READING STRATEGIES IN SECONDARY SOCIAL STUDIES:
TEACHER REPORTED PRACTICE AND PROFESSIONAL DEVELOPMENT

by

Carmen L. Newstreet

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This dissertation was prepared under the direction of the candidate’s dissertation advisor, Dr. Gail Burnaford, Department of Curriculum, Culture, and Educational Inquiry, and has been approved by the members of her supervisory committee. It was submitted to the faculty of the College of Education and was accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

SUPERVISORY COMMITTEE:

_____________________________________
Gail Burnaford, Ph.D.
Dissertation Advisor

_____________________________________
Louise Ball, Ed.D.

_____________________________________
H. James McLaughlin, Ph.D.

_____________________________________
John D. Morris, Ph.D.

H. James McLaughlin, Ph.D.
Chair, Department of Curriculum, Culture, and Educational Inquiry

_____________________________________
Valerie J. Bristor, Ph.D.
Dean, College of Education

_____________________________________
Barry T. Rosson, Ph.D.
Dean, Graduate College

Date
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ABSTRACT

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This quantitative study investigated the relationship between high school social studies teachers’ reading professional development through Project CRISS: Creating Independence through Student-Owned Strategies (CRISS) and the implementation of active reading strategies in the classroom. Quantitative data were collected through an online survey in order to provide a comprehensive picture of high school social studies teachers' self-reported classroom practices relating to the use of active prereading, during-reading, and postreading strategies. Additionally, the survey asked teachers to self-report their observations of student independent implementation of the same active reading strategies. These data were used to provide an in-depth look that expanded on high school social studies teachers' self-reported classroom practices relating to reading. The results of this study indicated that there was no significant relationship between teachers' reading professional development through CRISS and their self-reported classroom practices in the implementation of active pre-, during, and postreading strategies. Further findings indicated no significant relationship between teachers’ reading professional development through CRISS and their self-reported observations of student independent implementation of the same active reading strategies. Lastly, there were no correlations that
indicated that years teaching in the classroom moderated these relationships. Implications and suggestions for future research were offered for future reading professional development for secondary teachers and educational researchers who intend to utilize survey instruments.
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Chapter One

Pulitzer Prize recipient Frank McCourt (1999) described his high school English classroom in his memoir, ‘Tis:

The honeymoon ends and there is a chorus of complaints about these books, how boring they are, how heavy, and why do they have to bring them to school every day? The English students say, Oh, Silas Marner’s a small book, but if they have to carry Giants in the Earth you need a big breakfast, it’s such a big book and it’s so boring. Will they have to carry it every day? Why can’t they leave it in the classroom closet?

If you leave it in the closet how are you going to read it?

Why can’t we read it in class? All the other teachers tell their classes, Okay, Henry, you read page nineteen, okay, Nancy, you read page twenty, an’ that’s how they finish the book and when they’re reading we can put our heads down an’ take a nap ha ha ha, just kidding, Mr. McCourt. (p. 245)

In this scene, students vociferously complain to their teacher about textbook reading, which might be acted out in any secondary content area classroom where students are routinely asked to read. This study sought to discover the reading practices of teachers and students in the secondary social studies classrooms of a large, Southeastern urban public school district. In the decade since Congress passed the No Child Left Behind (NCLB) legislation, there was an acknowledged increase in the teaching of reading and mathematics in the nation’s schools (Azzam, Perkins-Gough, & Thiers, 2006; Crocco & Costigan, 2007; Howard, 2003; McMurrer, 2008; Misco, 2005; Mitsakos & Ackerman, 2009; Neill, 2003; O’Connor, Heafner, & Groce, 2007; Ravitch, 2005; Welner & Oakes, 2008; Wills, 2007). In the current climate of standardized testing and accountability, educators bemoaned the marginalization of social studies instruction.
in elementary schools, where the curriculum reflected increased instructional time for the “tested” subjects of reading, math, and science (Center on Education Policy, 2006, 2007). It was possible students could leave elementary school with no introduction to basic vocabulary, concepts, and structures with which to understand the study of social sciences (Azzam et al., 2006; Howard, 2003; McMurrer, 2008; Misco, 2005; Mitsakos & Ackerman, 2009; Neill, 2003; O’Connor et al., 2007; Welner & Oakes, 2008; Wills, 2007), thus setting them up for future learning gaps.

As Lujan and DiCarlo (2006) pointed out, “Teaching is not telling students what we know but showing students how we learn. Learning is not committing a set of facts to memory, but the ability to use resources to find, evaluate, and apply information” (p. 1). In order to find, evaluate, and apply information, students must be able to read to learn in the content area classroom. Understanding that content coverage was not as important as the process of learning the content was the first step to improving reading comprehension in the content area. Some researchers believed that one can model and teach the active reading practices of accomplished readers to less proficient readers (Alvermann, Phelps, & Ridgeway, 2007; Santa, Havens, & Valdes, 2004; Vacca & Vacca, 2005). These habits of mind emphasized information processing that represented an awareness of and control over cognition, knowing how we learn, and using that knowledge to apply strategies to question and master concepts. Making text-to-self, text-to-text, and text-to-world connections was essential to this process (Keene & Zimmerman, 1997; Palincsar, 1987). To best accomplish this, facilitators utilized a variety of literature in addition to the textbook in the social studies classroom to challenge and enrich the learning process (Allington, 2007; Alvermann et al., 2007; Daniels & Zemelman, 2004; Santa et al., 2004; Vacca & Vacca, 2005).
On the other hand, the high school social studies curriculum was compacted with information; thus, many teachers still relied upon a teacher-directed, lecture method of content delivery and text reading that required students to memorize facts (Chiodo & Byford, 2004; Fang, Fine, Jones, Ray, & Zygouris-Coe, 2006; Kahne, Rodriguez, & Smith, 2000; Misco, 2005; Woodward & Cuban, 2001). Typically, the state of Florida spent a portion of the annual budget each year specifically to train teachers on reading professional development (Florida Department of Education, 2009; University of California, 2000). After more than a decade of focusing secondary teacher professional development on active reading strategy instruction, it was necessary to determine what was happening within the high school social studies classroom to support content area reading.

Statement of the Problem

In addressing literacy in early childhood, two patterns of instruction emerged: learning to read and reading to learn (Chall, 1996). As students progressed from elementary to secondary education, researchers accepted that students progressed from learning to read into reading to learn within the content areas; the instructional focus shifted from teaching reading skills to teaching comprehension based strategies. This transition was documented as a significant learning obstacle for adolescent students in the National Assessment of Educational Progress (National Center for Educational Statistics, 2008) and by many researchers (Alfassi, 2004; Allington, 2007; Alvermann et al., 2007; Brown & Campione, 1990; Hirsch, E., 2003; Fang et al., 2006; Smagorinsky, 2001; Vacca & Vacca, 2005). Nationwide, reading scores among elementary school students improved, but scores were flat among middle school students and slightly declined among high school seniors (National Assessment of Educational Progress, 2008). Secondary schools addressed this problem of students’ mastery of reading to learn content
area literature through the use of reading methods and strategies, as taught by content area
teachers (Alvermann et al., 2007; Atwell, 1998; Moore, Bean, & Birdyshaw, 1999; Santa et al.,

**Significance of the Problem**

The ability to effectively read has always been required for high school graduation. To compute the graduation rate, the United States Institute of Education Sciences used the averaged freshman graduation rate to approximate the percentage of public high school students who graduated on time with a regular diploma. This represented an estimate of the percentage of an incoming freshman class that graduated 4 years later. In the class of 2005-06, the average public high school freshman graduation rate was 73.4%; that is, 2.6 million students graduated on time. The nation’s graduation rate has remained relatively flat: 71.7% in 2000-01, 73.4% in 2005-06. The average freshman graduation rate for the state of Florida was also flat, but significantly lower: 61.2% in 2000-01, 63.6% in 2005-06 (National Center for Educational Statistics, 2009). Clearly, there was a divide between the mandates of state standardized testing and the needs of high school students.

Additionally, Draper, Hall, and Smith (2005) stated that the presentation of social studies content bored students. Students who struggled with language processing found the textbook-bound, heavily language-based activities uninteresting. Apple (2008) reported that 80% of teachers used textbooks to center their classroom instruction and further relied upon the textbook for 80-90% of classroom and homework assignments. Unfortunately, social studies teachers were the most text-bound of any discipline and perpetuated these ineffective practices (Draper, Hall, & Smith, 2005; Ravitch, 2002; Ross, 1997; Yeager, 2000).
Consequently, across the nation, there was a call for high school reform. In Florida, this resulted in an initiative called “High School Reform.” This program had four goals: (1) to increase academic achievement levels of high school students; (2) to increase the percentage of high school graduates; (3) to increase the percentage of graduates who began postsecondary paths to college or career while in a Florida high school; and (4) to change the culture of high school (Florida Department of Education, 2009). In the state of Florida, students were required to successfully complete 1 credit hour in world history and American history, and one-half credit of both American government and economics to attain a high school diploma (Florida Legislature, 2009).

Furthermore, students were unprepared for collegiate level work. As Rouche and Rouche (1999) described,

Students are leaving high school no better prepared than they were in the mid-1960s. In fact, evidence indicates that despite higher grade-point averages, these students’ skills and competencies are at the lowest levels in American history. Moreover, we are not talking only about literacy, or unprepared or underprepared students as viewed from their mastery or their attainment of cognitive skills (p. 1)

In order to increase student academic achievement and graduation rates, students had to gain better access to the requisite social studies curriculum.

Primary schools, where great emphasis was placed on school reading programs, documented the national school reform policy. Yet, at the secondary level, there appeared to be a gap between professional development on research-based knowledge and actual classroom practices (Draper, Hall, & Smith, 2005; Ravitch, 2002). In addition to an explicit reading program, effective secondary teachers focused on content area academics, kept students on task
with clear learning goals, and monitored student progress through questioning and feedback. Indicators of effective teaching practice leading to improved achievement in reading included teacher high-level questioning and performance as a writing coach. In elementary and secondary schools across the nation, strong principal leadership and teacher-leaders worked as teams to lay the foundation for necessary change towards research-based practice and reflective teaching, thus initiating successful school reform (Drago-Severson, 2004; Taylor, Pearson, Peterson, & Rodriguez, 2005). For high schools segregated into academic departments, this information regarding research-based practice and student application of active reading strategies was crucial. Therefore, it was imperative this study tracked the successful teacher implementation of content area reading strategy instruction.

**Purpose of the Study**

The purpose of this study was to investigate urban, public high school (grades 9-12) social studies teachers’ self-reported implementation of active reading strategies in the content area classroom, how this related to teacher professional development, and teachers’ perception of student independent implementation of active reading strategies. While there were many studies of student reading practices at the elementary and middle school level, there was scant research involving the reading of expository literature at the high school level (Alfassi, 2004). Daniels and Zemelman (2004) examined adolescent reading in content area classes; however, their work focused on providing ancillary reading material to the standard textbook, with the goal of engaging and improving student reading practice. It was important to also examine how content area teachers engaged students in reading social studies textbooks.

This study also examines how high school social studies instructional practices supported student reading strategy application according to teachers’ own reports. Results of this study can
inform classroom social studies teachers, secondary reading specialists, and local, state, and national policymakers about which reading strategies, if any, social studies teachers use, ask students to use, and perceive students are using independently. This information is critical to determine future teacher professional development and instructional focus. Content area teachers often presumably explicitly teach active reading strategies that publishers embed in state adopted textbooks, which are the focus of ongoing personal and professional development. With compelling evidence on need and usage, policymakers may make informed decisions regarding funding and support for further professional development for secondary content area teachers in the application of reading strategies for their disciplines.

**Research Questions**

This study addressed the following 12 null hypotheses and 1 research question:

1. There is no relationship between teachers not reporting receiving CRISS training or reading endorsement, and self-reported instruction of active reading strategies in the secondary social studies classroom (H1).

2. There is no relationship between teachers reporting receiving CRISS training and not reading endorsement, and self-reported instruction of active reading strategies in the secondary social studies classroom (H2).

3. There is no relationship between teachers reporting receiving reading endorsement and not CRISS training, and self-reported instruction of active reading strategies in the secondary social studies classroom (H3).

4. There is no relationship between teachers reporting receiving CRISS training and reading endorsement, and self-reported instruction of active reading strategies in the secondary social studies classroom (H4).
5. There is no relationship between teachers not reporting receiving CRISS training or reading endorsement, and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom (H1).

6. There is no relationship between teachers reporting receiving CRISS training and not reading endorsement, and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom (H2).

7. There is no relationship between teachers reporting receiving reading endorsement and not CRISS training, and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom (H3).

8. There is no relationship between teachers reporting receiving CRISS training and reading endorsement, and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom (H4).

9. There is no relationship between teachers not reporting receiving CRISS training or reading endorsement, and the active reading strategies secondary social studies teachers’ self-report students use independently (H1).

10. There is no relationship between teachers reporting receiving CRISS training and not reading endorsement, and the active reading strategies secondary social studies teachers’ self-report students use independently (H2).

11. There is no relationship between teachers reporting receiving reading endorsement and not CRISS training, and the active reading strategies secondary social studies teachers’ self-report students use independently (H3).
12. There is no relationship between teachers reporting receiving CRISS training and reading endorsement, and the active reading strategies secondary social studies teachers’ self-report students use independently (H₄).

13. Is the number of years in the teaching profession a moderating factor in what secondary social studies teachers self-report about students’ use of active reading strategies in the content area?

   a. Is there a correlation between teachers not reporting receiving CRISS training or reading endorsement, and the number of years in the teaching profession and self-reported instruction of active reading strategies in the secondary social studies classroom? (H₁)

   b. Is there a correlation between teachers reporting receiving CRISS training and not reading endorsement, and the number of years in the teaching profession and self-reported instruction in active reading strategies in the secondary social studies classroom? (H₂)

   c. Is there a correlation between teachers reporting receiving reading endorsement and not CRISS training, and the number of years in the teaching profession and self-reported instruction in active reading strategies in the secondary social studies classroom? (H₃)

   d. Is there a correlation between teachers reporting receiving CRISS training and reading endorsement, and the number of years in the teaching profession and self-reported instruction in active reading strategies in the secondary social studies classroom? (H₄)

   e. Is there a correlation between teachers not reporting receiving CRISS training or reading endorsement, and the number of years in the teaching profession and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom? (H₁)
f. Is there a correlation between teachers reporting receiving CRISS training and not reading endorsement, and the number of years in the teaching profession and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom? (H₂)

g. Is there a correlation between teachers reporting receiving reading endorsement and not CRISS training, and the number of years in the teaching profession and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom? (H₃)

h. Is there a correlation between teachers reporting receiving CRISS training and reading endorsement, and the number of years in the teaching profession and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom? (H₄)

i. Is there a correlation between teachers not reporting receiving CRISS training or reading endorsement, and the number of years in the teaching profession and the active reading strategies secondary social studies teachers’ self-report students use independently? (H₁)

j. Is there a correlation between teachers reporting receiving CRISS training and not reading endorsement, and the number of years in the teaching profession and the active reading strategies secondary social studies teachers’ self-report students use independently? (H₂)

k. Is there a correlation between teachers reporting receiving reading endorsement and not CRISS training, and the number of years in the teaching profession and the active reading strategies secondary social studies teachers’ self-report students use independently? (H₃)
1. Is there a correlation between teachers reporting receiving CRISS training and reading endorsement, and the number of years in the teaching profession and the active reading strategies secondary social studies teachers’ self-report students use independently? (H4)

Theoretical Framework

The study was based upon a theoretical framework drawn from Young, Levin, and Wallin (2007), who analyzed curriculum decisions utilizing five overlapping categories: Issues, Actors, Processes, Influences, and Results. The study was an analysis of locally enacted active reading strategy curriculum driven by governmental policy.

Benjamin Levin, Ontario, Canada’s former Deputy Minister for Education, used literature and personal experience to examine the basis for governmental policy decisions (2008). He perceived voters as informing the actions of politicians, attempting to control and manage educational policy. Unfortunately, the whims of the public varied; the media influenced what people knew. Levin made the assertion (without citation) that citizens’ satisfaction levels regarding their schools was higher than their satisfaction for the system as a whole. He posited that negative media coverage drove voters’ systemic beliefs, rather than their realities. As a high level government official, he had firsthand knowledge of how policy decisions came to life – driven by an ill-informed electorate and accomplished hastily without much consideration for the facts (Levin, 2008). Young et al. (2007) elaborated, “Indeed, when we examine the historical record and see how sure people were about the rightness of policies we now see as completely misguided, we should be less sanguine about our current practices and keep in mind for years from now these too may well be seen as erroneous and unproductive” (p. 72). This became important to situate the study. After government made curricular decisions, researchers evaluated
the impact – were students learning what they were taught? The study sought to elucidate whether the focus on high school social studies teachers as reading teachers and the subsequent use of financial resources on reading strategy professional development was important as information to contribute to policy decisions regarding professional development. The study further sought to determine whether high school social studies teachers saw their own students utilize reading strategies – a crucial assumption of the professional development focused on reading.

The framework that Young et al. (2007) used for analysis was perhaps most interesting for the study. They proposed that issues, as described above, became the catalyst for establishing curriculum. Levin further elaborated that in the United States, the NCLB Act was the catalyst. Meant to drive national systemic reform, the Act proposed high levels of educational accountability implemented at the local level to feed educational practice and student achievement. Levin also acknowledged that disciplinary content could not be separated from teaching practice (Levin, 2008). These ideas formed the background for the study: accountability measures shifted emphasis in the secondary content areas to apply pedagogical approaches to reading through teacher active strategy instruction and student implementation. The study sought to identify the teacher’s response to accountability measures in the secondary social studies classroom of teaching active reading strategies in conjunction with content.

The second framework category was actors. Many participants debated curriculum. Districts and schools determined the focus of teacher professional development. NCLB established student achievement standards and school grading requirements that affected teacher practice. Levin posited that accountability results were only effective if the tests measuring student achievement aligned to curricula and methods. Further impacting this element was the
overarching NCLB mandate and definition of providing a “highly qualified” teacher in every classroom (Levin, 2008). The actors in the proposed study were recognized. The local school district and schools provided teacher professional development for reading in the content areas, and teachers were expected to implement learned strategies. Did students internalize the new practice? The study sought to investigate teacher perceptions of student independent use of active reading strategies.

