class B, with median scores of 8 and 10.5 respectively.
Table 1. Scores on initial and second assessments for Class A

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<tr>
<th>Student #</th>
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<th>Oral Prod.*</th>
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* A total of 16 points were possible for both listening comprehension and oral production scores.
Table 2. Scores on initial and second assessments for Class B

<table>
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<tr>
<th>Student #</th>
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Average 15 10.13 14 10.38

* A total of 16 points were possible for both listening comprehension and oral production scores. The initial assessment scores indicate that the use of TPR produced better results in both listening comprehension and oral production. Oral production scores were lower than listening comprehension scores because in the natural order of language learning, listening skills develop before speaking skills. The wide variance of scores in Class A reflects an overall lower level of mastery; although most students did learn some of the vocabulary during the study period, half of the class did not achieve as much as had been...
expected. Figure 1 compares the initial listening comprehension scores for both classes and Figure 2 compares the initial oral production scores.

After two weeks, both classes showed good levels of retention in both listening comprehension and oral production, however, Class A had better retention in listening comprehension than Class B, as measured by a percentage change in score (see Figure 3).
On average, students in Class A understood the same number of items as they had two weeks before, whereas, the students in Class B understood an average of one less item.

Class B showed better retention of oral production skills after two weeks than Class A, as measured by the average percentage change in score (see Figure 4). On average, students in Class B could name the same number of items as in the initial assessment, whereas in Class A, the students named an average of one and a half fewer items.

Although TPR was more effective in the short term for both listening comprehension and oral production, students who learned the vocabulary from the story had much better retention scores in listening comprehension, but lower retention scores in
oral production. From the information in the teacher’s log, it can be concluded that the differences result from the differences in focus between the two methods. With the story method, the students were focused on listening for a much longer period compared to the time spent on speaking. Therefore, they did not have the same amount of speaking time as the students who experienced the TPR method. The TPR method focused on listening also, but the students became comfortable more quickly in using the language and so oral activities began sooner than in the other class.

Several variables could have had an effect on the results in this study. Because the students were required to attend French class with their classmates, and because kindergartners have not yet experienced any standardized testing, it was impossible to match the ability levels in the two classes. Therefore, some of the differences between the two classes could have been due to differing overall ability levels in the two classes. In addition, the test environment was different in the two assessments and could have had some effect on the retention scores; however, since some students did better on the second assessment than on the first, it is unlikely this variable had much effect.

The fact that some students in both classes did better on the second assessment could have been due to health-related issues. During the intervention and teaching period, there were a large number of students in the school, including the kindergarten classes, who were absent due to the flu and other illnesses. Some students were absent for several days. Students who were present were often coughing, sniffling and generally not feeling well. It is likely then, that some students simply were not feeling well the day of the first assessment and thus did not perform as well as they could have. At the second assessment, there were far fewer signs of illness in the children.

Conclusions and Recommendations
Although TPR was generally more effective than the story method in this study, the story method had some advantages that should be noted. Class A learned more vocabulary from the storybook than the 16 assessed items. Words such as *le soleil*, *la lune*, *la feuille*, *la chenille*, *le papillon*, *manger*, *avoir faim* and more were introduced and understood by the students in Class A, an opportunity not available to Class B. In addition, Class A was very engaged in dramatizing the story, even after several times, whereas, interest in Class B sometimes waned. Taking both the results and the reactions of the students into account, it seems reasonable that a combination of TPR and story dramatization would be at least as effective as TPR alone and perhaps even more so. A combination of the two methods would raise the interest level of the students and add authenticity to the TPR method.

The combination of methods is the position generally advocated by FLES* educators, even though there have been calls for further research on the various methods. Future research should attempt to control for student abilities so that classes experiencing different methods are matched in terms of average academic abilities. Since after a two-week lapse, many students had the same score on either listening comprehension or oral production, it would be useful to conduct a study extending the time period between the first and second assessments or to conduct more than two assessments over a longer period of time to see the differences in retention.

Since both methods were productive, teachers would benefit from professional development opportunities related to TPR and story dramatization. Information and training opportunities in TPR are listed on the internet at www.tpr-world.com. Local theatre companies are often willing to train teachers in things like story dramatization and other creative drama techniques that would be useful in the foreign language classroom. In short, TPR and using children’s storybooks are two effective methods among many available to the kindergarten foreign language teacher.
References


## Kindergarten Food Assessment

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Literacy Instruction for Emergent Learners

An examination of different methods of literacy instruction for early learners

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Abstract

Reading is a fundamental skill. Failure to acquire effective reading skills early in life impedes the development of further learning. There are many ways to teach reading in the classroom, and much controversy over the effectiveness of each method. This research studies three different methods of reading instruction and their effectiveness. Previous research suggests that teachers are not well prepared to effectively teach reading. This research shows that the teachers in this study felt unprepared to teach students who were either struggling or advanced readers. It also shows a correlation between socio-economic status and reading scores. We must find ways to combat problems that the emergent learner may have, including behavior issues, low socioeconomic status, or generational poverty. Children cannot succeed in any subject, in any grade without literacy skills. It is up to us as educators to teach them as effectively as possible.
Introduction

Early reading skills supply the groundwork for a child’s academic success (Lonigan, Bloomfield, Anthony, Bacon, Phillips, & Samwel, 2003). A child begins his/her literacy instruction in utero. The child’s parents are the first literacy instructors. They are the key models of language and literacy learning. Children learn about print, its uses, and the different forms of literacy, through the day-by-day events of family life (McClain, 2000). The type of socioeconomic environment in which the child lives, is an indicator of the level of exposure to literacy. Children who come from families of lower-socioeconomic status have a higher chance of less exposure to literacy, and, therefore, have a higher chance of being less prepared to begin kindergarten. These children, typically, have not been exposed to the type of language-rich environment that encourages emergent literacy. Researchers in the emergent literacy field have concluded that children, who start slowly in literacy development, rarely catch up with their peers later (Justice & Pullen, 2003). Reading failure is widespread in urban schools (Cooter, 2003), but is also considered a problem in suburban and rural schools. Many claim different reasons for these failures, including inadequate teaching staff, poor reading instruction, student behavior problems, poverty of students, lack of parental support, and low funding (Cooter, 2003). This study purports to look at two of these reasons: reading instruction and poverty.

