The effect of a District-Wide Literacy initiative on English/ Language Arts standardized test scores

Sheri R. Robken

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THE EFFECT OF A DISTRICT-WIDE LITERACY INITIATIVE ON ENGLISH/
LANGUAGE ARTS STANDARDIZED TEST SCORES

by

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A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
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We hereby recommend that the dissertation prepared under our supervision by Sheri R. Robken be accepted in partial fulfillment of the requirements for the Degree of Doctor of Education.

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ABSTRACT

The purpose of this study was to determine the effect of a District-Wide Literacy initiative that implemented the 18 literacy strategies and Silent Sustained Reading activities incorporated in the 2008 Revised Louisiana Comprehensive Curriculum on English/Language Arts standardized test scores. Standardized test scores were obtained for seventh and eighth grade students from a control group (n=204, 2006-2008 tests administrations) and an experimental group (n=185, 2008-2010 test administrations). An Analysis of Variance was used to determine significance (p <.05) with regard to the 2 (year) x 2 (group) research design. As a result of the statistical data analysis, the following is a summary of the findings: (a) there was a significant effect on achievement by both groups between the first (seventh grade) and second (eighth grade) years. Multiple years of literacy instruction appear to have an effect on the overall student performance and on performance on each of the six strands with regard to second (eighth grade) year achievement; (b) there was a significant effect on literacy with regard to one of the six strands (Strand 4: Locate, Select, and Synthesize Information); and, (c) there was a significant interaction effect (year x literacy) for three of the six strands (Strand 1: Read, Comprehend, and Respond; Strand 4: Locate, Select, and Synthesize Information; and, Strand 6: Apply Reasoning and Problem Solving Skills). Results and recommendations from this study can be beneficial to policy makers, administrators, and teachers with regards to (a) proper program planning and implementation, (b) sustained
implementation over time, and (c) selection of literacy strategies to support reading and writing achievement.
APPROVAL FOR SCHOLARLY DISSEMINATION

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DEDICATION

This dissertation is dedicated to my husband, Jim, my son, John, and my daughter, Emily. Thank you for your love, encouragement, and patience. Thank you for your understanding and for loving me always. This achievement is as much yours at it is mine. To all of my family and friends who have supported me through this journey, I give my sincere thanks. I love you all so very much.
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CHAPTER 1

INTRODUCTION/PROBLEM

Recent federal policies and legislation have placed special emphasis on the importance of literacy instruction in helping to improve the quality of education in the United States. The No Child Left Behind Act of 2001 (No Child Left Behind [NCLB], 2002) ignited a national initiative to improve the quality of education in the United States overall and to bridge the achievement gap that exists between students who are economically advantaged and students who are from less advantaged economic, ethnic, and racial groups. The purpose of this national initiative was for each state to set standards for academic achievement and be responsible for seeing that all students met those standards by 2014. Unfortunately, editors of *Reading Today* (2007) reported the following:

Despite efforts undertaken to comply with the No Child Left Behind Act of 2001, the goal of eliminating the achievement gap between racial and ethnic minorities is proving elusive. The score gaps between white and black and white and Hispanic students are relatively unchanged since 1992. (p. 3)
According to Haynes (2011):

Beginning in the 1980s, reports such as *A Nation at Risk* documented the links between education, reading and writing skills, and the economy, and urged action to greatly accelerate the pace of literacy improvement. Despite these early warnings, limited progress has been made. Although students in grade 4 score among the best in the world, by grade 10 U.S. students place close to the bottom among developed nations. (p. 10)

Greenleaf and Hinchman (2009) researched adolescent literacy in the U.S. as it related to curriculum design, literacy instruction, and educational policy. The authors began by presenting an excerpt from the First Amendment to the Constitution of the United States and ask the reader about what circumstances would a teacher appropriately present it to a class of adolescent readers. The point was that it is appropriate for all U.S. students to be presented with this document, regardless of reading ability. Therefore, literacy becomes a human rights issue. It was even more alarming when considering the following facts presented by these researchers from the 2007 National Assessment of Educational Progress (NAEP):

- There were 3.9 million eighth graders in the U.S.
- Twenty-six percent of eighth graders who took the 2007 NAEP did not attain basic levels of literacy.
- Only 31% of eighth graders reached proficiency on the 2007 NAEP.
- Roughly 1 million eighth graders were at basic levels of literacy.
- Another 1.7 million eighth grade students were not proficient.
These startling statistics reflected Friedman's assertion (as cited in Greenleaf & Hinchman, 2009) that "Our youth's life choices and our nation's future participation in the global economy are disrupted on significant ways when such large numbers of young people have literacy difficulties (p. 5).

Greenleaf and Hinchman (2009) suggested that part of the problem was that students were not challenged to read increasingly complex texts as they progressed. Struggling readers were then more likely to struggle with content vocabulary, background knowledge, and text organization. Alvermann suggested (as cited in Greenleaf & Hinchman, 2009) that this deficit can affect young peoples' actions in and out of school. Therefore, content area literacy instruction is beneficial and should be considered when making decisions about curriculum, instruction, and policy. The researchers cautioned decision makers about seeking a quick-fix remedy to these literacy challenges by pointing to initiatives cited as successful after only several years of implementation. Not only should literacy initiatives be sustained over a period of years, but also encompass multiple grade levels.

In fact, according to Biancarosa and Snow (2006), educators must focus not just on early literacy instruction, but also on adequate ongoing literacy instruction for middle and high school grades in order to prepare students for academic and work readiness success.

Inevitably, this will require, for many of those students, teaching them new literacy skills: how to read purposefully, select materials that are of interest, learn from those materials, figure out the meanings of unfamiliar words, integrate new information with information previously known, resolve conflicting content in
different texts, differentiate fact from opinion, and recognize the perspective of the writer—in short, they must be taught how to *comprehend*. (p. 9)

Both the rise in literacy demands for the American work force and the decline in literacy achievement in the U.S. can be seen in the following statistics: (a) Between 1996 and 2006, the average literacy required for all American occupations is projected to rise by 14 percent and the fastest growing professions have above average literacy demands (Barton, 2000); (b) A significant number of adults in the workforce lack the literacy skills necessary for employment and newcomers to the workforce demonstrate weaker reading skills than in 1995 (NCES, 1999).

Moreover, Shiel and Eivers (2009) compared the reading literacy between countries that participated in two standardized assessments: The Progress in International Reading Literacy Study (PIRLS) and the Programme for International Student Assessment (PISA) sponsored by the Organisation for Economic Co-operation and Development (OECD) compared literacy between countries. In 2006, 40 countries administered the PIRLS to fourth grade students and 57 countries administered the PISA to 15 year-old students. The mean scores of the highest achieving countries on these assessments placed the United States 18th on the PIRLS and lower than 25th on the PISA, behind students from Russia, China, Japan, and Latvia, to name just a few. These authors cited the differences in instructional practices between countries in promoting reading engagement, between males and females, and between groups of differing socioeconomic status as a major indicator of literacy achievement. The implementation of instructional strategies that address these issues was recommended.
Similarly, Haskins, Murnane, Sawhill, and Snow (2012) reported on the effect of Common Core Standards, which were adopted by almost all fifty states, on the recent literacy achievement of American students. Common Core Standards have evolved out of an attempt to homogenize the definition of proficient in core academic subjects between the states. The authors revealed that the majority of today's jobs require reading skills beyond basic decoding; most jobs require the ability to categorize, make inferences, and draw conclusions. Furthermore, the literacy skills of average American students do not meet the standards reached by international students. Setting standards is one way of improving achievement, but the adoption of Common Core Standards alone is not enough. Four additional elements are necessary in order to increase literacy achievement for all and for addressing the problem of the achievement gap between high and low income families. First, state assessments aligned with the Common Core are being developed with the help of the Bill and Melinda Gates Foundation and the U.S. Department of Education. Second, a common reporting system is being implemented so that comparisons between schools, districts, and states can be made. Third, curriculums aligned with the Common Core are being created in order to deliver more effective instruction to students. Fourth, and most importantly, the quality of teachers must be improved both through professional development and teacher preparation programs. The authors highlight the fact that the achievement gap can only be narrowed by attracting and retaining highly effective teachers in high poverty areas. School leaders in high poverty areas must foster a supportive and collaborative school climate that offers easy access to resources and relevant professional development. Teachers of all subjects need
to possess literacy knowledge and skills in order facilitate students’ successful educational progress.

As a result, universities were charged with preparing pre-service teachers with the skills necessary to teach literacy across the curriculum. Fleming et al. (2007) addressed this issue with their study of California State University teacher education preparation programs of single subject, non-English/Language Arts (ELA) teacher majors such as art, physical education, art, and even core subjects such as math, science, and social studies. These researchers contended that non-ELA teachers often question why they should be concerned with literacy and how they should incorporate reading and writing into their teaching. In this study, a 14 member California State University task force investigated the problem. Starting in 2001, surveys were conducted of new secondary teachers and supervisors regarding the preparation of single subject, non-ELA teachers. Surveys indicated that students and supervisors did not feel they had been prepared by their college experience for teaching reading literacy in their individual subject. As a result, the researchers recommended that a binder be created that directly outlined reading and writing in all of the curricula taught in the California public schools. This binder outlined the purpose, importance, and appropriate process for teaching literacy across the curriculum. Sociocultural issues and the appropriate context for single subject teachers to incorporate reading and writing in the curriculum were outlined. As a result of this research, plans for professional development across the state were made. This is not unlike the genesis of the literacy initiative in the state of Louisiana.

In Louisiana, this need for adolescent literacy instruction was addressed by inviting Dr. William Brozo to consult with state educational leaders to select and
integrate literacy strategies into the 2008 Revised Louisiana Comprehensive Curriculum (RLCC). Although Brozo selected research-supported literacy strategies for inclusion in the revision of the state curriculum, one problem still became apparent. The problem was that no research existed to prove that the selected strategies would improve academic performance of students- specifically the performance of eighth grade students on the English/Language Arts portion of the Louisiana Educational Assessment Program (LEAP).

Purpose of the Study

The purpose of the study was to determine the effect of a district-wide literacy initiative that implemented the recommended 18 literacy strategies and Silent Sustained Reading activity found in the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on English/Language Arts standardized test scores. Dr. William Brozo, recognized literacy expert, was recruited by the Louisiana State Department of Education for the purpose of recommending literacy strategies to be included a revised curriculum. This revised curriculum was implemented in the 2008-2009 school year. With the intent to improve literacy throughout the state of Louisiana in the K-12 public school, the Louisiana State Department of Education added 18 research-supported literacy strategies to the 2008 Revised Louisiana Comprehensive Curriculum (RLCC), as recommended by Dr. Brozo. These strategies were imbedded in the various suggested activities detailed in the revised curriculum in all of the content areas: English, math, social studies, and science (Revised Louisiana Comprehensive Curriculum, 2008).
Justification for the Study

Very little study has been done on the effect of the literacy strategies and the Silent Sustained Reading (SSR) activity incorporated into the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on student achievement. No studies could be found by this researcher addressing the direct effect of these strategies on the ELA standardized test results of students. Therefore, this study was needed to investigate the relationship between recent and relevant studies on literacy initiatives and the effect on standardized test scores in Louisiana. Moreover, this longitudinal study of a literacy initiative could be used as a justification for similar initiatives in other states.

The study may be beneficial to policy makers, administrators, and teachers by uncovering the impact, if any, of the use these specific literacy strategies have on student achievement as measured by standardized tests. Furthermore, this research sheds light on the importance of proper program implementation on the success of any school reform initiative. The research also documents the benefits, if any, to a multi-year initiative.

Theoretical Framework

The literacy strategies selected by William Brozo for the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) have their roots in constructivism. Joyce, Weil, and Calhoun (2004) held that there are three central ideas that make up the constructivist view. To begin with, constructivism refers to the idea that learning is the process of taking information and reconstructing it in the mind. In other words, the mind stores and organizes information, then revises prior conceptions. Another major constructivist viewpoint is that a child learns from birth about the culture and ways of interacting. New information is absorbed into this mindset and, as a result, knowledge is adjusted.
Ultimately, constructivist theory involves the student’s response to and creation of understanding of information being taught.

Constructivist ideas were influenced by several theorists. However, “John Dewey was the major spokesperson through much of the twentieth century” (Joyce et al., 2004. P. 13). Chamblis (1996) explained that John Dewey valued the social needs of the mind in order for it to grow and develop. As such, learning is affected by emotion and action. According to Dewey, “Schools require for their full efficiency more opportunity for conjoint activities in which those instructed take part, so that they may acquire a social sense of their own powers and of the materials and appliances used” (Dewey, 1916/1944). In Dewey’s *Democracy in Education: An introduction to the Philosophy of Education* (1916/1944), he described some of his thoughts about education as follows:

The idea of education advanced in these chapters is formally summed up in the idea of continuous reconstruction of experience, an idea which is marked off from education as preparation for a remote future, as unfolding, as external formation, and as recapitulation of the past. (1944, p. 93)

In addition to Dewey, Lev Vygotsky also influenced constructivism. Louis (2009) explained Vygotsky’s theory this way:

While culture is deemed most important, language and social interaction are viewed as the means by which culture drives cognitive development. Of these two means, social interaction is the element that we are more concerned with here. Language functions as the facilitator of social interaction, and that interaction is then the means through which culture fosters cognitive development. (p. 20)
In fact, "Within the constructivist framework, Vygotsky invented the term zone of proximal development..." (Joyce et al., 2004). The zone of proximal development is defined as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). Yan-bin (2009) explained Vygotsky's Zone of Proximal Development as follows. There are two levels, one in which students can solve problems independently and another where the student needs help from a teacher. The difference between these two zones is called the Zone of Proximal Development.

Au (1998) used the social constructivist perspective and the ideas of Vygotsky to explain the literacy achievement gap. Literacy is seen in this context as a higher mental function that is affected not only by the individual's social experiences, but also by the cultural differences of societal groups. As a result, literacy is equally influenced by intellectual and affective components. Though the social constructivist lens, five explanations for the literacy achievement gap emerged: (a) linguistic differences between language spoken at home and at school, (b) cultural differences in the way students learn at home and expectations at school, (c) discrimination of minority groups, (d) inferior education in high poverty schools, and (e) rationales for schooling established by families' historical experiences. Knowledge of these social constructivist ideas is relevant to the design of a literacy initiative aimed at improving students' academic achievement on standardized tests and bridging the achievement gap.

Research Questions and Hypotheses

The major research questions of this study were as follows:
1. Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) have an effect on student performance on the English/Language Arts Read, Comprehend, and Respond strand of the iLEAP and LEAP tests in the seventh and eighth grades?

2. Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) have an effect on student performance on the English/Language Arts Write Competently strand of the iLEAP and LEAP tests in the seventh and eighth grades?

3. Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) have an effect on student performance on the English/Language Arts portion Use Conventions of Language strand of the iLEAP and LEAP tests in the seventh and eighth grades?

4. Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) have an effect on student performance on the English/Language Arts Locate, Select, and Synthesize Information strand of the iLEAP and LEAP tests in the seventh and eighth grades?

5. Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) have an effect on student performance on the English/Language Arts Read, Analyze, and Respond to Literature strand of the iLEAP and LEAP tests in the seventh and eighth grades?
6. Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) have an effect on student performance on the English/Language Arts portion Apply Reasoning and Problem Solving Skills strand of the iLEAP and LEAP tests in the seventh and eighth grades?

7. Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) have an overall effect on student performance on the English/Language Arts portion iLEAP and LEAP tests in the seventh and eighth grades?

For Statistical analysis, each of the research questions was stated as a null hypothesis. The null hypotheses for this study are as follows:

1. There will be no statistically significant effect of a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on the Read, Comprehend, and Respond to Literature strand of the iLEAP and LEAP.

2. There will be no statistically significant effect of a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on the Write Competently strand of the iLEAP and LEAP.

3. There will be no statistically significant effect of a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on the Use Conventions of Language strand of the iLEAP and LEAP.
4. There will be no statistically significant effect of a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on the Locate, Synthesize Information strand of the iLEAP and LEAP.

5. There will be no statistically significant effect of a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on the Read, Analyze, and Respond to Literature strand of the iLEAP and LEAP.

6. There will be no statistically significant effect of a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on the Apply Reasoning and Problem Solving Skills strand of the iLEAP and LEAP.

7. There will be no statistically significant overall effect of a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on ELA portion of the iLEAP and LEAP tests.

Definitions

The following terms are defined for the purpose of clarity in this study:

*Integrated Louisiana Educational Assessment Program (iLEAP)*- The standardized test administered since 2006 to Louisiana public school students in grades 3, 5, 6, and 7. The exams test students in English, math, science and social studies. Students do not have to earn a certain achievement level on the assessment in order to be promoted to the next grade. (Louisiana Department of Education, 2012).
Literacy- the ability to make and communicate meaning from and by the use of a variety of socially contextual symbols. The definition of literacy is dynamic, evolving, and reflects the continual changes in our society (Cunningham, 2000).