The third framework consideration was the processes of curricular decisions. Levin discussed the dangers of complex curricula designed by subject area experts and not easily understood by teacher practitioners as creating a gap between the curriculum and actual teaching and learning. He argued that attempting to connect curricula with professional development to change teacher practice was not likely to be successful (Levin, 2008). This was the fulcrum of the study. The merit of teaching active reading strategies in the content area classrooms was well documented (Alvermann et al., 2007; Santa et al., 2004; Vacca & Vacca, 2005). In the secondary social studies classroom, students needed to be able to read and comprehend expository text, yet there was little teacher instructional support in active reading strategies for this undertaking. Additionally, local, state, and national standardized tests contained informational text of social studies content which students were required to negotiate (McNamara, Ozuru, Best, & O’Reilly, 2007; Ogle & Blachowicz, 2002). Subsequently, Florida’s Reading Endorsement requirements directed teacher practice in content area reading, and the local school district implemented teacher workshops facilitating Project CRISS: Creating Independence through Student-Owned Strategies (CRISS) (Santa et al., 2004) to guide teacher practice in reading strategies implementation in content areas. The District assumption was that this systemic approach of continuous professional development resulted in improved teacher job performance (District
The study sought to investigate teachers’ self-reported implementation of active reading strategies in the social studies classroom and how that performance related to teacher professional development.

The fourth element in the framework was influences – what shaped decisions? Levin (2008) posited the role of research in contributing to teacher practice as increasingly important. He also pointed out the gap between research results and policy choices. When there were contradictory research findings, the public naturally fell back to its position of strength and reverted to personal and fundamental beliefs that flew in the face of empirical evidence. Of particular interest regarding the study was the acknowledgement that curricular review was not informed by data. Young et al. (2007) noted, “Schools continue to use certain kinds of instructional approaches . . . without collecting very much evidence as to how well these practices work . . . it seems odd that there is so little reflecting on the results of our own actions” (p. 94). The local school district implemented the Project CRISS curriculum and influenced secondary social studies teachers through workshop attendance to adopt new teaching methods in the classroom.

Lastly, the framework called for analysis of results. Levin (2008) stated that curriculum decisions were brought to life by practitioners and were subject to individually applied practical limits during implementation, possibly marginalizing the curriculum through inadequate implementation. Young et al. (2007) explained, “In schools, we have learned that writing new curriculum documents will not in itself change what teachers teach or how they teach . . . The success of a policy depends on the people who have to put it into practice; in schools, this is most often teachers and students” (p. 94). For the purposes of the study, it was incumbent the local
district assessed its curriculum decisions. Have students internalized active reading strategy instruction, according to their high school social studies teachers?

Curriculum decisions were analyzed using the lenses of five categories: issues, actors, processes, influences, and results. The framework grounded the study and formed the intersection among the five factors, which were overlapping entities, not separate identities.

**Definition of Terms**

Secondary content area teachers learned the vocabulary of reading instruction through teacher professional development. Understanding this vocabulary was a prerequisite to implementation of active reading strategies in the content area classroom.

*Anticipation guides:* Students responded to several statements related to a reading selection or topic with “agree” or “disagree” (Dufflemeyer, 1994; Santa et al., 2004).

*Brainstorming:* Students and teacher used a group creativity technique designed to generate a large number of ideas regarding an idea/concept (Jones, 2009; Osborn, 1953; Santa et al., 2004).

*Comprehension questions:* Student- and teacher-generated questions spiraling from lower to higher order thinking regarding reading (Bloom, 1956; Santa et al., 2004).

*Concept maps/Web notes:* Students designed a graphic or pictorial concrete representation of the relationship among ideas, organizing super-ordinate and subordinate components of a concept (Barron, 1969; Johnson & Pearson, 1984; Santa et al., 2004; Schwartz & Raphael, 1985).

*Cornell/Column notes:* Students divided their papers into two columns and recorded main ideas in the left column and supporting details in the right column (Pauk, 1965; Santa et al., 2004).

*Content charts/frames:* Students created a chart as an organizational structure to analyze the interrelationship of ideas (Armbruster, Anderson, & Meyer, 1991; Santa et al., 2004).
Fishbowl/concentric circle discussion: Students formed two concentric discussion circles to review or explain key concepts in reading (Priles, 1993; Santa et al., 2004).

Highlight/selective underlining: Students used markers or pens to highlight/underline main ideas in text (Poostay, 1984; Santa et al., 2004).

K-W-L chart: Students brainstormed what they knew about a topic, generated questions about what they wanted to learn through study, and recorded what they learned (Ogle, 1986; Santa et al., 2004).

Learning logs/journal entries: Students produced written entries to process thinking; logs took the form of free writing, explanations, observations, or personal thoughts (Alvermann, Phelps, & Ridgeway, 2007; Santa et al., 2004).

One sentence summary/chalk talk discussion: Students listed ideas and words about a concept and then utilized these to synthesize information either orally or in a written format (Santa et al., 2004).

Outline/power thinking: Students created a written organizational tool for reading, writing, and studying, by assigning main ideas and supporting details with different numbers/letters (Arthaud, 2006; Santa et al., 2004; Sparks, 1982).

Professional development: Teachers employed a systemic approach of continuous professional growth through the planning, delivery, follow-up, and evaluation that resulted in improved job performance and increased student achievement, which must be results-driven, standards-based, and job-embedded (District Internet web address removed for confidentiality).

Project CRISS: Creating Independence Through Student Owned Strategies Reading In-service Training (CRISS): Teachers participated in a professional development program that was part of
a system-wide effort to improve and integrate the ongoing development and support of educators in the area of reading (Santa et al., 2004; U.S. Department of Education, 2001).

Reading endorsement designation: Teachers participated in a program of study that prepared teachers to teach reading at the grade level of their base certification to any student (Florida Department of Education, 2009).

Reading strategy: Goal-directed cognitive operations over and above the processes that were a natural consequence of reading (Sinatra, Brown, & Reynolds, 2002).

Reading with note taking support (i.e., active reading strategy): A process whereby students do activities during-reading to facilitate comprehension (Santa, 1988).

Reading without support: A process of reading without any note-taking support (Tompkins, 2003).

Skim reading: Students identified the main ideas of a text at a speed three to four times faster than normal reading; this strategy was useful when seeking specific information rather than reading for comprehension (Santa, 1988; Thematic Pathfinders for All Ages, 2001).

Socratic/seed discussion: Students considered important topics from a reading for the purpose of discussion (Parker & Hess, 2001; Santa et al., 2004).

Timeline: Students developed a sequence organizer to analyze events, changes, or processes (Gallaher, 2004; Pressley, 2001; Santa et al., 2004).

Venn diagrams: Students designed diagrams of overlapping circles/shapes to record similarities and differences among concepts, characters, and events (Santa et al., 2004; Venn, 1881).

Whole class discussion: Typically led by the teacher, all students in a classroom situation participated in conversation about content (Alvermann et al., 2007; Nystrand, Gamoran, Kachur, & Pendergast, 1997; Santa et al., 2004).
Chapter Two

Literature Review

This literature review examined the national policies driving reading comprehension instruction in the secondary social studies classroom, the developmental history of active reading strategies, and the professional development processes utilized by an urban educational district to improve teacher expertise.

Issues

We have entered an age in which education is not just a luxury permitting some men an advantage over others. It has become a necessity without which a person is defenseless in this complex, industrialized society. We have truly entered the century of the educated man. (Cervantes, Creusere, McMillion, McQueen, Short, Steiner, & Webster, 2005)

In 1963, this excerpt from a commencement speech by then United States’ Vice President Johnson expressed the era’s tone and researchers examined the issues that drove the teacher’s response to accountability measures in the content area of secondary social studies using historical lenses. On October 4, 1957, the Union of Soviet Social Republics launched Sputnik, the first artificial satellite to orbit Earth. It was closely followed by a second launch of a larger satellite that carried a dog (National Aeronautical and Space Administration, 2007). These events galvanized the United States of America (U.S.) to evaluate its leadership position in the world of politics and science, and forced a close examination of the American public education system. Policymakers and theorists determined that U.S. students fell behind their Soviet counterparts in science and mathematics achievement. A sense of urgency prevailed and increased the focus on science and mathematics instruction in public schools (Bruner, 1960; Kliebard, 2004). Thirty years after Sputnik, President Reagan’s U. S. National Commission on Excellence in Education
published *A Nation at Risk* (1983), and charged again, “others are matching and surpassing our educational attainments.” The government asked the American public for increased funding for education and support for reform of the educational system. During the 1990s, the U.S. Congress announced goals for standards-based educational reform. In 1994, the *Goals 2000: Educate America Act* became law; this act provided minimal funding and, “supports State efforts to develop clear and rigorous standards for what every child should know and be able to do, and supports comprehensive state- and district-wide planning and implementation of school improvement efforts focused on improving student achievement to those standards” (U.S. Department of Education, 1998). In 2001, President George W. Bush and Senator Ted Kennedy joined forces, and the *No Child Left Behind (NCLB) Act* was authorized; this act reinforced many ideas initially proposed in *Goals 2000*. NCLB was reauthorized annually and required that “all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments” (U.S. Department of Education, 2001). To ensure this, the act required all content area teachers to be certified as “highly qualified.” The government defined “qualified” as an individual who held a bachelor’s degree and state certification and demonstrated competency in the teacher’s subject area. NCLB demanded this proficiency to increase the quality and effectiveness of the education system in raising achievement for all students (U.S. Department of Education, 1998).

In response, educational, political, scientific, and social communities announced changes in national policies, which led to the creation of specific content area standards by educational organizations. In the 1990s, disciplines published standards to which the professional teaching force was expected to adhere. First, the National Council of Teachers of Mathematics (NCTM)
published the *Professional Standards for Teachers of Mathematics* in 1991 and described elements of effective mathematics instruction. The National Council for the Social Studies (NCSS) followed suit in 1994 with the publication of *Expectations of Excellence: Curriculum Standards for Social Studies* as a framework for the disciplinary integration of U.S. and world history, civics and government, geography, global education, and economics. The standards sought an integrated social science, behavioral science, and humanities approach that guided school stakeholders towards student attainment of academic and civic competence with the overall goal of creating effective citizens. Effective social studies programs included the study of ten broad themes outlined in the standards. Finally, the National Council of Teachers of English (NCTE) created the *NCTE/IRA Standards for the English Language Arts* (International Reading Association and the National Council of Teachers of English, 1996). Professional groups of educators wrote standards in reaction to the national concern over the lack of standardized goals in U.S. public education. Politicians declared education was a federal government priority, particularly in the areas of math and reading. Accordingly, content area teachers observed that they must adapt to these changes that emphasized the importance of math and reading in a tacitly agreed upon national curriculum.

**Actors**

We begin with the hypothesis that any subject can be taught effectively in some intellectually honest form to any child at any stage of development. (Bruner, 1960, p. 30)

Bruner’s comment set the stage for the two actors who played lead parts in the secondary social studies content area classroom: teachers and students. Social studies teachers were responsible for teaching content and their students would emerge from their classrooms capable of living, working, and contributing to a democratic society. Content area reading
comprehension instruction research started when Durkin published her seminal criticism, *What classroom observations reveal about reading comprehension instruction* (1978), and stated that little occurred during intermediate elementary social studies instruction that could be identified as comprehension instruction. Durkin’s work initiated the idea that content area teachers were responsible for teaching reading skills in addition to disciplinary content and thus led directly to the study.

**History of Reading Strategies Development.** There were two dominant approaches to teaching reading in the content area classroom. The strategies comprehension approach centered on teacher directed instruction of specific procedures to support content reading; these included Two Column Notes, Reading Anticipation Guides, and Web Format Notes. Students used these strategies to work with expository text. The content approach to comprehension focused on keeping student attention directed towards reading the content and working through the text to build a new representation of textual ideas through discussion or further written processing of the material. Reading comprehension was understood as a complex, cognitive endeavor, affected by the reader, the text, and the context (Rumelhart, 1977). The study posited that these two broad approaches to content area reading were best understood by looking at teacher implementation of pre- and post-reading activities, along with during-reading strategies.

The focus of prereading strategies was making background knowledge accessible to support students as they read. Studies examined background knowledge to observe how it functioned (Anderson & Pearson, 1984), and how it was activated. Studies with primary grade children (Beck, Omanson, & McKeown, 1982; Pearson, Hansen, & Gordon, 1979) and 5th grade social studies students (McKeown, Beck, Sinatra, & Loxterman, 1992) examined the effects of background knowledge and demonstrated that activation of prior knowledge positively enhanced
students' comprehension. The study considered teacher use of prereading strategies in the high school social studies classroom.

Two other aspects studied in prereading strategies were the establishment of reading purpose and vocabulary instruction. Research showed the positive effects of establishing reading purpose (Tierney & Cunningham, 1984), and this became standard practice in content reading (McKeown, Beck, & Blake, 2009). Teaching vocabulary enhanced text comprehension, if students built meaningful associations to their knowledge base and if text instruction provided more than a brief definition (Baumann, Kame'enui, & Ash, 2003). The study examined teacher use of prereading strategies that established student purpose for reading and taught vocabulary in the secondary social studies classroom.

After-reading strategies typically fell into two categories: teacher questioning or class discussion. Anderson and Biddle (1975) first reported that asking students questions after reading yielded better comprehension than a teacher’s oral textual review. Researchers then focused attention on effective question structure and technique. Examples of effective content reading questions included those asked about important text information (Rickards, 1976), application questions (Rickards & Hatcher, 1977-1978), and high-level questions (Yost, Avila, & Vexler, 1977). Beck and McKeown (1981) developed story maps to help teachers design postreading questions based on the importance and sequencing of text information. More recent research on teacher questioning pertained to the amount of time teachers wait for students to elicit an answer; more time provided students the opportunity to think about answers to questions and increased response, accuracy, and length (Rowe, 2003). The study examined teacher use of questioning as a comprehension facilitator.

Another opportunity to increase student content comprehension after reading was
interpretive discussion. In social studies classrooms these discussions typically focused on asking students to consider a “big question” that arose from text and fostered critical and/or reflective thinking about text ideas (McKeown et al, 2009). Curriculum approaches to interpretive discussion backed by evidence of success in the secondary social studies classroom included *History Alive!* (Teachers Curriculum Institute, 1990), *Junior Great Books* (Great Books Foundation, 1987), and *Philosophy for Children* (Institute for the Advancement of Philosophy for Children, 1980). These programs provided reading material and guided questions for students and teachers; teachers attended specialized training to implement these curricula with fidelity.

During-reading interventions increased readers’ text interactions (Rosenblatt, 1985). During-reading interventions studies began as reviews of questions inserted into text. Studies of high school social studies students by Watts and Anderson (1971) and of high school science students by Rothkopf (1966, 1972) suggested that when students responded to questions during-reading, their reading comprehension was stronger than if they simply read the text. Tierney and Cunningham, in their review of comprehension instruction in the *Handbook of Reading Research* (1984), suggested that researchers needed deeper understanding of during-reading questions, including tying question types to models of text, to the reader, or to mental processes. The study sought to determine teacher implementation of questioning styles, written and oral, as a means of aiding student comprehension of reading material. Further, it sought to determine the active reading strategies teachers utilized in the high school social studies classroom.

The strategies and content approaches designed to increase reading comprehension developed in response to models of mental processing. The strategies approach developed from models of thinking and learning processes, and the content approach originated from models of text processing. A common factor within both approaches is that learners needed to be mentally
active to process text successfully. Consequently, both approaches attempted to increase active student reading engagement (McKeown et al., 2009).

A major distinction between the two approaches was that active reading strategy instruction encouraged students to think about their mental processes; based upon that, readers independently utilized specific strategies to interact with the text (Graesser, 2007; Santa et al., 2004). In comparison, content instruction engaged students in attending to text ideas and then built different representations of the ideas without specific consideration of mental processes (Billmeyer & Barton, 1998).

**Active Reading Strategies.** The concept of teacher provided instruction in active reading strategies for dealing with text originated in developmental psychology theory that established the active nature of learning. In *Experience and Education*, John Dewey (1938) posited,

> The effect of an experience is not borne on its face. It sets a problem to the educator. It is his business to arrange for the kind of experiences which, while they do not repel the student, but rather engage his activities are, nevertheless, more than immediately enjoyable since they promote having desirable future experiences. (p. 27)

Brown and Smiley (1978) first investigated the extent to which high school students used various strategies such as note taking and underlining for studying. They concluded it might be possible to improve the reading comprehension of low achievers by teaching them effective study strategies. Palinscar and Brown (1984) furthered this work and developed the concept of reciprocal teaching, a teacher directed instructional approach that taught middle school students to apply strategies of summarizing, questioning, clarifying, and predicting text while reading. Researchers conducted experiments that taught strategies for general learning tasks that included categorization, elaboration, and rehearsal (Brown, Bransford, Ferrara, & Campione, 1983).
These studies informed the study as it sought to examine which active reading strategies secondary social studies teachers utilized.

Strategies instruction also found its beginnings in models of thinking. Baron-Cohen, Leslie, and Frith (1985) compared the thought processes of autistic children to normal children. Sternberg originally examined the levels of organization individuals brought to mental processing for the U.S. government (1979); his later work focused on creativity and giftedness (2007). These authors emphasized that during the problem-solving process, adept thinkers employed three specific strategies: goal identification, progress monitoring, and evidence evaluation. Based on this work, researchers believed that providing students with specific procedures to employ during-reading could facilitate comprehension. Therefore, Pressley, El-Dinary, Gaskins, and Schuder (1992) developed a theory of transactional strategies instruction. The teacher explained and modeled active reading strategies and used these strategies to enable students to engage in discussion. The study sought to determine what types of support were in place to engage students in discussion after reading in the secondary social studies classroom.