The researcher worked for four months in a kindergarten classroom in an urban school as a requirement for a college class on literacy. Her job was to teach phonemic awareness to four kindergarteners who were struggling with phonemic skills and behavior problems. There were four students: three boys, and one girl. The researcher observed that the girl, Mary (pseudonym), was unable to remain in her seat. In the general classroom, she was
allowed to wander at will. She was also prone to violent outbursts, including both physical and verbal abuse toward other students and the instructor. One of the boys, Jack (pseudonym), was able to stay on-task for a few minutes at a time, but he stole items from both the instructor and the other students, given any opportunity. He was verbally and physically abusive to the other students. Both of the other boys, John (pseudonym) and Mark (pseudonym), were physically and verbally abusive to the instructor and to the other students. Neither was able to remain on-task for any significant length of time. Both cried repeatedly if they did not get their way. At the end of the school year, Mark (pseudonym) was diagnosed with Attention Deficit-Hyperactivity Disorder and placed on medication.

The researcher, a graduate student studying literacy, was instructed by her professor to teach aspects of balanced literacy, and the classroom teacher wanted the researcher to concentrate only on phonemic awareness. The first few days, the researcher worked with the classroom teacher’s materials. These included flash cards and worksheets. After that, the researcher purchased materials, including several books, white-erase boards, and “magic” letter finders. The children were uncooperative and the lessons did not go well using either method. They seemed to have more fun working on the balanced literacy approach, but were reluctant to try this method. They preferred to use the methods of phonemic awareness with which they were accustomed, including flash cards.

The researcher investigated different methods of classroom management and tried several, including positive reinforcement. The children had the most success at staying on-task when positive reinforcement was used, but were still having many problems. The researcher also investigated different methods of teaching literacy.
The researcher wanted to investigate ways to teach literacy in multiple setting and to students of varying degrees of competency. Specifically, the researcher is looking for answers to the following questions:

- What are the effects of balanced literacy, whole language, and graphophonemics on the struggling, average, and advanced emergent learner?
- Does each of these approaches help the emergent learner acquire more literacy skills?
- Do the teachers who use the approaches have the training necessary to teach using these approaches?
- Do the teachers believe that they are doing a good job teaching literacy to all emergent readers?
- Are students of low socio-economic status prone to problems in literacy?

In the setting observed by the researcher, the balanced approach seemed more research-based, but the children observed by the researcher, at times, seemed to work better with the graphophonemics (or bottom-up) approach. There is also much support for the graphophonemic approach in schools and communities.

**Review of Literature**

Many researchers have studied the long-term effects of the emergent learner’s success in the classroom (Asselin, 1999, Cooter, 2003, Justice & Pullen, 2003). These studies have shown that students with early reading problems are likely to experience reading difficulties and academic challenges throughout their school career (Miao, Darsh, & Rabren, 2002). In the United States, there has been great controversy as to which literacy program is the most effective for teaching emergent readers, meaning-based or skills-
based, or a mixture of the two (Asselin, 1999). For most of the twentieth century, formal instruction in reading did not take place until the first grade. It was believed that children had to reach a certain maturity level to be “reading ready.” This formal instruction, for the most part was phonemically oriented, until the 1980’s. In the late 1980’s, researchers started challenging the reading readiness theory with the concept of emergent literacy (Strickland & Morrow, 2000). Emergent literacy consists of the skills, knowledge, and attitudes that are presumed to be “developmental precursors” to standard forms of reading and writing (Lonigan, et al, 2003). At this time, the whole language approach emerged. The whole language theorists believe that reading and writing are learned best by engaging in authentic reading and writing, instead of reading and writing exercises. They also believe that literacy instruction should be rich in content, and that children’s interests should be incorporated into learning to read and write.

Depending on their school of thought, teachers in the early elementary classroom teach literacy in several different ways. One technique is to use the skills-based approach. This format involves focusing on discrete skills and uses partial text to teach letter-sound relationships. Using this format teaches literacy in a structured layout, beginning with the most basic component, which is letter recognition. Once the student masters letter recognition, he/she would move on to studying letter sounds, then syntax, and then semantics. The student would master each skill before moving on to the next skill, by using items, such as flashcards or worksheets. An example of this would be the Basal reading programs used widely in today’s elementary schools. This method of teaching literacy is referred to in many ways, including: the bottom-up approach, the phonemic approach, the graphophonemics approach, the skills-based approach, and the
Another technique used to teach literacy is a whole language approach. In this approach, instruction would begin with semantics, or meaning. This approach operates on the philosophy that a student should know why he/she needs to learn to read and write, before he/she can learn to read and write. Once the student knows this, the instruction would move on to syntax, and then to graphophonemics. This method of teaching literacy also has many names, including: the top-down approach, and the semantic approach (S. Sandefur, personal communication, January 15, 2004). For the purposes of this study, this approach will be referred to as the whole language approach.

A third technique to teach literacy involves combining the graphophonemics approach and the whole language approach. This approach attempts to bring the child’s own life experiences into the classroom, by showing the student why reading and writing are important, but also concentrates on phonemic and syntactical awareness. This approach is called the balanced literacy approach, the holistic approach, and the comprehensive approach (S. Sandefur, personal communication, January 15, 2004). For the purposes of this study, this approach will be referred to as balanced literacy.