Louisiana Educational Assessment Program (LEAP)- Students in 4th and 8th grade participate in this high stakes test, which determines whether they will be required to attend summer school or be retained. The LEAP measures 4th and 8th grade students' knowledge and skills in English Language Arts, math, science and social studies, and students must score Basic or above in either English or math and Approaching Basic or above in the other subject on the LEAP to advance to the next grade. 4th graders have had to meet this requirement since 2004, while eighth-graders have had to meet this requirement since 2006. (Louisiana Department of Education, 2012).

2008 Revised Louisiana Comprehensive Curriculum (RLCC)- The curriculum recommended to all local school districts in 2008 by the Louisiana State Department of Education.

Literacy Strategies- The way readers manage their interactions with the written text and how these strategies are related to text comprehension (Carrell, 1989 as cited in Li, 2010 p.185). For the purposes of this study this includes writing, reading, and speaking.

Response to Intervention (RTI)- A three tier approach to help struggling learners in which student progress is closely monitored at each tier of intervention with the progression of tiers indicating more intensive, specialized intervention. Major components of RTI include a research-supported core curriculum, universal screening, progress monitoring, and decision-making about student progress. RTI has emerged as a method for identifying students with disabilities (Hughes & Dexter, 2011).
CHAPTER 2

REVIEW OF LITERATURE

This review of related literature examines the role of literacy program implementation internationally and in the United States at both the state and district levels. Relevant research into effective literacy program development and implementation, including the importance of teachers’ beliefs and roles are also presented. The review also included literacy initiatives for at-risk and special education student, as well as literacy initiatives classified as Response to Intervention (RTI).

International Programs/Initiatives

In 2008, the United Nations established the Millennium Development Goals to end poverty. Myhill (2009) analyzed the goals and noted the unsurprising fact that literacy is acknowledged by the United Nations as a means of access to empowerment and autonomy. In this research, Myhill reported on literacy policy in classrooms in five countries and discussed the disparity between policy and practice. A common theme found by Myhill was the importance of policy-makers taking into account the realities in the classroom. Literacy initiatives that policy-makers co-constructed with teachers were found to be more successful. Moreover, an initiative such as The National Literacy Strategy in England, implemented by the New Labour government in 1998, attributes success to the program’s adaptive and responsive nature. As Myhill pointed out, careful investigation of successful literacy policy and practice can benefit future initiatives.
Literacy research has been conducted in the United States and in countries around the world which guides literacy policy and practice in an attempt to improve student academic performance and prepare individuals for the workforce.

Education in Australia, like the United States, has experienced a period of reform with the National Literacy and Numeracy Program (NAPLAN). In particular, Australia has implemented high-stakes testing practices similar to those in the US. Hipwell and Klenowski (2011) studied the importance of understanding the literacy demands of assessment tasks on students’ literacy skills. They found a disparity between the literacy demands of the tasks and the literacy capabilities of the students, the disparities were called “silent assessors.” As a result, the authors developed a literacy audit for teachers to address students’ literacy deficits. Similar to the literacy strategies embedded in the 2008 Revised Louisiana Comprehensive Curriculum (RLCC), Australian educators identified literacy strategies to improve the equity of assessments.

Just as in Australia, national literacy research was conducted in China. A study of English reading strategies at Ji’an County Middle School in the Jiang Xi Province of China was conducted by Li (2010). The study was designed to answer the three guiding questions: (1) What type and frequency of reading strategies do the students use in their reading processes? (2) Are there any significant differences by gender in the use of reading strategies? (3) Is there any relationship between strategy use and students’ English proficiency? These students identified English as their second language, but had had English for almost six years. Three randomly selected classes from the school were selected; a total of 196 students were administered a questionnaire, and 180 students were ultimately selected for this study simply because they validly completed the
questionnaire. Students ranged in age from 16 to 19. The survey was the Metacognitive Awareness of Reading Strategies Inventory (MARSI) along with demographic information. This survey measured awareness and use of reading strategies while reading academic material. Three main categories were measured in this survey: (a) Global Reading—evaluating what to read or ignore and guessing what the text is about, (b) Problem Solving—pausing to think or re-reading, and (c) Support Reading—underlining or circling material, taking notes, and using outside reference material. The results indicated that Problem Solving strategies were used the most with Global Strategies and then Support Strategies following. Furthermore, this study revealed that girls were aware of and used reading strategies more than boys. As for the relationship between the use of strategies and English proficiency, this researcher found a strong positive correlation. The author did point out that one should consider the culture of Chinese students when evaluating these results since Chinese students are taught to not question their teachers, as this would be seen as rude behavior, and Chinese students often do not co-operate with peers because of the intense competition for placement in school. Furthermore, Chinese girls are expected to be submissive and Chinese boys are taught to be leaders. These facts may have made portions of this study less applicable to other settings in other countries. Other limitations to the study included the short length of the questionnaire (MARSI), the application of the MARSI in the setting Chinese culture, and the disproportionately large number of boys compared to girls in this sample.

As in China, mitigating factors to a literacy study were also considered by researchers in the United Kingdom. Lewis and Wray (2001) reported on an ongoing literacy initiative in the United Kingdom and identified key factors which influenced
successful implementation. The factors which influenced successful implementation of a literacy strategy, including effective models and strategies within a school, might contribute to the development of students' literacy skills. Ultimately, Lewis and Wray cautioned that teachers need to see how abstract factors common to successful schools, such as shared goals or high expectations, influence practical actions in the classroom.

Research on government sponsorship of literacy program implementation was also conducted in Pakistan. Jumani, Akhlaq, Munshi, Chishti, and Malik (2010) evaluated the literacy efforts by the federal government of Pakistan, which defined a literate person as “one who can read a newspaper and write a simple letter in any language” (p. 403). The focus of these authors’ study was the Education Sector Reforms (ERS) program, which was a five-year literacy initiative from 2001-2006 that was part of the larger National Education Policy that began in 1998. The researchers narrowed their investigation to the Punjab province of Pakistan, the most populated province. The Education Sector Reforms (ESR) program was based on long-term framework linked to Education for All (EFA) goals by 2015. Following were the main missions of Education Sector Reforms (ESR) program.

1. Developing human resources in Pakistan is a pre-requisite for global peace, progress, and prosperity.
2. Achieving a 50% improvement in level of adult literacy by 2015, especially for women and equitable access to basic and continuing education for all adults.
3. Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on
ensuring girls full and equal access to and achievement in basic education of good quality;

4. Ensuring that the learning needs of all the young people and adults are met through equitable access to appropriate learning, life skills and citizenship Programme. (p.405).

The ESR program’s main projects were (a) Education for All (EFA), (b) Adult Literacy (AL), and (c) Early Childhood Education (ECE). The methodology was a comprehensive, mixed-methods design that took place from May 2009 to May 2010 in all districts of Punjab province. Both qualitative and quantitative research was conducted that included document review, interviews, field visits, and the analysis of quantitative data. Jumani et al. (2010) observed during their investigation that responsibility for the planning and management for these literacy programs has been placed at the local level, rather than the federal level. Fortunately, in situations where local funds could not accommodate the programs, provisions were made for federal funds to be dispersed. Unfortunately, mismanagement of funds was discovered and contributed to the underachievement of these programs. In an attempt to solve this problem, the Project Monitoring Unit (PMU) for Education Sector Reforms (ESR) program was established. Findings do indicate positive results for many participants of the program, especially for the benefit of women who were empowered to find employment that benefited their families. Researchers concluded that with proper financial management and local control of educational decision making, the ESR program has the potential to meet its goals and should be continued. Moreover, the ESR program was recognized as a means of improving the lives of individuals in Pakistan.
Using literacy as a means of empowering its citizens was also employed in England. Taylor (2005) reported on the development of a community-focused literacy initiative that began in Derbyshire, England and was adopted by the government of England for implementation throughout the country. Eventually, 99% of the school systems adopted this program. The initiative was titled Read On-Write Away! (ROWA!). “This became a community-focused basic skills initiative, whose mission was to engage families and communities in working together to develop, enhance, celebrate and improve both literacy and numeracy” (p.65). The goal of this initiative was to involve parents and the community in children’s learning. In its inception the program was based on a modified form of the Bradford Better Reading Partnership, but included additional literacy strategies as the program evolved.

A genuinely ‘joined-up’ approach was developed, based on the idea of ‘flooding’ an area with literacy in five main ways, through Books for Babies, family literacy, school focused basic skills, workplace basic skills and essential skills for work, with each sector impacting on another, enabling people to move between the ‘phases’ as they needed to or as their lives changed. (p. 66)

As one of the original developers of the program, the author credited three factors with the success of the program: (a) the support and commitment of the local school boards, teachers, and school partners, (b) the emphasis on evaluation, research, and monitoring, and (c) the philosophy of “cradle-to-grave” involvement in literacy education. Literacy advocacy for all members of the community was identified as a factor in increasing motivation to read.
Motivation, along with reading fluency, was investigated in Iran. Experimental research on reading fluency and motivation was conducted by Mihandoost, Elias, Nor and Mahmud (2011). This research focused specifically on dyslexic students in Ilam, Iran, where 64 students were randomly selected from fourth and fifth grade students. For three months, the experimental group received the Barton intervention program, while the control group received no reading intervention program. Before the experiment, these researchers formulated two major hypotheses. The first was that there is a statistically significant difference in motivation between the control and experimental group of students with dyslexia after the Barton intervention program. The second was that there is a statistically significant difference in reading fluency between the control and experimental group of students with dyslexia after the Barton intervention program. Reading Motivation Scale and Reading Fluency Test were used to evaluate the control and experimental groups. Results of the study showed that both fluency and motivation increased as a result of the Barton intervention program. The improved reading skills of the experimental group illuminate the importance of targeting both fluency and motivation in a reading intervention.

Similarly, Ediger (2009) reported student motivation to read as a primary factor in designing an effective reading program. Allowing students to self-select reading materials and relate both to subject matter and to genre promoted both motivation and individualized instruction, each being key elements to successful reading instruction.

Brozo, Sheil, and Topping (2007) were charged by the International Reading Association (IRA) with the task of analyzing results of the Program for International Student Assessment (PISA). Included in their investigation were these two questions: (a)
What are the main characteristics of educational systems that produce uniformly high achievement? and (b) Which variables have the most significant impact on reading performance? This study centered on the results of the 2000 PISA, which is an international assessment of fifteen-year-olds, of varying grade levels, in 32 countries. Schools were selected at random and then up to 35 students per school were randomly selected, resulting in 5,000 participants in most countries. Participants were assessed on a variety of reading skills and given a questionnaire to shed light on habits, beliefs, and feelings about reading. Engagement was found to be one of the most significant factors contributing to reading achievement and readiness to succeed in a global society. “PISA defines reading engagement as the time that students report reading a diversity of material for pleasure and their interest in and attitudes toward reading” (p. 4). Moreover, using regression analysis, reading engagement was found to compensate for low SES and for parents’ limited educational attainment. Boys and girls, interestingly, were found to have different reading habits and interest. Girls tended to engage with extended reading such as novels and boys gravitated to short readings such as magazine and newspaper articles. Results of this study were important to teachers and policy-makers interested in improving reading achievement and preparing students for the demands of a global society.

International research has not only focused on significant contributing factors to successful literacy programs, but also on the proper implementation of curriculum change. For example, curriculum change was investigated by Webb and Vulliamy (1999). Significantly, they inquired about the effects of curriculum change in primary schools in two countries. Even though the changes in the two countries appeared to be contrary, the
effects of curriculum change were found to be similar. These researchers found that there were significant negative effects whether or not the curriculum change was becoming more or less centralized. In Finland, they were dismantling their centralized curriculum; in Finland, they were trying to revise their centralized curriculum. This was a longitudinal study over a three-year period of six primary schools in England and in six schools in Finland. Researchers used a qualitative research strategy with in-depth case studies. The participating schools were opportunistically selected due to previous involvement in the schools, but researchers did make an effort to ensure diversity, rural/urban location, and curriculum approach. Researchers found that negative effects on curriculum change implementation were found to come most significantly from one area—teachers who were not personally committed. Lack of commitment from the teachers came as a result of a variety of reasons including too much pressure to get everything done, lack of supervision, and a feeling of lack of control. Therefore, Webb and Vulliamy (1999) found teacher support for curriculum change to be an important factor.

International studies of curriculum change related to literacy have also included investigation into educational literacy leadership. The purpose of the study by Fletcher, Greenwood, Grimley, and Parkhill (2011) was to examine the leadership practices of five New Zealand principals whose staff was identified as implementing systematic, regular and sustained teaching of reading of 10 to 12-year-old students. The schools were selected by a committee that included literacy advisors, a regional Ministry of Education literacy development officer, and the president of the regional reading association. The committee selected the schools based on their students' higher than normal achievement in literacy achievement. This qualitative research included semi-structured interviews of
the five principals of the selected schools and other relevant stakeholders. In total, 53 participants were interviewed, including literacy leaders, teachers, and parents. This study focused on influences of leaders on the success of student literacy achievement. One common factor of the selected principals was their knowledge of the cultural differences of their student. Moreover, these principals considered the following:

- provide staff with sustained professional literacy development using external experts and take part in it with the staff;
- develop school-wide use of standardized assessment in reading to monitor achievement and identify specific needs;
- build a collaborative environment where there is whole-school commitment to professional development;
- develop an environment of trust within the school so that literacy leaders can work collaboratively alongside other teachers; and
- articulate and develop a school-wide environment where there is an expectation of achievement for all learners. (p. 69-79)

These five points were common among principals of schools experiencing success in student literacy. In summary, the five principals believed that reading, in particular, was necessary for student success. Furthermore, trusting their staff to make instructional decision was important when the staff had been provided with appropriate professional development. Finally, these principals found it important to encourage an environment where all stakeholders could communicate in order to make collaborative decision to provide the optimal learning experience for individual students.
A similar study on curriculum change was investigated in Mexico. Greybeck, Gomez, and Mendoza (2004) evaluated the effectiveness of curriculum change in the Monterrey Institute of Technology and Higher Learning (ITESM) in Monterrey Mexico. This system sought to implement three curriculum changes: (a) a focus on the student in the teaching – learning process; (b) the incorporation of abilities, attitudes and values as an integral part of course content; and (c) the use of a technological platform for every course. The hypothesis was that students’ agreement would increase on a Likert-type scale created for this study. The scale asked students about their degree of agreement/disagreement with 36 items about the curricular changes. Reliability for the instrument was .87 using the Cronbach Alpha Coefficient. The Likert-type scale was administered to 955 first-year students in August 1998. From this group, a representative sample was selected and were administered the same scale in March 2001. This sample consisted of 400 students from the original group of 955. The mean score was determined for each student based upon their level of agreement (1-5). Then the students’ scores were converted to an equivalent score between 0 and 100 and a paired-samples t-test was applied. Results indicated the curriculum redesign was most effective in regard to students’ attitudes toward learning. Some impact was found in the incorporation of a learner-centered curriculum. However, no real change was found in the other categories under investigation. Therefore, curriculum redesign in this study of a Mexican university did have an impact, but the impact was not found in all areas hypothesized.

Australian researchers, Fleet and Wallace (2005), also investigated curriculum change dilemmas. This investigation reported on the way curriculum leaders at a Victoria, Australia secondary school implemented a mandated, systemic curriculum
reform. Data were collected through classroom observations, field journals, and semi-structured interviews. The focus of the investigation centered on the two vice principals, who were the instructional decision makers for the school. The methodology could be described as interpretive case study or narrative inquiry because results are revealed through story telling. An analysis of narrative reveals the change dilemmas in this Golbin Secondary College. These researchers found that control of the reform process was influenced by three dilemmas.

The three dilemmas are linked by a common theme—control of the reform process. The autonomy dilemma is about who controls the changes. The focus dilemma is about controlling where changes occur. The acceptance dilemma is also about control, but in this case control over the rate or extent of change. Control is dependent on the power relationships in school systems, schools, and classrooms, and change appears to be primarily about altering these relationships. (p. 192)

This study also revealed that teachers resent having to change when they are satisfied with their present curriculum. Moreover, top-down initiatives need to have the support of teachers in order to be successful and teacher focus and acceptance affect curriculum change success.

A similar study by Alexander, Walsh, Jarman, and McClune (2008) investigated the Making Science News' project that is a part of the Revised Key Stage 3 Curriculum that was being implemented in Northern Ireland, as well as the rest of the United Kingdom. This initiative promoted literacy across the curriculum, and in this case science was integrated with literacy. The researchers reported on the success of the program as a
true inter-disciplinary endeavor. The success was attributed to the teachers’ enthusiastic collaboration and appreciation for being treated as professionals. It was significant to the researchers that science teachers discovered that literacy skills, such as communication and presentation, were important in the science classroom like they are in the English classroom. English teachers were inspired by the students’ increased enthusiasm when learning through genuine topics of interest.