Programs of strategy instruction in elementary education by Paris, Cross, and Lipson (1984) and Duffy et al. (1987) also influenced strategies instruction. Paris et al.’s informed strategies for learning were based upon students developing an awareness of reading goals and the use of strategies to pursue the goals (1984). Instructors taught students to evaluate, plan, and regulate comprehension to build processing awareness. The strategies included understanding the purposes of reading, activating background knowledge, attending to main ideas, evaluating critically, monitoring comprehension, and drawing inferences. Duffy et al. emphasized self-regulation and monitoring and focused on using strategies to improve comprehension for low achieving readers (1987). They emphasized the role of the teacher in the direct explanation and
modeling of strategies instruction. Of particular interest in later programmatic approaches to the study was the work of Anderson and Roit (1993), who demonstrated successful implementation of reading strategies with learning gains for slow readers in grades 6-10. Block (1993) also reported success of teacher modeling of a reading strategy with students in grades 2-6 and subsequent student use with self-selected literature. Klingner, Vaughn, and Schumm (1998) worked with small groups of fourth grade students and utilized prereading, during-reading, and postreading activities on social studies expository text. Their results demonstrated that students who utilized active reading strategies made greater comprehension gains than students who utilized no strategies. This body of work with elementary school children and impaired secondary reading students demonstrated the successful application of reading strategies by these students. The study sought to contribute to the literature regarding high school students’ reported independent implementation of reading strategies according to high school social studies teachers.

The National Reading Panel (NRP) report (National Institute of Child Health and Human Development [NICHD], 2000) concluded, “the past two decades of research appear to support the enthusiastic advocacy of instruction of reading strategies” (p. 4-46). Seven strategies supported by research for improving student reading comprehension are: comprehension monitoring, cooperative learning, graphic and semantic organizers, question answering, question generation, story structure, and summarization. The NRP summarized the effectiveness of each strategy and teacher preparation for reading instruction. Further, it acknowledged the preponderance of research at the elementary and intermediate level, and specifically indicated the need for secondary level research. Additionally, the NRP specified the need for studies showing the impact of teaching reading strategies on content area achievement, rather than its
transfer to general reading comprehension standardized examinations (NICHD, 2000). The study examined these areas in its attempt to add to the understanding of reading needs at the secondary level of education.

**Content Reading.** As demonstrated above, theories of thinking and learning motivated reading strategies instruction. Constructionist models also developed to explain specifically how readers processed and made sense of text. Kintsch and Van Dijk (1978) posited the theory that readers chunk information while reading. In order for reading comprehension to occur, the reader activated long-term memory. Trabasso and Van den Broek (1985) demonstrated a student’s ability to form causal links between story events aided narrative text retention and comprehension. Graesser, Singer, and Trabasso (1994) provided another constructivist model, based on reader created inferences during narrative text reading. Interestingly, their study explicitly disregarded the expository text found in most social studies classrooms because readers lacked the appropriate background knowledge with which to formulate inferences. Van den Broek, Rapp, and Kendeou (2005) provided the theoretical roots to the content approach to comprehension and thus to expository text applications. They posited that text processing focused on the coherence of presented ideas based on a student’s ability to meaningfully organize text elements. The student read through text and identified each new piece of information, determined how it related to already provided information, and how it related to the individual’s background knowledge. Subsequently, researchers identified reading comprehension by what readers did with acquired text information to represent it and integrate it into their personal knowledge base. Teachers trained in the CRISS curriculum acquired knowledge about active reading strategies that they integrated into their secondary content classrooms. They also received instruction on postreading strategies that enabled their students to further synthesize
textual content. These constructivist approaches were an integral part of the study, which sought to determine teacher and student use of these models to improve their content area reading.

The text processing perspective of comprehension suggested that content orientation provided direction for instructional intervention. Comprehension enhancement was originated by readers who searched for meaning while reading through the text, rather than students who considered when and how to call up specific strategies to deal with new information. Numerous researchers believed that text-processing approaches were alternatives to the direct teaching of active reading strategies (Baker, 2002; Dole, Duffy, Roehler, & Pearson, 1991; Gersten, Fuchs, Williams, & Baker, 2001; Kucan & Beck, 1997; Pearson & Fielding, 1991).

The research on content-focused approaches was more limited than that of strategies approaches. These approaches reflected Kintsch's (1998) two-phase construction-integration model: during the construction phase, the reader processed text information; during the integration phase the reader analyzed, synthesized, and evaluated ideas from the text. Other approaches that centered on meaningful discussion about text included a social cognitive aspect where the class formed an interpretive community that worked together to construct meaning from the reading. Described as collaborative discussion, the focus initiated with a theme or issue-related question contained in the text. Discussion approaches included instructional conversations (Saunders & Goldenberg, 1999), collaborative reasoning (Chinn, Anderson, & Waggoner, 2001), dialogic instruction (Nystrand, Gamoran, Kachur, & Prendergast, 1997), and Junior Great Books (Alvermann, Dillon, O’Brien, & Smith, 1985).Nystrand et al. (1997) elaborated,

Certain kinds and features of classroom talk and writing assignments (e.g., discussion, authentic questions, journals, drafts, “learning logs,” . . . afford far more opportunity and
flexibility than others (e.g., most exams and essays used for examining purposes) for students to contextualize and assimilate new information. (p. 29)

In a major study of secondary Language Arts programs across the U.S., Applebee, Langer, Nystrand, and Gamoran (2003) noted that discussion approaches varied, presenting with different vocabulary and routines. However, the form and focus of interventions overlapped, and "comprehension of difficult text can be significantly enhanced by replacing traditional I-R-E (Initiation-Response-Evaluation) patterns of instruction with discussion-based activities" (p. 693). Nystrand et al. (1997) observed that discussions built around text promoted problem solving, comprehension, and increased learning in the secondary English classroom. Subsequent studies of secondary English and social studies classrooms found that productive discussions featured open ended questions, more student than teacher talk, student interpretation, and teacher reactions based on students' responses (Chinn, O'Donnell, & Jinks, 2000; Nystrand, Wu, Gamoran, Zeiser, & Long, 2003). Thus, classroom discussion-based practices and the implementation of active reading strategies instruction were effective in strengthening student reading comprehension. The study purported to examine the frequency teachers’ self-reported utilization of postreading discussions to improve student reading comprehension.

**Current Research.** McKeown et al. (2009) recognized that there was no clear focus on how to proceed with active reading strategies instruction in the content area classroom. To make informed instructional decisions, subject area teachers needed to know which active reading strategies to use, how to teach them, and how to help students apply them during-reading. Current research provided no answers to these considerations (McKeown et al., 2009). Research identified numerous effective strategies. Interest in this work originated with the National Reading Council (NRC) report (Snow, 1998) that summarized the literature regarding the skills,
environments, and early developmental content necessary for the acquisition of beginning reading skills. The NRP report built upon and expanded the NRC work. It provided comprehensive, formal, evidence-based analysis of the research, assimilating overlapping and different sets of active reading strategies that claimed effectiveness. The NRP purported that none of these studies was conclusive and that the issue demanded more study, notably in the secondary (grades 9-12) level of schooling (NICHD, 2000). More recent research advocated the instruction of multiple strategies, the provision of teachers and students with a “tool kit” from which to select appropriate strategies. However, the research was inconclusive as to which set of strategies to teach under what circumstances (McKeown et al., 2009). The study sought to evaluate the effectiveness of a particular intervention (CRISS) featuring a select number of active reading strategies, suggesting whether teacher professional development on a particular set of strategies increased student independent usage of the strategies and thereby increased student reading comprehension.

Further, the research did not indicate procedures for how to teach active reading strategies. One problem was definitional; strategy labels were not consistent from study to study and frequently contained different sets of activities. McKeown et al. (2009) analyzed 18 studies from the NRP (2000) report that demonstrated positive results in summarizing. They reported that in one study, students were taught steps to create a summary. Then, in another study, teachers asked students questions about text content, leading students to draw an inference about a character’s actions. They found similar inconsistencies in studies labeled comprehension monitoring. One study instructed students in activating prior knowledge, setting reading purposes, generating and answering pre-questions, forming hypotheses, verifying or rejecting hypotheses, evaluating predictions, and summarizing. Another study in the same category
included students learning metacognitive approaches for considering text and underlining problems found within text. Obviously, reading comprehension monitoring activities vary and studies included activities labeled as other strategies, such as summarizing and asking questions (McKeown et al., 2009). The study sought to ameliorate this discrepancy in the research by providing access to a sample of teachers who had common reading professional development experiences and therefore acquired similar vocabulary regarding their reading strategy practices in the classroom.

The research provided an inconsistent picture of effective active reading strategies and analysis of their effectiveness. Research in content area reading comprehension provided very general information about how teachers bring students into discussion or about how teachers learned productive questioning techniques. McKeown et al. (2009) concluded the educational practice of focusing on what is important and making verbal connections with text engaged readers in summary and inference making without explicitly teaching the strategies. The researchers deduced that outcomes measured in content approaches included discussion quality and discussion-based story comprehension (McKeown et al., 2009). The study sought to correlate teacher instruction in active reading strategies and postreading discussions, providing a connection to which processes were featured more heavily in the secondary classroom.

Processes

The relation of thought to word is not a thing but a process, a continual movement back and forth from thought to word and from word to thought. In that process the relation of thought to word undergoes changes which themselves may be regarded as development in the functional sense. (Vygotsky, 1934)
Vygotsky identified language acquisition as a developmental process; that process continues to grow as the student transfers learning the spoken word, to the one written on a page. Learning outcomes through reading text in the secondary social studies content area classroom were influenced by teacher practice. The professional development processes of Project CRISS in-service training and the attainment of Reading Endorsement may mediate this practice.

**Teacher Practice.** Wilson’s literature review (2001) suggested the most frequent teacher practices in the secondary history classroom: heavy textbook reliance, a dominance of teacher lecture and recitation, weekly quizzes and individual assignments interwoven with an occasional video. She posited a need to define accomplished teaching and to link that pedagogy to student learning, thus setting the purpose for the study (2001). A review of the literature by Seixas (2001), distinct to the social studies classroom, noted similar issues. He further described the importance of teaching students to critically read and interpret various texts in addition to the textbook. Barr (2001) noted the research supporting instruction of reading strategies in content area classrooms to facilitate student reading and comprehension. She observed that change in teacher practice is negotiated between university researchers and teachers. Changes in content classroom pedagogy were complicated by teacher beliefs and goals, which were conflicted. She said, “Yet ambivalence remains, which is shown most clearly by those who seek representations of practice to guide the professional development of experienced and novice teachers” (p. 407). The question then developed for the study, how might a district seek to foment change in the pedagogy of the content area classroom?

Guskey (2003) analyzed 13 lists of effective professional development program characteristics and found there was little agreement as to what comprised effective programming. This process was made more difficult by the gap of linking professional development to student
achievement. He further found that most professional development took place in a real world context and made it difficult to define a single answer as to what constituted effective programming. Lastly, he advised that differences within school populations were more magnified than those at the district or state level. One solution was to orchestrate efficient professional development by tapping effective school-based teachers and promoting their successful practices, thereby providing programming within the local context.

Another approach to change teachers’ practice described by Chin and Benne (1969) was to utilize an empirical-rational strategy. In this mode, change agents, policymakers, and educators perceived teachers as recipients and consumers of research and practice. From this, change originated outside the classroom with a new behavior, way of thinking, or instructional program based on research and/or theory. Teachers were told about the necessary change topic, it was demonstrated to them through professional development, and they were expected to implement it in their classrooms. Authorities outside the classroom held the power over change, and teachers were described as noncompliant and oppositional when change was not implemented in the classroom. The study focused on teachers’ application of reading strategies that they presumably learned in professional development workshops, and further investigated whether the expectation Chin and Berne described and critiqued in this model was demonstrated.

Richardson and Placier (2001) summarized the literature that analyzed this training model. Workshop participation succeeded only when teacher beliefs matched program assumptions. They cited a workshop program implementation level of approximately 15%. Assuming successful completion and program implementation, a study of elementary school teachers found that, by the third year following staff development, teachers implemented the program with less fidelity than in previous years. The researchers concluded,
Unless teachers internalize teaching strategies so that they feel comfortable using the strategies and teaching is made easier and more fun, teachers will stop using the strategies when the staff developers leave. Strategies that have been learned superficially will eventually be disregarded. (Stallings & Krasavage, 1986, p. 137)

As the change agent in the proposed study arose from the district and was delivered to the teachers through professional development, the question of successful program execution and follow-through after many years of implementation was one that required study. Further, Richardson and Placier (2001) indicated the need for studies involving teacher change as it impacts student learning, situating the study in the literature. The study was relevant in that it investigated teachers’ self-reported implementation of professional development, correlated with years in the teaching profession.

**Project CRISS.** One urban district’s answer to the challenge of school reform and the quandary over instructional practice was the implementation of a research-based program for lessons on common texts, Project CRISS: Creating Independence through Student-owned Strategies (Santa et al., 2004). This implementation took the form of teacher professional development. In the 1980s, the National Diffusion Network (NDN), a part of the U.S. Office of Educational Research, noted Project CRISS as an exemplary high school program to teach students how to maximize their learning through reading, writing, talking, and listening in content area classrooms (Santa et al., 2004). The local district whose social studies classrooms were the sites for the study adopted the program during this period of time. Further, Project CRISS was implemented across the U.S., as well as in Canada, Egypt, and Norway (Santa et al., 2004).
Authors of the program claimed that CRISS strategies instruction led to Florida students performing “significantly better on reading and studying evaluations than did students in control classrooms without a CRISS focus” (Project CRISS, 1993). The referenced study was executed during 1993 in Putnam County, Florida, described by program authors as “working middle class,” with demographics of 77% white, 20% black, and 3% Hispanic. There were three other research projects cited on the CRISS program website, all conducted in the far west of the U.S., the latest in 2003-2004 (Project CRISS, 1993). The research section of the Project CRISS website listed five teacher action research studies that claimed proven results. A perusal of the five studies yielded little information; these were 1 page summaries of teacher work. The work followed no action research report protocols, ranged across grades 4 to high school, and included a variety of disciplinary interests; however, all five study participants taught in Kalispell, MT. The 2006 demographics for the 18,932 residents of Kalispell are 94% white, 2% black, and 2% Indian; these residents had a median income of $40,110 and were relatively younger than the rest of the U.S. population (MuniNetGuide, 2009). In 2009, Project CRISS claimed Addison Trail High School as one of its success stories. The principal was proud of making Adequate Yearly Progress in 2009 and credited CRISS professional development as part of its success (Project CRISS, 2009). This school had an enrollment of 1,885 students with a student body 50.4% Caucasian, 2.4% African American, 39.8% Hispanic, and 5.3% Asian; 23.8% of these students were classified as economically disadvantaged (Standard & Poors, 2009). Based on these findings, it appeared there was a need for the Florida district that encompassed a much different student and teacher demographic to evaluate the effectiveness of this program’s implementation. The study was situated to accomplish that task.
The CRISS professional development program consisted of a 2-3 day workshop. During this time, teachers learned the CRISS philosophy and attempted multiple active reading strategies the program promotes. The program authors purported that CRISS was most successful when teachers and administrators worked together and supported program implementation with fidelity (Santa et al., 2004). The program was expensive. The website listed costs of the Level I training (limited to 30 participants) at $65 per teacher; the cost lowered to $50 per teacher if the trainer for the session was housed in the district. Level II training was called Training of Trainers, and Master Trainers conducted this level. This session was limited to 12 teachers per class. District cost for this program level was $250 per participant and included a prerequisite for attendance of two Level I trainings and experience using CRISS in the classroom (Project CRISS, 2008). The proposed study sought to determine if the district successfully implemented Level I training as reading professional development in the district.

The CRISS program developed because,

The most prevalent teaching model in our high school was the lecture-read the chapter-answer the chapter questions-take a multiple choice test paradigm. Teachers taught like they were taught. This flat, boring methodology degraded our own vitality and curiosity. Even more important, it was degrading to our students. (Santa et al., 2004, p. 3)

The program sought to improve learning and pedagogy and provided teachers with a simple recipe for classroom success: first, activate readers’ schema; second, establish purpose for reading and learning; third, provide active reading/learning modeling/student use of active strategies; and lastly, discuss and/or write about presented ideas. While simple in philosophy, actual implementation was more elaborate. CRISS employed 4 instructional steps, 8 elements of learning, and 31 active reading strategies presented in the manual for teacher use in lesson
planning (Santa et al., 2004). The local district implemented the CRISS program based on the assumption that the program impacted teacher practice and thereby helped to reform high school content area pedagogy. The study sought to elucidate the impact of this professional development model on the secondary social studies teachers within the district.

**Reading Endorsement.** It was well documented that the single most important determinant in student academic achievement was the classroom teacher (Bransford & Darling-Hammond, 2005; Darling-Hammond, 2000; Darling-Hammond, Berry, & Thoreson, 2001; Myrberg, 2007; Wayne & Youngs, 2003; Wenglinsky, 2000). One way to effect change within the profession was ensuring that qualified teachers taught the material. Increasingly across the nation, content area teachers were encouraged to pursue a reading endorsement, which they added to their teaching certification. To acquire this endorsement, the teacher took the equivalent of 300 hours of continued professional development, either through district in-service training or through college courses. Florida required newly graduated teachers to meet the first two reading competencies (Florida Department of Education, 2009), suggesting that the State Department of Education was committed to the process of reading endorsement through college credit courses. These endorsement classes represented instruction in six areas of competency: Foundations in Language and Cognition, Foundations in Research Based Practices, Foundations of Assessment, Foundations of Differentiation, Application of Differentiated Instruction, and Demonstration of Accomplishment (Florida Department of Education, 2009).

The research on successful student implementation of active reading strategies with narrative text at the elementary school level led the teaching profession to implement these same strategies applied to content area expository text across grade levels. Because secondary content area teachers did not traditionally take classes that specifically addressed reading instruction, the
state and district undertook the provision of additional opportunities for teachers to increase their expertise in content area reading instruction. Project CRISS was a 2-3 day professional development reading workshop, facilitated by teachers for teachers. The Reading Endorsement classes provided a more expansive overview of reading in the content area through five semester-long courses, facilitated by the university professoriate, resulting in an addition to the state professional licensure. The study examined whether the differences in these professional development experiences affected teachers’ self-reported use of reading strategies and their self-reported perceptions of students’ use of reading strategies in social studies.