A teacher using the balanced literacy approach to literacy teaches five elements of balanced reading and four elements of balanced writing. These, along with descriptions, are below (Fountas & Pinnell, 2001):

- **Reading aloud** – In reading aloud, the teacher reads aloud to the whole class or to small groups. All genres of literature are used, including narrative fiction,
informational texts, poetry, songbooks, newspapers, predictable pattern books, etc.

- Shared reading - In shared reading, the teacher involves the children in reading together using a pointer and enlarged text, which includes big books, or texts recreated on chart paper or overhead transparencies. These texts also encompass all genres of literature.

- Guided reading - In guided reading, the teacher works with a small group. The teacher selects and supports the reading of the text by a group that has similar reading processes.

- Independent reading – In independent reading, children read on their own or with partners.

- Word analysis – Using all of the other elements of balanced literacy, the teacher helps children notice and use letters and words.

- Writing aloud – The teacher writes and discusses personal texts in multiple genres, including list, memo, story, letter, recipe, journal entry, etc, on overhead transparency, chart paper, or dry erase board.

- Shared writing – The teacher and students work together to construct various genres, including stories, recipes, lists, etc. The students dictate to the teacher.

- Guided writing – In guided writing, the teacher guides the students through the writing process, including brainstorming, drafting, revising, editing, and publishing. The students write in a variety of genres.

- Independent writing – The students write their own pieces in a variety of genres.
Both the graphophonemics approach and balanced literacy approach include phonemic instruction. The whole language approach does not, but many schools that use it also teach phonics. Researchers and teachers are very aware that the phonological processes are strongly connected to subsequent word decoding abilities (Lonigan, et al., 2003), and that specific training in phonemic awareness has a positive effect on emergent literacy (Miao, 2002). Research indicates that nearly all poor readers have a “core phonological deficit”. This deficit can be in one of three interrelated phonological areas (Lonigan, et al., 2003):

- Phonological sensitivity, which is the sensitivity to and ability to manipulate the sound structure of oral language,
- Phonological memory, which is the coding of information in a sound-based representation system for temporary storage,
- And phonological access to lexical store, which is the efficiency of the retrieval of phonological codes from permanent memory (Lonigan, et al, 2003).

In 2000, the National Reading Panel cautioned that phonological awareness should be considered “a means to an end” (National Reading Panel, 2000). The balanced literacy approach considers phonological awareness as a vital part of literacy instruction, but encourages teachers to teach phonological awareness in a realistic setting. For example, to focus on teaching phonological sensitivity, an instructor, who uses either approach to literacy instruction, would teach word families, such as “-ack” or “-at.” The graphophonemics instructor would, possibly, teach this concept through worksheets and partial texts. The balanced literacy instructor could teach this concept through shared reading of rhyming poems, which would contain many word families.
Since early reading skills provide the groundwork for academic success, it is critical that our students succeed as emergent learners. Unfortunately, there are many factors, other than the approach used to teach, which can affect that success. Research has shown that children who come from low-income families are at a high risk for reading difficulties, delays in language development, delays in development of letter knowledge, and phonological sensitivity (Velting & Whitehurst, 1997). This can relate to later difficulties in word decoding skills and reading comprehension skills. Research also indicates that children who have language and reading difficulties are at a higher risk for the development of social, behavioral, and emotional difficulties. These difficulties further impede academic success. One study shows that more than 50% of the children diagnosed with Attention Deficit-Hyperactivity Disorder are also diagnosed with a language disorder. Past research shows that behavior and reading skills are closely related, and even reciprocal in nature (Lonigan, et al, 2003). Each causes the other, and each can, and usually will, get worse throughout the school career of the student, and into adulthood. Learning to read is an activity that requires concentration and attention to details for certain lengths of time. Children with behavior problems, including inattention, distractibility, and Attention Deficit-Hyperactivity Disorder, have difficulty learning to read (Velting & Whitehurst, 1997). Research has proven that children who are referred for special education services are usually referred due to limited reading skills, and that over half the students referred to speech and language clinics had severe behavior problems (Lonigan, et al., 2003). The cost of this low academic performance and antisocial behavior is high, for both the children and society (Sylva & Evans, 1999). Research has also shown that this reciprocal relationship occurs, not only in children
from lower-socioeconomic status families, but also from middle-socioeconomic status families (Lonigan, et al., 2003). The researcher discovered no studies on children from high-socioeconomic status families.

Data Collection and Results

PURPOSE

The purpose of this study is to gather information regarding the extent to which the method of literacy instruction affects the reading ability of the emergent learner. The hope of the researcher is that each method will prove to be equally effective. This study may suggest that different approaches are more effective for emergent readers at different levels. Or, it may suggest that the approach used is not as important as the quality of instruction received.

Methodology

Participants

Copies of a single questionnaire were distributed to kindergarten, first, and second grade teachers at three different public schools in and near Chattanooga, Tennessee. For the purposes of anonymity, they will be known as Schools A, B, and C. These schools were chosen because of their main approaches to teaching literacy. School A, an urban magnet school, uses the whole language approach. School B, an urban school, uses the balanced literacy approach, and School C, a suburban/rural school, uses the graphophonemic approach. These grade levels were chosen because the study deals with emergent learners.

Instruments

The Survey
The actual survey instrument consisted of twenty-five response items. Each item required checking a box under the appropriate heading, and some items required a written explanation. No name or personal information was requested, except for school name, number of years teaching, grade level, and courses completed on literacy. The survey asked for data concerning the demographics of the classroom, including reading levels and income levels of students. The survey also asked the teacher to provide information about the literacy programs they use in the classrooms, and their thoughts on these programs. The teachers answered questions about their feelings and beliefs concerning literacy and how they felt the school and district administration view literacy instruction. Also included in the survey, were questions about concepts of literacy instruction.

To see the actual survey that was distributed to the three schools, please refer to Appendix A.

