

THE EFFECTS OF STRATEGY INSTRUCTION IN READING INFORMATIONAL TEXT
ON READING LEVEL AND MOTIVATION OF FIFTH GRADE STUDENTS

By

Michelle Donn Adler

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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APPROVED BY:

Dr. Linda Holcomb, Ed.D, Committee Chair

Dr. Jonathan Burton, Ed.D, Committee Member

Dr. Cheryl Rude, Ph.D, Committee Member

Dr. Scott Watson, Ph.D, Associate Dean of Graduate Programs

ABSTRACT

The purpose of this nonequivalent control-group design study was to determine if students had an increase in reading level and motivation to read when more informational text and instruction was added into the curriculum. The independent variables were the reading curriculum, with Success for All (SFA) used with the control group and SFA with additional instruction in informational text used with the study group. The dependent variables were reading level and levels of motivation determined by the Scholastic Reading Inventory (SRI) and the Elementary Reading Attitude Survey (ERAS) measured after eight weeks of instruction and again three months post-study. The research questions sought to determine if there was a two population case significance test of means difference in reading level and motivational gains between the group that received traditional reading instruction and the group that received additional instruction in reading informational text. The study also sought to determine if the academic reading and recreational reading gains differed between two instructional groups. Finally, the study also looked at immediate and three month post-study reading level gains. The sample included approximately sixty fifth graders from a mid-sized elementary school in the mid-west. Reading levels were measured with the Scholastic Reading Inventory (SRI), a quantitative assessment that is both valid and reliable, and attitude gains were measured with the Elementary Reading Attitude Survey (ERAS), also valid and reliable. After Levene's tests were run, ANCOVA was used to compare means. Results showed that students in the study group scored significantly higher on the academic, recreational, and total score of the ERAS post-study but did not score significantly better on the SRI, neither eight weeks post-study nor three months post-study.

Keywords: Constructivism, Informational Text, Motivation, Reading

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Abbreviations

Common Core State Standards (CCSS)

Elementary Reading Attitude Survey (ERAS)

National Assessment of Educational Progress (NAEP)

Programme for International Student Assessment (PISA)

Scholastic Reading Inventory (SRI)

Success for All (SFA)

CHAPTER ONE: INTRODUCTION

The search for what may help students become fluid readers with excellent comprehension skills has been on-going. While teaching students to read has been the crux of much research, keeping them reading and continuing to improve their reading abilities continues to flummox educators. The National Reading Panel, a group of educators, researchers, and teachers, concluded in 2000 that there are Five Pillars of Reading: Phonological Awareness, Phonics, Fluency, Vocabulary, and Comprehension (National Reading Panel, 2015). These pillars help students learn to read; however, they do not necessarily keep students reading. Finding what motivates readers is imperative to teaching readers, and what motivates one student in reading may not help another. This paper sought to determine if providing more time and instruction in reading informational text increased the reading level and engagement of young readers in a small, mid-western town. This chapter provides evidence of the reading gap between various types of students, identifies the differences that might be contributing to the gap, and lists suggestions, based on current research, for motivating students to read and possibly closing the reading gaps.

Background

Since 2000 and the implementation of No Child Left Behind, students have been assessed annually on their skills in reading and math (National Center for Education Statistics, 2009). This information is used to hold educators accountable, but can also be disseminated to see what appears to help students score higher on the assessments and to monitor growth (Education Week, 2004). While these tests are designed for comparing students in the United States, students can also be compared to their international counterparts.

The Programme for International Student Assessment (PISA) is an assessment given every three years, and in 2012 it was given to 510,00 fifteen-year-olds all over the world in 34 different countries. That year, American 15-year-olds ranked 17th out of 34 countries on the reading assessment (PISA 2012 Results, 2012). While nearly half of the countries improved their test scores, the United States did not see significant change in test scores. Though a variety of explanations are provided to explain the lack of progress in reading, one noted difference between American schools and some of the others, such as top-scoring Shanghai-China, is the various types of students who take the test (PISA 2012 Results, 2012). Unlike the school systems in other countries, American public schools have been designed to educate all students, regardless of gender, background, location, socio-economic status or ability. This is part of the Rehabilitation Act of 1973 (Free Appropriate Public Education for Students with Disabilities, 2010). America's teachers are required by law to give all students a free and appropriate public education. The curriculum and delivery of instruction have to vary to help all students learn the required material so that all students do receive an appropriate education. Danielson (2007) noted, "Not all outcomes are equally suitable for all students, nor are the same outcomes always appropriate for all students in a class. Skilled teachers adjust their instructional outcomes to accommodate the diversity of their students" (p. 52).