**Summary.** The national policy mandated by NCLB to increase accountability measures in core tested subject areas was the issue driving present-day reading comprehension instruction in the secondary social studies classroom. The research indicated the strength of teaching active reading strategies to increase student comprehension. The local urban district implemented a process of reading strategy professional development to teach content area teachers reading strategies. The study examined the effects of this professional development on teacher practice, as indicated on a self-report survey. The results of the study may enable policymakers to formulate informed decisions regarding funding and support for further professional development for secondary content area teachers in the application of reading strategies for their disciplines.
Chapter Three

Methodology

The researcher implemented a quantitative model of data collection and utilized an online survey as the primary research instrument. This model provided empirical evidence for the impact of reading professional development, through teacher self-reported reading instructional practices in the secondary social studies classroom and teacher observations of student independent implementation of active reading strategies.

Pilot Studies

The researcher developed and tested a survey as part of an Action Research study of 125 students in the researcher’s classroom during the spring of 2008, prior to determining the research focus for the proposed study. In order to develop the survey for the proposed study, the researcher utilized coding and triangulation of qualitative data about reading practices in the high school social studies classroom from original pilot study videotapes, surveys, and questionnaires. To analyze these pilot study data, the researcher grouped student responses by instructional level assigned by the school: low, intermediate, and high. The pilot study confirmed the extant research, demonstrating that the majority of social studies instruction for students at any reading level was largely text-based. Further, the majority of these students at every reading level were incapable of, or simply chose against, applying active reading strategies that might aid their retention of reading based knowledge. Pilot study results indicated secondary social studies students self-selected a particular reading method to use when reading social studies text. The
most frequently identified method was skim reading to locate answers within text; ranked second by students was reading without support; the least frequently identified method was reading with note-taking support. These results were consistent across student reading levels; however, the researcher did not correlate student use of active reading strategies with their teachers’ professional development.

The researcher conducted a second pilot study and utilized the survey instrument with a minimum sample number of 24 high school content area teachers. The researcher knew these teachers personally and therefore excluded them from the actual study. The researcher correlated these survey results utilizing the Statistical Package for the Social Sciences (SPSS) by testing Cronbach’s alpha to determine internal reliability of the instrument. The computations showed inter-correlations between survey items based on the ratings of the respondents. A new variable that was the sum of all of the individual items for each respondent was included in the correlation matrix computation. The researcher performed a $t$-test of the differences between the mean value for the item for the top and bottom quarter respondents. Higher $t$-values indicated a greater difference between the highest and lowest respondents. Items with higher $t$-values were better discriminators, and the researcher retained these items for the study survey (Trochim, 2006). An internal reliability of .70 or higher was acceptable, indicating that the survey data were consistent.

**Subjects**

The urban, Southeastern public school district selected for the study served a population of 33 high schools, with approximately 70,235 high school students (District Internet web address removed for confidentiality), who needed to successfully complete 1 credit of world
history, 1 credit of U.S. History, and one-half credit each for government and economics, as required for graduation (Florida Legislature, 2009).

The researcher contacted the principals of these high schools by e-mail, informed them of the proposed study, and requested their cooperation in encouraging their faculty’s participation in the study (Appendix A). There were 517 district high school social studies teachers who were solicited via e-mail to participate in the survey process. The district teachers averaged 12.96 years of experience, and 43% had earned an advanced degree. The study utilized a sample of district teachers who self-reported teacher implementation of active reading strategies. To enable data collection to be completed in a timely manner, the sample population was restricted to informants who responded to the online survey within the 2 week time frame specified in the instrument. The only incentive for participation was the teacher’s ability to contribute to the body of knowledge through survey participation.

Coding. Initially, four groups of teachers were coded as follows: (1) Teachers with neither CRISS training nor reading endorsement (H1); (2) Teachers with CRISS training and no reading endorsement (H2); (3) Teachers with reading endorsement but no CRISS training (H3); and, (4) Teachers with both CRISS training and reading endorsement (H4). This preliminary research assumption was that participation in these two reading professional development programs was mutually exclusive. Data analysis for the demographic responses on the survey demonstrated a flaw in this original assumption. Six individuals reported participation in CRISS professional development; five of these six also attained the reading endorsement; no teacher reported earning the reading endorsement without CRISS training in the second pilot study. For the survey sample, of the 55 respondents, 30 (55%) reported completion of CRISS training. Three teachers who participated in CRISS training also attained the reading endorsement. Only one teacher
reported earning the reading endorsement without participating in CRISS training. Because that one teacher constituted an outlier, the researcher removed his/her responses from the analyzed data. This meant that coding for survey responses was divided into two groups, those who had reading professional development, CRISS Training, \((H_1)\), and those who did not \((H_0)\).

Additionally, the survey response was lower than anticipated. Of the 517 teachers in the survey population, 55 respondents chose to participate in the final sample, an 11% response rate. This meant that, rather than the original construction of searching for item variances, study results needed statistical analyses to produce the most stable results possible.

**Research Questions.** The simplification of coding led the researcher to modify the original research questions. The following 3 null hypotheses and 1 research question were subsequently tested:

1. There is no relationship between teachers reporting receiving reading professional development (CRISS training) and self-reported instruction of active reading strategies in the secondary social studies classroom \((H_0)\).

2. There is no relationship between teachers reporting receiving reading professional development (CRISS training) and self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom \((H_0)\).

3. There is no relationship between teachers reporting receiving reading professional development (CRISS training) and the active reading strategies secondary social studies teachers self-report students use independently \((H_0)\).

4. Is the number of years in the teaching profession a moderating factor in what secondary social studies teachers self-report about student use of active reading strategies in the content area?
a. Is there a correlation between teachers reporting receiving reading professional development (CRISS training) and the number of years in the teaching profession and self-reported instruction in active reading strategies in the secondary social studies classroom? (H₀)

b. Is there a correlation between teachers reporting receiving reading professional development (CRISS training) and the number of years in the teaching profession and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom? (H₀)

c. Is there a correlation between teachers reporting receiving reading professional development (CRISS training) and the number of years in the teaching profession and the active reading strategies secondary social studies teachers’ self-report students using independently? (H₀)

Instrumentation

To address the research null hypotheses, the district social studies teachers took a self-administered online survey of classroom reading practices. The teachers in the study provided a purposeful sample; however, they may not reflect the demographics of teachers within the district (Bracey, 2006). The researcher used this information to develop statistical information about teacher training and self-reporting of classroom reading practices. The researcher utilized SPSS software to apply statistical techniques to the survey responses to determine reliability and statistical significance.

Survey research was utilized for measurement in applied social research settings such as education. The broad area of survey research pertained to measurement procedures that involved asking questions of respondents. Because the study did not compare groups or have multiple
waves of measurement, it was a non-experimental design, and the results inferred no causality. Rather, results were correlated. The survey questions were measured as an interval and using a traditional 1-to-5 rating referred to as a Likert response scale. This was a one-dimensional scaling method. The concept of teacher application of active reading strategies was one-dimensional in nature; either classroom teachers instructed their students on using reading strategies or they did not (Trochim, 2006).

There were disadvantages to survey data, such as limits to what a researcher can learn when relying on informant self-reporting. Baldwin (2000) discussed the inherent mistrust of this type of data. The data may be incorrect because of a conscious bias of the person who was reporting, intentionally or unintentionally. At the same time, Baldwin acknowledged that this type of data acquisition was essential to behavioral research. The surveys were self-administered, so there was no interviewer influence injected. However, there was the possibility of survey drop-offs, in which respondents stopped answering mid-way through the survey and thus skewed response rates (Scheuren, 2004).

To ensure minimal burden on respondents, the survey was brief (12 items), with a response burden of about 15 minutes per respondent. Because the sample size was relatively small, collection of data was quick. The online Likert scale survey design kept data consistent from subject to subject. This scale provided a single-option variable; the respondent had multiple choices, but only selected one option. For analysis, this was a single variable that took the integer values from one to five (Trochim, 2006). As shown in Table 1, survey items were correlated with specific null hypotheses. Items 1-18 related to the strategies teachers instructed or assigned as part of homework or in-class work in the high school social studies classroom. Items 19-36 related to the frequency with which teachers instructed or assigned each strategy in their
classrooms. Survey items 37-45 were strategies teachers observed students using independently
during-reading. These strategies named on the survey were specifically addressed during CRISS
training and in reading endorsement coursework.

Table 1

*Survey Item Correlation to Null Hypothesis*

<table>
<thead>
<tr>
<th>Items</th>
<th>Teacher code</th>
<th>Research question</th>
<th>Data analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-18</td>
<td>$H_0$</td>
<td>1</td>
<td>ANOVA</td>
</tr>
<tr>
<td>19-36</td>
<td>$H_0$</td>
<td>2</td>
<td>ANOVA</td>
</tr>
<tr>
<td>37-45</td>
<td>$H_0$</td>
<td>3</td>
<td>ANOVA</td>
</tr>
<tr>
<td>1-45</td>
<td>$H_0$</td>
<td>4</td>
<td>ANOVA</td>
</tr>
</tbody>
</table>

**Data Collection Procedures**

The data were collected directly from high school social studies teachers to address the
null hypotheses and research question. To collect this feedback, the researcher implemented a
survey (Appendix B) via e-mail utilizing an online survey instrument to current 9th through 12th
grade social studies teachers in the district’s high schools in order to determine teacher training
and self-reporting of classroom reading practices. The district Secondary (6-12) Social Studies
Curriculum Specialist provided a list of Social Studies department chairpersons at the county
public high schools; due to confidentiality, the support letter was omitted from this document.
Subsequently, the researcher sent each school’s department chairperson a letter requesting the
support of their school’s department in survey participation. Because the survey sought
information pertinent to the respondents, it met the qualification of salience, which the researcher
hoped would help increase response rate. Analysis of survey response rates indicated that
surveys consisting of approximately 22 items and requiring 13 minutes or less to complete received the highest response rates (Porter, 2004). This instrument met those requirements.

Because survey participation was voluntary, not every teacher responded. Following data collection recommendations suggested by Porter (2004) to increase response rates, exactly 1 week prior to initial survey distribution, the researcher contacted possible teacher informants via e-mail to notify them of the study and upcoming survey administration (Appendix D). Seven days later, potential respondents were contacted via e-mail with the survey instrument attached (Appendix E). Exactly 1 week after survey distribution, the researcher sent a follow-up e-mail and survey attachment to encourage more responses and secure increased data collection (Appendix F). The researcher correlated responses from the teacher survey regarding perceived application of reading strategies in high school classrooms.

Data Analysis

Statistical analysis of specific survey responses took place to measure the significance of teacher professional development as independent variables: CRISS training and attainment of reading endorsement as predictors of teacher implementation of reading strategies and looking for significant differences between these groups of teachers and their results.

Initially, the researcher hoped that with strong survey response, the use of specific active reading strategies would be predicted based upon teacher participation in reading professional development programs. The aforementioned study adjustments meant that statistical analysis required revamping as well. In order to create more stability, survey responses were summed by section into “prereading”, “during-reading”, and “postreading” strategies. Doing this meant a trade off; less variance reported, but the calculations were more reliable. There was no longer a
reason to perform regression analysis; ANOVA testing for significance would enable the researcher to observe if there was a significant difference between the two groups of teachers in the implementation of practices, frequency of classroom use, or perceptions of student use of active reading strategies.

Implementation results for items 1 – 18 (Part I of the survey) were calculated to determine teacher self-reported classroom use of each strategy. The results were used to calculate significance through ANOVA analysis. These items were deemed significant if the standard .70 was achieved in analysis. Each of the ANOVA analyses was analyzed to determine if number of years of teaching was a moderating factor.

Frequency results were calculated for items 19 – 36 (Part II of the survey) to determine how often teachers self-reported teaching or assigning the use of each strategy. The results were used to calculate significance through ANOVA analysis. These items were deemed significant if the standard .70 was achieved in analysis. Each of the ANOVA analyses was analyzed to determine if number of years of teaching was a moderating factor.

Results were calculated for items 37-45 (Part III of the survey) to determine under what circumstances teachers self-reported students independently utilizing each strategy. The results were used to calculate significance through ANOVA analysis. These items were deemed significant if the standard .70 was achieved in analysis. Each of the ANOVA analyses was analyzed to determine if number of years of teaching was a moderating factor.

**Delimitations of the Study**

Only high school social studies teachers currently employed in the public schools of a large, urban school district in Southeastern Florida were invited to participate in the online survey. Only an online survey instrument was utilized. There may have been teachers without the
requisite technologies to be able to participate in the survey. Only active reading strategies explicitly instructed via Project CRISS and utilized in reading endorsement university instruction were measured. There may be other reading strategies content area teachers utilized that were not addressed in the survey.

Limitations of the Study

As discussed in the Instrumentation section, the study was based on a survey self-report instrument that may lack fidelity by design. The survey was limited as a tool for data collection in that respondents may not accurately reflect the teacher demographics within the district. Further, the reported survey data may be incorrect because of a conscious bias of the respondents, either intentionally or unintentionally. Survey participation was voluntary, so teacher participation was limited. Teacher perceptions of student independent application of the strategies may not be accurate. Teachers may not be aware of active reading strategies that students employ outside of the classroom.

Timeline

Prior to study implementation: Application and approval to proceed were received from Florida Atlantic University and the school district Internal Review Boards.

Week One-Two: Contacted high school principals and conducted pilot study.

Week Three: Analyzed pilot study results utilizing SPSS.

Week Four: Initially contacted potential respondents via e-mail to inform them of study and forthcoming survey instrument.

Week Five: Contacted potential respondents via e-mail with cover letter and survey instrument attachment.
Week Six: Initiated follow-up contact with potential respondents via e-mail with cover letter and survey instrument attachment.

Week Seven: Terminated online survey instrument and began data analysis utilizing SPSS.
Chapter Four

Results

Introduction

This study investigated the relationships between high school social studies teachers’ self-reported participation in CRISS professional development and their self-reported implementation of active reading strategies in the classroom in a large county in Southeastern Florida during the 2010-2011 school year. Further, it investigated teachers’ self-reported observations of independent student use of active reading strategies during the same time period. The researcher proposed the following 12 null hypotheses and 1 research question:

1. There is no relationship between teachers not reporting receiving CRISS training or reading endorsement and self-reported instruction of active reading strategies in the secondary social studies classroom (H1).

2. There is no relationship between teachers reporting receiving CRISS training and not reading endorsement and self-reported instruction of active reading strategies in the secondary social studies classroom (H2).

3. There is no relationship between teachers reporting receiving reading endorsement and not CRISS training and self-reported instruction of active reading strategies in the secondary social studies classroom (H3).

4. There is no relationship between teachers reporting receiving CRISS training and reading endorsement and self-reported instruction of active reading strategies in the secondary social studies classroom (H4).
5. There is no relationship between teachers not reporting receiving CRISS training or reading endorsement and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom (H1).

6. There is no relationship between teachers reporting receiving CRISS training and not reading endorsement and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom (H2).

7. There is no relationship between teachers reporting receiving reading endorsement and not CRISS training and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom (H3).

8. There is no relationship between teachers reporting receiving CRISS training and reading endorsement and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom (H4).

9. There is no relationship between teachers not reporting receiving CRISS training or reading endorsement and the active reading strategies secondary social studies teachers self-report students use independently (H1).

10. There is no relationship between teachers reporting receiving CRISS training and not reading endorsement and the active reading strategies secondary social studies teachers self-report students use independently (H2).

11. There is no relationship between teachers reporting receiving reading endorsement and not CRISS training and the active reading strategies secondary social studies teachers self-report students use independently (H3).
12. There is no relationship between teachers reporting receiving CRISS training and reading endorsement and the active reading strategies secondary social studies teachers self-report students use independently (H₄).

13. Is the number of years in the teaching profession a moderating factor in what secondary social studies teachers self-report of students’ use of active reading strategies in the content area?

a. Is there a correlation between teachers not reporting receiving CRISS training or reading endorsement and the number of years in the teaching profession and self-reported instruction of active reading strategies in the secondary social studies classroom? (H₁)

b. Is there a correlation between teachers reporting receiving CRISS training and not reading endorsement and the number of years in the teaching profession and self-reported instruction in active reading strategies in the secondary social studies classroom? (H₂)

c. Is there a correlation between teachers reporting receiving reading endorsement and not CRISS training and the number of years in the teaching profession and self-reported instruction in active reading strategies in the secondary social studies classroom? (H₃)

d. Is there a correlation between teachers reporting receiving CRISS training and reading endorsement and the number of years in the teaching profession and self-reported instruction in active reading strategies in the secondary social studies classroom? (H₄)

e. Is there a correlation between teachers not reporting receiving CRISS training or reading endorsement and the number of years in the teaching profession and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom? (H₁)
f. Is there a correlation between teachers reporting receiving CRISS training and not reading endorsement and the number of years in the teaching profession and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom? (H₂)

g. Is there a correlation between teachers reporting receiving reading endorsement and not CRISS training and the number of years in the teaching profession and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom? (H₃)

h. Is there a correlation between teachers reporting receiving CRISS training and reading endorsement and the number of years in the teaching profession and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom? (H₄)

i. Is there a correlation between teachers not reporting receiving CRISS training or reading endorsement and the number of years in the teaching profession and the active reading strategies secondary social studies teachers self-report students use independently? (H₁)

j. Is there a correlation between teachers reporting receiving CRISS training and not reading endorsement and the number of years in the teaching profession and the active reading strategies secondary social studies teachers self-report students use independently? (H₂)

k. Is there a correlation between teachers reporting receiving reading endorsement and not CRISS training and the number of years in the teaching profession and the active reading strategies secondary social studies teachers self-report students use independently? (H₃)
1. Is there a correlation between teachers reporting receiving CRISS training and reading endorsement and the number of years in the teaching profession and the active reading strategies secondary social studies teachers self-report students use independently? (H₄)

This chapter describes the results addressing each of these research questions regarding teachers’ professional development experiences and their possible relationship to the implementation of active reading strategies in the high school social studies classroom during the 2010-2011 school year. Discussion and conclusions resulting from the analysis of data are contained in Chapter Five of this dissertation.