**Standardized Tests**

The researcher also examined data from the Tennessee Comprehensive Assessment Program (TCAP), a standardized test administered to all students in Tennessee. This data allowed comparison of the reading skills of the students in each school. Data was obtained on overall student test scores for kindergarten through eighth grade. These scores were obtained from the Tennessee Department of Education website for Report Card 2004.

**RESULTS**

*The Respondents*

Out of the questionnaires distributed, sixteen were completed and returned. All sixteen were filled out by general education teachers, with three returned from School A,
ten returned from School B, and three returned from School C. All the respondents are teaching in kindergarten, first, or second grade. Seven completed questionnaires were returned from kindergarten teachers. Six were returned from first grade teachers, and three were returned from second grade teachers. All but one respondent are long-term teachers, having taught for more than five years. Four respondents have taught more than twenty years. Six have taught between ten and twenty years, and five have taught for five to ten years.

With regard to literacy training that they have received, many claimed to have no training in several key areas of literacy instruction. Several teachers had attended many sessions of both professional development and college courses dealing with child development, linguistics, research methods, linguistic development, and literacy instruction. Eight out of sixteen teachers stated that they had no professional development sessions on child development, and one had no college courses on it. Four teachers claimed to have no professional development sessions on linguistics and six had no college courses on it. One claimed to have attended no professional development sessions on linguistic development and six had no college courses on linguistic development. Two teachers stated that they have attended no professional development sessions on literacy instruction, and three stated that they took no college courses on literacy instruction. Most teachers stated that the professional development sessions and college courses that they attended included discussions of the prevention or intervention of reading difficulties. Several teachers had attended many sessions of both professional development and college courses dealing with child development, linguistics, research methods, linguistic development, and literacy instruction.
One question on the survey asked “Which of the following do you feel are risk factors for problems in reading: speech or hearing impairment, limited exposure to print, low reading ability of parent or caregiver, and poverty?” Surprisingly, few respondents thought that all of these were risk factors for problems in literacy. Three teachers felt that a speech or hearing impairment and a limited exposure to print were not risk factors for problems in reading. Two felt that a low reading ability of a parent or caregiver was not a risk factor. Five out of sixteen teachers felt that poverty was not a risk factor for reading problems.

The survey asked about the use of commercial reading programs. The teachers at School A do not use commercial reading programs. The teachers at School B use them sporadically and the teachers at School C use them almost exclusively. The teachers at School B rated the commercial reading programs as poor and the teachers at School C rated the same programs as average or good.

All teachers with the exception of one stated that, given the opportunity, they would not change the format that they use to teach literacy. Several stated that their programs have proven results and that is why they would continue to use it. The one exception is from School B, where balanced literacy is used. This respondent stated “I would create my own way and intertwine it with what I do now.”

On question 19 of the survey, the respondents were asked to “describe the following groups’ approach to literacy and the emergent reader:” district administration, school administration, general education teachers, special education teacher, and the respondent. The respondents were given the choices of strongly language based, balanced, and
strongly phonics based. Almost all respondents indicated that all groups approached literacy in a balanced fashion, merging phonics and language based instruction.

On question 20 of the survey, the respondents were asked to rate themselves on their abilities to teach reading effectively to struggling readers, average readers, and advanced readers. Fifty-eight percent of the respondents rated their ability to teach reading to average readers as exceptional. Only 25% rated their ability to teach reading to struggling readers as exceptional. All respondents rated their abilities to teach reading effectively as average or above.

On question 21 of the survey, the respondents were asked to identify their knowledge of several topics, including:

- Current research on literacy
- Phonics-based instructional methods
- Literature-based instructional methods
- Identifying at-risk readers
- Structure of English language
- No Child Left Behind Act
- TN Standards for Reading

All teachers, with one exception, rated their knowledge of current research on literacy as adequate or above. The one exception rated his/her knowledge as insufficient.

The respondents rated their level of knowledge of each of the other categories as adequate or above, with the exception of the No Child Left Behind Act. Nineteen percent of the respondents rated their knowledge of the No Child Left Behind Act as either “insufficient” or “none.”
The respondents were asked to what degree they agreed or disagreed with the statement that “It is a realistic goal, to have every child reading by the end of the third grade.” Answers from the respondents varied across the choices, with three respondents disagreeing in some degree with the statement. Those three respondents are from School C.

The respondents were asked to what degree they agreed or disagreed with the statement that “All students can learn to read.” Answers from the respondents, again, varied across the choices, with five respondents disagreeing in some degree with the statements. Those five respondents are all from School C.

Almost all respondents disagreed with the statement, “I use the same method of teaching reading for all students.” Only two respondents mildly agreed with that statement, one from School C and one from School B. All respondents agreed with the statement, “I adjust reading instruction to meet individual needs.”

On question 25, respondents were asked, “to what extent the following adversely impacts your success in teaching reading.” This question included several choices including:

- Classroom management issues
- Lack of preparation time
- High number of children
- Lack of adequate instructional time
- Wide Variance in student levels
- Lack of student motivation
Several other choices were given, but the majority of the respondents did not find that these adversely impacted their success in teaching reading. Table 1 shows the percentage of respondents at each school who feel that their teaching is adversely impacted a great deal.

### Table 1

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<td>Wide Variance in Student Levels</td>
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<td>Lack of Student Motivation</td>
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Notes: Teachers feel that many things adversely impact their success in teaching reading.