Skilled teachers adjust their instruction to meet the needs of all the different students that are in one class. Gender differences are one example of diversity seen in a typical classroom. Recently, the struggles of male readers have been brought to light, with boys noticeably behind girls in reading and writing (Whitmire, 2010). During the last two decades, more research has been conducted to determine if boys and girls find similar levels of success in school, and the research indicates boys are struggling more academically than girls, particularly in reading

achievement (Tyre, 2009; Zambo & Brozo, 2009). In a 1994 study conducted by the U.S. Department of Education, 9-year-old boys scored five points lower than girls in reading on the National Assessment of Education Progress (NAEP), with the gap widening to 14 points by age 17 (Zambo & Brozo, 2009). James (2007) noted that while girls had a 16-20 point advantage on boys in 1998, the gap had widened to nearly 24 points in 2002. The NAEP scores typically range from 0-500 in reading, with anchor scales used so similar levels of students are compared (National Center for Education Statistics, 2009). In the mid-western state, where this study took place, 86% of females passed the 4th Grade State Reading Assessment in 2012, while only 81% of males passed. The gap did narrow slightly with the older students, with 90% of females passing the 11th Grade State Reading Assessment and 86% of males passing (Kansas Department of Education, 2012). In summary, data reveals females are outperforming the males in today's classrooms.

Several reasons have been put forth to explain why there can be such variance in students' scores in literacy achievement. Physiological differences, including brain size and hormone levels, for example, is a reason researchers believe some may struggle more in reading than others (Gurian & Stevens, 2005). The desire to read, however, is often considered one of the biggest predictors of reading success (McKool, 2007), and it appears as if some students are not motivated to read because they do not like the reading today's schools provide. Love and Hamston (2003) noted that students can have a variety of reasons for wanting to read and different purposes for their reading. For example, boys often read to gather information about a given topic or for a very specific purpose, while girls are more likely to read recreationally, or simply for fun. Differences in reading preferences (Jenkins, 2009) could explain the literacy achievement gap between different populations. Some students tend to prefer reading

informational text and non-fiction, but the bulk of reading time in elementary schools is spent reading fiction (Whitmire, 2010). Research continues to prove that student engagement is crucial in reading. Students who are interested in the reading material that is given to them will put forth more effort in the reading process than those who have little or no interest in the given reading material (Roe & Smith, 2011). Yet, schools often spend nearly 80% of the students' day reading in the genre that may be the one least likely to motivate students to read (Calkins, Ehrenworth, & Lehman, 2012). It is unlikely the gap between groups will be closed if educators are not actively pursuing ways to engage all readers through various genres.

More can be done so there is an increase in the number of students who are engaged in reading both in and out of school. Several studies have revealed that students do have preferences for what occurs in school, including what they read. The preferences of one group may impact the learning of another group, however. Boys generally prefer to read informational text, whereas girls tend to prefer narratives (Jenkins, 2009; White, 2009; Zambo & Brozo, 2009). Elementary school teachers often spend a greater portion of literacy instruction and reading time on narratives (Whitmire, 2010), benefitting the girl learners. It is believed that many elementary students are spending up to 80% of their day reading narratives (Calkins et al., 2012), the kind of literature most preferred by female students. Boys, meanwhile, generally prefer non-fiction, the genre least likely to be found in classroom libraries (Allyn, 2011).

Reading more informational text, even if students prefer that genre over narrative texts, may or may not actually improve comprehension. Current research does not conclusively demonstrate that students who read more informational text comprehend that material better than those who read less (Love & Hamston, 2003; Topping, Samuel, & Paul, 2008). McGeown, Norgate, and Warhurst (2012) noted that increasing the reading interests of children using books

the children found engaging positively correlated with their reading skill, and interest in what is being read mattered in comprehension performance. Their study was conducted on narrative readings, however, the genre found to be less engaging for some students. Topping et al. (2008) commented that although boys of various ages were checking out more informational texts from the library than girls, it was not clear that this translated into the boys comprehending informational text better than the girls.

Many studies show that engagement does matter in reading comprehension and achievement, but none of the reviewed studies identified if reading more informational text raised reading levels or increased the motivation to read. Further, none of the reviewed studies offered solutions on what type of instruction might increase the reading level of students who do read informational text.

Problem Statement

American students have lower reading achievement scores compared to other students internationally. “These low levels of performance tend to be coupled with low levels of engagement with school and – as observed in PISA 2009 – with low levels of engagement and with commitment to reading” (PISA 2012 Results, 2012, p. 9). Educators continue to look for ways to boost comprehension of students, and one way to do this may be to increase the students’ engagement with reading. If students like to read, they will read more, and more reading will improve reading skills, improving comprehension. Yet as the PISA results acknowledged, American students are not making significant gains in reading. Changing the education of America’s students may be required to see real gains on tests like the NAEP and PISA.

As noted earlier, American classrooms are full of narrative texts even though informational text is the preferred genre for many students. The creation and subsequent adoption of the Common Core State Standards (CCSS) by many states may provide students with more opportunities to read what they prefer, especially in the genre of informational text. The CCSS may be the catalyst that creates change in American classrooms and ultimately improves student achievement in reading.

The CCSS were created by the Council of Chief State School Officers and the National Governors Association “to create the next generation of K-12 standards in order to help ensure that all students are college and career ready in literacy no later than the end of high school” (CCSS Initiative, 2010, p. 3). The standards were designed in part to increase rigor in American classrooms and help students find success in college and in work after high school graduation. They have since been adopted by 46 states and are currently being implemented across the nation; the CCSS will change how informational text is used in school. If implemented correctly, the CCSS will increase the amount of time teachers spend using informational text in their classrooms. The CCSS are asking that fourth graders spend 50% of their day reading and actively working with informational text (CCSS, 2010).