**Pilot Results**

For the purpose of piloting the survey, 24 social studies teachers at the researcher’s school were asked to complete the online survey. Eleven teachers completed the survey, a 45% response rate. The pilot sample reported teaching a variety of social studies classes to students of varying academic levels. Of the 11 respondents, 6 (55%) reported participation in Project CRISS: Creating Independence Through Student Owned Strategies (CRISS) professional development. Five of these 6 teachers attained the Reading Endorsement; no teacher reported earning the Reading Endorsement without CRISS training. CRISS was a professional development program that was part of a system-wide effort to improve and integrate the ongoing development and support of educators in the area of reading (Santa et al., 2004; U.S. Department of Education, 2001). The Reading Endorsement Designation was a program of study that prepared teachers to teach reading at the grade level of their base certification (Florida Department of Education, 2009). These teachers were seasoned professionals; of the 11
respondents, 2 reported teaching 6-10 years, 2 reported teaching 16-20 years, and 7 reported teaching more than 20 years.

The first section of the online survey was a checklist, asking teachers to identify the use of active reading strategies in their classrooms. Reliability was tested for the second and third sections of the survey, with an acceptable reliability goal of .70 or higher. For the second survey section dealing with prereading strategies, reliability statistics indicated stability of all items, with the exception of “skim reading.” By eliminating that item, reliability rose to an acceptable .720. The researcher eliminated this item for a second pilot survey. The second section of the survey dealing with during-reading strategies had an acceptable internal reliability of .798. The second section of the survey dealing with postreading activities initially displayed a Cronbach’s alpha of .568, indicating that this section was not internally consistent.

*Figure 1. Initial Survey Section II, Part 3*

<table>
<thead>
<tr>
<th>Postreading Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>Summary comprehension questions</td>
</tr>
<tr>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>Whole class</td>
</tr>
<tr>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>Socratic/seed discussion</td>
</tr>
<tr>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>Fishbowl/Concentric circle discussion</td>
</tr>
<tr>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>One sentence summary/chalk talk discussion</td>
</tr>
</tbody>
</table>

The researcher reworded this survey section for clarity for the second pilot survey. Figure 2 indicates the wording clarification for the second pilot survey changes. The phrase “Teacher Led Discussion Strategies” was added to the heading to clarify what classroom activities occurred during the Postreading Activities Discussion. Additionally, “Teacher generated” was added to
the phrase “summary comprehension questions” and “Teacher directed” was added to the phrase “whole class discussion” sections. The third section of the survey dealing with teacher-reported observation of student independent reading implementation had an acceptable reliability of .848.

**Figure 2. Wording Changes to Initial Survey Section II, Part 3 for Pilot 2**

<table>
<thead>
<tr>
<th>Post Reading Activities:</th>
<th>Teacher Led Discussion Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 1 2 3 4 5</td>
<td>Teacher generated summary comprehension questions</td>
</tr>
<tr>
<td>0 1 2 3 4 5</td>
<td>Teacher directed whole class discussion</td>
</tr>
<tr>
<td>0 1 2 3 4 5</td>
<td>Socratic/seed discussion</td>
</tr>
<tr>
<td>0 1 2 3 4 5</td>
<td>Fishbowl/Concentric circle discussion</td>
</tr>
<tr>
<td>0 1 2 3 4 5</td>
<td>One sentence summary/Chalk talk discussion</td>
</tr>
</tbody>
</table>

The survey was piloted for a second time to the same group of 24 teachers. This time, nine teachers completed the survey for a 38% response rate. The reliability of the Part II Section dealing with prereading activation strategies rose to an acceptable .841; during-reading active strategies was reported at .846; and postreading discussion activities rose to an acceptable .801. Again, the third section of the survey, dealing with teacher-reported observation of student independent reading implementation, had an acceptable reliability of .848.

**Description of Sample**

The study population consisted of 517 high school social studies teachers who worked in the district during the 2010-2011 school year. The sample was restricted to those teachers who voluntarily completed an online survey. Of the original population, 55 teachers completed the survey, forming an 11% response rate. These teachers worked at 25 different schools and
reported teaching a wide variety of social studies classes with students of varying academic levels. Teachers were asked to identify the types of reading professional development in which they participated. Of the 55 respondents, 30 (55%) reported completion of CRISS training. Three teachers who participated in CRISS training also attained the Reading Endorsement. Only one teacher reported earning the Reading Endorsement and not participating in CRISS training. Because that one teacher constituted an outlier, the researcher removed those responses from the data for analysis. Of the remaining 54 respondents (N), 16 reported teaching 0-5 years, 9 reported teaching 6-10 years, 10 reported teaching 11-15 years, 6 reported teaching 16-20 years, and 13 reported teaching more than 20 years.

**Research Questions Reconsidered**

The district offered two types of reading professional development to its teachers: CRISS training and Reading Endorsement coursework. Participation in either in-service program was not mutually exclusive, and so the initial research questions addressed both programs. However, both the pilot study and the full study revealed this research assumption was not the case; only individuals who reported participation in CRISS training went on to attain the Reading Endorsement. In only one case did this not hold true, constituting an outlier response. The removal of this respondent from data analysis meant that the null hypotheses and research question could be consolidated to make the study more meaningful.

The following revised 3 null hypotheses and 1 research question were then tested:

1. There is no relationship between teachers reporting receiving reading professional development (CRISS training) and self-reported instruction of active reading strategies in the secondary social studies classroom (H₀).
2. There is no relationship between teachers reporting receiving reading professional
development (CRISS training) and self-reported frequency of classroom instruction in active
reading strategies in the secondary social studies classroom (H₀).

3. There is no relationship between teachers reporting receiving reading professional
development (CRISS training) and the active reading strategies secondary social studies teachers
self-report that students use independently (H₀).

4. Is the number of years in the teaching profession a moderating factor in what
secondary social studies teachers self-report about student use of active reading strategies in the
content area?

a. Is there a correlation between teachers reporting receiving reading professional
development (CRISS training) and the number of years in the teaching profession and
self-reported instruction in active reading strategies in the secondary social studies
classroom? (H₀)

b. Is there a correlation between teachers reporting receiving reading professional
development (CRISS training) and the number of years in the teaching profession and the
self-reported frequency of classroom instruction in active reading strategies in the
secondary social studies classroom? (H₀)

c. Is there a correlation between teachers reporting receiving reading professional
development (CRISS training) and the number of years in the teaching profession and the
active reading strategies secondary social studies teachers self-report students using
independently? (H₀)
Statistical Correlations

Null Hypothesis 1. There is no relationship between teachers reporting receiving reading professional development (CRISS training) and self-reported instruction of active reading strategies in the secondary social studies classroom (H₀).

As a small sample population (N) voluntarily responded to the online survey, the researcher grouped the reading strategies into usage groups: prereading, during-reading, and postreading. These section totals of the survey were summed and ANOVA testing for significance performed, rather than addressing the strategies individually, thereby lending stability to the calculations. Analyzing the data item by item through regression analysis would have demonstrated greater variance. Table 2 displays the descriptive statistics for teacher-reported instruction of prereading strategies variables used in the study. The table contains the overall and group means and standard deviations for each dependent variable. The study participants presented their years of teaching experience dichotomously; 25 teachers had 0-10 years of experience, 29 teachers had more than 10 years of teaching experience. Therefore, these two categories self-identified; statistical discriminations between smaller subgroups would be less significant than representing years of teaching dichotomously. Subsequently, for data analysis, years in teaching was designated by a “1” for 0-10 years, or a “2” for 11 or more years in the profession. Because there was little difference between the mean scores reported, according to these data neither CRISS professional development nor years spent teaching influenced teacher instruction of prereading strategies.
Table 2

*Descriptive Statistics for Teacher-Reported Instruction of Prereading Strategies Variables*

<table>
<thead>
<tr>
<th>CRISS Professional Development</th>
<th>Years dichotomized</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>1.00</td>
<td>2.2143</td>
<td>.80178</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td>2.4444</td>
<td>1.13039</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2.3043</td>
<td>.92612</td>
<td>23</td>
</tr>
<tr>
<td>Yes</td>
<td>1.00</td>
<td>2.5556</td>
<td>.72648</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td>2.4500</td>
<td>1.05006</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2.4828</td>
<td>.94946</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>1.00</td>
<td>2.3478</td>
<td>.77511</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td>2.4483</td>
<td>1.05513</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2.4038</td>
<td>.93431</td>
<td>52</td>
</tr>
</tbody>
</table>

Table 3 shows Levene’s test of equality of variances for the dependent variable. This statistic tested the null hypothesis that the error variance of the dependent variable was equal across groups. For these data, \( p = 0.208 \), and thus indicated that the assumption of homogeneity of variance was met.

Table 3

*Levene’s Test of Equality of Error Variances for Teacher-Reported Instruction of Prereading Strategies Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>( F )</th>
<th>( df_1 )</th>
<th>( df_2 )</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prereading Strategies</td>
<td>1.572</td>
<td>3</td>
<td>48</td>
<td>.208</td>
</tr>
</tbody>
</table>

*Note.* *significant at 0.05 level.*
For Table 4 and for all of the following tables, professional development was designated as PD and referred to the teachers’ participation in the CRISS program. Table 3 shows the ANOVA summary table for the dependent variables. The values of $p$ indicated that there was no significant difference between teacher groups in CRISS professional development (.538) or in years of teaching (.825), because both $p$ values were greater than 0.05. Further, there was no significance in the interaction between the two groups (.551). The Partial Eta Squared serves as an effect size and represents the portion of the variance in the reported instruction of prereading strategies that was accounted for by CRISS professional development or years teaching. From these results, it would appear that neither CRISS professional development (.008) nor the years teaching (.001) variable represent a large effect (0.5). The Observed Power of .100 was the probability of finding a difference among means this large if it existed in the population. Because the observed power was small (< .70), the researcher did not reject the null hypotheses regarding teacher-reported instruction of prereading strategies in the secondary social studies classroom.
Table 4

ANOVA Summary Table for Teacher-Reported Instruction of Prereading Strategies Variables

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncentrality Parameter</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>.768a</td>
<td>3</td>
<td>.256</td>
<td>.281</td>
<td>.839</td>
<td>.017</td>
<td>.842</td>
<td>.100</td>
</tr>
<tr>
<td>Intercept</td>
<td>271.783</td>
<td>1</td>
<td>271.783</td>
<td>298.174</td>
<td>.000</td>
<td>.861</td>
<td>298.174</td>
<td>1.000</td>
</tr>
<tr>
<td>PD</td>
<td>.350</td>
<td>1</td>
<td>.350</td>
<td>.384</td>
<td>.538</td>
<td>.008</td>
<td>.384</td>
<td>.093</td>
</tr>
<tr>
<td>Years</td>
<td>.045</td>
<td>1</td>
<td>.045</td>
<td>.050</td>
<td>.825</td>
<td>.001</td>
<td>.050</td>
<td>.055</td>
</tr>
<tr>
<td>PD*Years</td>
<td>.328</td>
<td>1</td>
<td>.328</td>
<td>.360</td>
<td>.551</td>
<td>.007</td>
<td>.360</td>
<td>.090</td>
</tr>
<tr>
<td>Error</td>
<td>43.752</td>
<td>48</td>
<td>.911</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Corrected</td>
<td>345.000</td>
<td>52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>44.519</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = .017 (Adjusted R Squared = -.044)

Table 5 displays the descriptive statistics for teacher instruction of during-reading strategies variables used in the study. The table contains the overall and group means and standard deviations for each dependent variable. The study participants presented their years of teaching experience dichotomously; 25 teachers had 0-10 years of experience, 29 teachers had more than 10 years of teaching experience. Therefore, these two categories self-identified; statistical discriminations between smaller subgroups would be less significant than representing years of teaching dichotomously. Subsequently, for data analysis, years in teaching was designated by a “1” for 0-10 years, or a “2” for 11 or more years in the profession. Because there was little difference between the mean scores reported, according to these data neither CRISS professional development nor years spent teaching influenced teacher instruction of during-reading strategies.

Table 5
Table 6 shows Levene’s test of equality of variances for the dependent variable. This statistic tested the null hypothesis that the error variance of the dependent variable was equal across groups. For these data \( p = 0.848 \), and thus indicated that the assumption of homogeneity of variance has been met.

Table 6

<table>
<thead>
<tr>
<th>Variable</th>
<th>( F )</th>
<th>( df 1 )</th>
<th>( df 2 )</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>During-reading Strategies</td>
<td>.268</td>
<td>3</td>
<td>50</td>
<td>.848</td>
</tr>
</tbody>
</table>

*Note. *significant at 0.05 level.

Table 7 shows the ANOVA summary table for the dependent variables. The values of \( p \) indicated that there was no significant difference between teacher groups in CRISS professional development (.592) or in years of teaching (.222), because both \( p \) values were greater than 0.05.
Further, there was no significance in the interaction between the two groups (.636). The Partial Eta Squared serves as an effect size and represents the portion of the variance in the reported instruction of during-reading strategies that was accounted for by CRISS professional development or years teaching. From these results, it would appear that neither CRISS professional development (.006) nor the years teaching (.030) variable represented a large effect (0.5). The Observed Power of .240 was the probability of finding a difference among means this large if it existed in the population. Because the observed power was small (less than .70), the researcher did not reject the null hypotheses regarding teacher-reported instruction of during-reading strategies in the secondary social studies classroom.
Table 7

ANOVA Summary Table for Teacher-Reported Instruction of During-Reading Strategies Variable

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncentrality Parameter</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>9.415*</td>
<td>3</td>
<td>3.138</td>
<td>.933</td>
<td>.432</td>
<td>.053</td>
<td>2.798</td>
<td>.240</td>
</tr>
<tr>
<td>Intercept</td>
<td>1535.353</td>
<td>1</td>
<td>1535.353</td>
<td>456.316</td>
<td>.000</td>
<td>.901</td>
<td>456.316</td>
<td>1.000</td>
</tr>
<tr>
<td>PD</td>
<td>.980</td>
<td>1</td>
<td>.980</td>
<td>.291</td>
<td>.592</td>
<td>.006</td>
<td>.291</td>
<td>.083</td>
</tr>
<tr>
<td>Years</td>
<td>5.156</td>
<td>1</td>
<td>5.156</td>
<td>1.532</td>
<td>.222</td>
<td>.030</td>
<td>1.532</td>
<td>.229</td>
</tr>
<tr>
<td>PD*Years</td>
<td>.763</td>
<td>1</td>
<td>.763</td>
<td>.227</td>
<td>.636</td>
<td>.005</td>
<td>.227</td>
<td>.075</td>
</tr>
<tr>
<td>Error</td>
<td>168.233</td>
<td>50</td>
<td>3.365</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Corrected Total</td>
<td>1923.000</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Corrected Total</td>
<td>177.648</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = .053 (Adjusted R Squared = -.004)

Table 8 displays the descriptive statistics for teacher-reported instruction of postreading strategies variables used in the study. The table contains the overall and group means and standard deviations for each dependent variable. The study participants presented their years of teaching experience dichotomously; 25 teachers had 0-10 years of experience, 29 teachers had more than 10 years of teaching experience. Therefore, these two categories self-identified; statistical discriminations between smaller subgroups would be less significant than representing years of teaching dichotomously. Subsequently, for data analysis, years in teaching was designated by a “1” for 0-10 years, or a “2” for 11 or more years in the profession. Because there was little difference between the mean scores reported, according to these data neither CRISS
professional development nor years spent teaching influenced teacher instruction of postreading strategies.

Table 8

*Descriptive Statistics for Teacher-Reported Instruction of Postreading Strategies Variables*

<table>
<thead>
<tr>
<th>CRISS Professional Development</th>
<th>Years dichotomized</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>1.00</td>
<td>2.4667</td>
<td>.91548</td>
<td>15</td>
</tr>
<tr>
<td>2.00</td>
<td>2.7778</td>
<td>.83333</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>2.5833</td>
<td>.88055</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>Yes</td>
<td>1.00</td>
<td>2.8000</td>
<td>.63246</td>
<td>10</td>
</tr>
<tr>
<td>2.00</td>
<td>3.2000</td>
<td>1.10501</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>3.0667</td>
<td>.98027</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>1.00</td>
<td>2.6000</td>
<td>.81650</td>
<td>25</td>
</tr>
<tr>
<td>2.00</td>
<td>3.0690</td>
<td>1.03272</td>
<td></td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>2.8519</td>
<td>.95971</td>
<td></td>
<td>54</td>
</tr>
</tbody>
</table>

Table 9 shows Levene’s test of equality of variances for the dependent variable. This statistic tested the null hypothesis that the error variance of the dependent variable was equal across groups. For these data $p = 0.282$, and thus indicated that the assumption of homogeneity of variance was met.
Table 9

*Levene’s Test of Equality of Error Variances for Teacher-Reported Instruction of Postreading Strategies Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$F$</th>
<th>$df_1$</th>
<th>$df_2$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Reading Strategies</td>
<td>1.310</td>
<td>3</td>
<td>50</td>
<td>.282</td>
</tr>
</tbody>
</table>

*Note.* *significant at 0.05 level.