Finally, according to Whitehead (2008), educators should consider specific criteria when selecting a literacy or thinking strategy in order to justify the implementation of new programs. Through a review of related literature, analysis of educational theories, and study of a three-year literacy initiative in New Zealand, Whitehead drew conclusions. Literacy and thinking program design encompasses concepts of cognitive theory, social cognition, and constructivism. The New Zealand Secondary School Literacy Initiative (SSLI) involved a group of 60 pilot secondary schools. This research involved a quasi-ethnographic, multi-locale methodology was used along with detailed case studies, classroom visits and interviews. Results indicated the following criteria be considered when educators make decision regarding literacy and thinking initiatives:

• teaching focused
• learner focused
• thought linked
• neurologically consistent
• subject specific
• text linked
• developmentally appropriate
• assessment linked criteria

Whitehead focused his inquiry for application of elementary teachers specifically, but the findings most certainly could be generalized to any grade level.

State and District Literacy Initiatives

In addition to international research, literacy studies in the United States of both state and district initiatives shed light on current practices. Morgan et al. (2003) revealed the problems experienced in the implementation of a statewide reading initiative in South Carolina. This initiative was a three-year program that focused on the professional development of reading teachers instead of the adoption of programs. The thinking was that improving teachers’ knowledge base was the key to affecting student achievement, not the adoption of specific teaching strategies or literacy programs. The state of South Carolina appropriated $3.2 million to be used by the newly formed South Carolina Reading Initiative (SCRI) for the hiring of district literacy coaches, pay teachers stipends for professional development, and research materials. Literacy coaches were to act as consultants at their four assigned schools to lead teacher study groups, model lessons, and provide feedback. The focus was on introducing teachers to literacy research in order that they become experts in not only effective teaching strategies, but also on how students learn, why strategies are effective, and how to modify their practices to best fit the needs of their students. After the first year of the initiative, university and state department leaders of the SCRI reflected on the program and made suggestions for program change. Suggestions included the need for the clarification of literacy coaches’ role in the schools and increased principal buy-in to the program. Foremost, the program leaders
acknowledged the fact that “change takes time (p. 143).” Morgan et al. (2003) highlighted the need for ongoing reflection and reform to any long-term initiative.

Current literacy practices were also investigated in the qualitative research on the Alabama Reading Initiative which was conducted by Bacevich and Salinger (2006). Unlike many state-wide literacy initiatives that focus on literacy in the elementary grades, the Alabama Reading Initiative (ARI) has uniquely targeted reading instruction on the secondary level since 1997. Reading First Funding of $15,000,000 went to 93 Alabama schools in 46 Local Education Agencies.

The ARI involves several components, such as: schools becoming literacy demonstration schools and committing to a 100 percent student literacy rate; at least 85 percent of faculty and administration attending intensive summer institutes about reading improvement, as well as ongoing professional development throughout the school year; and appointing full-time reading coaches to work with teachers and struggling readers. Additionally, the program encourages collaboration between schools and higher education faculty partners and local businesses, to provide mentoring services and research and to help resolve instructional issues relating to literacy learning (p. 2).

ARI embraced the recommendation of the National Reading Panel to provide professional development to teachers and administrators regarding phonemic awareness, phonics, fluency, and comprehension. In addition to these elements of reading instruction, the ARI secondary schools were allowed to implement this initiative in ways that met the specific needs of students and teachers on the secondary level. Through
qualitative survey of teachers and administrators involved in the ARI, ten lessons for implementing and sustaining a successful reading initiative were revealed.

1. Be responsive to the different needs of secondary and elementary students and schools—a one-size-fits-all approach won't work.

2. Develop partnerships among teachers, administrators, and schools to create a coherent and well-defined K-12 continuum of reading instruction.

3. Provide secondary teachers and schools with consistent support from specialized staff.

4. Be attentive to the local, state, and national policy environment related to reading.

5. Intensive Reading Programs should be available at the secondary level in addition to literacy across the curriculum initiatives.

6. Ensure that there is centralized leadership at the beginning, but encourage and support the emergence of local leaders.

7. Coordinate support from district and state administrators.

8. Emphasize the importance of explicit strategies for increasing comprehension and show how they can be applied in all content areas.

9. Identify students who are most at risk for continued reading difficulties and provide intervention as early as possible; identify which student are most at risk for reading difficulties as soon as possible enhances long-term reading outcomes.

10. Use data to inform instructional decisions.
Bacevich and Salinger (2006) found in their qualitative survey of participants in the ARI that high quality professional development, effective strategies, and school buy-in are common components of the successful schools involved. Finally, these researchers emphasized the importance of teachers having a sense of responsibility for reading instruction across the curriculum.

Like Bacevich and Salinger (2006), Piech (2004) studied the problem of reaching low achieving students. The problem of how districts respond to the challenges of ensuring all students make Adequate Yearly Progress (AYP) by the year 2014, set forth by the 2002 NCLB legislation, was investigated by Piech (2004). The purpose of this study was to examine how key players in three low-performing Illinois suburban schools responded to a mandated literacy initiative. The study was designed to answer the following questions:

1. How does a school staff perceive a mandated reform initiative designed to remediate its low-performing status?
2. How does a school staff respond to a mandated reform initiative? What structures, activities, and processes are identified and implemented by schools faced with district reform initiatives in order to improve their low-performing status and increase student achievement?
3. What barriers do schools face as they begin to implement mandated school reform interventions? How are these barriers overcome? (p. 39).

This was a mixed methods study that was mostly qualitative in nature, but did also include a quantitative, case-study component. Data were collected through surveys, interviews, focus groups, observations, and documents. The district mandated literacy
initiative was the Four Blocks literacy framework and this study occurred during the second year of implementation. Results were described as pertaining to the school, the principal, and the teachers. The researcher concluded that mandates can work, that strong leadership is essential, that relationships must be cultivated, and school culture receptive of change is key for there to be a successful implementation of a mandated literacy initiative.

Related research was conducted by Foorman and Moats (2004). Both reading instruction best practices and the sustainability of a literacy initiative were investigated. In addition, the obstacles to implementing a sustainable literacy initiative are discussed along with the overwhelming evidence of the importance of early intervention. As a result of a review of current reading literature, Foorman and Moats established the importance of early reading intervention. These authors focused on analysis of databases from the Texas Reading Initiative and the authors’ own research in Houston and Washington D.C. to reveal necessary conditions for sustainability and scalability of best practices in reading instruction. For four years the authors investigated 1,400 students in 17 high-poverty, low-performing schools in Houston and the District of Columbia. In both areas, a professional development approach to improving student literacy was implemented. Two cohorts were tracked, one selected in Kindergarten and the other in first grade. After four years, students in both cohorts were achieving at the national average in spite of the fact that the implementation of the program widely differed at the two sites. However, researchers acknowledged that the Hawthorne effect may be partially responsible for the similar results in the two sites. The Houston schools had less stable leadership, were offered fewer professional development opportunities, and were given
limited support resources. Due to available grant resources in Washington D.C., teachers were paid stipends for completing courses, literacy coaches were hired, consultants were brought in, and a research assistant was hired to record structured interviews. In Houston, teachers were only exposed to four days of professional development from master teachers on teaching (a) phonological awareness, (b) phonics, (c) spelling, (d) vocabulary, (e) comprehension, and (f) writing. Teachers at both sites were aware that fidelity of their instruction would be an important part of the study because researchers were investigating the relationship among teacher knowledge, teacher competence, and classroom outcomes. The Teacher Knowledge Survey (TKS) was selected to assess teacher knowledge, the Texas Teacher Appraisal System (TTAS) was used to measure teachers' effectiveness and classroom management, and the Woodcock-Johnson Basic Reading and Broad Reading Clusters (WJ-R) was employed to examine student end-of-year tests. Results indicated that teachers who rated high in the knowledge and use of teaching techniques had students with somewhat higher reading outcomes. Surprisingly however, attendance in professional development courses did not show a statistically significant positive relationship to student achievement. These researchers suggested that the single most important factor in the effectiveness of a literacy initiative is the perseverance of the teachers to implement the program with fidelity. In addition, motivational literacy leaders are beneficial to a new program's sustainability.

Secondary School Literacy Initiatives

Like state and district initiatives, related literacy initiative investigation has also been conducted specifically in secondary schools. This research has implications when designing a literacy initiative for students in this age group. For example, according to
Biancarosa and Snow (2006) stated that the following elements must be considered in the design of successful middle school and high school literacy programs:

- Direct, explicit comprehension instruction
- Effective instructional principles embedded in content
- Motivation and self-directed learning
- Text-based collaborative learning
- Strategic tutoring
- Diverse texts
- Intensive writing
- A technology component
- Ongoing formative assessment of students
- Extended time for literacy
- Professional development
- Ongoing summative assessment of students and programs
- Teacher teams
- Leadership
- A comprehensive and coordinated literacy program (p.12)

Brozo and Flynt (2007) developed a checklist of what should be included in a literacy program. First, the program should include elements of motivation and engagement. Second, it should include academic and instructional language. Third, it should have time for reflection and experimentation. The following literacy initiatives contain one, if not all of these recommendations.
Jewett, Wilson, and Vanderburg (2011) studied the effect of a yearlong literacy initiative at Hand Middle School, a southeastern United States middle school consisting of sixth, seventh, and eighth grades. This initiative involved a whole school read of Paul Fleischman's *Seedfolks*. Initiative leaders selected this novel because the culturally diverse characters were reflective of the school's student body and could thus spark dialogue about social issues. These researchers asked the following question: "What happens when the students, teachers, and families at Hand Middle School engage in a whole-school read of a text designed to foster dialogue about social issues?" (p. 415). The researchers included two university faculty and one PhD candidate. The school level, three member planning committee consisted of a media specialist, a literacy coach, and an eighth grade English teacher. This committee selected the novel, ordered 900 copies, created a teacher's guide for all content areas, and planned a parent/community night. The researchers' qualitative data collection and analysis started with informal interviews of the planning committee members and focus group interviews of all teachers. Next, teachers were re-interviewed in focus groups based on their initial responses and teachers at each grade selected representative students to be interviewed. These interviews were the primary source of data, but classroom observations and student artifacts were also included, and a survey was administered to students and teachers at the end of the end of the year. Only 25 of 73 teachers and 510 of 940 students returned the survey. Data were analyzed through open coding when researchers individually read and coded the data using grounded theory and constant comparative methods. Then, a list of 26 codes was created that included topics such as celebrating commonalities, creating classroom and school community, and deconstructing prejudices. Qualitative analysis software was used
to reveal emerging common themes. Results showed that the whole-school read brought together teachers and students across grade levels. Boundaries between subjects and grade levels were blurred. Open discussion about social issues and a realization of common struggles also occurred as a result of the initiative. Moreover, teachers reported that relinquishing some control over student learning encouraged student centered learning where students constructed their own knowledge. Researchers suggest that future whole-school reading initiatives include all stakeholders (teachers, students, and parents) in the selection of the book.

Beltramo (2012) reported on literacy research she conducted on grades four through eight at a private Catholic school in California. Being the Headmaster of the school, Beltramo felt it was her responsibility to develop a literacy program that would best meet the needs of the students at her school, which is described as high poverty and low achieving.

The purpose of this action research project was to determine the effectiveness of a reading intervention program on improving mastery of fluency, word study, and comprehension for students in grades four through eight. The major research questions considered in this action research project include:

1. Does the reading intervention program improve student performance on standardized fluency, word study, and comprehension assessments?
2. Does the reading intervention program influence student perceptions of reading? (p. 297)

Participants in this quasi-experimental study were 112 middle school students at Mother of Sorrow Catholic School in grades four through eight. Ninety-seven percent were
Latino, 98% qualified for Free or Reduced Lunch, and 77% were English language learners. To measure fluency, students were administered the MASI-R oral reading fluency measures as a pre and post test. To measure word study, a spelling inventory was administered as a pre and post test, but the participants were also administered a weekly spelling test. Reading comprehension was assessed using both a teacher-made test and the standardized, norm-referenced Gates-MacGinitie Reading Test (GMRT). Student perceptions before and after the interventions were assessed using a researcher developed survey. This reading intervention program began in August 2010 and continued through March 2011. Throughout the study, progress in fluency and word study was monitored either monthly or at the end of each unit. For reading fluency, all students received interventions in sound-spelling practice, choral reads, triple reads, and fluency folders. Students scoring at the lowest levels in fluency were additionally exposed to the Great Leaps reading program. For word study, The Words Their Way: Word Study for Phonics, Vocabulary, and Spelling Instruction program was used with all students. Two strategies were also employed for reading comprehension interventions, the SRA Reading Laboratory and Accelerated Reader programs. "The second component of the intervention involved instruction in and application of reading comprehension strategies. All participants received direct instruction in seven main strategies: predict; connect; summarize; monitor and clarify; analyze; infer; and, evaluate" (p. 305). Students were taught to use graphic organizers for each of the seven thought processes with both narrative and expository texts. Results indicated that this multi-component approach showed positive results on standardized tests in reading fluency, word study, and
comprehension. Additionally, students in all five grades expressed a statistically significant increase in positive feelings about reading.

Calhoon, Sandow, and Hunter (2010) conducted an inquiry into the question of developing a more effective design for middle school remedial reading programs. This study expanded on the work of Lovett et al. (2000) conducted an investigation into the RAMP-UP program’s level of sensitivity to the instructional needs of program participants. The researchers also sought to determine which component should be allotted the most time to produce the largest gains in reading comprehension.

Instructional participant were six middle school special education Language Arts teachers in two southeastern middle schools. Student participants were 90 sixth, seventh, and eighth grade students that were selected due to an IQ of over 75, had an Individualized Education Plan (IEP), had reading difficulties, received Language Arts instruction in a self contained classroom, and not identified as English as a Second Language (ESL). RAMP-UP program implementers advocated small class size, directed questioning, guided practices, explicit instruction, and extended practice. The four main components of RAMP-UP (linguistics skills, spelling, fluency, and comprehension) are similar to the components of other reading programs; the difference is in the attempt to differentiate the amount of time spent on each component based on students’ individual needs. In this research, The Alternating model was used as the control against the Integrated and Additive models. Each module received the same amount of instructional time, 45 min/day, 5 days/week, for 24 weeks with a total of 97 hours of remedial reading instruction for all participants. Each participant was administered reading subtests of the
Woodcock Johnson-III, the Gray Silent Reading Test, and Oral Reading Fluency passages as pre and post tests.

From this study, the RAMP-UP remedial reading program begins to show promise as a quality multicomponent remedial reading program for sixth to eighth grade students with RD. More specifically, an emphasis placed on isolated linguistics skill instruction along with the organization provided by the Additive module allowed these students to develop a stronger knowledge base in linguistics skills and spelling, which then practically generalized into better fluency and comprehension skills. (p. 78)

The researchers stressed that more time for students to read and to engage in reading activities is vital to the improvement of reading skills for students with reading difficulties. Furthermore, addition research into the organization of the components reading intervention programs should be conducted.

The effect of a district-wide reading initiative on the engagement of middle school students was qualitatively examined by Daniels and Steres (2011). It began with a new principal’s belief that student engagement and achievement would be improved if there was a whole school priority placed on silent sustained reading where students had choice about what they read and where teachers and administrators modeled a fervent love of reading. This three-year longitudinal study of the implementation of a literacy initiative was evaluated through observations and interviews. The principal mandated that all students be allowed 15 minutes of Silent Sustained Reading (SSR) during each English class and that students be allowed to select what they read. In class libraries were created, teachers brought books from the public library, and students were given easy access to
the school library. Teachers also modeled by reading books they selected while students were reading. During faculty meetings, professional development was provided to teachers to help them know how to talk to students about reading and the administration encouraged conversations about books throughout the school day. Through these actions, a school culture of reading was established which fostered an environment for increased student reading achievement.