Although Topping et al. (2008) noted that some students do read more informational text, their study also noted that different practices regarding the reading of informational text may have helped students improve in reading achievement, but strategy instruction was not the focus of their study. It is unknown if reading more informational text with strategy instruction will actually benefit all learners, increasing the motivation and comprehension or reading level scores. Research has shown that reading motivation and reading skill are reciprocally related (McGeown et al., 2012). If students are more motivated to read and encouraged to read

informational text as opposed to narratives, and motivation to read is tied to reading skill, then students who are reading in their preferred genre could be more motivated to read and increase their skills as a result of reading more informational text. Additionally, it would seem that additional instruction in reading informational text, which is often more difficult to read than narrative, might boost the achievement of all students.

This study sought to determine if fifth graders who received additional strategy instruction and time reading informational text responded differently than those students using only the existing reading curriculum, and if their motivation and reading levels increased as a result of being allowed to explore this genre more fully. The population sample included 60 mid-western fifth grade students at Winter Intermediate School, which is in a rural community, and the reading level of all participating students was between the fourth and sixth grade.

Purpose Statement

The purpose of this nonequivalent control-group design study was to examine differences in motivation and reading level when reading informational text. The study compared the reading level and motivation gains of fifth graders who used only the Success for All (SFA) reading program with those who used SFA with additional time and instruction in reading non-fiction. The motivation and reading level results were broken down further, looking at differences in motivation to read academic reading and recreational reading. Reading level differences were analyzed immediately post-study and again three months later.

Fifth grade students who read on level at a public mid-western intermediate school participated. The independent variable was the addition of informational text and strategy instruction to the SFA curriculum. The dependent variables were reading levels and levels of motivation. For this study, the reading level was defined as the level achieved on the Lexile

Framework for Reading (Scholastic Reading Inventory, 2013). Motivation was defined as a student's desire to read (Cambria & Guthrie, 2010), as evidenced in the Elementary Reading Attitude Survey (ERAS).

Significance of the Study

Educators, politicians, and policy makers are looking for ways to increase students' scores on tests such as the PISA and NAEP, proving America's students are ready to compete in a global market (CCSS Initiative, 2010; PISA 2012 Results, 2012). The CCSS, developed in part to help students better compete, are only beginning to be implemented in schools across the United States. Testing using these standards began in the spring of 2015 (CCSS Initiative, 2010). Analyzing how instruction based on the CCSS may improve reading achievement is important; schools will be looking for direction in implementation and will be searching for ways to help students find success on assessments based on the CCSS (Calkins et al., 2012). Understanding how instruction based on the CCSS benefits various populations is also important because differentiation is necessary to reach all students (Zambo & Brozo, 2009) and give them the greatest chance of performing to their highest level on the assessments. Research indicates a relationship between the motivation to read and comprehension (Cambria & Guthrie, 2010). Perhaps if students are reading more in their preferred genre, which for some is informational text, their motivation to read will improve as well as their reading levels. The study can contribute to the implementation of the CCSS; although the CCSS suggests having upper elementary students spend at least 50% of their day reading and working with informational text, it is unknown as to how this increase will help students. This study clarified how the additional time and instruction in reading informational text affected students.

This study can contribute to the field of education by providing evidence of the importance of strategy instruction in reading informational text, and that allowing students to have more choice increases the motivation to read. The study conducted by Topping et al. (2008) indicated that boys read more informational text but had lower reading achievement of such text. Their study did not determine if particular strategies would increase their reading levels and engagement, nor did it examine how females responded. This study examined both of those issues. Studies by Bauerlein and Stotsky (2009) and Farris, Werderich, Nelson, & Fuhler (2009) identified strategies that may engage male readers but did not have data to substantiate their suggestions. This study determined that one of the suggested strategies, reading more of the genre many students tend to prefer, does increase students' motivation to read.

Research Questions and Null Hypotheses

The purpose of this study was to explore the differences in motivation and reading levels between fifth grade students who received targeted instruction in reading informational text and those who did not receive the eight week intervention. Additionally, it also examined the differences in motivation to read for pleasure and to read for academic purposes and the effects on the reading level of students three months after the intervention.

RQ1: Is there a difference in the motivation scores between fifth grade students who receive additional strategy instruction in reading informational text and fifth grade students who do not?

H₀1.A: There will be no statistically significant difference in the means of the Elementary Reading Attitude Survey (ERAS) scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.

H₀1.B: There will be no statistically significant difference in the means of the Elementary Reading Attitude Survey (ERAS) motivation recreational reading scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.

H₀1.C: There will be no statistically significant difference in the means of the Elementary Reading Attitude Survey (ERAS) motivational academic reading scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.

RQ2: Is there a difference in the reading scores of fifth grade students who receive additional strategy instruction in reading informational text and fifth grade students who do not?

H₀2.A: There will be no statistically significant difference in the post-study means of Scholastic Reading Achievement Lexile reading scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.