Table 10 shows the ANOVA summary table for the dependent variables. The values of $p$ indicated that there was no significant difference between teacher groups in CRISS professional development (.166) and in years of teaching (.192), because both $p$ values were greater than 0.05. Further, there was no significance in the interaction between the two groups (.869). The Partial Eta Squared serves as an effect size and represents the portion of the variance in the reported instruction of postreading strategies that was accounted for by CRISS professional development or years teaching. From these results, it would appear that neither CRISS professional development (.038) nor the years teaching (.034) variable represented a large effect (0.5). The Observed Power of .437 was the probability of finding a difference among means this large if it existed in the population. Because the observed power was small (< .70), the researcher did not reject the null hypotheses regarding teacher-reported instruction of postreading strategies in the secondary social studies classroom.
Table 10

ANOVA Summary Table for Teacher-Reported Instruction of Postreading Strategies Variables

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncentrality Parameter</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>4.726a</td>
<td>3</td>
<td>1.575</td>
<td>1.787</td>
<td>.162</td>
<td>.097</td>
<td>5.360</td>
<td>.437</td>
</tr>
<tr>
<td>Intercept</td>
<td>385.742</td>
<td>1</td>
<td>385.742</td>
<td>437.459</td>
<td>.000</td>
<td>.897</td>
<td>437.459</td>
<td>1.000</td>
</tr>
<tr>
<td>PD</td>
<td>1.742</td>
<td>1</td>
<td>1.742</td>
<td>1.975</td>
<td>.166</td>
<td>.038</td>
<td>1.975</td>
<td>.281</td>
</tr>
<tr>
<td>Years</td>
<td>1.543</td>
<td>1</td>
<td>1.543</td>
<td>1.750</td>
<td>.192</td>
<td>.034</td>
<td>1.750</td>
<td>.254</td>
</tr>
<tr>
<td>PD*Years</td>
<td>.024</td>
<td>1</td>
<td>.024</td>
<td>.027</td>
<td>.869</td>
<td>.001</td>
<td>.027</td>
<td>.053</td>
</tr>
<tr>
<td>Error</td>
<td>44.089</td>
<td>50</td>
<td>.882</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Corrected</td>
<td>488.000</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>48.815</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = .097 (Adjusted R Squared = .043)

Null Hypothesis 2. There is no relationship between teachers reporting receiving reading professional development (CRISS training) and self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom (H₀).

Table 11 displays the descriptive statistics for teacher-reported frequency of instruction of prereading strategies variables used in the study. The table contains the overall and group means and standard deviations for each dependent variable. The study participants presented their years of teaching experience dichotomously; 25 teachers had 0-10 years of experience, 29 teachers had more than 10 years of teaching experience. Therefore, these two categories self-identified; statistical discriminations between smaller subgroups would be less significant than representing years of teaching dichotomously. Subsequently, for data analysis, years in teaching was designated by a “1” for 0-10 years, or a “2” for 11 or more years in the profession. Because
there was little difference between the mean scores reported, according to these data neither
CRISS professional development nor years spent teaching influenced the frequency of teacher
instruction of prereading strategies in the secondary social studies classroom.

Table 11

Descriptive Statistics for Teacher-Reported Frequency of Instruction of Prereading Strategies

<table>
<thead>
<tr>
<th>Variables</th>
<th>CRISS</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Professional Development</td>
<td>1.00</td>
<td>9.8462</td>
<td>4.98073</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.00</td>
<td>11.250</td>
<td>2.21736</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>10.1765</td>
<td>4.46144</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1.00</td>
<td>9.1667</td>
<td>2.92689</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.00</td>
<td>11.2500</td>
<td>3.08761</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>10.6818</td>
<td>3.12267</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.00</td>
<td>9.6316</td>
<td>4.36158</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.00</td>
<td>11.2500</td>
<td>2.88143</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>10.4615</td>
<td>3.71941</td>
</tr>
</tbody>
</table>

Table 12 shows Levene’s test of equality of variances for the dependent variable. This
statistic tested the null hypothesis that the error variance of the dependent variable was equal
across groups. For these data $p = 0.613$, and thus indicated that the assumption of homogeneity
of variance was met.

Table 12

Levene’s Test of Equality of Error Variances for Teacher-Reported Frequency of Instruction of Prereading Strategies

<table>
<thead>
<tr>
<th>Variables</th>
<th>CRISS</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Professional Development</td>
<td>1.00</td>
<td>9.8462</td>
<td>4.98073</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.00</td>
<td>11.250</td>
<td>2.21736</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>10.1765</td>
<td>4.46144</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1.00</td>
<td>9.1667</td>
<td>2.92689</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.00</td>
<td>11.2500</td>
<td>3.08761</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>10.6818</td>
<td>3.12267</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.00</td>
<td>9.6316</td>
<td>4.36158</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.00</td>
<td>11.2500</td>
<td>2.88143</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>10.4615</td>
<td>3.71941</td>
</tr>
</tbody>
</table>
Table 13 shows the ANOVA summary table for the dependent variables. The values of $p$ indicated that there was no significant difference between teacher groups in CRISS professional development (.811) or in years of teaching (.223), because both $p$ values were greater than 0.05. Further, there was no significance in the interaction between the two groups (.811). The Partial Eta Squared serves as an effect size and represents the portion of the variance in teacher-reported frequency of instruction of prereading strategies that was accounted for by CRISS professional development or years teaching. From these results, it would appear that neither CRISS professional development (.002) nor the years teaching (.042) variable represented a large effect (0.5). The Observed Power of .170 was the probability of finding a difference among means this large if it existed in the population. Because the observed power was small (< .70), the researcher did not reject the null hypotheses regarding teacher-reported frequency of instruction of prereading strategies in the secondary social studies classroom.
Table 13

ANOVA Summary Table for Teacher Frequency of Use of Prereading Strategies Variables

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncentrality Parameter</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>27.417a</td>
<td>3</td>
<td>9.139</td>
<td>.642</td>
<td>.593</td>
<td>.052</td>
<td>1.926</td>
<td>.170</td>
</tr>
<tr>
<td>Intercept</td>
<td>3098.986</td>
<td>1</td>
<td>3098.986</td>
<td>217.680</td>
<td>.000</td>
<td>.861</td>
<td>217.680</td>
<td>1.000</td>
</tr>
<tr>
<td>PD</td>
<td>.830</td>
<td>1</td>
<td>.830</td>
<td>.058</td>
<td>.811</td>
<td>.002</td>
<td>.058</td>
<td>.056</td>
</tr>
<tr>
<td>Years</td>
<td>21.868</td>
<td>1</td>
<td>21.868</td>
<td>1.536</td>
<td>.223</td>
<td>.042</td>
<td>1.536</td>
<td>.226</td>
</tr>
<tr>
<td>PD*Years</td>
<td>.830</td>
<td>1</td>
<td>.830</td>
<td>.058</td>
<td>.811</td>
<td>.002</td>
<td>.058</td>
<td>.056</td>
</tr>
<tr>
<td>Error</td>
<td>498.276</td>
<td>35</td>
<td>14.236</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Corrected</td>
<td>4794.000</td>
<td>39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Corrected</td>
<td>525.692</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = .052 (Adjusted R Squared = -.029)

Table 14 displays the descriptive statistics for teacher-reported frequency of instruction of during-reading strategies variables used in the study. The table contains the overall and group means and standard deviations for each dependent variable. The study participants presented their years of teaching experience dichotomously; 25 teachers had 0-10 years of experience, 29 teachers had more than 10 years of teaching experience. Therefore, these two categories self-identified; statistical discriminations between smaller subgroups would be less significant than representing years of teaching dichotomously. Subsequently, for data analysis, years in teaching was designated by a “1” for 0-10 years, or a “2” for 11 or more years in the profession. Because there was little difference between the mean scores reported, according to these data neither CRISS professional development nor years spent teaching influenced the frequency of teacher instruction of during-reading strategies in the secondary social studies classroom.
Table 14

*Descriptive Statistics for Teacher-Reported Frequency of Instruction of During-Reading Strategies Variables*

<table>
<thead>
<tr>
<th>CRISS Professional Development</th>
<th>Years dichotomized</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>1.00</td>
<td>23.5000</td>
<td>5.33428</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td>25.6667</td>
<td>2.88675</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>23.9333</td>
<td>4.93481</td>
<td>15</td>
</tr>
<tr>
<td>Yes</td>
<td>1.00</td>
<td>19.2000</td>
<td>2.28035</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td>24.3333</td>
<td>5.78504</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>22.0000</td>
<td>5.09902</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>1.00</td>
<td>22.2353</td>
<td>4.99411</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td>24.7778</td>
<td>4.84195</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>23.1154</td>
<td>4.99862</td>
<td>26</td>
</tr>
</tbody>
</table>

Table 15 shows Levene’s test of equality of variances for the dependent variable. This statistic tested the null hypothesis that the error variance of the dependent variable was equal across groups. For these data $p = 0.041$, indicating that the data reject the hypothesis that the variances of the groups are equivalent.
Because Levene’s Test demonstrated marginal significance (p = .041) regarding the hypothesis that the groups of professional development and years spent teaching were equivalent, the researcher ran a $t$-test on these data sets to be able to use the equal variances not assumed option. Table 16 shows the group descriptive statistics for the teacher variables of CRISS trained or not CRISS trained regarding reported frequency of instruction of during-reading strategies variables used in the study. Table 16 exhibited the means and standard deviations for each variable. Because there was little difference between the mean scores reported, according to these data, teacher CRISS professional development did not influence the frequency of teacher instruction of during-reading strategies in the secondary social studies classroom.

Table 15

*Levene’s Test of Equality of Error Variances for Teacher-Reported Frequency of Instruction of During-Reading Strategies Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$F$</th>
<th>$df 1$</th>
<th>$df 2$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>During-reading Strategies</td>
<td>3.243</td>
<td>3</td>
<td>22</td>
<td>.041</td>
</tr>
</tbody>
</table>

*Note.* *significant at 0.05 level.*

Table 16

*Group Descriptive Statistics for Professional Development and Teacher-Reported Frequency of Instruction of During-Reading Strategies Variables*

<table>
<thead>
<tr>
<th>Please check: I have attended &amp; completed CRISS</th>
<th>$N$</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>During-reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Selected</td>
<td>15</td>
<td>23.9333</td>
<td>4.93481</td>
<td>1.27416</td>
</tr>
<tr>
<td>Selected</td>
<td>11</td>
<td>22.0000</td>
<td>5.09902</td>
<td>1.53741</td>
</tr>
</tbody>
</table>

Table 17 shows the $t$-test summary table for the independent variable of CRISS professional development. Because of Levene’s Test results indicating marginal significance, the
researcher examined the line for equal variances not assumed. The values of \( p \) indicated that there was no significant difference in the frequency of active reading strategy classroom implementation between teacher groups, regardless of CRISS professional development (.344), because \( p \) was greater than 0.05.

Table 17

*Independent Samples Test for Professional Development Statistics for Teacher-Reported Frequency of Instruction of During-Reading Strategies Variables*

<table>
<thead>
<tr>
<th>During-reading</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( T )</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.968</td>
</tr>
</tbody>
</table>

Table 18 shows the group descriptive statistics for the teacher variable of years in teaching for the \( t \)-test of teacher-reported frequency of instruction of during-reading strategies variables used in the study. The table contains the means and standard deviations for each variable. Because there was little difference between the mean scores reported, according to these data the number of years a teacher spends in the profession did not influence the frequency of teacher instruction of during-reading strategies in the secondary social studies classroom.
Table 18

*Group Descriptive Statistics for Years in Teaching and the Teacher-Reported Frequency of Instruction of During-Reading Strategies Variables*

<table>
<thead>
<tr>
<th>Years dichotomized</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>During-reading</td>
<td>1.00</td>
<td>17</td>
<td>22.2353</td>
<td>4.99411</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td>9</td>
<td>24.7778</td>
<td>4.84195</td>
</tr>
</tbody>
</table>

Table 19 shows the $t$-test summary table for the independent variable of years in teaching. The values of $p$ indicated that there was no significant difference between teacher groups in years in teaching (.225), because $p$ was greater than 0.05. Because the effects were not significant for either $t$-test in whatever way the data were partitioned, the researcher did not reject the null hypotheses regarding teacher-reported frequency of instruction of during-reading strategies in the secondary social studies classroom.

Table 19

*Independent Samples Test for Years in Teaching Statistics for Teacher Reported Frequency of Instruction of During-Reading Strategies Variables*

<table>
<thead>
<tr>
<th>$t$-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>$T$</td>
<td>$df$</td>
</tr>
</tbody>
</table>

Table 20 displays the descriptive statistics for teacher-reported frequency of instruction of postreading strategies variables used in the study. The table contains the overall and group means and standard deviations for each dependent variable. The study participants presented their years of teaching experience dichotomously; 25 teachers had 0-10 years of experience, 29 teachers had more than 10 years of teaching experience. Therefore, these two categories self-identified; statistical discriminations between smaller subgroups would be less significant than representing years of teaching dichotomously. Subsequently, for data analysis, years in teaching
was designated by a “1” for 0-10 years, or a “2” for 11 or more years in the profession. Because there was little difference between the mean scores reported, according to these data neither CRISS professional development nor years spent teaching influenced the frequency of teacher instruction of postreading strategies in the secondary social studies classroom.

Table 20

*Descriptive Statistics for Teacher-Reported Frequency of Instruction of Postreading Strategies*

<table>
<thead>
<tr>
<th>Variables</th>
<th>CRISS Professional Development</th>
<th>Years dichotomized</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>1.00</td>
<td></td>
<td>13.2143</td>
<td>5.60465</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td></td>
<td>17.2500</td>
<td>3.59398</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>14.1111</td>
<td>5.41120</td>
<td>18</td>
</tr>
<tr>
<td>Yes</td>
<td>1.00</td>
<td></td>
<td>12.8000</td>
<td>5.06952</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td></td>
<td>14.2857</td>
<td>3.68841</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>13.8947</td>
<td>3.99854</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>1.00</td>
<td>13.1053</td>
<td>5.33224</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td>14.9444</td>
<td>3.78032</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>14.0000</td>
<td>4.67262</td>
<td>37</td>
</tr>
</tbody>
</table>

Table 21 shows Levene’s test of equality of variances for the dependent variable. This statistic tested the null hypothesis that the error variance of the dependent variable is equal across groups. For these data $p = 0.775$, and thus indicated that the assumption of homogeneity of variance was met.
Table 21

_Levene’s Test of Equality of Error Variances for Teacher-Reported Frequency of Instruction of Postreading Strategies Variables_

<table>
<thead>
<tr>
<th>Variable</th>
<th>$F$</th>
<th>$df_1$</th>
<th>$df_2$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Reading Strategies</td>
<td>.371</td>
<td>3</td>
<td>33</td>
<td>.775</td>
</tr>
</tbody>
</table>

*Note. *significant at 0.05 level.

Table 22 shows the ANOVA summary table for the dependent variables. The values of $p$ indicated that there was no significant difference between teacher groups in CRISS professional development (.357) or in years of teaching (.136), because both $p$ values were greater than 0.05. Further, there was no significance in the interaction between the two groups (.485). The Partial Eta Squared serves as an effect size and represents the portion of the variance in teacher-reported frequency of instruction in postreading strategies that was accounted for by CRISS professional development or years teaching. Based on these data, neither CRISS professional development (.026) nor the years teaching (.066) variable represented a large effect (0.5). The Observed Power of .224 was the probability of finding a difference among means this large if it existed in the population. Because the observed power was small ($< .70$), the researcher did not reject the null hypotheses regarding teacher-reported frequency of instruction of postreading strategies in the secondary social studies classroom.
Table 22

ANOVA Summary Table for Teacher-Reported Instruction of Postreading Strategies Variables

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncentrality Parameter</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>59.236(^a)</td>
<td>3</td>
<td>19.745</td>
<td>.897</td>
<td>.453</td>
<td>.075</td>
<td>2.690</td>
<td>.224</td>
</tr>
<tr>
<td>Intercept</td>
<td>5586.510</td>
<td>1</td>
<td>5586.510</td>
<td>253.665</td>
<td>.000</td>
<td>.885</td>
<td>253.665</td>
<td>1.000</td>
</tr>
<tr>
<td>PD</td>
<td>19.254</td>
<td>1</td>
<td>19.254</td>
<td>.874</td>
<td>.357</td>
<td>.026</td>
<td>.874</td>
<td>.148</td>
</tr>
<tr>
<td>Years</td>
<td>51.422</td>
<td>1</td>
<td>51.422</td>
<td>2.335</td>
<td>.136</td>
<td>.066</td>
<td>2.335</td>
<td>.317</td>
</tr>
<tr>
<td>PD*Years</td>
<td>10.968</td>
<td>1</td>
<td>10.968</td>
<td>.498</td>
<td>.485</td>
<td>.015</td>
<td>.498</td>
<td>.105</td>
</tr>
<tr>
<td>Error</td>
<td>726.764</td>
<td>33</td>
<td>22.023</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8038.000</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>786.000</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = .075 (Adjusted R Squared = -.009)

**Null Hypothesis 3.** There is no relationship between teachers reporting receiving reading professional development (CRISS training) and the active reading strategies secondary social studies teachers self-report that students use independently (H₀).

Table 23 displays the descriptive statistics for teacher-reported observation of student use of active reading strategies variables used in the study. The table contains the overall and group means and standard deviations for each dependent variable. The study participants presented their years of teaching experience dichotomously; 25 teachers had 0-10 years of experience, 29 teachers had more than 10 years of teaching experience. Therefore, these two categories self-identified; statistical discriminations between smaller subgroups would be less significant than representing years of teaching dichotomously. Subsequently, for data analysis, years in teaching was designated by a “1” for 0-10 years, or a “2” for 11 or more years in the profession. Because
there was little difference between the mean scores reported, according to these data neither CRISS professional development nor years spent teaching influenced teacher observations of student use of active reading strategies in the secondary social studies classroom.

Table 23

*Descriptive Statistics for Teacher-Reported Observations of Student Frequency of Use of Active Reading Strategies Variables*

<table>
<thead>
<tr>
<th>CRISS Professional Development</th>
<th>Years dichotomized</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>1.00</td>
<td>17.0000</td>
<td>2.77350</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td>17.6000</td>
<td>3.84708</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>17.1579</td>
<td>2.98632</td>
<td>19</td>
</tr>
<tr>
<td>Yes</td>
<td>1.00</td>
<td>17.2857</td>
<td>3.49830</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td>17.8667</td>
<td>1.35576</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>17.6818</td>
<td>2.19059</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>1.00</td>
<td>17.0952</td>
<td>2.94796</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>2.00</td>
<td>17.8000</td>
<td>2.11760</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>17.4390</td>
<td>2.56952</td>
<td>41</td>
</tr>
</tbody>
</table>

Table 24 shows Levene’s test of equality of variances for the dependent variable. This statistic tested the null hypothesis that the error variance of the dependent variable was equal across groups. For these data $p = 0.113$, and thus indicated that the assumption of homogeneity of variance was met.
Table 24

Levene’s Test of Equality of Error Variances for Teacher-Reported Observations of Student Frequency of Use of Active Reading Strategies Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>F</th>
<th>df 1</th>
<th>df 2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Reading Strategies</td>
<td>2.128</td>
<td>3</td>
<td>37</td>
<td>.113</td>
</tr>
</tbody>
</table>

Note. *significant at 0.05 level.