The participants in the study were 1,356 sixth, seventh, and eighth grade students and their teachers at Parkdale Middle School. Those that participated in interviews or classroom discussion numbered 108. Focus group discussions with 17 of the 85 teachers and administrators were also included. Interviews with a stratified random sample of 18 students were conducted. Ninety additional students participated in class discussions with researchers. Teacher participants were randomly selected by pulling their names out of a bucket. The research team included a university professor and a trusted faculty member of Parkdale Middle School. The middle school teacher conducted interviews so as to encourage honesty and forthrightness. One question guided this research: Why and how did a district-wide reading culture student engagement and performance? In order to identify emerging themes in this qualitative investigation, transcripts of observations and interviews were analyzed. Three themes emerged that contributed to the reading culture at this school. “The conditions were: (a) making reading a priority, (b) modeling by and support from the adults in the school, and (c) the creation of motivating learning environments” (p. 6). In short, making reading a priority, providing teachers with professional development, and committing resources (both time and money) were identified as the reasons for this school’s positive change in reading culture.
Moyer and Williams (2011) investigated the use of the Accelerated Reader (AR) program to increase student motivation to read at Delsea Regional High School. Since 2003, the AR program had been used as a supplemental reading program for special education and remedial reading students, but by 2010 program implementers expanded the program to address the needs of an increased number of struggling readers. Specifically, the problem of reading motivation was addressed through an AR program. Included in the program in the 2010-2011 school year at Delsea Regional High School were seven teachers and 152 students. The traditional AR program offers computer based quizzes for a wide variety of books, but not all books have a quiz available. At Delsea, students were encouraged to select any book that interested them and if an AR quiz was not available, the teachers created one. In addition, if students were unsuccessful at the quiz, they were allowed the opportunity to review their reading logs and retake the quiz until they passed. Decision about reading goals were discussed at frequent conferences between the students, the librarian, and the teachers. Students were also taught how to use literacy strategies that addressed their personal needs. Teachers presented reading certificates every time a student reached a goal, giving the students a feeling a success. At the end of each marking period, students were invited to attend a reading celebration to further enhance positive feelings about reading. Although these researchers admitted that AR is not the only solution to the problem of student motivation to read, they maintained that giving students a choice about what they read, setting student goals, offering ongoing support, and rewarding even the smallest accomplishments have been the reasons that their students have experienced an increase in motivation to read (Pfeiffer, 2011). The Embedded Story Structure (ESS) reading instruction strategy was also investigated.
previously in Faggella-Luby, Schumaker, and Deshler (2007). In this 2007 research, ESS was compared to Comprehension Skills Instruction (CSI), which was a bundle of research based reading strategies: (a) the LINCS Vocabulary Strategy, (b) the Question-Answer Relationship (QAR), and semantic summary mapping. The population was comprised of 79 incoming ninth grade students attending a nine-day summer program for at-risk students. These students were randomly assigned to either the ESS or CSI groups and then the students in each group were randomly assigned to one of three classes in each group, with a total of six classes. Independent samples t-tests were used by researchers to ensure that the groups were homogeneous. To measure participants’ use of the strategies, the Strategy-Use Test was administered day one as a pretest, day five as a progress test, day nine as a post-test, and eight weeks after the program as a maintenance measure. To measure students’ knowledge of ESS strategies, the Knowledge Test was administered to both groups as a pre and post-test. This provided evidence that the CSI group did not receive instruction in the ESS strategy. A Unit Comprehension test was administered as a post-test in order to determine which of the two strategies was more effective. In addition, satisfaction surveys and a fidelity checklist were given to both groups. “The study was designed to answer the question: Can story-structure components be taught to heterogeneous groups of learners, in general education settings, to improve reading comprehension without sacrificing the learning of the higher achieving peers?” (p.144). The most important conclusions from this study were that ESS was more effective than CSI in the areas of strategy use, story structure knowledge, and unit reading comprehension. Furthermore, ESS was just as effective with students with learning disabilities and those without. Researchers acknowledged that a significant
limitation to this study was that the teachers in the study were also the researchers. Also, the sample size was small-only 14 students. Therefore, researchers admitted that a larger and longer study should be done in order to validate these results.

Early/Elementary School Literacy Initiatives

Relevant research by Sterbinsky, Ross, and Redfield (2006) investigated Comprehensive School Reform (CSR) and its effect on student achievement and school change in a longitudinal, multisite study. Twelve elementary schools in diverse geographic locations were paired with control schools with similar demographics to investigate implementation of a wide variety of teaching strategies. One of the major research questions was- "What differences in classroom practices, school climate, and reading achievement occurred between CSR and control schools over a 3-year period?" A second major research question was- "Did CSR impacts vary for urban and rural schools?" Instruments used included the School Observation Measure (SOM) to measure the extent to which teaching practices were used in the experimental classrooms, the School Climate Inventory (SCI) to assess teachers' perceptions of reform initiatives, the Comprehensive School Reform Teacher Questionnaire (CSRTQ) to assess teachers’ experiences and perceptions of the school reform process, and Reading Test (both standardized and non-standardized) to measure student achievement. Three-way MANOVAs were the primary method for statistical analysis of the collected data. Results of the study indicated that experimental schools did see a change in instructional practices that corresponded to the CSR initiative at that school when compared to control schools. Results did not show a significant change in reading test scores for the first two years, but there was a significant improvement in reading scores at the end of third year.
Furthermore, rural students outscored urban students all three years and the CSR students were significantly superior on Passage Comprehension tests in year three.

A unique research design was used to study literacy initiative by Zimmerman, Rodriguez, Rewey, and Heidemann (2008). Unlike most literacy studies that only have one comparison group these researchers compared four different groups. The literacy program in this case was the Words Work early literacy initiative. The four groups used in this study were students from traditional Head Start centers (HS), students from Head Start that received the Words Works program (WW), students on the waitlist for Head Start (WL), and a random sample of non-Head Start students (NHS). These students all received school readiness instruction from around four years of age and were tracked through fifth grade using standardized test scores to measure the academic success of all four groups. One major research questions was: “What is the relation between early literacy instruction and second grade academic performance?” and “How does this relation differ between HS, WW, WL, and NHS?” The second major research question was: “What was the relation between early literacy instruction and academic growth from second to fifth grades within the comparison groups?” To answer the first question, HSM (look back) analysis compared the WW group with HS, WL, and NHS groups respectively on second grade reading and math performance on standardized tests. The results indicated the WW students significantly outscored the other groups in both reading and math on second grade standardized tests scores. For the second research question, a growth model was used to analyze students’ test scores from second through fifth grade. This analysis suggests that WW students were able to maintain their advantage over non WW students from second to fifth grade. This indicates an early
literacy initiative can have a positive, long-term effect on students' academic success. Moreover, early literacy initiatives can overcome the achievement gap that educators everywhere struggle to overcome.

An elementary literacy initiative focused on increasing the motivation of gifted boys to read and write was qualitatively studied by Hebert and Pagnani (2010). In this investigation, the reading and writing habits of fifth grade boys was analyzed through observation and interview of gifted fifth grade students and their teachers. Results indicated that gifted boys have very distinct areas of literacy interests that differ from fifth grade gifted girls. Two factors were identified that relate to this specific population: (a) Gifted boys tended to prefer non-fiction/informational texts while gifted girls prefer fiction; and (b) gifted girls tended to spend more time reading than gifted boys. This meant that gifted boys preferred short pieces that help them to learn something factual about the world. However, these researchers did identify genres of fiction that gifted boys often do choose. For example, science fiction, fantasy, comedy, action, horror, and serialized/media-connected fiction are sometimes selected by gifted boys. An extensive list of recommended books was provided. The authors recommended that teachers of gifted boys consider the reading preferences and habits of their students when selecting reading materials in order to increase motivation to read and write.

Begeny et al. (2010) conducted a study of two early literacy programs to answer the following research questions: (a) Does HELPS and/or Great Leaps produce reading outcomes that differ significantly from a control group and/or from each other? (b) If significant differences exist between conditions, across which areas of reading development do differences exist? Great Leaps is a widely accepted early literacy
program used across all 50 U.S. states, all Canadian provinces, and in at least 40 other countries. Although much research has been conducted on the Great Leaps program, Begeny et al. (2010) questioned the scope of that research primarily because no other measures of reading ability except for fluency were investigated. The Helping Early Literacy with Practice Strategies (HELPS) program, developed primarily for this study, is similar to the HELPS program, but its developers sought to improve on implementation procedures, incorporate all identified components of effective literacy fluency instruction, and include a built-in assessment system. The participants in the study were second grade students from one school; 22 received Great Leaps, 23 received HELPS, and 23 were in a wait-list control group. The study was conducted over a three-month period of time. Five different pre/post test measures of reading growth were used: (a) the Test of Word Reading Efficiency; (b) Curriculum-Based Measurement-Oral Reading Fluency; (c) the Gray Oral Reading Test, Fourth Edition; (d) the Basic Reading Skills subtests of the Woodcock-Johnson Tests of Achievement, Third Edition; (e) and Curriculum Based Measurement. Results indicate no significant difference between the control group and the Great Leaps group, but a significant positive effect was found with the HELPS group. However, limitations to the study such as the small number of participants and the short length of the study should be considered.

The Stony Brook Emergent Literacy Project was evaluated by Massetti (2009). This literacy program involved a combination of teacher training, classroom-based activities, and teacher-evaluated performance using rubrics to target preschoolers’ emergent literacy skills. A sample of convenience was used that matched and randomly assigned ten Head Start classrooms to either the experimental or control groups. The
experimental classrooms received lessons that incorporated 20 developmentally appropriate literacy activities. The total number of students in these classrooms was 194, but due to several factors (such as moving, absenteeism, and English language learners) only 116 completed the study. Students were given a pre and post-test to evaluate their emergent literacy skills. Portions of the Developing Skills Checklist (DSC; CTB/McGraw Hill, 1990) that pertain to emergent literacy were used to evaluate the students. Results of the study indicate a statistically significant difference between the control and experimental groups, with the students receiving the Stony Brook Emergent Literacy Project having superior literacy skills.

Effective Literacy Program Development and Implementation

Fisher and Ivey (2006) give advice to curriculum leaders regarding the selection of a new literacy program. They advocate that schools first ensure that students have “access to high-quality, readable texts and instruction in strategies to read and write across the school day” (p. 181). After ensuring these recommendations, these researchers concluded that there should be five guiding question for literacy leaders when selecting a reading intervention program. First, does the teacher play a critical role in assessment and instruction? Second, does the intervention reflect a comprehensive approach to reading and writing? Third, is the reading and writing engaging? Fourth, are the assessments driving the intervention useful and relevant? Fifth, are there significant opportunities for authentic reading and writing?

The purpose of the study by Fisher and Frey (2007) was to compare and contrast the curriculum change between two middle schools. Here, the implementation of literacy strategies was incorporated into the curriculum. This was a qualitative study in which
investigators followed two different students at separate middle schools. The researchers shadowed these two students through their school day in order to compare and contrast the way teachers used instructional time and how literacy strategies were implemented. The two schools had similar populations, but differences in achievement persisted. Researchers wanted to answer the question- What does middle school curriculum and instruction feel like as a student? Researchers compared the observations of the schools in respect to structure and instruction. Both schools had teachers who understood content literacy strategies and who cared about student achievement. Both were proud of their accomplishments and had supportive leaders. Both had diverse student populations. Differences were noted in the schedule structure. In contrast, the first school, Albert Einstein Academy, was on a seven period day with 48-minute classes and short passing periods. The higher achieving school, Alexander Graham Bell School, was on a 4x4 block with longer breaks between classes and even had time for snacks. Einstein students had more classes per day than Bell, causing students to focus for less time on more subjects than at Bell. Students at Einstein were in class with more students per day, reducing the opportunity to form working relationships and friendships. Teachers at Einstein taught around 180 students per day, while Bell teachers only taught 108. Bell teachers had more time to get to know the individual students. Teachers at Bell also had 25% of their day allocated for planning and Einstein only had 14%. Not only were differences found in the structure of the school day, but differences were also found in the consistency of instructional strategies. While Einstein teachers did use research-based literacy strategies, the use of the strategies was not consistent from class to class. Bell
implemented strategies school wide. These differences were asserted to be the cause of Bell's higher student achievement.

Politics, ideology, and current events often shape educational policy. López and Fránquiz (2009) exposed this fact in their research of a Two-Way Immersion (TWI) program for Spanish and English speaking students in Texas. In fact, the major research question for their study was: What language ideologies are present in a TWI (school) community? In order to examine this question, the following subsidiary questions guided the research: (a) What are the language and literacy ideologies held by teachers working in schools with TWI programs? (b) What are the official discourses and policies of one school with a TWI program? (c) How are language and literacy policies enacted in classrooms? And (d) What were parents' responses to the official TWI discourse and enacted policies? In order to answer these questions, teachers at five south central Texas schools with TWI programs were administered a five-point Likert-scale questionnaire called Teachers' Language Ideologies. Seventeen questions were asked of 209 teachers regarding teachers' views of language ideologies. In addition, qualitative research practices were used over an 18 month period of time to gather information about the schools, classrooms, and homes. Findings suggested that educators should examine literacy ideologies in policies and practice and be reflexive in regards to the local implementation of policy, especially since the ideologies of policy-makers, educators, and parents often differ. Policies must be thoughtfully constructed and revisited so that intended outcomes are realized.

Palumbo and Sanacore (2009) advocated the combination of literacy instruction with content area material to improve both reading achievement and content area
knowledge in upper elementary and middle school students. They advised a Spiral Curriculum that begins at the student’s individual level and progressively moves to more challenging expectations. Other components of an integrated literacy program for struggling readers, according to these researchers, should include academic vocabulary instruction (including word roots), the use of reading fluency strategies, allowing extra time in the school day for reading, and extracurricular/after school reading programs. Most importantly, having supportive, understanding teachers and administrators is vital to helping struggling readers achieve success.

According to Sanacore and Palumbo (2010), “…the pressures to produce acceptable test results can cause some educators to regard independent reading as a luxury they cannot afford. Yet if middle-level learners are expected to achieve curricular success, then independent reading remains a necessity” (p 180). These authors continued the exploration of their previous investigation of best practices in literacy instruction for the purpose of improving students’ academic performance on standardized tests. First, students must be provided with time to read. Ninety minutes each day was suggested, but authors acknowledge the difficulty in achieving this length of time in a typical middle school schedule. Authors suggested designating one day a week for independent reading across the curriculum and advocated teachers demonstrate their love of reading during this time. Second, authors recommended balancing independent reading with a variety of textual experiences. This meant that a variety a genres on a single topic should be used. Furthermore, teachers were encouraged to read expressively and use maps, illustrations, and charts to support their read-alouds. Third, educators should extend in-school reading to the home by providing easy access to classroom libraries so that students can bring
reading materials home. This can drastically increase the number of minutes a child reads each day. It is noted that the available literature should reflect the demographics of the class. Fourth, drama based activities can be used to promote reading and writing. For example, Readers Theater has been successfully implemented into many classrooms in a variety of different ways. Finally, educators must guide learners through activities that build vocabulary. Researchers know that limited vocabulary is one of the major causes of the achievement gap. According to Sanacore and Palumbo (2010), the positive correlation between vocabulary knowledge and reading comprehension can be addressed through effective vocabulary instructional strategies. Furthermore, effective strategies include word maps, concept-of-definition maps, personal dictionaries, and study of morphemes or word roots. Finally, schools seeking to meet Adequate Yearly Progress requirements should consider giving students more time to read and supporting that reading with effective literacy strategies.

In the study by Lewis and Wray (2001), four main areas of potential development in literacy work for schools to consider are identified as follows: (1) the specific teaching of literacy within English and related departments; (2) the subject specific literacy demands within individual departments, (3) cross-curricular issues which can be supported by all departments; and (4) a whole school literacy awareness strand that concentrates on creating, and maintaining, a positive ethos towards literacy and a high public profile for literacy within the institution. Beyond these four areas, the researchers identify several abstract characteristics of effective schools that are important for a literacy initiative to be effective. These characteristics include, but are not limited to effective and purposeful leadership, shared goals, purposeful teaching with clear
objectives, giving positive reinforcement, progress monitoring, and support for professional needs of staff. Lewis and Wray concluded by stating that the “commitment of teachers will always be necessary to the success of new initiatives” (p. 53).

Teacher Beliefs/Roles

The purpose of a study by Marlow, Inman, and Shrewery (2005) was to investigate teacher beliefs about the availability of materials and professional development to support literacy initiatives for k-6. The population consisted of teachers in ten select southern states. A Gay’s Table of Random Numbers was used to identify ten schools within those states and approximately 400 teachers responded to the survey. The survey design consisted of a four-point Likert Scale with items ranging from Strongly Disagree to Strongly Agree. Survey items fell into two categories: professional development and reading materials. Principals at selected schools were sent a packet of information requesting their participation. If the principal chose to decline, then the packet was to be mailed back and then reassigned to a comparable school. If the principal accepted, then he/she was to distribute the surveys to ten teachers and the teacher would mail back the survey. Data from the surveys were analyzed to determine tendencies about teacher beliefs about support for literacy initiatives. Results indicated that teachers did not feel well supported with appropriate materials and professional development in order to meet the literacy accountability mandates. Results of this study were helpful for administrators implementing literacy initiatives.

Kilpatric (2009) analyzed mathematics curriculum change in the United States in order to help understand the role that teachers play in creating a curriculum. Particularly, the role that teacher attitude and level of involvement plays in the success of curriculum
change implementation was revealed. Can this analysis benefit Portuguese education officials as they experience curriculum change? Results of this investigation supported the idea that the teacher is the key to change. Teacher attitude and involvement are major factors in the change process. Furthermore, thinking of curriculum and change from a top-down perspective is dangerous because it assumes that teachers are blindly obedient. Involving teachers in the process and considering their attitude is beneficial to the success of curriculum change.