H₀2.B: There will be no statistically significant difference in the three month post-study means of Scholastic Reading Achievement Lexile scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.

Variables

Independent Variable

Strategies used in additional instruction. These types of reading strategies are designed to help students read informational text and are often developed by reading researchers utilized

to facilitate CCSS implementation (Calkins et al., 2012; Owocki, 2012). Strategies came from *NonFiction Reading Power* by Gear (2008) and *The Common Core Lesson Book: K-5* by Owocki (2012). The strategies utilized were zooming in, questioning and inferring, determining importance, connecting, and transforming (Gear, 2008). Zooming in asks readers to find the important facts and questioning and inferring asks students to use the textual evidence to answer questions. Determining importance helps students identify the main idea and supporting details, while connecting asks readers to connect the text to previous knowledge and previous readings. Transforming reminds the readers that every reading should leave them changed and asks them to determine how their own thinking has been altered. Each strategy was studied for one to two weeks, with a review of previous strategies as new ones are introduced. The book *Nonfiction Reading Power* (Gear, 2008) provided detailed lesson plans so teachers knew what strategy to teach and how to teach it. Additionally, students were provided with more informational text and resources related to topics covered in other classes and specifically encouraged to read informational text on Tuesdays and Thursdays when they had free reading time.

Dependent Variables

Reading level. The reader achieves levels of understanding regarding a text or message, which is called comprehension. The understanding is derived from the interaction between the written words and the knowledge they trigger in the reader (Rayner, Foorman, Perfetti, Pesetsky, & Sedenberg, 2001). The reading level is a measurement of the student's level of reading comprehension on the Scholastic Reading Inventory and is reported as a score based on the Lexile Framework for Reading (Scholastic Reading Inventory, 2013). Fountas and Pinnell (2010) indicated the reading level is determined by teachers who use benchmark assessments and

other forms of systematic observation. The Scholastic Reading Inventory is an example of a benchmark assessment.

Motivation scores. In regards to being motivated to read, motivation is “the likelihood of engaging in reading or choosing to read” (Gambrell, 2011, p. 5). Motivation was measured from student responses to the ERAS.

Definitions

1. *Academic Reading* – Academic reading is reading that occurs during school time and is required by the teacher, or reading that occurs outside of school time but is necessary to complete school work. It is a term used on the ERAS.
2. *Expository Text* - Expository text is a term used to explain how a text is organized. While a narrative tells and has a beginning, middle, and end, expository is informational text with a specific type of text structure such as compare/contrast or description (Duke & Bennett-Armistead, 2003).
3. *Informational Text* - This type of non-fiction is written to explain information about science, nature, or the social world. It should include technical vocabulary and other features such as headings (Scholastic.com, 2012). Shanahan (2012) explained that informational text classifies objects and experiences and avoids individual and personal experiences.
4. *Narrative* – Narrative text is a specific type of text that is used to tell stories and convey events of the past, present, or future. The story does not have to be factual and can be written from the point of view of a character in the text (Bender, 2011).
5. *No Child Left Behind* – No Child Left Behind is a reauthorization of the Elementary and Secondary Education Act. No Child Left Behind was signed into law in 2001 by

President Bush. It was designed to hold all schools accountable for the achievement of all students, monitored by regular testing and strict accountability (Education Week, 2004).

6. *Nonfiction* – Nonfiction is a classification of literature that includes anything that is factual (Duke & Bennett-Armistead, 2003). Informational text is a type of nonfiction; another type is biography. Not all nonfiction is informational text, although they are often used interchangeably (Duke & Bennett-Armistead, 2003).
7. *Recreational Reading* - McKool (2007) identified reading outside of school for pleasure as recreational reading. This term is also used on the ERAS.
8. *Success for All* - This reading program is designed to enhance the learning and achievement of all students (Success for All, 2006). Developed as a result of No Child Left Behind, SFA provides teachers with a script so that every teacher follows the program with fidelity using research-based strategies to help every child find success in reading.

CHAPTER TWO: LITERATURE REVIEW

Introduction

When No Child Left Behind was passed and signed by President George W. Bush, schools were expected to assess and document students' scores and provide data to examine which schools had students who were performing well and which schools needed further interventions so students could achieve success. The success was, and continues to be, measured by scores on state assessments (U.S. Department of Education, 2013). Additionally, the PISA allows educators and those with a stake in education to compare American students' academic knowledge to students in other developed countries. In essence, it is not difficult to find data showing how students are performing academically. The data shows that although American schools spend thousands of dollars per student, its students are not at the top of list (PISA 2012 Results, 2012).