Table 25 shows the ANOVA summary table for the dependent variables. The values of $p$ indicated that there was no significant difference between teacher groups in CRISS professional development (.765) or in years of teaching (.523), because both $p$ values were greater than 0.05. Further, there was no significance in the interaction between the two groups (.992). The Partial Eta Squared served as an effect size and represented the portion of the variance in the teacher-reported observations of student implementation of active reading strategies accounted for by CRISS professional development or years teaching. From these results, it would appear that neither CRISS professional development (.002) nor the years teaching (.011) variable represented a large effect (0.5). The Observed Power of .097 was the probability of finding a difference among means this large if it existed in the population. Because the observed power was small (< .70), the researcher did not reject the null hypotheses regarding teacher-reported observations of student independent use of active reading strategies in the secondary social studies classroom.
Table 25

ANOVA Summary Table for Teacher-Reported Observations of Student Frequency of Use of Active Reading Strategies Variables

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Mean Square</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncentrality Parameter</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>5.736a</td>
<td>1.912</td>
<td>3</td>
<td>.274</td>
<td>.844</td>
<td>.022</td>
<td>.821</td>
<td>.097</td>
</tr>
<tr>
<td>Intercept</td>
<td>10116.167</td>
<td>10116.167</td>
<td>1</td>
<td>1448.736</td>
<td>.000</td>
<td>.975</td>
<td>1448.736</td>
<td>1.000</td>
</tr>
<tr>
<td>PD</td>
<td>.634</td>
<td>.634</td>
<td>1</td>
<td>.091</td>
<td>.765</td>
<td>.002</td>
<td>.091</td>
<td>.060</td>
</tr>
<tr>
<td>Years</td>
<td>2.900</td>
<td>2.900</td>
<td>1</td>
<td>.415</td>
<td>.523</td>
<td>.011</td>
<td>.415</td>
<td>.096</td>
</tr>
<tr>
<td>PD*Years</td>
<td>.001</td>
<td>.001</td>
<td>1</td>
<td>.000</td>
<td>.992</td>
<td>.000</td>
<td>.000</td>
<td>.050</td>
</tr>
<tr>
<td>Error</td>
<td>258.362</td>
<td>6.983</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12733.000</td>
<td></td>
<td>41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>264.098</td>
<td></td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Squared = .022 (Adjusted R Squared = -.058)

Summary

The researcher failed to reject Null Hypothesis 1 regarding the correlation of teacher participation in CRISS professional development with the self-reported implementation of active prereading, during-reading, or postreading strategies in the high school social studies classroom. Additionally, the researcher failed to reject Null Hypothesis 2 concerning the correlation of teacher participation in CRISS professional development with the self-reported frequency of utilization of active prereading, during-reading, or postreading strategies in the high school social studies classroom. Finally, the researcher failed to reject Null Hypothesis 3 relating to the correlation of teacher participation in CRISS professional development on the self-reported observations of student independent use of active reading strategies in the high school social studies classroom. Furthermore, to answer the research question seeking a relationship between
the number of years in the teaching profession as a moderating factor in what secondary social studies teachers self-report about student use of active reading strategies in the content area: The researcher found that there was no correlation between teachers’ years in practice and their self-reported classroom use of, frequency of implementation, or observation about student independent use of active prereading, during-reading, or postreading strategies.
Chapter Five

Conclusions and Implications

This chapter is divided into four sections. The first section addresses the nature of survey data and issues that arose in this study. The second section addresses the study context. The third section looks at each research null hypothesis and question, offering discussion and conclusions for the analytical findings of the study. The final section of this chapter offers implications for future research in the field of education. Before taking an in-depth look at the findings for the purposes of offering conclusions and implications, it is necessary to look at the survey responses to provide a context for which the data should be interpreted.

Initially, 517 high school social studies teachers were sent via the district e-mail system the online classroom reading practices survey. Of these 517 teachers, 55 teachers completed the survey. The researcher had hoped for a higher return rate than the 11% that was generated. Because of this low return rate, there was no ability to generalize these results across comparable populations. Therefore, it was necessary to consider possible reasons for the low participation.

The survey was sent in mid-December, and the school winter break commenced 1 week later. Though this is typically a period of the school year when teacher responsibilities are not intrusive and well in advance of spring testing dates, the impending break may have deterred some teachers from responding to the survey. Following data collection recommendations suggested by Porter (2004) to increase response rates, upon teachers’ return to the classroom from winter break, the researcher again contacted possible teacher informants via e-mail to request their participation in responding to the survey. Because teachers are always busy,
regardless of time frame, there may be no optimal time of year for survey administration. Timing was probably not a primary factor that contributed to the low response rate.

Reio (2007) highlighted the problem of survey non-response bias in social science research and classified possible reasons for non-participation: inaccessibility, inability, carelessness, and noncompliance. All of the possible respondents received the survey link in their work e-mail, so the survey was accessible; teachers were able to respond, and they did not misplace a hard copy of the survey due to carelessness. Therefore, the majority of individuals in the survey population were actively non-compliant; they consciously decided not to participate in the study. Reio (2007) further indicated that active noncompliance occurred because the participants were not interested in the topic. Also, research demonstrated that non-compliants, in contrast to individuals who complied with survey participation, possessed greater intentions to quit their jobs, less organizational commitment, and less satisfaction toward supervisors and their own jobs. Non-compliants also possessed more negative beliefs regarding how their organization handled survey data, believing that their input was not valued (Rogelburg, Luong, Sederburg, & Cristol, 2000). During this study, the active nonrespondents were clearly evident.

The researcher believes that a lack of interest and a perceived lack of time were the primary reasons for noncompliance by teachers. This researcher acknowledges that the participants in this study may have consisted of teachers who had an interest in student reading in the content area, and therefore a possible bias may exist in this study from non-responders. This study did not fully capture what teachers do in their classrooms; teachers may apply active reading strategies without being fully aware of it, and without participating in CRISS professional development. High school content area teachers may be resistant to incorporation of active reading strategies into their practice, thereby becoming “reading teachers.” They perceive
themselves not as reading teachers, but as social scientists. The nation, state, and district-mandated content area teachers should function as reading teachers as well as teachers of social studies; perhaps the teachers’ resistance to participate in this survey is a statement against this labeling. However, while the data may not be generalized to other groups, it offers valuable information in the study of teacher reading practices in the high school social studies classroom. The lack of significant difference in classroom reading practices between teachers who have participated in CRISS reading professional development and those who have not, may be an indicator of the weakness in the professional development, and deserving of closer study. These findings should lead policy makers and high school educators to more fully examine their practices and the impact of ongoing professional development programs currently assumed to be successful in promoting improved teacher methods and student achievement.

**Restatement of the Problem**

This study investigated the self-reported relationships among high school social studies teachers’ reading professional development and years in the classroom, with their use and implementation frequency of active reading strategies in the classroom, and their observations of student independent utilization of the same strategies. The conceptual framework for this study was found in five overlapping categories: Issues, Actors, Processes, Influences, and Results (Young, Levin, & Wallin, 2007). The No Child Left Behind Act (NCLB) served as a catalyst that shifted instructional emphasis in secondary content area classrooms to apply pedagogical approaches to reading through teacher active strategy instruction and student implementation. The actors in the study were the local district and its high school social studies teachers. The processes in the study were reading professional development opportunities provided to district teachers: Project CRISS and reading endorsement designation classes. The study sought to
examine the influences of these approaches to reading professional development on secondary social studies teachers’ adoption of new reading methods in the classroom. Lastly, teachers’ observations of student independent implementation of active reading strategies demonstrated the results of this sustained professional development program.

Utilizing this framework, this researcher first reviewed the professional literature, examining the national policies that drove reading comprehension instruction in the secondary social studies classroom (Center on Education Policy, 2004, 2007), the developmental history of active reading strategies (Chall, 1996; Durkin, 1978; McKeown et al., 2009; National Center for Educational Statistics, 2008), and the professional development processes utilized by an urban school district to improve teacher expertise (Florida Department of Education, 2009; Santa el al., 2004). From the review of the research, the study found a lack of quantitative and qualitative research on the relationships between high school content area teacher reading professional development, its transfer to teacher practice, and student independent implementation of learned reading strategies (NICHD, 2000).

The purpose of this study was to examine how high school teachers engaged students in reading social studies textbooks and to determine if their instructional practices supported student reading strategy application, according to teachers’ own reports. This study informed practitioners and policymakers about high school social studies teachers implementation of pre-, during-, and postreading strategies, their self-reported frequency of classroom use of active reading strategies, and their self-reported perceptions about students independently use of reading strategies. This information was critical to determine future teacher professional development and instructional focus.

**Review of Methods and Variables**
This study used data collected by the researcher through an online survey instrument. Data were collected during the 2010-2011 school year from the district high school social studies teachers. Self-report data regarding teacher classroom use and frequency of implementation of prereading, during-reading, and postreading active strategies were analyzed in the study. Data were also analyzed from teachers’ self-reported observations of student independent implementation of active reading strategies in the study. Only those teachers who voluntarily completed the online survey instrument were included in the study. The study was quantitative and non-experimental in design; the survey instrument answered all research questions. The study used a purposeful sample of 54 district teachers.

Results

Power is the probability of detecting an effect, given that the effect is really there; the probability of rejecting the null hypothesis, when it is in fact false. In this study, the researcher examined effect was teacher reading professional development in Project CRISS. The non-significant results demonstrated in this study, combined with low observed power, indicated that the results of professional development may or may not exist within this population, but may not be statistically evident. ANOVA analyses were used to address null hypothesis 1 and the research question.

1. There is no relationship between teachers reporting receiving reading professional development (CRISS training) and self-reported instruction of active reading strategies in the secondary social studies classroom (H0).

4. Is the number of years in the teaching profession a moderating factor in what secondary social studies teachers’ self-report about student use of active reading strategies in the content area?
a. Is there a correlation between teachers reporting receiving reading professional
development (CRISS training) and the number of years in the teaching profession and
self-reported instruction of active reading strategies in the secondary social studies
classroom? (H₀)

ANOVA analysis was used to address null hypotheses 1 and research question 4a
(Table 3) for prereading strategies. Results showed that there was no significant difference in the
self-reported classroom implementation of prereading strategies between teacher groups in
CRISS professional development (p = .538) and in years of teaching (p = .825) because both ps
were greater than 0.05. Further, there was no significance in the interaction between the two
groups (p = .551). This resultant correlation cannot answer the question of whether or not CRISS
teacher professional development or teachers’ years in practice were factors in teacher classroom
use of active prereading strategies. This question would require further empirical data to answer.
But the correlation does show that in this study there was no significance between these factors.

ANOVA analysis was used to address null hypothesis 1 and research question 4a
(Table 6) for during-reading strategies. Results showed that there was no significant difference in
the self-reported classroom implementation of during-reading strategies between teacher groups in
CRISS professional development (p = .592) and in years of teaching (p = .222), because both ps
were greater than 0.05. Further, there was no significance in the interaction between the two
groups (p = .636). This resultant correlation cannot answer the question of whether or not
teacher CRISS professional development or teachers’ years in practice were factors in teacher
classroom use of active during-reading strategies. This question would require further empirical
data to answer. But the correlation does show that in this study there was no significance
between these factors.
ANOVA analysis was used to address null hypothesis 1 and research question 4a (Table 9) for postreading discussion strategies. Results showed that there was no significant difference in the self-reported classroom implementation of postreading discussion strategies between teacher groups in CRISS professional development ($p = .592$) and in years of teaching ($p = .222$), because both $p$s were greater than 0.05. Further, there was no significance in the interaction between the two groups ($p = .636$). This resultant correlation cannot answer the question of whether or not teacher CRISS professional development or teachers’ years in practice were factors in teacher classroom use of active postreading strategies. This question would require further empirical data to answer. But the correlation does show that in this study there was no significance between these factors.

CRISS was a professional development strategy implemented and required of content area teachers by the district and at the school level, with the goal of supporting student reading comprehension scores on a standardized state examination. However, this study demonstrated that regardless of high school social studies teachers’ reading professional development in CRISS, their self-reported practice, as it related to the implementation of active reading strategies in the classroom, did not vary greatly from teachers who did not participate in reading professional development. Many researchers (Chin & Benne, 1969; Guskey, 2003; Richardson & Placier, 2001; Stallings & Krasavage, 1986) described the inherent implementation difficulties of strategies learned in professional development and the nature of changing teacher practice. It appears that their findings, that district-inspired professional development programs made little impact on substantial changes in teacher practice and student learning, were substantiated by this study.
ANOVA and *t*-test analyses were used to address null hypothesis 2 and the research question.

2. There is no relationship between teachers reporting receiving reading professional development (CRISS training) and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom (H₀).

4 Is the number of years in the teaching profession a moderating factor in what secondary social studies teachers’ self-report about student use of active reading strategies in the content area?

b. Is there a correlation between teachers reporting receiving reading professional development (CRISS training) and the number of years in the teaching profession and the self-reported frequency of classroom instruction in active reading strategies in the secondary social studies classroom? (H₀)

ANOVA analysis was used to address null hypothesis 2 and research question 4b (Table 12) for the frequency of classroom implementation of prereading strategies. Results showed that there was no significant difference in the frequency of self-reported classroom implementation of prereading strategies between teacher groups in CRISS professional development (*p* = .811) or in years of teaching (*p* = .223) because both *ps* were greater than 0.05. Further, there was no significance in the interaction between the two groups (*p* = .811). This resultant correlation cannot answer the question of whether or not teacher CRISS professional development or teachers’ years in practice were factors in the frequency of teacher classroom use of active prereading strategies. This question would require further empirical data to answer. But the correlation does show that in this study there was no significance between these factors.
$T$-test analysis was used to examine null hypothesis 2 and research question 4b (Table 16) for the self-reported frequency of teacher implementation of classroom during-reading strategies. Results showed that there was no significant difference in the frequency of self-reported classroom implementation of during-reading strategies between teacher groups in CRISS professional development ($p = .344$) because $p$ was greater than 0.05. $T$-test analysis was used to examine null hypothesis 2 and research question 4b (Table 18) for the self-reported frequency of teacher implementation of classroom during-reading strategies. Results showed that there was no significant difference in the frequency of self-reported classroom implementation of during-reading strategies between teacher groups in years of teaching ($p = .225$) because $p$ was greater than 0.05. These resultant correlations cannot answer the question of whether or not teacher CRISS professional development or teachers’ years in practice were factors in the frequency of teacher classroom use of active during-reading strategies. This question would require further empirical data to answer. But the correlation does show that in this study there was no significance between these factors.

ANOVA analysis was used to address null hypothesis 2 and research question 4b (Table 21) for the frequency of classroom implementation of postreading discussion strategies. Results showed that there was no significant difference in the frequency of self-reported classroom implementation of postreading strategies between teacher groups in CRISS professional development ($p = .357$) or in years of teaching ($p = .136$), because both $ps$ were greater than 0.05. Further, there was no significance in the interaction between the two groups ($p = .485$). This resultant correlation cannot answer the question of whether or not teacher CRISS professional development or teachers’ years in practice were factors in the frequency of teacher classroom use of active postreading discussion strategies. This question would require further
empirical data to answer. But the correlation does show that in this study there was no significance between these factors.

This study demonstrated that regardless of CRISS professional development, high school social studies teachers’ self-reported practice as it relates to the frequency with which active reading strategies were implemented in their classrooms, did not vary greatly from teachers who have not participated in reading professional development. Wallace (2009) discussed the link between teacher professional development and the frequency of teacher implementation of active reading strategies. She found that across the nation, the research demonstrated mixed effects of reading professional development and the frequency of reading practices implemented in the classroom. She said, “There is a link between professional development and teacher reading practice, but the results indicate that it is as likely to support and increase practices as lead to a reduction in the use of those practices” (p. 584). It appears that her findings were substantiated by this study, where teachers’ frequencies of implementation in active reading strategies did not appear to reflect professional development or years in the classroom. Because all statistical correlations in this study had low power, this research cannot speak to the effectiveness of CRISS professional development. What this researcher does not know is why this situation exists – did teachers make a conscientious choice not to support student reading through strategy implementation, or did they not ask their students to read in class? It is also possible that this may bring into question the appropriateness of these types of reading strategies professional development – if the strategies are not adopted by the teachers in their practice, does that serve as an inherent program indictment? Because there were no statistical differences identified between the teacher groups, qualitative data gathered through observations, artifacts, or teacher interviews
might have added depth to the study about the qualities and characteristics of active reading strategies teachers learned in professional development.

ANOVA analysis was used to address null hypothesis 3 and the research question.

3. There is no relationship between teachers reporting receiving reading professional development CRISS training) and the active reading strategies secondary social studies teachers’ self-report that students use independently (H0).

4. Is the number of years in the teaching profession a moderating factor in what secondary social studies teachers’ self-report about student use of active reading strategies in the content area?

   c. Is there a correlation between teachers reporting receiving reading professional development (CRISS training) and the number of years in the teaching profession and the active reading strategies secondary social studies teachers’ self-report students independently using? (H0)

ANOVA analysis was used to address null hypothesis 3 and research question 4c (Table 24) for teacher observations of student frequency of use of active reading strategies. Results showed that there was no significant difference in teacher self-reported observations of student independent use of reading strategies between teacher groups in CRISS professional development (p = .203) or in years of teaching (p = .103) because both ps were greater than 0.05. Further, there was no significance in the interaction between the two groups (p = .497). This resultant correlation cannot answer the question of whether or not teacher CRISS professional development or teachers’ years in practice were factors in teacher observations of student independent use of reading strategies. This question would require further empirical data.
to answer. But the correlation does show that in this study there was no significance between these factors.