The purpose of research by Hattie (2003) was to identify the power of the teacher and to reflect on the qualities of excellent teaching. Hattie remarked as to the relevance of this research to school improvement efforts in the United States. To determine the major factors on variance of student achievement, Hierarchical Linear Modeling was used to look at schools in New Zealand. What the student brings to the task, the curricula, the policy, the principal, the school climate, the teacher, the various teaching strategies, and the home were all influences relevant in this investigation. Students accounted for 50% of the variance of achievement because the correlation between ability and achievement was high. Therefore, according to Hattie, the strongest predictor of student achievement is what the student brings to the table. Furthermore, the researcher noted “recent PIRLS and TIMMS studies which have shown that our trajectory for the not so bright students is one of the flattest in the OECD worlds” (Hattie, 2003, p.1-2). Home, school, peers, and principal revealed themselves to be relatively minor influences. However, Teachers accounted to 30% of the variance in student achievement. Therefore, the researcher encouraged discovery into effective teacher qualities in order to maximize this most powerful area in affecting student achievement. The author referred to several of his
previous research findings that conclude that although many factors can have positive, those interested in significant positive change should focus on the most significant changeable factor— the teacher.

In order to analyze the practices of the most highly effective teachers, Hattie (2003) reported on a review of literature he did with Dick Jaeger (Hattie & Jaeger, in review). Hattie, 2003, stated the following:

While teachers have the power—few do damage, some maintain a status quo in growth of student achievement, and many are excellent. We need to identify, esteem, and grow those who have powerful influences on student learning. My quest has been to discover these teachers and study Distinguishing Expert Teachers from Novice and Experienced Teachers.

Only when we dependably identify excellence, and study excellence, can be provide the goalposts to aim for. Let us have more studies of excellence. (p. 4-5)

Through the review of literature with Jaeger and with the influence of the NBPTS system, Hattie identified five dimensions of excellent teachers and which led to 16 prototypical attributes of expertise (a) identify essential representations of their subject, (b) guide learning through classroom interactions, (c) monitor learning and provide feedback, (d) attend to affective attributes, and (e) influence student outcomes.

In this study, 65 Middle childhood/Generalists or Early Adolescence/English Language teachers were selected from four groups—two groups of identified experienced teachers and 2 groups identified expert teachers. A series of students tasks, observation schedules, interviews with the teacher and selected students, surveys, and artifacts were used to analyze the 16 attributes identified above. A pair of trained observers reviewed
the data and an inter-rate indices for the various dimensions was applied. In addition, the students’ work form the lessons observed was coded on the surface and deep, or SOLO rubric, which assesses surface to deep on a four-point scale. Most profoundly, Hattie revealed the following:

74% of the work samples of students in the classes of expert teachers were judged to reflect a level of undertaking that is Relational or Extended Abstract. This compares with 29% of the work samples of non-certified teachers classified. This is demonstrating that, at least the NBPTS system, its series of comprehensive performance assessments of teaching proficient, is identifying and certifying teachers that are producing students who differ in profound and important ways from those taught by less proficient teachers. These students appear to exhibit an understanding of the concepts targeted in instruction that is more integrated, more coherent, and at a higher level of abstraction than the understanding achieved by other students. (p.13)

To sum-up the significance of the findings in this study, Hatti asserted that more focus should be placed on making decisions about teachers’ best practices based on the outcomes of student learning. “Students who are taught by expert teachers exhibit an understanding of the concepts targeted in instruction that is more integrated, more coherent, and at a higher level of abstraction than the understanding achieved by other students.” (Haitti, 2003, p. 15) A deep understanding by educational leaders and decision-makers of the attributes of expert teachers can have a profound effect on student achievement.
Flynt and Brozo (2009) reasserted their shared belief that the teacher has the greatest influence on student achievement. Successful content literacy teachers can affect the achievement gap clear expectations and engaging students through insistence. Furthermore, struggling students often have difficulty making connections across the curriculum. Effective literacy teachers use evidence-based literacy strategies to teach across the curriculum. However, it is not enough to just integrate reading, writing, listening, and speaking with topics being studied across the curriculum. The best teachers also use evidence based strategies. Such strategies can be found in the Content Literacy Strategy Descriptors for the 2008 Revised Louisiana Comprehensive Curriculum (RLCC).

Strahan and Hedt (2009) conducted a three-year, longitudinal case study of a middle school literacy initiative involving two middle school teachers working with university partners and a literacy coach. Specifically, this study focused how the Connected Coaching program addressed the needs for teacher leadership, student engagement, and professional development for this school. Moreover, the researchers looked at how teachers made changes in their classrooms based on the professional development and collaboration experienced as a result of the Connected Coaching program. Summer literacy workshops and ongoing support from program leaders were documented, interviews occurred at least twice a month, and classroom observations were conducted by researchers. Additionally, standardized test scores and surveys from teachers and students were analyzed which led to the adoption of a conceptual framework that "envisioned professional development as a spiral of growth fueled by discussions with coaches, sharing resources with colleagues, and analyzing data from
student assessments" (p. 4). The following research questions were developed based on this conceptual framework:

1. How did participants change their instructional practices as they engaged with the Connected Coaching initiative?

2. How did collaboration with teammates, the literacy coach, and other colleagues influence changes in practices?

3. How did participants' efforts to improve instruction impact student learning?

(p. 4)

The school in this investigation had approximately 600 students with 35% minority and 45% Free or Reduced Lunch. Researchers in this case could be described as participant observers. Results indicated that students of teachers that participated in the initiative experienced gains in literacy, but teachers that collaborated with their colleagues and shared resources experienced even greater gains in student performance. Therefore, the professional development provided did have a positive effect on student performance, but collaboration among teachers caused greater results in achievement on standardized tests.

Reed (2009) sought to reveal a causal relationship between high-quality professional development and improved student achievement through an intensive examination of all relevant research on professional development for middle school content area teachers and their implementation of literacy strategies. The following research questions were included:

- What professional development practices influence the implementation of reading strategies in middle school mathematics, science, social studies, and English/Language Arts classes?
• What contextual factors are associated with the implementation of reading strategies in middle school mathematics, science, social studies, and English/Language Arts classes?

• To what extent does professional development for middle school teachers of mathematics, science, social studies, and English/Language Arts impact student outcomes on one or more measures of reading? (p. 3).

Reed searched PsycINFO and ERIC for relevant studies by using different combinations of query terms such as middle school, literacy, content area and professional development. Although 87 articles were identified as relevant, all but eight were eventually excluded because they did not meet the author's specified criterion. Of the eight studies, two were qualitative, one was ethnographic, and another was quasi-experimental; all dealt with literacy. The researcher employed common coding techniques to reveal four categories for consideration related to professional development on literacy strategies for teachers of middle school students. First, training structure should be based on teachers' perceived needs and be provided over an extended period of time (over 14 hours). Second, the context of the implementation must include support on the school and district levels with needed materials and time to plan and collaborate. Third, teachers need to be supported and expected to implement initiatives with fidelity. Finally, the author reveals that more time is needed for more research in the area of literacy professional development. That is not to say that the current research should not be considered, just that more research should be done before overarching recommendations are made.
Teberg (1999) examined what teachers considered to be the most important support, resources, and professional development needed when implementing curricular reform. The study was intended to assist school districts in properly implementing change in order to improve student learning. In a northwest state, 185 middle school literacy teachers from 12 districts participated in this study. A three-part questionnaire about teachers’ knowledge of the reform initiative and about their perceived needs for support was administered to participants. Part I requested demographic information, Part II asked for teachers’ level of need for various types of support, and Part III contained three open-ended questions to all for individualized responses. Part II contained 32 items that teachers responded to with a four-point interval scale indicating (1) no need to (4) great need. Focus group interviews were conducted for elaboration and clarification. The data were analyzed and reported as descriptive data on eight tables. Part I data were used to show certain characteristics’ frequency. Measures of central tendency and standard deviations were reported using data from Part II; a chi-square test was used on certain items to determine if items differed significantly. Emerging issues were discovered through analysis of Part III. Teberg found “Teachers identified the need for the resource of time to plan, discuss, observe, and share ideas with their colleagues about the craft of teaching” (p.4). Additionally, teachers’ desire for support from other teachers and district personnel to encourage the public to support professional development was noted to be important. Teachers also reported that money to support these curriculum changes was essential. Also, the findings reveal teachers’ strong desire for additional assessment and whole class instructional strategies information. Ultimately, this study highlighted the importance of teacher involvement in the curriculum change process.
Wilson, Grisham, and Smetan (2009) examined a yearlong professional
development initiative focused on content area teachers incorporating the Question-
Answer Relationship (QAR) literacy strategy into their instruction. These researchers
investigated teachers' metacognitive understanding of QAR by examining explicit lesson
plans incorporating the strategy and through open ended questionnaire. The authors
revealed in the Theoretical Framework section of their article that there had been a recent
emphasis on content literacy, that content teachers often felt it was the responsibility of
the English teachers, and as a result, did not understand the need of using literacy
strategies across the curriculum. This research presented lessons learned from the first
year of a literacy initiative. Schools were selected to participate in the QAR initiative
based on application and need. Ultimately, the participants were 22 secondary teachers
from 11 different schools across a large Midwestern state. The professional development
consisted of reading professional literature, working in small groups and viewing models
of the QAR strategy during a three-day intensive workshop and subsequent follow-up
sessions. Wilson et al. (2009) used qualitative research methods to analyze teachers' 
conditional, contextual, and procedural knowledge of QAR. The data were collected from
lesson plans and an open-ended questionnaire. Findings of the study were divided into
two themes: Theme One- An Understanding of QAR, and Theme Two- Sharing
Metacognitive Thinking about QAR. Wilson et al. found that teachers demonstrated their
metacognitive understanding of a strategy differently based on the context. Furthermore,
the authors asserted that "effective teaching depends on the instructional decisions that
teachers make and that teachers' expertise plays a critically important role in these
decisions" (p. 716). Three important findings in this research were (a) students need
models of strategies, (b) academic performance improves when students become metacognitive with content area material, and (c) reading strategies are difficult for content teachers to implement. Limitations to the study included the small sample size and the inability of the investigators to observe teachers in the classroom. However, Wilson et al. (2009) asserted that content teachers may learn to welcome effective teaching strategies when they improve content area learning.

Literacy and At-risk/Special Education Students

Bridging the achievement gap in literacy by addressing the curriculum gap is discussed by Teale, Paciga, and Hoffman (2007). While most educators are familiar with the term achievement gap, which refers to the disparity between different groups (social-economic and race), these researchers use the term curriculum gap to describe places in many early childhood curriculums where key elements of literacy instruction are neglected. Teale et al. (2007) attributed the cause of this curriculum gap to be the legislation stemming from No Child Left Behind (2001) and the Reading First Initiative, which has channeled billions of dollars into literacy initiative in schools. These researchers suggested that the assessments have been driving instruction and that this has caused key elements of sound literacy instruction to be neglected. Specifically, comprehension instruction, background/world knowledge, and writing instruction are the cause of the curriculum gap. These researchers pointed out that many early literacy programs are increasing the amount of time for reading instruction by decreasing the allotted time for other subjects such as science and social studies. This practice may have a negative long-term effect on student achievement because science and social studies instruction can improve a student’s world knowledge. Therefore, any curriculum gap that
exists in many early literacy programs may actually cause an unintended increase in the achievement gap in later years. Early literacy programs and assessments should be analyzed to check for this gap so that students do not just start well; they finish well.

Shippen, Houchins, Steventon, and Sartor (2005) compared the effects of two direct instruction reading programs on urban middle school students. The Direct Instruction model was selected by these researchers due to its reputation for effectiveness with at-risk students. A southeastern inner-city middle school that is 99% African American was selected for this study. The participants in this study were seventh grade students that were reading at least two years behind grade level. Identified students that participated in pretesting numbered 78, but due to attrition, only 55 students were included in the final sample. All participants were African American between the ages of 12 and 14 years, with 40% being girls and 60% being boys. “The research questions included the following: (a) Do urban middle school students with poor reading skills demonstrate differential skill improvement in word reading efficiency based on the type of DI reading program intervention? and (b) Do urban middle school students with poor reading skills demonstrate differential skill improvement in oral reading performance (rate, accuracy, and fluency) based of the type of DI reading program intervention?” (p. 180). The treatments used in this study were Corrective Reading Decoding B2, Corrective Reading Decoding C, and REWARDS- Reading Excellence: Word Attack and Rate Development Strategies. The researchers employed a quasi-experimental pre-posttest design with randomly assigned participants to either Corrective Reading Decoding or REWARDS. Those in Corrective Reading Decoding were then assigned to B2 or C based on reading level as prescribed by that program. A repeated-measures
multivariate analysis of variance (MANOVA) was used to analyze the data. Furthermore, a 2x2 between-subject analysis and a 2x4 within-subject analysis were conducted. After implementing the treatment for six weeks, students in both direct instruction groups, Corrective Reading Decoding and REWARDS, showed gains in reading competence, confirming the assertion that Direct Instruction is effective with struggling readers. However, it is important to note that the students scoring higher on the pre-test also showed the most significant gains on the post-test. The authors cite the “Matthew Effect” to explain the tendency of higher performing students to also be more likely to show growth quickly.

Lingo, Slaton, and Jolivette (2006) also investigated the effectiveness of the Corrective Reading program (Engelmann et al., 1999) with at-risk students, but in this case, the investigation not only measured reading abilities, but also classroom behavior. Corrective Reading was selected because it is a Direct Instruction model that has proven to be successful with at-risk students in a multitude of previous studies.

The research questions guiding this study are as follows: a) What are the effects of the Corrective Reading program on the oral reading fluency of students with reading deficits and challenging behaviors on within-program passages? b) What are the effects of the Corrective Reading program on the oral reading fluency for these students on grad-level generalization passages? c) What are effects of the Corrective Reading program on the social behaviors of these students as compared to their peers during reading-related instruction in both special and general education classrooms? And d) What is the social validity of the Corrective Reading program as assessed by these students and their special education teachers?
Participants included seven at risk students from two special education classrooms, seven general education students, and two special education teachers. All students were in either the seventh or eighth grade at an urban, southeastern public middle school. Teacher participants received three hours of training on Corrective Reading before introducing the lessons to the students. Investigators conducted observations almost daily for a three-month period of time. In addition to student observation, reading measures were taken using the Woodcock Reading Mastery Test Revised Normative Update, form G and H. To measure social validity, a survey was administered to the participants at the conclusion of the program. Positive results were found for both reading with-in program passages and grade-level generalized passages. There was no significant change found for the program’s effect on behavior, but the program was assessed to be socially valid by both the students and the teachers.

The problem of bridging the achievement gap was also investigated by Kennedy (2010). This teacher-educator sought to improve literacy in a high-poverty elementary school while reporting on the results of this literacy intervention program. Collaboratively, classroom and special education teachers at an elementary school in Ireland selected a customized plan for professional development and program implementation that would meet the needs of students. In addition to the ongoing professional development that focused on teachers’ knowledge of essential literacy skills, teachers were trained in the use of several literacy strategies, participated in professional readings and discussions, and received support from the literacy coach. The researcher pointed out that a constant focus was kept on student achievement. In order to report on the influence of the home life and consider factors such as students’ self esteem and
motivation, a mixed-methods, multilevel research design was used to investigate the results of this program. The initiative began with four first grade classes with a total of 56 students participating. Data from teacher surveys, students’ standardized test results, and scores on students’ writing samples were used not only to plan the professional development, but also to evaluate the program. Qualitative data were gathered through teacher, student and parent interviews, observations of literacy lessons, and recordings of professional development. Quantitative data were analyzed using a repeated-measures MANOVA and post-hoc tests to determine the change in student achievement as a result of the interventions. A constant comparative method was used to find common themes in the qualitative data. “By the end of the intervention, the participating students had significantly higher achievement in reading, writing, and spelling than would have been expected based on their pretest scores” (p. 385). Participants were also described by parents, teachers, and even by themselves as more motivated, engaged, and strategic when it comes to reading and writing. Additionally, Teachers reported a high level of confidence in their instructional skills as a result of this initiative. This report of the development and implementation of a now literacy initiative can be used by other educators to create other literacy intervention programs.

Print literacy engagement of low-income parents was the focus of study by Lynch (2009). Because links have been established between parents’ educational level and their children’s’ reading ability, the findings of this study by Lynch have far reaching implications on all literacy initiatives. This study focused on the following research questions: (a) What are the types of print literacy activities low-income parents engage in their daily lives? (b) How frequently do low-income parents engage with these print
materials? (c) Are their differences in parents’ print literacy experiences based on geographical circumstances? and (c) What are the implications of this engagement for literacy instruction in adult and family literacy programs? Participants were 38 randomly selected parents of children enrolled on Head Start in a mid-western state. Findings from a print literacy questionnaire reveal the need for learners to be involved in the curriculum development, particularly in the selection of reading materials. Also, by including print materials children are exposed to in the home, a connection between in-school and out-of-school literacy can be established. In addition, low-income parents need suggestions for providing homework support for their children and English second Language parents should be encouraged to talk to their students in their primary language about school work.