Other questions on the questionnaire dealt with the demographics of the classroom. There is an average of eighteen students per classroom, with the smallest class size of fifteen, and the largest class size of twenty-three. Sixty three percent, or ten teachers, report between seventeen and nineteen students per class. Respondents reported 291 total students in their classrooms, with 78 struggling readers, 117 average readers, and 96 advanced readers.
In School A, which uses whole language instruction, the teachers consider 20% of the students to be struggling readers, 49% to be average readers, and 31% to be advanced readers. In School B, which uses balanced literacy instruction; the teachers consider 19% of the students to be struggling readers, 31% to be average readers, and 50% to be advanced readers. In School C, which uses more graphophonemics instruction, the teachers consider 31% of the students to be struggling readers, 40% to be average readers, and 29% to be advanced readers (See Figure 1).

Figure 1
Percentage of Student Reading Levels in Schools A, B, and C

Of the three schools, there are a higher percentage of struggling readers at School C. The percentage of struggling readers at School C is 33%, versus 20% at School A and 19% at School B. At School C, 22% of struggling readers are considered by the respondents to be from families with low income. This is higher than both Schools A, at 7%, and B, at 16%. The respondents at School B and School C consider 18% and 16% of their average readers to be from families with low incomes. The respondents from School A consider only 7% of their average readers to be from families with low incomes.
At School A, 0% of advanced readers were considered to be from families with low incomes. Respondents at School B reported 12% of advanced readers to be from families with low incomes, and respondents at School C reports 14% of advanced readers to be from families with low incomes (See Figure 2).

As evidenced in Figure 2, students from families with low incomes are more likely to be struggling readers, than students who come from families with higher incomes. In School A, where the whole language approach is used, there is less distinction between reading levels as associated with income status. In School A, 2% of struggling readers come from families with high incomes and 7% of struggling readers come from families with low incomes. In School C, where graphophonemics is used, there is more of a distinction between reading levels as associated with income status. In School C, 0% of struggling readers come from families with high incomes, 10% come from families with middle incomes, and 22% come from families with low incomes.

The Test Scores
Tennessee students took both a norm-referenced assessment and a criterion-referenced assessment in 2004. Data from both of these assessments were included in the Tennessee Department of Education’s website, Report Card 2004.

A criterion-referenced test measures an individual student’s performance against a predetermined set of standards (Report Card 2004, n.d., Report card terms). This type of assessment is used under the No Child Left Behind Act.

A norm-referenced test compares an individual student’s performance against a national norm group of students that take a similar test (Report Card 2004, n.d., Report card terms). This type of assessment was used before the No Child Left Behind Act.

The data from the three schools shows that School A has fewer economically challenged students than either of the other schools. See Figure 3.

School A has only 31.7% economically challenged students, and Schools B and C have over 70%. According to the website, the state average of economically challenged students is 49.9%. Schools B and C have approximately 25% more economically
disadvantaged students as the state average and over 40% more economically
disadvantaged than School A.

On the criterion referenced assessment, only School B had a failing grade. School C
had a passing grade of C, and School A had a passing grade of A. The state average
score on this assessment was 50 with a grade of C. See Figure 4 for the actual scores.

Conclusions and Results

The data collected shows that each approach works, at least partially, for emergent
learners. The whole language approach seems to have better results, when reviewing the
test scores. The graphophonemic approach also seems to work well. The balanced
literacy approach seems to be the least effective in the schools studied.

The data collected also shows that many teachers, regardless of the approach used,
feel that they are not as effective at teaching struggling or advanced readers as they are at
teaching average readers. Many of these teachers felt that they were exceptional teachers
of average learners but inadequate teachers of struggling or advanced learners.
Several had received little or no training in key areas of literacy instruction. The researcher was very surprised to see that several teachers felt that poverty was not a risk factor for reading problems. In reviewing both the criterion- and norm-referenced test scores, as compared to the percentage of economically disadvantaged students, it is obvious that schools with a higher population of the economically disadvantaged students had lower test scores. Other surprising risk factors that several teachers felt were not important included, speech or hearing impairment, limited exposure to print, and low reading ability of the parent or caregiver.

All teachers, with one exception, rated their knowledge of current research on literacy as adequate or above. It is interesting to note, that even though most of the respondents claim to be knowledgeable of current research, only the respondents from School B, a balanced literacy school, seemed to be familiar with the concept of balanced literacy, which is different than the mixture of language-based and phonics-based instruction implied by many of the respondents. Much of the current research on literacy has focused on balanced literacy and its effectiveness.

The data collected suggests that teachers need more training in key areas of literacy instruction, child development, and teaching literacy to struggling readers. The data also indicates that teachers are very concerned with their ability to adequately teach to students with a wide variance of abilities. A program designed to focus on key areas of concern and research-supported methods for teaching reading to all readers would better prepare teachers to teach all learners effectively.

The researcher, a balanced literacy advocate, was surprised to learn that, according to test scores, balanced literacy was the least effective method of literacy instruction. The
data suggests that whole language and graphophonemics are more effective to teaching students of all levels of ability. More research needs to be done in this area, including a larger sampling of teachers. Since the balanced literacy school also had the largest population of economically disadvantaged students, a study that concentrated on schools with similar economic populations, but used different methods of literacy instruction might yield different results.

Regardless of the method used to teach, reading readiness, or emergent literacy, seems to be like a window, which is open for a brief time during the early years of childhood, and closed thereafter. Educators, parents, and researchers must take full advantage of this critical, and possibly only time, to teach children literacy. We must find ways to combat problems that the emergent learner may have, including behavior issues, low socioeconomic status, or generational poverty. Children cannot succeed in any subject, in any grade without literacy skills. If we fail to help them acquire these skills at an early age, then it is not the children who fail, but, rather, it is the educators, parents, and researchers who fail the children.
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Parental Involvement and Student Success