When examining standardized testing results, trends are noted. Researchers and educators look to see who is scoring well and who needs more guidance (PISA 2012 Results, 2012). These lower performing subgroups are then examined and educators look to find ways to help support the learners that are struggling and ultimately raise their achievement levels (Dove & Honigsfeld, 2013). During the last decade, as subgroups have been analyzed, a new trend became evident: Boys were underperforming girls in reading achievement (Brozo, 2002; Newkirk, 2009; Tyre, 2009). Newkirk noted girls were far ahead of boys in reading by third grade, while Brozo (2002) stated, "boys score lower on virtually all measures of verbal ability, [and] abound in remedial classes" (p. 21). The gap in reading and writing is especially significant with eighth grade girls outperforming their male counterparts by twenty points, 160 to 140, on the writing portion of the NAEP (Newkirk, 2009), which has a range of three hundred

points. This review will identify the theoretical and conceptual framework, examine the various factors contributing to the disparity in reading achievement, explore the influences of motivation on reading, and explain various interventions that could improve student achievement and motivation in reading, particularly the addition of informational text to the reading curriculum.

Theoretical Framework

Constructivism is a learning theory that positions the learner as an active participant, constructing meaning through creating and crafting connections (Barksdale-Ladd & King, 2000). Information that is unfamiliar or new is purposefully tied to the learner's background knowledge, allowing the student to form unique connections (learning-theory.com, 2012). According to Barksdale-Ladd & King (2000), "Constructivist teachers create learning experiences with the expectation that students may learn differently from each other and differently from the teacher's expectations" (p. 353-354). The constructivist educator provides experiences from which students can learn, allowing the students to build their own meaning and guide their own learning. McLaughlin and Overturf (2013) explained, "Constructivism is manifested in classrooms that are characterized by engagement, accessible text, student-generated ideas, discussion, interaction, higher levels of thinking, and personal construction of meaning" (p. 66). This type of learning can be crucial in reading, where meaning building is so important. Giouroukakis (2014) suggested students needed to construct their own meaning of a text instead of attempting to locate the meaning in a text.

The constructivist theory asks that teachers consider the unique qualities of each student and then identify ways for each student to make those necessary connections so learning and achievement growth can occur (Barksdale-Ladd & King, 2000). This type of learning is difficult for teachers because they cannot readily see it happening in the learner. The building of meaning

happens in the brain and the teacher then looks for evidence through the students' actions. The human brain is amazing in its complexity. Although each individual has his or her own unique characteristics, the human brain is considered remarkably similar from one person to the next (Gurian & Stevens, 2005). Yet it is these tiny and often hidden anomalies that affect the actions, interactions, and meaning building. Brain imaging, using PET scans and MRIs, allows us to see the cognitive differences between babies and the differences in how students read and respond to stimuli (Gurian & Stevens, 2005). For example, boys use less of the brain when reading than girls, so they typically can focus on only one topic at a time while reading. However, Gurian and Stevens indicated that because boys efficiently use certain parts of their brain, they tend to memorize facts quicker because they are very focused on that one topic.

Differentiation must be considered if teachers are to reach bored and struggling readers, regardless of gender, and motivational strategies need to be researched (Zambo & Brozo, 2009). If teachers recognize that subtle nuances exist between students' brains, and these differences do manifest in the behavior of students in the classroom, teachers need to adjust their teaching style and the environment so all students can construct meaning.

Conceptual Framework

As noted earlier, constructivism hinges on teachers helping students make connections between the new learning and their own background knowledge, allowing students to construct the meaning and make the learning uniquely their own. These connections are built in the brain, so an understanding of how the brain makes these connections is required if teachers are to follow this teaching theory.

According to Washburn (2010), there are five building blocks to learning: experience, comprehension, elaboration, application, and intention. Washburn stated,

Through experience, your brain gains raw sensory data. During comprehension, the brain sorts, labels, and organizes the raw sensory data. Through elaboration, the brain examines the organized data for patterns, recalls relevant prior experiences, and blends the new data with your experiences to construct understanding. During application the brain practices using the new skill knowledge. Finally, through intention, the brain uses the new understanding of skills in widened contexts. (p. 3)

The brain is complicated, so besides understanding how the brain constructs new meaning, other independent factors must also be considered as integral in each student's learning, including gender differences, levels of engagement, and motivation. Each of these can play a part in a student's reading success.

As indicated previously, gender differences can impact how students learn (Tyre, 2009), and these differences should be taken into account when planning instruction for students. The research is clear that what girls typically like to read and what boys typically like to read are not the same (Brozo, 2002). Although many schools use a preponderance of fiction, boys tend to prefer non-fiction or informational text (Boltz, 2007). Now that the CCSS requires more informational text be read, students who were reluctant to read may become more engaged with the reading.

If the students are not reading material they are interested in, their engagement with the text usually decreases. Engagement shapes how deeply students connect with reading (Zambo & Brozo, 2009), and engagement aids in comprehension (Tovani, 2004). Engaged students are often motivated to read because they want to find out what happens next or gather more information. Ignoring the motivational aspect of reading neglects what may be the most important part of reading (Cambria & Guthrie, 2010). Skills such as phonics, sight words and

comprehension are only one part of the reading equation. The will to read is also essential. “A good reader has both skill and will” (Cambria & Guthrie, 2010, p. 16). For students to attain higher standards in literacy, teachers must monitor not only students’ reading abilities but also the students’ levels of engagement and their motivation.