Englert (2009) discussed her work as part of a group of educators at the University of Michigan that developed, implemented, and researched a series of interventions for struggling readers. This endeavor began with research pertaining to the importance of text structure knowledge in literacy performance that indicated a strong positive correlation between knowledge of text structure and one’s ability to identify the main idea and recall information from a passage. This author first reports on the Cognitive Strategy Instruction in Writing (CSIW) and found that knowledge of text structure is developmentally acquired and is more difficult for students with learning disabilities to understand. “Clearly, students needed instructional assistance if they were to develop effective learning-to-learn strategies for reading and writing expository texts” (Englert, 2009, p. 105). Graphic organizers were also a component of the program to facilitate the thought process necessary for reading, writing, and discussion. As a result,
the CWIS strategies included assistance with the writing process though an acronym, POWER, which stood for Plan, Organize, Write, Edit, and Revise. Another organizer used the acronym POSSE to assist with reading comprehension, which stood for Predict, Organize, Search, Summarize, and Evaluate. Englert, Berry, and Dunsmore (2001) evaluated this strategy by comparing it to the well-known K-W-L graphic organizer which encourages students to express what they already know, what they want to know, and what they learned from a passage. The study involved 109 students with learning disabilities with 63 students using the POSSE and 46 using the K-W-L. The results indicated that students using the POSSE method demonstrated a statistically significant advantage when retelling or recalling the passage than the students that used the K-W-L method. However, these program developers at the University of Michigan wanted to create a program that would unify the different components of the CSIW strategies; what resulted was project ACCEL. The major components of ACCEL were titled Plans-It, Reads-It, and Reports-It. The program synthesized the strategies from CSIW and modified the process in such a way that students were now taught with the philosophy of writing and reading in order to learn. Englert et al. (2001) found that this program to be most beneficial to special education students over non special education students. The explicit instruction facilitated by these literacy intervention programs ultimately proved to increase struggling students' literacy achievement.

Nichols, Young, and Rickelman (2007) conducted research relevant to professional development for a year-long literacy initiative that they were employed to conduct for an alternative middle school for at-risk students in southwest Virginia. Specifically, these literacy experts were asked to instruct teachers in the use of literacy
strategies that would meet the needs of this school and, in turn, improve student performance on standardized tests. The researchers took this opportunity to investigate the extent to which the teachers, across the curriculum, at this school implemented the strategies and instructional designs presented in monthly professional development meetings and to determine if teachers used certain strategies or instructional designs based on their content area. Initially, a needs assessment was conducted to determine what was to be included in the professional development. Then, the results of the needs assessment were discussed with the faculty and the Reading Language Arts Instructional Features Questionnaire (RLAIFQ) was administered to the teachers involved. The RLAIFQ was descriptively analyzed to determine how familiar and to what frequency teachers used literacy strategies. These interactions with the teachers guided the program developers in their creation of the professional development where strategies were presented and modeled. Ultimately, popular reading strategies such as Question-Answer Relationship (QAR), Directed Reading and Thinking Activity (DRTA), and graphic organizers were selected in addition to writing strategies such as What I Know, What I Want to Learn, and What I Learned (KWL) charts. Next, a related Instructional Design and Strategy Checklist were developed with which teachers indicated monthly the type and frequency of the use of literacy strategies in their instruction. Data was collected by the principal and delivered to the researchers monthly over a four-month period of time. Results of the surveys indicated that teachers did use the strategies gleaned from the professional development such as Note-taking, graphic organizers, and Brainstorming on a weekly, if not daily basis. Perhaps more significantly, results of the study indicated that teachers selected the type of literacy strategy differently based on their content area.
The number one strategy selected by the English teachers was Guided Reading, while the number one strategy selected by the math teachers was 3-Minute Pause and Reflection. The number one strategy selected by the science teachers was Brainstorming, while the number one strategy selected by the social studies teachers was Test-Taking Strategies. The additional teachers at the school selected Note-Taking as their primary strategy. Based on these results, these researchers determined that whole-school literacy professional development should include a variety of strategies so that the most appropriate strategy for the content area may be selected.

Literacy Initiatives Classified as Response to Intervention (RTI)

Response to Intervention (RTI) is a three tier approach to help struggling learners in which student progress is closely monitored at each tier of intervention with the progression of tiers indicating more intensive, specialized intervention. Major components of RTI include a research-supported core curriculum, universal screening, progress monitoring, and decision-making about student progress in the progression of tiers. RTI has emerged as a method for identifying students with disabilities (Hughes & Dexter, 2011).

Many schools have adopted the Response to Intervention or Instruction Model (RTI) to bring about change in student reading achievement. Although shown to be a successful tool on the elementary level, Brozo (2009) cautioned policymakers when considering RTI for secondary schools. Brozo suggested asking three questions.

First, is RTI a feasible structure for secondary literacy? Little research has been done to support the success of RTI in secondary settings. Secondary teachers see themselves as specialists and may lack the expertise to individualize instruction and
implement literacy strategies. Second, is RTI the most effective model for a
comprehensive secondary literacy program? RTI has a behavioral and cognitive focus. Therefore, factors in reading achievement such as self-efficacy, youth culture, and new literacies are not commonly considered in a school-wide RTI program. Brozo (2009) asserted that a variety of forms of multimedia technologies, not normally considered in most RTI programs, are necessary to providing successful literacy instruction. Third, can RTI provide responsive literacy instruction for all students? According to Brozo, the answer is no if the teacher is unable to offer differentiated instruction to all students. Without providing differentiated assistance to struggling students, the preventative benefits of RTI are lost on the secondary level.

The effect of response to intervention (RTI) on literacy instruction was also investigated by Graves, Brandon, Duesbery, McIntosh, and Pyle (2011). The major purpose of this study was to compare a group of 6th grade students receiving Tier 2 reading instruction with a control group that did not receive Tier 2 reading instruction. A secondary purpose was to use the information collected in this RTI investigation and combine that information with what is currently in the literature about RTI to construct a RTI model for middle school. The researchers selected a large inner-city with a 100% Free or Reduced Lunch rate and a 90% rate of English language learners. To begin the development of a Tier 1 and Tier 2 interventions, a focus group composed of three sixth grade teachers from the selected school and two university researchers. This focus group used relevant research to recommend strategies for inclusion in the Tier 1 instruction, all English Language Arts (ELA) classes were scheduled for a two hour block and all ELA teachers participated in literacy workshops, formed leveled student reading groups, and
assigned weekly writing and reading assignments reflective of state mandated standardized tests. For the Tier 2 program, the focus group recommended attention “in the following areas: (a) decoding, including phonemic awareness and phonics; (b) fluency development; and (c) reading comprehension with vocabulary development” (p. 77). Corrective Reading and the REWARDS program were selected for decoding, the Reading Naturally program for fluency, and the Daybrooks strategies and activities for comprehension and vocabulary. Sixth grade students at this school were divided into two groups based on class assignments that were consistent demographically and the 30 lowest performing students in each group (based on reading results from standardized testing) were selected for participation in this study. One 30 student group served as a control group and another 30 student group served as the experimental group, with both groups being virtually equal numbers with regard to race, socio economic status, ability level, and special education status. This study can be described as quasi-experimental because the two groups were not randomly assigned. The experimental group was placed into homogenous groups of three to receive small group Tier 2 instruction from one teacher. The control group did not receive small group Tier 2 instruction. The Tier 2 instruction was scheduled for three hours per week for 10 weeks. Pre and post-test for oral reading fluency (ORF) and the Maze reading comprehension assessment were used to measure the effects of instruction. Results indicate that students that received Tier 2 instruction realized much high gains in reading fluency and reading comprehension. Furthermore, special education students achieved even greater gains than non-special education students. The most significant finding was that students receiving Tier 2 instruction gained an average of 10 words per minute in ten weeks. The authors conclude
that Tier 2 combined with Tier 1 instruction has a significant positive effect on literacy, especially for special education students. Limitations to the study included the limited size sample and the limitations of the measurement instruments. Recommendations were made for further, larger scale investigation into RTI for middle schools reading instruction.

Faggella-Luby and Wardell (2011) also investigated the effectiveness of Response to Intervention (RTI) on the reading progress of middle school students. Since RTI and RTI research has been largely focused on elementary instruction, these researchers sought to investigate when, how, and by whom RTI instruction should be employed. Specifically, Faggella-Luby and Wardell (2011) examined three Tier 2 reading comprehension interventions used with fifth and sixth grade, at-risk, urban students. After an exhaustive review of relevant research, three reading interventions selected for use in this study: (a) Story Structures (SS), Typical Practice (TP), and Silent Sustained Reading (SSR). Story Structure (SS) is a modified form of Embedded Story Structure that directs students to ask themselves seven questions about basic story elements like main character, setting, and major conflict. Next, students complete a SS diagram and create a five sentence summary of the story. Typical Practice (TP) instruction reflected the Tier 2 beliefs and practices of the reading specialists in the classroom and was not influenced in any way by the researchers or other participants. Practices outlined by the National Reading Program (NRP) were the major influence on TP interventions; this allowed for comparison to SS and SSR. Activities in this group included active reading mini-lessons, Active Reader Cards, and Guided Reading in Literature Circles. Silent Sustained Reading (SSR) involved students silently reading self-selected materials for 30 minutes each day.
while the teacher also often read a book silently. Participants were 86 fifth and sixth
grade students and five teachers in an urban school in a northwest state. The students
were selected based on their at-risk status as determined by the Degrees of Reading
Progress (DRP) screening test. As per the school’s request, students with documented
disabilities were excluded from this study because they were already receiving services.
Students were randomly assigned to one of the three intervention groups. Two fifth-year
interns were assigned to be the SS teachers, three certified reading specialists were
assigned to the TP group, and two other teachers were assigned to the SSR group. Five to
seven students were grouped together to receive their assigned intervention for 30
minutes two or three times per week for two quarters. This post-test only design
employed the Cloze test, the Strategy-Use test, and the Comprehension section of the
Gates- MacGinitie Reading Comprehension test. Furthermore, to assess the integrity of
implementation, a Treatment Integrity Checklist was given to the participating teachers.
Results of the study indicate a positive correlation between the use of RTI strategies such
as SS, TP, and SSR, but results were mixed when it came to indicating one method as
consistently more effective than the others. As a result of their data analysis, these
researchers concluded that direct/explicit reading instruction like that found in the SS and
TP paired with SSR is most effective. Finally, these investigators declare that middle
school is not too late for effective reading intervention.

Mokhtari, Porter and Edwards (2010) reported on the implementation of a
Response to Intervention (RTI) initiative in a primary grade classroom. This initiative
focuses on identifying students with reading deficits early through assessment, providing
those students with targeted interventions, and continually assessing the effectiveness of
the prescribed interventions. When treatment is found to be unproductive, the prescribed intervention is adjusted and decisions are made based on the student’s individual needs.

Just as with the previously described reading initiatives, RTI was found by these researchers to be most effective when teachers were allowed to be the instructional expert. Program implementation was found in this case, as in other studies, to be most effective when implemented from the bottom-up, instead of the top-down.

Vaughn et al. (2010) studied the effects of a Tier 1 and Tier 2 Response to Intervention (RTI) model on middle school students with reading difficulties. The “primary research question was as follows: What are the effects of a secondary intervention (Tier 2) provided in relatively large groups (10-15 students) on the reading-related outcomes of individuals with reading difficulties?” (p. 5). This study represents the first year of a large-scale, multiyear initiative to improve reading achievement for low performing students through intensive interventions. Seven schools in two urban cities in the southwest United States were selected conveniently based on proximity to the researchers, with about half of the participants coming from each city. For the purposes of this study, researchers analyzed the results from the Texas Assessment of Knowledge and Skills (TAKS) to identify struggling and typical readers that would be going in to the sixth grade at the participating schools. All identified struggling readers were included and were identified as those whose TAKS scaled score were below the cutoff of 2,100 or who were identified as at risk of not passing the next state achievement test because of the measure of error of the test. Also included were students exempt from the TAKS due to other extenuating circumstances. The preliminary sample included 2,034 fifth-grade students, but due to circumstances like student movement and change in feeder patterns,
the study ultimately included 249 typical readers and 327 struggling readers, with 212 students receiving Tier 2 interventions. Teachers of students in both the treatment and comparison groups received a six-hour professional development for implementing reading instruction strategies. Teachers then met in study groups once a month at their schools and coaching support was available from researchers, resulting in Tier I instruction. For Tier 2 instruction, nine interventionists provided year-long additional reading instruction to the identified low-achieving readers for approximately 50 minutes per day. Results of the study indicate that Tier 2 intervention students outperformed comparison students in areas of word attack, spelling, comprehension, and phonemic decoding efficiencies. However, these gains were relatively small. Unfortunately, “The findings from this study revealed that the goal of closing the gap between at-risk sixth-grade students who received Tier 2 intervention and students not at risk in the beginning of the school year may be overly ambitious. Findings for intervention students were positive, but did not change substantially over the course of the year” (p. 16). Researchers attributed this result in part to the fact that all participants received added reading instruction compared to if there had been no study. Additionally, previous studies similar to this one were most often done over much shorter periods of time. These researchers emphasized the need for further research in closing the reading achievement gap among middle school students.

Summary

In summary of this review of related literature, literacy has been recognized as an ongoing issue of importance not only for the United States, but also internationally.
Researchers have identified literacy as a key for success in a global economy. In fact, Myhill (2009) noted that literacy is a means of access to empowerment and autonomy.

National literacy reform projects have been developed, implemented, and studied in Australia, China, the United Kingdom, Pakistan, New Zealand, Mexico, the United States, and many others. These efforts have been made out of the necessity to create workforces that can sustain the economies of nations, but also to bring opportunity for stability and equality to individuals. Jumani et al. (2010) found literacy instruction to be of particular benefit to the empowerment of women in Pakistan. Taylor (2005) reported that a community-focused literacy initiative empowered people at all phases of their lives in England. Mihandoost, et al. (2011) revealed the importance of literacy intervention for the academic success of student with disabilities. As reported earlier, literacy has been shown to be a deciding factor not only in the success of a nation, but also in the quality of life of its citizens.

Just as countries all over the world, The United States has focused as a nation on literacy reform since the 1980s, when authors of *A Nation at Risk* implored educational policy leaders to urgently focus on literacy improvement. The *No Child Left Behind Act of 2001* increased the accountability and assessment systems of state and local education agencies by requiring them to be responsible for all students meeting academic achievement standards by 2014. Unfortunately, as recently as 2007, The National Assessment of Educational Progress results indicate that 26% of the 3.9 million eighth grade students in the U.S. do not have basic literacy skills. This means that 1.7 million U.S. eighth graders were not proficient in reading and writing. Haskins et al. (2012) reported that almost all 50 states have adopted Common Core State Standards (CCSS). In
addition, the Bill and Melinda Gates foundation and the U.S. Department of Education are supporting efforts to align curriculum the CCSS, properly align assessments to CCSS, and to create a common reporting system in order to fairly compare educational quality.

In response to the increased national standards for literacy, states and districts across the U.S. have supported, and even mandated, the implementation of literacy initiatives at all levels. States have passed legislation demanding evidence of increased standards for districts and schools. State departments of education have developed programs to support local education agencies with improving literacy instruction. According to Flemming et al. (2007), universities are under increasing pressure to equip pre-service teachers with the necessary to deliver effective literacy instructional instruction across the curriculum. Districts have studied factors that separate high performing from low performing schools, as in Piech (2004), and to identify conditions necessary for sustainability and scalability of best practices, as in (Foorman and Moats (2004). Professional development from all levels has supported efforts to improve literacy achievement for all.

Junior high and high schools have used research-supported literacy programs and strategies such as Accelerated Reader (AR), Embedded Story Structure (ESS), LINCS Vocabulary strategy, Question-Answer Relationship, Great Leaps reading program, Words Their way, SRA; the list is endless. Researchers have also investigated the same types of programs for early/elementary literacy education (Flemming et al. 2007). In the hope of maximizing effective literacy instruction in schools, educational researchers have studied the elements of these programs and the factors associated with their proper implementation.
Research into effective literacy program development and implementation has revealed important factors for educational leaders to consider. Fisher and Ivey (2006) and Palumbo and Sanacore (2009) suggested that access to high quality reading material and time dedicated reading throughout the day is important. Lewis and Wray (2001) revealed research that supports the importance of whole school literacy awareness and support. These sentiments were echoed by Fisher and Frey (2007) and the employment of research-based literacy strategies district-wide was also advocated. Importantly, researchers support the assertion of Sanacore and Palumbo (2010) that vocabulary development is required for bridging the achievement gap.