in Urban Middle Schools

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Introduction

Although it is well known in elementary education that parental involvement fosters success in the classroom, this philosophy also applies to middle school. With No Child Left Behind, high stakes testing rules the classroom of a middle school educator. Because of the emphasis on high stakes testing in middle school, there is a plethora of literature devoted to importance of parental involvement in targeted urban middle schools, but within the world of art education, parental involvement is most discussed at the elementary school level. The scenario often discussed is the parent or guardian assisting the eager eight-year-old to finish his or her art project at school to develop confidence within the child. When the child reaches middle school according to Beghetto (2001), “the last thing that middle-level students, in the throes of developing a sense of autonomy and social identity, want is their parents making a habit of visiting and ‘hanging out’ at school” (p. 76). This need for independence and at the same time the need for guidance compounds the job of both the educator and parents. The prescribed methods for parents and students to increase scores on high stakes testing has proven successful over the past several years, but does parental involvement within art education correlate with student success in middle school not only on high stakes tests, but grade point average as well. Though art education is not a priority within the world of high stakes testing, the purpose of this action research is to examine the relationship between parental involvement on a simple art project at home and the student’s success in middle school. The directions for the projects were modeled after “Connect for Success: A Tool Kit for Middle and High School Teachers” (RNT, 2001). The survey was explicit, and provided clear directions for both parents and students (see Appendix A). By examining
the results from the art project and the survey, this action research will correlate the data
to the success or lack thereof in the middle school classroom.

**Review of Literature**

By researching the data about parental involvement in middle school, the
dparameters of the research became clear. In West’s article entitled, “Increasing Parent
Involvement for Student Motivation (2000),” she presents action research that involves
middle school parents and teachers in a reading program in the home after school. This
research mirrors the process set up by this project but deals with reading scores and
expanding grade level proficiency. The demographics of her respondents matches the
respondents of our Urban Middle School and the urban setting with the perpetual
problems of decaying facilities were also highlighted. West received “15 of the 19”
parent surveys sent home with a “variety of similar positive responses about this reading
program” (West, 2000, p. 17). The result of parental involvement of the “15 students who
participate in the reading at home program, achieved an 80% or better for the first term”
(West, 2000, p. 17). The link between parental involvement and student success is firmly
established by West’s research.

In Beghetto’s article (2001), “Virtually in the Middle: Alternative Avenues for
Parental Involvement in Middle Level Schools,” he provides a framework for developing
parental involvement in the virtual world of cyber-space. By using technology of online
resources, he proposes the concept of providing independence of the student at school
and creating a venue for parents to monitor and guide students at home. The article
examines not only the challenge of fostering parental development in the middle school,
but also the hurdles of educating parents and students on how to use the technology.
Beghetto provides plenty of data to support the benefits of online conferencing, but it is in his conclusion where he addresses the problems of his program in a high poverty urban middle school. He stated,

Clearly, virtual parent communities are not created to replace traditional forms of parental involvement but rather to enrich and augment existing programs as well as to provide a forum to generate new programs. The biggest initial concern with respect to creating virtual communities is the issue of accessibility, especially for families who cannot afford to own computers or have difficulty accessing computers. Creative collaborations within communities may start to address the issues of accessibility, but further consideration must be given to how to ‘wire’ traditionally hard to reach populations (Beghetto, 2001, p. 82).

The concept is excellent in this article but the practicality of online communication is a problem for our Urban Middle School. The success of parental involvement in the article provided the tone for this study in dealing with maturing students.

In the action research entitled “Lack of Organization Skills Interfere With Academic Success” by Molenhouse, Pestsas, Somers, Spiller, and Thomas (2000), the authors deal with the problem of failing middle school students from the point of view of shaping organizational skills. Like the previous articles, the researchers document the problem of lack of parental support as a key factor in student failure, and they include surveys, checklists, and conference logs to include parents in the educational process. The focus of the research is to correlate organizational skills to student success rates, but for the purpose of this study, the methods and results achieved through parental
involvement are examined. The researchers discovered within the demographic of their study, education of organizational skills was needed for both parents and students. The conclusion of their study provided a key point in parental involvement used in this research. The research stated,

Showing a transfer of organizational skills from the school environment to the home environment is necessary because it instills in the student the idea of transfer. In order to accomplish this, parental involvement must be superior. Just as students must be taught the various elements of organizational skills, so must the parents…. The consistency of stressing organizational skills at home would easily transfer to the school (Molenhouse, Pestsas, Somers, Spiller, Thomas, 2000, p. 18).

This article was used to build the art project to examine the organizational skills of parents and students within this test group.

In the article “Parent Involvement Equals Student Success” from the Learn More Resource Center at Indiana University (2005), the center provides a checklist and specific questions for parents to ask middle school students to cultivate student success. The article is directed to parents with straightforward language. The publication scripts questions to ask middle school student to ferret out the causes of unsuccessful school experiences. It also is sensitive to the fledgling independence of the middle school student, but like the other articles, this article stresses the clarity of communication in surveys, questions, and homework that is sent home to parents. This article was used to frame the questions about the art project.
In chapter four entitled, “Parent Involvement: A Misnomer for Urban Schools” from the book *Believing in Ourselves: Progress and Struggle in Middle School Reform* by Anne Lewis (1995), she poses the problem of parents and teachers having barriers of distrust because of differences in culture. She highlights the need for parental involvement a key to student response, but shifts the focus of the article quickly to the role of the educator in the parental involvement equation. Lewis wrote, “parental involvement is not a substitute for teachers being professional and making students learn” (p. 2). This statement cuts to the issue of cultural and demographic differences that often occur in most urban middle schools. The parental involvement model often used for student success in middle to upper class suburban middle schools does not fit well in a impoverished urban middle school. She wrote, “More parental involvement might minimize teacher behaviors rising from cultural differences” (Lewis, 1995, p. 2). This statement indicates the need for teacher education about the community where he or she teaches. The findings of this article chronicles the roadblocks that were overcome across the United States by understanding the “love/ hate relationship many urban middle school parents have with school” (p. 2). This article was used to begin to understand the obstacles in developing a dialogue with parents within this Urban Middle School.