The effects of teacher professional development must be rooted in what their students learn. In this study, regardless of teacher CRISS professional development, high school social studies teachers’ self-reported observations of student independent use of active reading strategies did not vary from the students of teachers who had not participated in reading professional development through Project CRISS. The What Works Clearinghouse: An Intervention Report published by the U.S. Department of Education (2010) summarized the research done on the effects of Project CRISS pertaining to adolescent learners. Of the 31 extant studies, only 2 met the criteria for inclusion in the analysis. These two studies (Horsfall & Santa, 1994; James-Burdumy et al., 2009) were reviewed from information provided on the Project CRISS website and were randomized controlled trials that met Clearinghouse evidence standards. Interestingly, even these 2 studies were flawed for secondary students; the 8th and 11th grade samples were excluded from Clearinghouse results tabulations because the measures of effectiveness could not be attributed solely to the CRISS intervention. The Clearinghouse denunciation of the research into CRISS was the same observation of the limited nature of research into this professional development program made by the researcher in the Literature Review of this study. The analysis of the two studies concluded that CRISS participation had “potentially positive effects” for increasing student reading comprehension. Student independent implementation of active reading strategies is at the crux of increasing student reading comprehension. This study did not indicate that teacher observations of student independent utilization of active reading strategies occurred with more or less frequency in teachers’ classrooms that received CRISS reading professional development. While there may be
“potentially positive effects” for increased student reading comprehension, those effects were not
evidenced in this study.

**General Conclusions**

This study examined the relationships among high school social studies teachers’ self-reported classroom implementation of active reading strategies, the frequency with which those strategies were utilized in the classroom, and teacher observations of students’ independent utilization of the strategies with teacher participation in CRISS professional development and years in the classroom. The study did not show any correlation with teacher CRISS professional development or years in the profession and teacher subsequent classroom use of active reading strategies or their observations of student independent implementation of the same strategies. It only used data obtained from an online survey instrument of high school social studies teachers during the 2010-2011 school year.

One limitation to this study was the reliance on the online survey instrument as the sole method of analysis. The self-report nature of the survey presented inherent difficulties in interpretation. The study may not have been taken seriously enough by respondents, and, given the low response rate, it could very well be that high school social studies teachers use active reading strategies more than this small study suggested. Although the study was not able to suggest any correlation between teacher professional development and active reading strategy classroom implementation or student independent use of the strategies, a larger sample population may have enabled an examination of the individual strategies and their implementation rather than the investigation of active reading strategies as groups: prereading, during-reading, and postreading.
This study fit into the larger body of work that was cited in the Literature Review. Most of the research literature focused on small studies, looking at student and teacher implementation in single schools, or even single classrooms (Brown & Smiley, 1978; McKeown et al., 1992; McKeown et al., 2009; Watts & Anderson, 1971). Of notable exception was the work of the National Reading Panel, which made the point of calling for larger scale work, particularly at the secondary level (NICHD, 2000). While this study attempted to examine teacher practice in a very large urban school district, the response rate to the survey was such that it qualified as a small study with no ability to generalize to a larger population.

Early examination of the data demonstrated evidence of an outlier, a teacher who attained the reading endorsement designation without participation in CRISS training. The existence of the outlier brought up questions that merit further study; was the endorsement attained to satisfy individual motivations, rather than as a school or district mandate? How would those teacher responses contrast with the findings of the study? Are there other individuals, perhaps in different content areas, who share the same professional development history? The question of whether or not teacher or student performance has improved or remained the same because of the teacher’s professional development, were not answered by these correlations.

Implications for Future Research

The results of this study can be interpreted by returning to the framework that provided lenses with which to examine teachers’ classroom practices.

Issues. Levin (2008) identified NCLB as the driving issue behind content teachers reading professional development and said that content could not be separated from pedagogy. The district, schools, and high school social studies teachers in this study demonstrated a response to accountability measures driven by the issues of national, state, and local policies.
This study documented that they responded; more than half the survey respondents (55%) participated in Project CRISS professional development. Yet more research can be conducted to examine specific reading professional development programming for high school teachers in their respective curricular areas to determine if this response was unique to the social studies or if it was cross-curricular.

**Actors.** The actors in this study were informed by the research regarding two broad approaches (strategies and content) to content area reading. This study looked at teacher implementation of pre-, during-, and postreading activities (Alvermann et al., 2007; Santa et al, 2004; Vacca & Vacca, 2005) in the high school social studies classroom. More research could further validate the findings in this study that there was no significant difference between the implementation of active reading strategies at any point in the reading process between high school social studies teachers who had received CRISS training, and those who did not. It is possible that the structure of this study as an online survey contributed to the low response rate. Future research might include a hard copy solicitation of survey information, perhaps administered in a “captive setting,” for instance, during an on-site department meeting. Additionally, future research may be broadened and deepened by adding a qualitative research component, seeking observations, interviews, and artifacts from content area teachers’ classrooms (Rogelburg, Conway, Sederburg, Spitzmuller, Aziz, & Knight, 2003).

**Processes.** This study examined the process of content area teachers’ reading professional development by correlating CRISS professional development and classroom practice. The study was able to amend the research dilemma of lack of common vocabulary regarding reading processes (McKeown et al., 2009) by sampling high school social studies teachers who had common reading professional development experiences and therefore similar
vocabulary regarding their reading strategy practices in the classroom. However, the fact that there were no significantly different findings for strategy implementation between teachers who received CRISS professional development and those who did not will require further research to determine why or why not teachers failed to implement learned reading processes in their classrooms. More research may be conducted to explain if the reading professional development programs are designed in such a way that they cannot predict teacher classroom practices, and to further examine the difficulties teachers have transferring what they learn in professional development to their classroom practices.

**Influences.** The district and schools supplied the influences in this study, providing access to reading professional development through Project CRISS and the reading endorsement designation to content area teachers. The study failed to find any significant differences relative to high school social studies teacher practices or teacher observations of student independent use of active reading strategies. It is possible that teachers use reading strategies in their classrooms that they learned without participating in CRISS professional development. It is also possible that high school content area teachers do not see the value of explicitly teaching or using reading strategies with their students. There may be numerous contributory factors to such attitudes: high school teachers may perceive the content area as their focus and thus believe it is not their job to be reading teachers; and they may resist the imposed and mandated initiative, given that reading and math are preeminently important in the current testing and accountability environment. It would behoove the district to conduct further project evaluation work on Project CRISS to further elucidate the effectiveness of this type of professional development. It may not be possible for future empirical studies discriminate between the influence of the various reading professional programs, given the overlap identified in this study between teachers participation
in Project CRISS and reading endorsement coursework. It is possible that studies grounded in mixed methodology with qualitative data may prove to be more fruitful for researchers to identify the impact of teacher professional development programs on teacher beliefs and practices. With such data maybe future research may be able to determine if these programs inform each other, or if they do not, and to elucidate the effectiveness of this type of professional development.

**Results.** This study looked at the results of ongoing professional development programs in a large urban school district. The need to evaluate the success of district professional development programs (Levin, 2008; Young, 2007) was presented in the literature. Further, this study sought to contribute to the literature regarding high school students’ reported independent implementation of reading strategies according to high school social studies teachers. This study was a small step in examining the value and relevance of high school social studies teacher professional development in active reading strategies. The researcher attempted to look broadly at teacher classroom reading practices, incorporating pre-, during-, and postreading strategies. Future studies might provide an opportunity to narrow the lenses through which the researcher views these practices and to focus on one area of active reading strategies, while attempting to build a more diverse study population. The data in this study initially demonstrated marginal significance measuring the frequency of teacher implementation of during-reading strategies. Future studies focused on during-reading strategies in particular may yield more significant results. There are other important curricular content areas that can be studied for relationships among reading professional development and teacher practice. Studies regarding correlations for English, mathematics, and science teachers would further advance the available data to assess the
effectiveness of teacher professional development as it relates to practice in content area classrooms.

In the end analysis, this small study raised more questions than it answered. This study should lead to future investigations of relationships among other curricular courses and their teachers’ professional development, classroom practices, and observations. It is important that future research investigate teachers' purposes for participating in professional development, examining the context of political setting in the local school, community perceptions of teacher performance, and state standardized testing. This includes probing the challenge of mandated professional development programming, as opposed to teachers accessing a menu of professional development options based upon what they perceive they need to learn and do to increase their expertise. Through further study, it might be possible to one day eliminate the scene that introduced this study: students’ complaints about the boring classroom task of textbook reading.
Appendix A: Principal Acknowledgement

Reading Strategies In Secondary Social Studies: Teacher Reported Practice and Professional Development

Dear Principal:

I am a high school social studies teacher in Broward County, and a doctoral student at Florida Atlantic University working on my dissertation study, “Reading Strategies In Secondary Social Studies: Teacher Reported Practice and Professional Development.” The purpose of this research is to investigate high school social studies teachers’ self-reported implementation of active reading strategies, how this relates to teacher professional development, and teacher’s perception of student independent implementation of these strategies.

Upon approval from both Florida Atlantic University and Broward County Institutional Review Boards, your social studies teachers will receive a copy of the online survey in their e-mail. Please encourage them to complete the short survey upon receipt. The risks involved in participating in this study are no more than one would experience participating in regular daily activities. Benefits from participation in this study include a deeper understanding of reading strategies as they relate to content knowledge and a contribution to the knowledge base in the Broward school district. We believe the research will produce valuable information regarding the use of reading strategies in the secondary social studies classroom.

Thank you in advance for encouraging your faculty’s participation! If you have any questions about the study, please contact me via e-mail or at 754-322-0500.

Sincerely,

Carmen Newstreet
Coral Springs High School
754.322.0500
Appendix B: Survey

Reading Strategies In Secondary Social Studies: Teacher Reported Practice and Professional Development

Investigators: Dr. Gail Burnaford and Carmen Newstreet

Thank you for your interest in participating in our research study. The purpose of the study is to strengthen social studies and reading academic instruction, to highlight the relationship between teaching practices and professional development, and to provide data that compare student performance with teacher expectations. It should take you no more than 15 minutes to complete this survey. You may skip any questions that make you feel uncomfortable, and you are free to withdraw from the study at any time without penalty. The risks involved with participating in this study are no more than one would experience in regular daily activities. Potential benefits that you may receive from participation include a greater knowledge of reading in the content area and the satisfaction of knowing you have contributed to a better understanding of social studies and reading in high school students in Broward County, Florida.

If you experience problems or have questions regarding your rights as a research subject, contact the Florida Atlantic University Division of Research at (561) 297-0777. For other questions about the study, you should call the principal investigator: Dr. Gail Burnaford at (561) 297-2305 or researcher Carmen Newstreet at (754) 322-0500. By completing the survey, you give consent to participate in this study.
1). School

- Atlantic Technical
- Boyd Anderson
- Coconut Creek
- Cooper City
- Coral Glades
- Coral Springs
- Cypress Bay
- Deerfield Beach
- Dillard
- Ely
- Everglades
- Flanagan
- Fort Lauderdale
- Hallandale
- Hollywood Hills
- McArthur
- McFatter
- Miramar
- Monarch
- Northeast
- Nova
- Piper
- Plantation
- Pompano Beach
- South Broward
- South Plantation
- Stoneman Douglas
- Stranahan
- Taravella
- West Broward
- Western
- Whidden-Rogers Education Center

2). Date

Please enter in MM/DD/YYYY format
Please list all Social Studies classes you currently teach

Q3a
Q3b
Q3c

4). Please check: I have attended and completed

☐ C.R.I.S.S. 1
☐ Reading Endorsement 2

5). I have been teaching

☐ 0-5 years 1
☐ 6-10 years 2
☐ 11-15 years 3
☐ 16-20 years 4
☐ more than 20 years 5

Your responses will be kept confidential. Thank you for participating in this study!

PART I
Mark the strategies you teach or assign as part of homework or in-class work in your social studies classroom. Of course, you're not expected to know or use all of these strategies!

6). Reading Strategies - Activating Prior Knowledge

☐ Learning Logs/Journal Entries 1
☐ Brainstorming 2
☐ K-W-L charts 3
☐ Anticipation Guides 4

7). Reading Strategies - During Reading

☐ Highlight/Selective Underlining 1
☐ Answer comprehension questions 2
☐ Content charts/frames 3
☐ Concept maps/web notes 4
☐ T-charts 5
☐ Cornell/column notes 6
☐ Timeline 7
☐ Outline/power thinking 8
☐ Venn diagram 9
8). **Post Reading Activities - Discussion**

- Summary comprehension questions
- Whole class
- Socratic/seed discussion
- Fishbowl/concentric circle
- One sentence summary/chalk talk discussion

**PART II**

Mark the number that most accurately reflects how often you teach or assign each strategy. Of course, you’re not expected to know or use all of these strategies!

**Reading Strategies - Activating Prior Knowledge**

<table>
<thead>
<tr>
<th>9a) Learning logs/journal entries</th>
<th>Never</th>
<th>1-2 times a week</th>
<th>1-2 times a month</th>
<th>Almost every time I teach</th>
<th>Every time I teach</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>9b). Brainstorming</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9c). K-W-L charts</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9d). Anticipation Guides</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
### Reading Strategies - During Reading

<table>
<thead>
<tr>
<th></th>
<th><strong>Never</strong></th>
<th><strong>1-2 times a week</strong></th>
<th><strong>1-2 times a month</strong></th>
<th><strong>Almost every time I teach</strong></th>
<th><strong>Every time I teach</strong></th>
<th><strong>Don't know</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10a).</strong></td>
<td>Highlight/selective underlining</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>10b).</strong></td>
<td>Answer comprehension questions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>10c).</strong></td>
<td>Create charts</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>10d).</strong></td>
<td>Concept maps/web notes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>10e).</strong></td>
<td>T-charts</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>10f).</strong></td>
<td>Cornell/column notes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>10g).</strong></td>
<td>Timeline</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>10h).</strong></td>
<td>Outline/power thinking</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>10i).</strong></td>
<td>Venn Diagrams</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tbody>
</table>

### Post Reading Activities - Teacher Led Discussion Strategies

<table>
<thead>
<tr>
<th></th>
<th><strong>Never</strong></th>
<th><strong>1-2 times a week</strong></th>
<th><strong>1-2 times a month</strong></th>
<th><strong>Almost every time I teach</strong></th>
<th><strong>Every time I teach</strong></th>
<th><strong>Don't know</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>11a).</strong></td>
<td>Teacher generated summary comprehension questions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>11b).</strong></td>
<td>Teacher directed whole class discussion</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>11c).</strong></td>
<td>Socratic.seed discussion</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>11d).</strong></td>
<td>Fishbowl/Concentric circle discussion</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>11e).</strong></td>
<td>One sentence summary/Chalk talk discussion</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
PART II

Mark the number that most accurately reflects how often you observe students independently using each strategy. Of course, students are not expected to know or use all of these strategies!

### Reading Strategies - Student Independent Usage

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Use independently</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>12a).</strong> Skim reading</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>12b).</strong> Highlighting/selective underlining</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>12c).</strong> Create charts</td>
<td>1</td>
<td>2</td>
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<td><strong>12d).</strong> Concept maps/web notes</td>
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<td><strong>12e).</strong> T-charts</td>
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<td><strong>12f).</strong> Cornell/column notes</td>
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<td><strong>12g).</strong> Timeline</td>
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<td><strong>12h).</strong> Outline/power thinking</td>
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<td><strong>12i).</strong> Venn Diagrams</td>
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Thank you for participating in this study! Please click Submit.
Appendix C: Initial Notification Letter

Reading Strategies In Secondary Social Studies: Teacher Reported Practice and Professional Development

Dear Colleague:

I am a high school social studies teacher in Broward County, and a doctoral student at Florida Atlantic University working on my dissertation study, “Reading Strategies In Secondary Social Studies: Teacher Reported Practice and Professional Development.” The purpose of this research is to investigate high school social studies teachers’ self-reported implementation of active reading strategies, how this relates to teacher professional development, and teacher’s perception of student independent implementation of these strategies.

We hope to gain a deeper understanding of reading strategies as they relate to content knowledge and to contribute to the knowledge base in the Broward school district. We believe the research will produce valuable information regarding the use of reading strategies in the secondary content area classroom.

In the next week you will receive a copy of the online survey in your e-mail. Please complete the short survey upon receipt. Thank you in advance for your participation!

Sincerely,

Carmen Newstreet
Coral Springs High School
754.322.0500
Appendix D: Cover Letter with Survey Attachment

Reading Strategies In Secondary Social Studies: Teacher Reported Practice and Professional Development

Dear Colleague:

I am a high school social studies teacher in Broward County, and a doctoral student at Florida Atlantic University working on my dissertation study “Reading Strategies In Secondary Social Studies: Teacher Reported Practice and Professional Development.” The purpose of this research is to investigate high school social studies teachers’ self-reported implementation of active reading strategies, how this relates to teacher professional development, and teacher’s perception of student independent implementation of these strategies.

Please click on the link below to begin the online survey. The risks involved in participating in this study are no more than one would experience participating in regular daily activities. Benefits you may get from participation in this study include a deeper understanding of reading strategies as they relate to content knowledge and a contribution to the knowledge base in the Broward school district. We believe the research will produce valuable information regarding the use of reading strategies in the secondary social studies classroom.

The survey is designed to be simple and concise. Completing the whole survey will probably take less than 15 minutes. You are requested to complete the survey within two weeks of receipt. All of the results will be kept confidential and secure and only the people working with the study will see your data.

Thank you for taking the time and effort to complete this survey.

Sincerely,

Carmen Newstreet
Coral Springs High School
754.322.0500
Appendix E: Follow-up Letter with Survey Attachment

Reading Strategies In Secondary Social Studies: Teacher Reported Practice and Professional Development

Dear Colleague:

You may have received a copy of an online survey via e-mail two weeks ago. I am a high school social studies teacher in Broward County, and a doctoral student at Florida Atlantic University working on my dissertation study “Reading Strategies In Secondary Social Studies: Teacher Reported Practice and Professional Development.” The purpose of this research is to investigate high school social studies teachers’ self-reported implementation of active reading strategies, how this relates to teacher professional development, and teacher’s perception of student independent implementation of these strategies.

We hope to gain a deeper understanding of reading strategies as they relate to content knowledge and to contribute to the knowledge base in the Broward school district. We believe the research will produce valuable information regarding the use of reading strategies in the secondary content area classroom.

Please click on the link below to complete the short survey. The deadline for submission is next Monday. Thank you for your participation!

Sincerely,

Carmen Newstreet
Coral Springs High School
754.322.0500
References


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