Research into proper implementation of literacy programs reveals that respecting teachers’ beliefs and roles may be the most important considerations for a successful literacy initiative. Kilpatric (2009) showed us that teacher attitudes and involvement are vital to the change process. A top-down approach to decision making is an ineffective approach to program implementation and curriculum change. Hattie (2003) recommended the identification of expert teachers and including those teachers in the change process. This increases program buy-in by all teachers. When teachers do not feel supported with materials and professional development, then the literacy achievement of students suffers. Similarly, Teberg (1999) revealed that teachers, in addition to professional development and support from district personnel, need time to plan, discuss, and share with their colleagues. Research also supports the need for professional development and district support for any initiative to be ongoing for an extended period of time. As stated earlier in this review of relevant literature, teachers’ roles in developing
and implementing curriculum change and beliefs about their value in the initiative are essential to affecting positive academic performance from students.

As presented earlier, policy makers have called for educators to bridge the achievement gap. No discussion about the achievement gap can be complete without addressing the needs of at-risk and special education students. Shippen, et al. (2005) supported the work of other researchers by advocating the use of direct, explicit literacy instruction for at-risk students. At-risk students often also have classroom behavior problems, and therefore are prone to being excluded from classroom instruction. Lingo et al. (2006) revealed that teachers and students report a strong correlation between literacy abilities and behavior for many students. Literacy program selection should take into consideration the needs of at-risk students so that the most appropriate strategies be employed to meet individual student needs.

Response to Intervention or Instruction (RTI) is a current model for instruction that has been adopted by many educators. Professional development and resources regarding RTI are widespread throughout the U.S. This method involves frequent evaluation of student progress as a result of the instruction and encourages change when no improvement is evidenced, and is therefore responsive to the needs of the student. Many recent literacy initiatives include the RTI model. Brozo (2009) cautioned decision makers about RTI because little research has been done so far on its effect on secondary students and non-special education students, but research on RTI for elementary students is fairly extensive and shows significant positive results for at-risk and special education students. Brozo’s caution against the use of RTI on the secondary level stems from the traditional structure of secondary schools that limits time for individual and small group
instruction. Therefore, schools that address this issue may find the same positive results on the secondary level as are found on the elementary level. That being said, RTI may also prove to be effective in literacy initiatives in secondary schools.

In conclusion, literacy is an issue for all. Countries around the world recognize the importance of improving literacy of their citizens in order to improve their economic viability. The United States has focused on increasing academic standards in order to be competitive in the world economy. Policy makers must use data regarding effective literacy program development that includes research-supported strategies for all and teacher beliefs and roles in any initiative in order to achieve success for all students.
CHAPTER 3

METHODOLOGY AND PROCEDURES

In this chapter, the research problem, research questions, and null hypotheses that were investigated will be restated. The methodology that was used in conducting this study, including the research design, sample, instrumentation, procedural details, validity and reliability, data analysis, and limitations will be discussed.

Problem

The purpose of the study was to determine the effect of a district-wide literacy initiative that implemented the 18 literacy strategies and the Silent Sustained Reading (SSR) activity incorporated in the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on English/Language Arts standardized test scores. The problem was little research has been done on the effect of these literacy strategies and the SSR activity on standardized test scores.

Research Questions and Hypotheses

The research questions that were used to focus this study were as follows:

1. Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) have an effect on student performance on the English/Language Arts Read, Comprehend, and Respond strand of the iLEAP and LEAP tests in the seventh and eighth grades?
2. Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) have an effect on student performance on the English/Language Arts Write Competently strand of the iLEAP and LEAP tests in the seventh and eighth grades?

3. Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) have an effect on student performance on the English/Language Arts Use Conventions of Language strand of the iLEAP and LEAP tests in the seventh and eighth grades?

4. Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) have an effect on student performance on the English/Language Arts Locate, Select, and Synthesize Information strand of the iLEAP and LEAP tests in the seventh and eighth grades?

5. Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) have an effect on student performance on the English/Language Arts Read, Analyze, and Respond to Literature strand of the iLEAP and LEAP tests in the seventh and eighth grades?

6. Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) have an effect on student performance on the English/Language Arts Apply Reasoning and Problem Solving Skills strand of the iLEAP and LEAP tests in the seventh and eighth grades?
7. Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) have an overall effect on student performance on the English/Language Arts iLEAP and LEAP tests in the seventh and eighth grades?

For statistical analysis, each of the research questions was stated as a null hypothesis. The null hypotheses for this study are as follows:

1. There will be no statistically significant effect of a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on the Read, Comprehend, and Respond to Literature strand of the iLEAP and LEAP.

2. There will be no statistically significant effect of a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on the Write Competently strand of the iLEAP and LEAP.

3. There will be no statistically significant effect of a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on the Use Conventions of Language strand of the iLEAP and LEAP.

4. There will be no statistically significant effect of a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on the Locate, Synthesize Information strand of the iLEAP and LEAP.
5. There will be no statistically significant effect of a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on the Read, Analyze, and Respond to Literature strand of the iLEAP and LEAP.

6. There will be no statistically significant effect of a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on the Apply Reasoning and Problem Solving Skills strand of the iLEAP and LEAP.

7. There will be no statistically significant overall effect of a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) on the ELA portion of the iLEAP and LEAP tests.

Research Design

In response to the development of the literacy strategies included in the 2008 Revised Louisiana Comprehensive Curriculum (RLCC), a district-wide literacy initiative was implemented in a north-central Louisiana school district. The purpose of the literacy initiative was to implement the new literacy strategies incorporated in the LRCC district-wide. The goal of the initiative was to improve standardized test scores on the iLEAP, given in seventh grade, and the LEAP given in eighth grade. The purpose of this study was to determine the effect of the literacy initiative on standardized test scores at one junior high in the district. During the first year of the initiative, the 2008-2009 school year, the literacy initiative focused on the secondary schools, particularly the seventh and eighth grades, with the plan set to extend to the lower grades in subsequent years.
The superintendent of schools added a new literacy coordinator position for the
district. The coordinator was charged with designing, implementing, and evaluating a
district-wide literacy initiative that would train teachers throughout the system in the 18
literacy strategies and Silent Sustained Reading (SSR) activity suggested in the 2008
Revised Louisiana Comprehensive Curriculum (RLCC). The literacy coordinator invited
classroom teachers at each of the schools to form a district literacy team. The large,
centralized junior high had four team members, one for each core subject. Three small,
rural schools had one or two team members. The main high school for the district had
two team members. The team met monthly for the first year beginning in the summer of
2008, and then met quarterly the subsequent year. A team book study of Brozo and
Simpson's *Content Literacy for Today's Adolescents: Honoring diversity and building
competence* (2007) focused the provided a framework for designing, implementing, and
evaluating this initiative. The Quality Indicators for Secondary Literacy questionnaire
was completed teachers in August to determine the literacy climate and culture at each of
the schools. The same survey was completed again in January and May as a means of
monitoring progress. Literacy training was provided to all teachers in the district at the
beginning of the school year, with follow-up training throughout the year in monthly
faculty meetings and three teacher in-service days. The Scholastic Reading Inventory
(SRI) was administered to all junior high students as one means of monitoring student
progress in August, January, and May. Junior high administrators monitored literacy
strategy implementation through observations, student work examples, lesson plans, and
teachers were required to have strategies posted along with their daily objectives and
activities. The literacy coordinator and the literacy team members provided support and modeled strategies in their respective schools throughout the school year.

English and Language Arts test scores from the Integrated Louisiana Educational Assessment Program (iLEAP) and the Louisiana Educational Assessment Program (LEAP) for students beginning in seventh grade during the 2008-2009 school year at a north Louisiana junior high school after the implementation of the literacy strategies were analyzed to determine the effect, if any, of the literacy strategies implemented through the literacy initiative on iLEAP and LEAP scores. The 2008-2009 seventh grade class served as the experimental group and their test scores were tracked through their eighth grade year. These ELA scores were compared to the ELA scores of a different class of students prior to the implementation of the literacy initiative. The 2006-2007 seventh grade class served as a control group and their test scores were also tracked through their eighth grade year.

The first standardized test given after the addition of literacy strategies to the 2008 Revised Louisiana Comprehensive Curriculum (RLCC) was in the spring of 2009. Test results for the 2009 iLEAP of seventh grade students were used as a baseline and then scores for the same students on the 2010 LEAP were collected. The same data were collected from the control group, which was composed of students who attended the same school, but in years prior to the implementation of the literacy initiative. Therefore, this study is a longitudinal study because the study observed the same students in two separate groups over a period of two years each, totaling four consecutive years.
Sample

The sample consisted of students in an experimental group beginning in the seventh grade at a north Louisiana junior high school that took the seventh grade 2009 iLEAP and followed the same students’ results on the eighth grade LEAP in 2010. These students represented the experimental group because they received the treatment of the literacy initiative. The sample also included a control group consisting of students of seventh and eighth grade students who attended school in the same school system prior to the implementation of the literacy initiative. The control group attended the same junior high school in north Louisiana as the experimental group during the 2006-2007 school year, taking the 2007 iLEAP and 2008 LEAP. The control group represented similar Socioeconomic Status (SES), race, and gender as the experimental group.

The sample included both regular and special education students that took the iLEAP in the seventh grade and the LEAP in the eighth grade. Students that took the seventh grade iLEAP and did not remain in the same system for both the seventh and eighth grades were excluded from the study. The experimental group under investigation was selected out of convenience to the researcher and due to the depth of literacy strategy implementation from the LRCC at that school due to the district-wide literacy initiative.

Instrumentation

The instrument in this study was the LEAP and iLEAP test scores. The Louisiana Educational Assessment Program (LEAP) was a high stakes standardized test administered to all public school students in 4th and 8th, which determined whether students would have been required to attend summer school or be retained. The LEAP measured 4th and 8th grade students' knowledge and skills in English Language Arts,
math, science and social studies. Students had to score Basic or above in either English or math and Approaching Basic or above in science and social studies on the LEAP to advance to the next grade. Fourth graders had to meet this requirement since 2004, while eighth-graders had to meet this requirement since 2006. The Integrated Louisiana Educational Assessment Program (iLEAP) was the standardized test administered since 2006 to Louisiana public school students in grades 3, 5, 6, and 7. The exam tested students in English, math, science and social studies. Students did not have to earn a certain achievement level on the assessment in order to be promoted to the next grade. The iLEAP was both norm referenced and criterion referenced; the LEAP was criterion referenced. Six strands made up the ELA tests included in the iLEAP given in sixth and seventh grades and the LEAP given in the eighth grade. These strands were:

1. Read, Comprehend, and Respond
2. Write Competently
3. Use Conventions of Language
4. Locate, Select, and Synthesize Information
5. Read, Analyze, and Respond to Literature
6. Apply Reasoning and Problem Solving Skills

Procedural Details

The district-wide literacy initiative implemented in this north Louisiana school district began with the leadership of a literacy coach in the summer of 2008. The first action taken by the literacy coach was to form a literacy team composed of English/Language Arts teachers from each of the secondary schools in the district. Members of the literacy team participated in a book study of Content Literacy for
Today's Adolescents: Honoring Diversity and Building Competence by Brozo (2007) and met regularly to discuss the book and how it could be used to guide the implementation of this literacy initiative. Each member of the literacy team was responsible for being a literacy leader in their school. In the first year of the initiative there was participation by teachers representing 7-12 grades, but no teachers from the 6th grade formally participated in the initiative until the second year. This study focused on the effects of the literacy initiative at a sixth grade school that was a feeder for a junior high school for seventh and eighth grades. The literacy initiative included (a) professional development on the use of the literacy strategies incorporated into the state curriculum through the consultation of Dr. William Brozo, (b) encouragement to commit to daily Silent Sustained Reading (SSR) during every ELA class meeting, (c) job-embedded modeling by the literacy coach and other expert teachers, and (d) funds for literacy materials such as classroom libraries and technology to facilitate literacy instruction such as document cameras and projectors. After the first year, the literacy initiative expanded to include all secondary teachers with the English/Language Arts teachers being the literacy leaders in their schools. Teachers in grades 6-12 in all subjects were provided with literacy professional development and were encouraged and monitored for their use of the strategies. Principals at each school were charged with the responsibility of requiring teachers to provide evidence of literacy strategy use in lesson plans, on their boards, and through student work. The purpose of this initiative was to improve iLEAP and LEAP test scores through the implementation of the literacy strategies included in the 2008 Revised Louisiana Comprehensive Curriculum (RLCC). It was expected that the district-wide implementation of the specific literacy strategies in the RLCC throughout all
subjects would improve standardized test scores throughout the district, not just in ELA, but in all core subjects.

Validity and Reliability

The ELA portions of the iLEAP and LEAP tests were deemed valid for the purposes of this study because they measured students' ability for reading, reading comprehension, and writing. Most importantly, these tests were the measures used by the Louisiana State Department of Education to determine not only an individual student's literacy abilities, but also the effectiveness of the school to prepare students for matriculation into subsequent grades. The ELA scores were a major factor in the School Performance Score (SPS) that contributed to the rating of the school as an A, B, C, D, or F school. According to the authors of The Louisiana Educational Assessment Program Leap/Gee 2006–2007 Annual Report, the iLEAP and LEAP yields valid and reliable data due to the fact that students who performed at one level, be it unsatisfactory, approaching basic, basic, or advanced, tended to score at that same level after one year of instruction on the next year's test due to scaling scores.

Data Analysis

The mean scores for each of the six strands on the ELA portion of the iLEAP and LEAP for students in the experimental group were compared to the mean scores in the control group. These mean scores represented a percentage correct in each of the six strands of the ELA iLEAP and LEAP tests. This resulted in 2 (year) x 2 (group) design for data analysis. A review of demographic data for the control and experimental group participants revealed that the groups were not appreciably different with regards to Socio Economic Status (SES) as measured by Free or Reduced Lunch, gender or race. An
Analysis of Variance (ANOVA) was performed using the Statistical Package for the Social Sciences (SPSS) with statistical significance set at $p < .05$.

**Limitations**

This investigation was limited to only seventh and eighth grade students at one North Louisiana junior high school. The sample was further limited by the number of students attending that school between the 2006-2007 school year and the 2009-2010 school year, with the exclusion of those who did not take the pretest (iLEAP) and post-test (LEAP) in the control or experimental group. These circumstances limited the number of participants and the demographic composition of both the control and experimental groups. The fact that this study was not conducted for more than two years is an additional limitation.

**Summary**

The results of the data analysis were used to determine if there was a statistically significant difference in the mean scores of each of the six strands and on overall effect between the experimental and control groups. This chapter discussed the methodology and procedures for this investigation. Practitioners and researchers can use this information when designing, implementing, investigating other literacy initiatives.
CHAPTER 4

DATA ANALYSIS

With the intent of improving student achievement on standardized tests, the Louisiana State Department of Education released the 2008 Revised Louisiana Comprehensive Curriculum (RLCC). This curriculum incorporated 18 literacy strategies and the Silent Sustained Reading (SSR) activity which was suggested by Dr. William Brozo. English/Language Arts, math, science, and social studies units were embedded with these activities. This study analyzed the effect of this literacy initiative on English/Language Arts standardized test scores.

The mean scores for each of the six strands and for overall effect on the ELA portion of the iLEAP and LEAP for students in the experimental group were compared to the mean scores of the control group across two tests. These tests represented two years with a pretest (iLEAP) in the seventh grade and posttest (LEAP) in the eighth grade. These mean scores represented a percentage correct in each of the six strands and for overall effect of the English/Language Arts portion of the iLEAP and LEAP tests. This resulted in seven separate Analysis of Variance (ANOVA) with a 2 (year) x 2 (group) design for data analysis. With regard to Socio Economic Status (SES) gender, and race, (percentage of Free or Reduced Lunch; percentage male/female; and percentage Black/White/Other), the groups were determined by the researcher to be similar through a review of demographic data (See APPENDIX A for demographic data). All ANOVA
were performed using the Statistical Package for the Social Sciences (SPSS) with statistical significance set at $p < .05$. Six separate $2 \times 2$ ANOVAs were conducted on the data, one for each strand. The variable represented the experimental group who received the Literacy Initiative and the control group who did not. The year variable represented either seventh or eighth grade. Because the data analyses included multiple ANOVA’s on the same data set, a Bonferroni correction was applied to control for Type I error. The corrected $p$ value was set at $p < .03$ (6 ANOVAS x .05).

Data Collection

The sample consisted of students in an experimental group beginning in the seventh grade at a north Louisiana junior high school that took the seventh grade 2009 iLEAP and followed the same students’ results on the eighth grade LEAP in 2010. These students represented the experimental group because they received the treatment of the literacy initiative. The sample also included a control group consisting of seventh and eighth grade students who attended the same school in the same school system prior to the implementation of the literacy initiative. The control group attended the same junior high school in north Louisiana as the experimental group during the 2006-2007 school year, taking the 2007 iLEAP and 2008 LEAP. The control group represented similar Socioeconomic Status (SES), gender, and race as did the experimental group (See APPENDIX A).