As in the previous article, the publication “Connect for Success: A Toolkit for Middle and High School Teachers (2001)” provides a framework to understand the population and culture of urban middle schools. This toolkit is designed as a guide for first year teachers. As any educator needs a variety of tools in his or her toolbox, this article provides the basic tools for student success. The article stresses “teacher involvement in the community, visibility at school and outside functions, and frequent
visits to community hangouts” (RNT, 2001, p. 32). The understanding of the community values will help the teacher develop the relationships needed to create a safe atmosphere for parental involvement. The surveys, checklists, and directions for students and parents were used as model to set up the communication used in this research. This toolkit was based on best practices and is an excellent guide in fostering parental involvement.

Data Collection and Results

Purpose

The purpose of this research is to find out whether or not parental involvement has any influence on the success rate of one urban middle school’s 8th grade art students. Literature shows that parental participation and academic support is a contributor to student success. The hope of this research is that first and foremost, these eighth grade art students have some sort of parental support in the home and that secondly, that support contributes to their success as art students. In other words, does parental involvement affect student success in one urban 8th grade art classroom? This research will show that parental involvement does in fact have an impact on the grades and discipline problems of middle school art students.

PROCEDURE

The Location:

The surveys were distributed to the eighth grade art students at one urban middle school in the Chattanooga area. For purposes of anonymity, the school will be known simply as Urban Middle School. This school was chosen because over the past few years it has had a significant increase in student success rates. This school is a Title One school, has a 93% attendance rate, and a student population of 350. All but one of the students considers himself/herself to be non-African American. The majority of the students in this school come from split homes- homes where there is only one parent, and many of
the students live in foster care.

The Survey Instrument:
The actual survey instrument consists of two response items- one student response survey and one parental/guardian response survey (see Appendix A). The parental response survey asked for approximate time spent together on the project. No personal information was asked for on these surveys and honest responses were requested. Specific questions were asked of both the student and the parent/guardian regarding initial thoughts about this survey, if they have become a stakeholder in the project, and if they would be willing to help their student(s)/work together with an adult on other assignments outside of the classroom. Plenty of space was given after each subjective question for responses to be written and objective questions regarding “rating experiences on a scale of 1-10” were also included.

The students were given approximately three days (or one weekend) to complete both the project and the surveys. An extra day was offered to the students who did not return their packet by the requested return date, but no projects or surveys were returned on the extra day.

The Respondents:
The eighth grade art classroom at Urban Middle School consists of five males and nine females. Out of the 14 project packets and surveys distributed, seven were returned. Of the seven returned, only four had parental participation. Of the four parentally directed packets, three were returned by female students and one was returned by a male student. Of the remaining three non parent directed projects, all were returned by female students.

Results of the Completed Surveys:
In regards to the question, “How much time did you spend actually working together on this activity?,” the average time spent together was 1 hour 22 minutes. All the
parents and the students who completed the survey felt that they had successfully completed the project, and the majority of the parent/student collaborators truly enjoyed working together. One parent is quoted as saying, “We had a lot of fun working together. The one thing I learned is that art is much more complicated that I imagined!”

And, as for the responses to the question, “Would you be willing to share time with your student/parent or guardian weekly on other assignments or activities? If yes, why? If not, why?,” all but one of the students responded yes. The student who responded No stated that “some people like to bring other people down.” In contrast, the corresponding parental response to this question was, “Yes, because I love spending time with my child. It helps us bond more.” Other parental responses to this question were, “If it will help [his/her] grade,” and most importantly, “Yes, [I would be willing to share time with my student weekly on other assignments or activities] because we hardly ever get to see the actual work done in school and we don’t know what is being learned or if it is really being learned.” Overall, on a scale of 1-10 with a 10 being the most valuable, the students and parents rated the value of time spent together on this project as an average of 8.1.

Conclusions and Recommendations

After the analysis of the data from the 14 respondents and correlating it with the data from their grades and discipline records, the three students who returned the packets with parental feedback had an average grade of 84.2 in all classes this year with no discipline incidents on their record. The four students who returned the packets without the parental survey had average grade of 77.4 in all of their classes with no discipline incidents on their record. Of the remaining students who did not return the information, their average grade in all their classes is 75.3 with 23% of these students had a discipline
occurrence within the last year. It is obvious that parental involvement creates student success within these statistics, but it is in the analysis of the surveys from students and parents the conclusion is understood. The higher order thinking skills needed to understand and replicate perspective in an artwork can be transferred into the traditional academic areas. The responses from the parents and students illustrated the environment needed to foster the elements needed for success in middle school. The students had learned the project in class and used this to teach the parents how to involve themselves in the project. This model establishes the framework for the student to be a stakeholder in the process and establish the fledgling independence, and the parents have the vested interest of knowing what is taking place in the classroom. This research supports the vital role that parents must play in the student’s education. The respondents that returned the project without parental input illustrate the seeds of self-direction of some middle school students, but also illustrate how the missing parental support hampers the students full potential. The packets that were not returned illustrate how students with no parental support suffer from the lack of guidance needed to be successful. The working bond between teacher, student, and parents needs to be developed in art in order to develop the foundation to be built upon to be successful in the high stakes testing that drives middles schools.

The recommendation of this study is to continue the art projects with parental guidance in a familiar place in the community outside the confines of the school. The art project gives the student independence at school, but gives the student guidance with school concerns. Also by empowering the student to educate the parent, the student has a defined role in the academic process that will later be used to allow the parent to guide in
stressing the importance of the core subjects. This study also recommends that the educator allow the students and parents the freedom needed to choose the subject matter that is culturally relevant to them, instead of the teacher choosing the subject. It is the educator’s role to give clear directions on the process, but not the subject. This framework can be used to create the foundation for success in this Chattanooga Urban Middle School.
Comparison of Discipline Problems

Comparison of Grades
Appendix A:

Hello Parents/Guardians/etc!
I am your student’s art teacher and I need your help!
I am VERY interested in helping each and every one of your students succeed in my

classroom. Thus, I am conducting a little survey. This survey will tell me whether or not

parental support at home contributes to the success of students in my classroom.