The psychology of struggling readers and the effects this may have on their self-esteem must also be considered (Brozo, 2002). Motivational strategies should be analyzed so students who are reading well do not become alliterate or non-readers. Using text that is known to be more engaging for boys, for example, is one such strategy.

Allowing boys and girls to construct their reading time, choose what they read, and allowing all students to read and explore texts that are engaging to them personally, supports the constructivist theory of students individually building their knowledge. Drawing on information from Washburn (2010), it may also cause deeper learning. Boys and girls may explore informational texts, engage more deeply in it, construct their knowledge base more readily, and as a result increase their comprehension and reading scores by being allowed to choose more of their own reading texts.

History and Evidence of Struggling to Reach All Readers

Evidence from various sources shows the discrepancy in reading achievement, both nationally and internationally. While not all struggling readers are boys, boys consistently perform poorer in tests of reading achievement than girls. In the 1930s, a study revealed that in remedial reading classes, boys outnumbered girls by as many as ten-to-one (Holbrook, 1988). In a study conducted by the U.S. Department of Education in 1994, nine-year-old boys scored five points lower than girls on the NAEP in reading, but the gap widened to 14 points by age 17 (Zambo & Brozo, 2009), indicating the reading gap grew as students progressed through school.

The Center on Education Policy (Chudowsky & Chudowsky, 2010) indicated the girls outperformed the boys at every level on literacy achievement in 2008, but it appeared as if the problem had been evident for decades. On the NAEP, females have consistently scored higher than males on the reading portion at all grades tested, which included fourth, eighth and twelfth graders, since 1992 (Chudowsky & Chudowsky, 2010).

Internationally, the same disparity in scores can be seen. Zehr (2009) reported that reading specialist, Bill Costello, noticed a gap in the reading scores of Japanese students; the boys were outperforming the girls in math on the 2006 PISA, but girls were outperforming the boys in reading, “and the reading gap is more than 50 percent greater than the math gender gap” (Zehr, 2009, para. 1). On the 2009 PISA, girls scored an average of 39 points, or nearly a year of schooling, higher than the boys in every participating country (Cappon, 2011). Between 31 and 35 of the world’s most developed countries have seen test results indicating girls are outperforming boys in reading (Farris et al., 2009; Gurian & Stevens, 2005), although the gap can vary significantly from country to country (Watson, Kehler, & Martino, 2010). On the Progress in International Reading Literacy Study (PIRLS), all participating countries showed girls scoring significantly higher than boys in reading achievement, with the average difference near 20 points (Geske & Ozola, 2009). The PIRLS is given to fourth graders internationally and has a scaled mean score of 500. For comparison purposes, the boys in Florida scored a 561 while the girls scored a 576 in 2011 (Institute of Education Sciences, 2013).

To summarize, American students have not been scoring as well as their international counterparts and some students struggle more than others, pulling test scores down. While low test scores are a concern, a greater concern may lay in the impact the struggle to read has on student confidence.

A Lack of Confidence in Literacy

If students look around and see they are behind in reading skills and abilities, they may lack the confidence to move forward as readers. Confidence “refers to belief in your capacity, [and] is tied intimately to success” (Cambria & Guthrie, 2010, p. 17). Research indicates that a student’s belief in oneself is more closely linked to school achievement than any other motivation (Cambria & Guthrie, 2010).

A cycle of failure can be seen in many struggling readers. Students who struggle begin to doubt in their own abilities (Cambria & Guthrie, 2010). If students believe they will be unsuccessful, they may stop trying altogether. “Their low confidence undermines them even further in a cycle of doubt and failure” (Cambria & Guthrie, 2010, p. 17). Adding to the complexity of the issue, students who do struggle are often given less choice in what they read. When students are not allowed to choose what they read, then they may assume they are not a capable reader.

Moss (2000) noted that students who cannot read well and do not choose to read are limited in what they are allowed to read. The teachers are more concerned with matching the student to a text to assess competence, while the stronger readers are given more choice. This further undermines the struggling reader’s confidence. McKool (2007) commented:

students who were in schools where they were given opportunities to read self-selected materials and were given access to materials that they were personally interested in reading were more likely to engage in voluntary reading than those in classrooms where these practices were not evident. (p. 113)

Instead of picking material for struggling readers, teachers need to provide them with lessons on how to accurately self-select a book and provide them with a list of options of books

to read that include books similar to what their peers are reading (Swartz & Hendricks, 2000). Choice and self-selection have a positive impact on reading and in the creation of life long readers (Swartz & Hendricks, 2000) and on student confidence (Moss, 2000).

The Motivation to Read

While confidence is an issue for struggling readers, readers of all levels can struggle with a motivation to read. When students do not like what the options are for reading, regardless of ability level, they do not read. Reading frequency is often used to validate the reading between students and could explain why test scores are not rising. For example, Bauerlein & Stotsky (2005) found the average adolescent reads recreationally for eight minutes daily, which is a little misleading as boys have nearly an hour more of free time daily than females. Students are choosing other things to do with their time besides reading, like watching TV for over four hours a day, listening to music for over two hours and playing nearly seventy minutes of video games in an average day (Goodwin & Miller, 2012). Finding out students are choosing other activities besides reading when they have free time is particularly troublesome since the relationship between out of school reading time and success in school is strong. The time students spend reading outside of school has been tied to vocabulary development, fluency, comprehension, and general intellectual development (Taylor, Frye, & Maruyama, 1990). Students who are motivated to read will spend more time reading than those who are less motivated (Zambo & Brozo, 2009).