The sample included both regular and special education students that took the iLEAP in the seventh grade and the LEAP in the eighth grade. Students that took the seventh grade iLEAP and did not remain in the same system for both the seventh and eighth grades were excluded from the study. The experimental group under investigation
was selected out of convenience to the researcher and due to the depth of literacy strategy implementation from the RLCC at that school due to the district-wide literacy initiative.

No data were collected or analyzed prior to approval from the Human Use Committee at Louisiana Tech University (See APPENDIX B). Data collection consisted of retrieving archived electronic data from the district test coordinator. The student names were replaced by assigned numbers in order to conceal the students' identities before statistical analyses were performed.

Descriptive Data Analysis

Demographic data of participants were collected from the district test coordinator. The control group consisted of 204 participants with 57% receiving Free or Reduced Lunch; the experimental group consisted of 185 participants with 56% receiving Free or Reduced Lunch. Both gender and race proportions were similar between the groups. The control group had 51% male and 49% female; the experimental group had 47% male and 53% female. The control group was 59% Black, 40% White, and 1% Other; the experimental group was 60% Black, 39% White, and 1% Other (See APPENDIX A for summary).

Statistical Data Analysis

The mean scores for each of the six strands on the ELA portion of the iLEAP and LEAP for students in the experimental group were compared to the mean scores in the control group as a function of year (seventh versus eighth grades). The mean scores represented a percentage correct in each of the six strands of the English/Language Arts iLEAP and LEAP tests. Overall effect was also compared between the two groups. A summary of the data analysis noting significant findings can be found in APPENDIX C.
Research Question One asked: Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum have an effect on student performance on the English/Language Arts portion on the Read, Comprehend, and Respond strand of the iLEAP and LEAP tests in the seventh and eighth grades?

Results of the 2 (year) x 2 (group) ANOVA for the Read, Comprehend, and Respond strand indicate that there was a statistically significant effect for Year $F(1, 387) = 20.526, p < .05$ and Year x Initiative (Interaction) $F(1, 387) = 5.989, p < .05$, but not for Initiative. Interaction between groups for Strand 1 was is shown in Figure 1. Based on these results the null hypothesis was rejected.

![Figure 1: Strand 1: Read, Comprehend, and Respond](image)

Research Question Two asked: Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum have an effect on student performance on the
English/Language Arts portion on the Write Competently strand of the iLEAP and LEAP tests in the seventh and eighth grades?

Results of the 2 (year) x 2 (group) ANOVA on the Write Competently variable indicate a significant effect for Year, $F(1, 387) = 158.282, p < .05$, but not by Initiative or Year x Initiative (interaction). Based on these results the null hypothesis was accepted.

Research Question Three asked: Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum have an effect on student performance on the English/Language Arts portion on the Use Conventions of Language strand of the iLEAP and LEAP tests in the seventh and eighth grades?

Results of the 2 (year) x 2 (group) ANOVA for the Use of Conventions of Language indicate that there was a statistically significant effect for Year $F(1, 387) = 53.925, p < .05$, but not for Initiative or Year x Initiative (interaction). Based on these results the null hypothesis was accepted.

Research Question Four asked: Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum have an effect on student performance on the English/Language Arts portion on the Locate, Select, and Synthesize Information strand of the iLEAP and LEAP tests in the seventh and eighth grades?

Results of the 2 (year) x 2 (group) ANOVA indicate that there was a statistically significant difference by Year $F(1, 387) = 5.279, p < .05$, by Initiative $F(1, 387) = 4.133, p < .05$ and Year x Initiative $F(1, 387) = 7.845, p < .05$. Although the interaction was significant, examination of this interaction showed that the effect was due to an increase
in performance by the control group, whereas the experimental group stayed relatively the same. Interaction between groups for Strand 4 is shown in Figure 2. Based on these results the null hypothesis was accepted.

![Mean Score Graph](image)

**Figure 2: Strand 4: Locate, Select, and Synthesize Information**

Research Question Five asked: Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum have an effect on student performance on the English/Language Arts portion on the Read, Analyze, and Respond to Literature strand of the iLEAP and LEAP tests in the seventh and eighth grades?

Results of the 2 (year) x 2 (group) ANOVA indicate that there was a statistically significant difference by Year $F(1, 387) = 189.534, p < .05$, but not by Initiative and Year x Initiative. Based on these results the null hypothesis was accepted.

Research Question Six asked: Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum have an effect on student performance on the English/Language Arts portion on the Apply Reasoning and Problem Solving Skills strand of the iLEAP and LEAP tests in the seventh and eighth grades?
Results of the 2 (year) x 2 (group) ANOVA indicate that there was a statistically significant difference by Year $F(1, 387) = 14.680, p < .05$ and Year x Initiative $F(1, 387) = 4.068, p < .05$, but not by Initiative. Interaction between groups for Strand 6 is shown in figure 3. Based on these results the null hypothesis was rejected.

![Graph showing mean scores for experimental and control groups across 7th and 8th grades.](image)

**Figure 3: Strand 6: Apply Reasoning and Problem Solving Skills**

Research Question Seven asked: Did a district-wide literacy initiative that implemented the literacy strategies suggested by the 2008 Revised Louisiana Comprehensive Curriculum have an effect on student performance on the English/Language Arts portion on the Overall Effect of the iLEAP and LEAP tests in the seventh and eighth grades?

Results of the 2 (year) x 2 (group) ANOVA indicate that there was a statistically significant difference by Year $F(1, 387) = 100.978, p < .05$, but not by Initiative and Year x Initiative. Based on these results the null hypothesis was accepted.
The 2008 Revised Louisiana Comprehensive Curriculum (RLCC) included 18 literacy strategies and Silent Sustained Reading (SSR). These additions to the Louisiana Comprehensive Curriculum were made by the Louisiana State Department of Education with the hopes of improving student achievement in all core subject on standardized tests. English/Language Arts, math, social studies, and science units contained explicit instructions on how to implement SSR and the 18 strategies. The Integrated Louisiana Assessment of Educational Progress (iLEAP) taken in the seventh grade and the Louisiana Assessment of Educational Progress (LEAP) were the standardized tests used to measure student achievement for the Louisiana State Department of Education and for the purposes of this study. Significant findings of this research were discovered in the following areas: (a) Sustained Literacy Instruction, (b) Improved Reading Comprehension, (c) Improved Reasoning and Problem Solving, (d) Include Writing Instruction, and (e) Retain Best Practices.

Findings

Results from the present study revealed that the literacy initiative had an effect on two of the strands (Strand 1: Read, Comprehend, and Respond; Strand 6: Apply Reasoning and Problem Solving Skills) and not on the other strands. The purpose of the experiment was to test the effects of this literacy initiative, not regular literacy education.
taught in English/Language Arts courses. However, a consistent finding from this research was that across all strands students improved from seventh to eighth grade. This effect was likely due to students not in the experimental group receiving the literacy initiative still receiving literacy exercises in their regular English classes. Sustained literacy instruction, regardless of whether or not students received the literacy initiative or literacy instruction without the initiative, appeared to have an effect on the overall student performance and on each of the six strands of the iLEAP and LEAP standardized tests. Multiple years of instruction that includes activities to support literacy skills, like those normally found in English/Language Arts curriculums, should be consistently practiced from year to year. Activities that show evidence of being effective based on not only standardized test scores, but also classroom assessments, should be retained in the curriculum.

Having found an effect on Strand 1: Read, Comprehend, and Respond indicated reading comprehension to be improved as a result of a literacy initiative. This indicated that incorporating literacy strategies like those that were under investigation in this study can improve students’ reading comprehension skills on standardized tests to a greater degree than the activities found in standard English/Language Arts instruction. For example, the GIST strategy entailed students reading a passage and then summarizing in short sentences and/or phases the essential information or main idea in their own words. In addition, Silent Sustained Reading (SSR) for 10-15 minutes each day with a book of the student’s choice was implemented along with the Learning Log strategy. This required students to give a written reflection based on their daily reading. Practice with strategies like those can be beneficial to students’ reading comprehension skills.
The literacy initiative had a positive effect on Strand 6: Apply Reasoning and Problem Solving. This was also likely due to the specific strategies in this initiative. The Learning Log responses used with SSR were often prompted by higher order thinking questions that required students to reason and problem solve. An example of such a prompt was “How would the story be different if told from another character’s point of view?” or “What advice would you give the character to solve their dilemma?”. This suggests that student performance on standardized tests that measure reasoning and problem solving skills can be improved by a literacy initiative that includes strategies that support reasoning and problem solving skills.

There was no effect of the initiative on Strand 2: Write Competently and Strand 3: Conventions of Language. The literacy strategies included in the initiative did not address direct, explicit writing instruction. Several of the strategies involved students writing, but none required extended or multi-paragraph responses. Writing strategies that support the writing process, sentence structure, or grammar strategies were not included. Therefore, the inclusion of strategies that support writing may have a positive effect on student standardized test scores on strands that require extended written responses.

Strand 4: Locate, Select, and Synthesize Information results indicated a somewhat unusual trend, the control group improved from seventh to eighth grade, but the experimental group stayed the same. This indicated that activities that supported this strand that were employed before the literacy initiative were effective and may have been discontinued. In fact, the control group received instruction on this strand from the librarian every two weeks during their seventh and eighth grade years. The librarian taught these students about how to use informational resources, the different types of
resources, and what kind of information was in those resources. She also taught the students how to cite references. These were the skills assessed on this portion of the standardized tests. The experimental group also received instruction from the librarian every two weeks during their seventh and eighth grade years, but the lessons focused on using the literacy strategies to read and answer questions about what they read. Therefore, retaining best practices is important to remember when implementing a new initiative.

Conclusions

The focus of this research project was to investigate the effect of a district-wide literacy initiative on English/Language Arts standardized test scores. Of interest to policy makers, administrators, and teachers may be the finding that indicated time improved literacy skills, regardless of whether or not students had the literacy initiative (experimental group) or received traditional literacy instruction as part of their English classes. In the school studied, students in English classes received literacy instruction that may have included such strategies as Vocabulary Cards, RAFT Writing, or Question the Author. The finding in this study that the literacy initiative had no significant effect on the strand that was measured through multi-paragraph writing (Strand 2: Write Competently) should be considered by policy makers, administrators, and teachers when designing a literacy initiative. Incorporating strategies that support students' writing skills can in turn support student standardized test achievement when extended writing is required. Similarly, there was no significant effect found on the strand that measured students use of grammar (Strand 3: Conventions of Language). Grammar strategies should also be considered by decision makers for inclusion in a literacy initiative. Finally,
retaining best practices that have shown to have a significant effect on student
achievement should be continued when implementing a new initiative.

Recommendations for Further Research and Practice

Although this study resulted in limited significant findings, it is possible that
future research would find additional information on the impact of a literacy initiative on
standardized test scores. Based on the findings and conclusions of this study, the
following recommendations are made for further research and practice:

1. The study should be repeated with other groups of students at different grade
   levels to determine if these results are atypical.

2. The study should be scheduled at more than one site at the same time to
   increase the possibility of a more diverse sample of students. More sites
   would also increase the number of school systems and teachers involved in the
   study.

3. The study should be extended for a period of more than two years. This would
   enable the tracking of students for a longer period of time to see if a literacy
   initiative becomes more effective, as other research suggests, after three-five
   years.

4. The study should be repeated with different instrument to measure the effect
   of a literacy initiative on student achievement. The pressure of standardized
   tests, especially those with the high-stakes of not progressing to the next
   grade, may have had an effect on student test performance. Perhaps another
   instrument without the added pressures of high-stakes testing would reveal
   more accurate results on student achievement.
5. Researchers should study each of the literacy strategies in isolation to determine the specific impact of each of the individual strategies.

6. School leaders should include a more regular and consistent monitoring of the implementation of the literacy strategies, including the implementation in science, math and social studies.

7. School leaders should call for more regimented professional development and support for all subjects throughout the length of the study.

8. School leaders should include more efforts to develop teacher buy-in for the value of the implementation of the literacy initiative.
APPENDIX A

SUMMARY OF DEMOGRAPHIC TABLES
APPENDIX A

Summary of Demographic Tables

Table 1: Socio Economic Status (SES)

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<tr>
<td>Experimental:</td>
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Table 2: Gender

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Table 3: Race

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APPENDIX B

HUMAN USE APPROVAL
MEMORANDUM

TO: Ms. Sheri Robken and Dr. Rebecca Smith
FROM: Barbara Talbot, University Research
SUBJECT: HUMAN USE COMMITTEE REVIEW
DATE: May 13, 2013

In order to facilitate your project, an EXPEDITED REVIEW has been done for your proposed study entitled:

"The Effect of a District-Wide Literacy Initiative on English/Language Arts Standardized Test Scores"

*HUC 1074

The proposed study's revised procedures were found to provide reasonable and adequate safeguards against possible risks involving human subjects. The information to be collected may be personal in nature or implication. Therefore, diligent care needs to be taken to protect the privacy of the participants and to assure that the data are kept confidential. Informed consent is a critical part of the research process. The subjects must be informed that their participation is voluntary. It is important that consent materials be presented in a language understandable to every participant. If you have participants in your study whose first language is not English, be sure that informed consent materials are adequately explained or translated. Since your reviewed project appears to do no damage to the participants, the Human Use Committee grants approval of the involvement of human subjects as outlined.

Projects should be renewed annually. This approval was finalized on May 8, 2013 and this project will need to receive a continuation review by the IRB if the project, including data analysis, continues beyond May 8, 2014. Any discrepancies in procedure or changes that have been made including approved changes should be noted in the review application. Projects involving NIH funds require annual education training to be documented. For more information regarding this, contact the Office of University Research.

You are requested to maintain written records of your procedures, data collected, and subjects involved. These records will need to be available upon request during the conduct of the study and retained by the university for three years after the conclusion of the study. If changes occur in recruiting of subjects, informed consent process or in your research protocol, or if unanticipated problems should arise it is the Researchers responsibility to notify the Office of Research or IRB in writing. The project should be discontinued until modifications can be reviewed and approved.

*NOTE: The data is public record and aggregate data required for research by Ms. Robken. However, any personal, identifiable data will require consent for use by the researcher.

If you have any questions, please contact Dr. Mary Livingston at 257-2292 or 257-5066.

A MEMBER OF THE UNIVERSITY OF LOUISIANA SYSTEM
APPENDIX C

SUMMARY OF ALL ANALYSIS
APPENDIX C

Summary of All Analysis 2 (year) x 2 (group) ANOVA

| Strand 1: Read, Comprehend, and Respond | *Year Initiative
|                                         | *Year x Initiative |
| Strand 2: Write Competently             | *Year Initiative
|                                         | Year x Initiative  |
| Strand 3: Use Conventions of Language   | *Year Initiative
|                                         | Year x Initiative  |
| Strand 4: Locate, Select, and Synthesize Information | *Year
|                                         | *Initiative       |
|                                         | *Year x Initiative|
| Strand 5: Read, Analyze, and Respond to Literature | *Year
|                                         | Initiative        |
|                                         | Year x Initiative  |
| Strand 6: Apply Reasoning and Problem Solving Skills | *Year
|                                         | Initiative        |
|                                         | *Year x Initiative|
| Overall Effect                          | *Year Initiative
|                                         | Year x Initiative  |

* Significant Difference at the p < .05 level
APPENDIX D

Summary of Means and Standard Deviations

Strand I: Read, Comprehend, and Respond

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**Strand 2: Write Competently**

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**Strand 3: Use Conventions of Language**

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<tr>
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**Strand 4: Locate, Select, and Synthesize Information**

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**Strand 5: Read, Analyze, and Respond to Literature**

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Strand 6: Apply Reasoning and Problem Solving Skills

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Overall Effect

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APPENDIX E

SUMMARY OF ANOVA TABLES
### APPENDIX E

*Summary of ANOVA Tables*

#### Strand 1: Read, Comprehend, and Respond

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**Strand 3: Use Conventions of Language**

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**ANOVA Results - Strand 4: Locate, Select, and Synthesize Information**

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REFERENCES


Louisiana Department of Education (2012). http://www.louisianaschools.net/testing


Strahan, D., & Hedt, M. (2009). Teaching and teaming more responsively: Case studies in professional growth at the middle level. *RMLE Online: Research in Middle Level Education, 32*(8), 1-4.


VITA

Sheri Robken has had a 25-year career in public education at the middle school, junior high school, high school, and university levels. Her career began as a high school and junior high band director that continued on to the university level where she served as the Head of Music Education and the Concert Band conductor. She also taught junior high and high school English/Language Arts in two parishes in north Louisiana for many years. She holds a Bachelor of Science in Music Education from the University of Arkansas in Fayetteville, and a Master of Curriculum and Instruction from Louisiana Tech University. She has been and continues to be a literacy advocate.