Would you mind taking an hour or two of your time to help your student

with an ART PROJECT ??

What it’s all about?
A Survey for Your Child’s Success:
You will be asked to complete an art activity with your child; after which, both you and
your child will be asked to complete separate surveys regarding your experiences
working together. Please answer the survey questions as truthfully as possible.

By supporting your student, participating in this project, and completing the survey, you
are providing valuable information for the success of your student. I appreciate your time,
effort, and participation in this project. The results of this survey may be made to you
upon request once the project is complete.

None of your individual responses will be viewed by anyone other than me, the art
teacher. Please note that the information you provide will remain confidential, but the
data accumulated will be published, BUT NEITHER YOUR STUDENT NOR YOUR
NAME WILL BE USED. By participating in this survey, you agree that the information
you provide will culminate in an overall report to be used for educational purposes.

Please sign and date below if you agree to allow both your and your child’s responses to
be compiled into an anonymous report.
Student Assent Form

I have been informed that my parent(s) have given permission for me to participate in a study concerning Parental Involvement and Student Success in Urban Middle School Art.

I will be asked to work with a parent, guardian, or caretaker to complete an Impressionist style tissue paper landscape, fill out the enclosed survey, have my parent/guardian/caretaker complete the Parent Survey, and return the entire package by the specified date.

My participation in this project is voluntary and I have been told that I may stop my participation in this project at any time. If I choose not to participate, it will not affect my treatment in the classroom in any way.

____________________________________  ____________________
Authorized parental/guardian signature      Date

____________________________________  ____________________
Signature      Printed Name
Instructions for the project:
Enclosed in this packet are:
1. A set of instructions that will explain how to complete an art project.
2. Materials needed to complete one art activity
3. Record for time keeping- both beginning and end times are requested
4. One student survey to be completed by the student and returned with the completed project.
5. *One parental/guardian survey to be completed and returned with the completed project. *Adult participation is required for this project. PLEASE NOTE THAT a Parent/Guardian is any adult who aids in the care of a student.

1. Read the enclosed instructions with your child and TOGETHER complete the activity as directed.
2. Make note of the time you spend on this project (even time you spend reading this memo!!)
3. Fill out the Adult Participator survey when the activity is completed.
4. Have the student fill out the Student survey when the activity is completed.
5. Return THE ENTIRE, COMPLETED PACKET to school with your student on
Time Sheet for Project Assignment
*To be filled out by the student and the adult participant

<table>
<thead>
<tr>
<th>Begin Time for Project:</th>
<th>End Time for Project:</th>
<th>Total Time (hours and minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>__________ Am or PM</td>
<td>__________ Am or PM</td>
<td>_____ Hrs. _______ min.</td>
</tr>
</tbody>
</table>

* Please work at a pace that is appropriate for both of you. The total time WILL NOT AFFECT your student’s grade.
Adult Participator Survey
(to be filled out by the parent/guardian)

Please answer the following questions as truthfully as possible.

1. What were your first thoughts about having to complete this project?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. Was the instructional sheet for the art activity clear? Did it have precise instructions that were easy to follow?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3. How much time did you spend working together on this activity? Please be specific.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

4. Do you feel you: (CIRCLE ONE)
   a. successfully completed the project.
   b. Didn’t quite complete the project as you hoped.
   c. Could not finish the project.

5. If your response above was
   (a.) briefly explain the factors that you believe contributed to your success.
   (b.) briefly explain the factors that you believe would have resulted in a more successful activity.
(c.) briefly explain the factors that prevented you from successfully completing this project.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

6. While working together, did you have fun or get frustrated with one another? How was it a learning experience for you, the adult participator?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

7. On a scale of 1 to 10, with 10 being the highest, rate the value of the time you and the student spent together working on this project.

1 2 3 4 5 6 7 8 9 10

8. What was the most successful part of this activity?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

9. What was the most difficult part of this activity?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

10. Would you be willing to share time with your student weekly on other assignments or activities? If yes, why? If not, why?
Other Comments (optional):
**Student Survey for Success**  
*(to be filled out by the student)*

Please answer the following as truthfully as possible.

1. What were your first thoughts about having to complete this activity?

________________________________________________________________________  
________________________________________________________________________  
________________________________________________________________________  
________________________________________________________________________

2. What were your first thoughts about having to work with a parent/guardian on this project?

________________________________________________________________________  
________________________________________________________________________  
________________________________________________________________________  
________________________________________________________________________

3. How much time did you spend working together on this project? Be specific.

________________________________________________________________________  
________________________________________________________________________  
________________________________________________________________________  
________________________________________________________________________

4. Do you feel you: (CIRCLE ONE)
   
   a. successfully completed the project.  
   b. Didn’t quite complete the project as you hoped.  
   c. Could not finish the project.  

5. If your response above was:  
   
   a. -briefly explain the factors that you believe contributed to your success.
b. Briefly explain the factors that you believe would have resulted in a more successful activity.

c. Briefly explain the factors that prevented you from successfully completing this project.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

6. While working together, did you have fun or get frustrated with one another? How was it a learning experience for you, the student?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

7. On a scale of 1 to 10, with 10 being the highest, rate the value of the time you and your parent/guardian spent together working on this project?
   
   1     2     3     4     5     6     7     8     9     10

________________________________________________________________________

8. What was the most successful part of this activity?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

9. What was the most difficult part of this activity?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

10. Would you be willing to share time with your family members/guardians on assignments or projects? If yes, why? If no, why?
Other Comments (optional):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

____________________________________
References