It appears, however, that the motivation to read might be a stronger predictor of reading achievement than even the amount of time spent reading. Evidence suggests that “reading frequency may not be as important a factor as motivation” (Logan & Johnston, 2010, p. 178). Students who are not motivated to read and see little value in reading simply do not read.

Thomas and Moorman (1983) asserted the most crucial concern facing schools today is very likely the student who can read, but chooses not to, the very definition of being alliterate. Boltz (2007) concluded, “It seems that the adults in their lives have inculcated the value of reading in order to learn, but that the leap to reading for enjoyment – the foundation for a lifelong reading habit – has not been realized” (Findings and Analysis: Part 1).

While there is recognition that the motivation to read is declining in boys and girls, it seems to be more problematic with boys. Farris et al.’s (2009) research confirmed that boys are reading less than girls, are unmotivated to read, have little interest in reading, and do not particularly value reading. As teacher and researcher, Senn (2002), indicated, boys “respond to literacy as if it were the most excruciating punishment that could possibly be inflicted upon them” (p. 212).

Tied to motivation and engagement is the students’ attitude towards reading, and reading will not occur if it is viewed as punishment. Attitude toward reading is a student’s feelings toward reading, which result in avoiding or approaching various reading tasks (Cooter & Alexander, 1984). Kush and Watkins (1996) indicated that a child’s attitude towards reading may be the strongest affective factor influencing reading achievement. They also commented that this is the where the least amount of time is spent in school. While time may be spent on improving reading skills, little time is spent shaping the readers’ attitudes towards reading (Kush & Watkins, 1996). McKool (2007) discovered that avid readers do have a better attitude about recreational reading than the reluctant readers. These avid readers liked reading outside of school and readily described themselves as good readers who liked to read.

The importance of motivation and readers cannot be overstated. Research indicates that a high interest in the text will encourage students to read for understanding, which will result in

strategy use and stronger comprehension of the text (Gillespie & Deacon, 2010). McKenna, Kear, and Ellsworth (1995) noted that the scores on the Elementary Reading Attitude Survey, which they developed, correlated significantly with the ratings the teachers gave of the students' reading ability. If teachers believe students cannot read well, students pick up on that. Their attitude towards reading becomes more negative, which means they read less and their motivation to read continues to decline, along with their chances of growing as a reader.

School Issues

Grades and remediation. While all students may struggle in school at one time or another, a glance around the average elementary school can also shed light on whom the struggling readers are. Reading disabilities are more common in boys (Logan & Johnston, 2010); 70% of students needing services for a known learning disability are boys (Gurian & Stevens, 2005). Boys get the majority of Ds and Fs in all subjects (Gurian & Stevens, 2005).

Some boys are performing well and succeeding in school. The troubling issue raised by these statistics is that more boys are struggling in school than girls. As noted earlier, struggling students are often aware of their issues and lack confidence and motivation. While not all struggling readers are boys, finding ways to motivate boys might be the first step in closing some of the achievement gaps.

Female teachers and female curriculum. Another factor that may affect students, particularly boys, is the preponderance of female teachers. In 2006, the U.S. Department of Education stated that "75% of K-12 teachers are female, with the elementary level having a higher percentage of female teachers than does the secondary level" (Farris et al., 2009, p. 180). In her October 18, 2009 blog for edweek.org, Miller, a staunch advocate for differentiated reading instruction, wondered, "how much of the disengagement many boys have for reading

stems from classroom instruction designed by predominantly female English teachers” (para. 12).

Most English and language arts teachers are female. They succeeded in classrooms taught by females using female-dominant literacy and model their own classrooms from what they experienced. Males may feel left out of this type of classroom because of a lack of interest in the literature, or the label they might receive for being engaged in feminine activities (Fredrick, 2006). Boys may feel unmotivated to read because of classes taught by women who are using literature that is preferred by girls. Lipsyte (2011) went so far as to say that children’s literature currently seems to favor females, with more female authors than males, a preponderance of female editors, mostly female librarians purchasing books for schools, and schools having far more female teachers than male. Again, all of these issues may work together to decrease students’ motivation to read, particularly male students, and the group more likely to struggle in reading.

However, the gender of the teacher cannot overshadow the excellence of the teacher. Watson et al. (2010) indicated the qualities of the teacher matter far more than the gender does. Cambria and Guthrie (2010) stressed that students who are able to build a trusting relationship with a teacher might be able to rebuild their confidence. Caring teachers who challenge, connect, and encourage are likely to connect with all students. What must be acknowledged is that whether the teacher is caring or critical, “the teacher is the main factor influencing a student’s development of reading motivation” (Cambria & Guthrie, 2010, p. 16). Wessling (2014) explained,

...it’s human intervention – teacher intervention – that will create avid readers. It’s matching increasingly complex texts with readers, but it’s not assuming all students will

read the same texts at the same times. . . It's about making room for the necessary world of informational texts, but it's not about displacing the rest of a crucial language arts experience. . . a clear compass of core standards matched with teachers who approach both the standards and their students with fidelity can cultivate classrooms of avid readers.... (p. 11)

A teacher can dramatically impact the growth and development of a reader. Also contributing to the psychology of reader is the student's perception of classmates who are good readers (Brozo, 2002). Peer pressure can make those who are readers pretend they are not. It is often socially unacceptable to be smart, particularly among boys. Newkirk (2009) noted that boys in his classes would brag about who studied the least for tests. Because so many passionate English students are females, boys may become even more disenchanted with literacy. "Boys are engaged at lower levels than girls in all subjects, but most of all in the English Language Arts" (Fredrick, 2006, p. 152). In the age of technology, however, the need is there for all learners and workers to be adept in the use of English language arts, and as Kristof (2010) indicated, many boys are not choosing to rise to the challenge. Teachers need to look for ways to make reading enticing for all students and take away the stigma that may be associated with being a strong reader.

Reading preferences.

All children use the same simple books to learn to read. Once they are fluent enough to take their first tentative steps toward independent reading, they are at an important crossroads: They need to read material that jibes with their natural penchant for telling stories. (Tyre, 2009, p. 150)

The interests of the various readers in any classroom will, eventually, differ, and yet each student needs to find material that matters. While countless books are published each year, currently there is a proliferation of culturally relevant and young adult literature that addresses tough issues like divorce and bullying (Lipsyte, 2011). There is no evidence that this type of literature, which is so bountiful in schools and libraries, is grabbing the interest of struggling readers and turning them into readers (Bauerlein & Stotsky, 2009). Zehr (2009) reminded educators that boys like to read about trucks, sports, animals, war, and other boys who get in trouble. Aside from the latter, many of those topics are non-fiction. If the preference is nonfiction or informational text, it is in short-supply in many classroom libraries, with just 9.8% of classroom libraries containing this type of reading material (Goodwin & Miller, 2012). Meanwhile, according to Lipsyte (2011), girls wanted to read about mean girls, gossip girls, and vampires.

While Doiron (2003) concluded boys were reading a balance of fiction and nonfiction and girls were predominantly reading fiction, most studies show boys reading more nonfiction than fiction. Zehr (2009) indicated that boys prefer reading non-fiction, and Zambo and Brozo (2009) identified non-fiction as a genre boys tended to read more than girls. Bauerlein and Stotsky (2005) identified the reading preferences of girls, noting they preferred fantasies and stories about personal relationships. White (2009) noted that when she spoke with the mothers of struggling boys, they were able to tell her what the boys liked to read at home. It was a preponderance of non-fiction, while at the school the students were being forced to read fiction and material that was uninteresting to them, material that did not seem relevant to their lives, and were failing to make connections with the literature. “Asking boys to read stories that are not

connected to their interests, or stories with long drawn-out plots, is likely to discourage them,” (p. 39) reasoned Zambo and Brozo.

Miller (2009) also emphasized the importance of the reading material used with students. Bauerlein and Stotsky (2005) reported:

The textbooks and literature assigned in the elementary grades do not reflect the dispositions of male students. Few strong and active male role models can be found as lead characters. Gone are the inspiring biographies of the most important American presidents, inventors, scientists and entrepreneurs. No military valor, no high adventure.

On the other hand, stories about adventurous and brave women abound. (para. 8)

Perhaps when the books in the classroom do not represent what interests students and what they like to read, they wonder if who they are as readers is not welcome in the classroom. This mindset would only add to a lack of motivation and engagement. Adding to the issue, the material that is present in classrooms is often less than appealing to many readers. Senn (2012) commented:

Consider the fact that when deciding on read-aloud selections, fiction is typically the genre of choice for most teachers and parents. Most books in this category tend to focus on thoughts and feelings, explore relationships between characters, and encourage reflection – all concepts that develop reading comprehension. Boys often perceive books of this nature as “girl books.” (p. 216)

Boys, when forced to read books they perceive as “girl books,” may become very anxious (Dutro, 2001). Additionally, many of the fiction books preferred by boys, like *Captain Underpants* and the *Goosebumps* series, are not found on the Caldecott or Newberry list of

honored and awarded picture books and novels (Tyre, 2008). Instead, the books boys prefer are likely to be banned or not chosen to be in school libraries (Senn, 2012).

Not all struggling readers are boys, and not all boys are struggling in school. Boys still beat out girls at the very top; in 2009, 62% of the 297 students who had a perfect score on the SAT were boys (Kristof, 2010). Reading scores for boys and girls improved from 1992-2003, and the percentage of boys reading at or above the basic level has also continued to rise (National Center for Education Statistics, 2009).

Perhaps the inclusion of more informational text into the classroom, along with more engagement and strategy work, will give boys a desire to become the readers they need to be to find success both in and out of the classroom. It is important to remember, however, that in the quest to reach struggling and reluctant readers, who are often boys, the girls should never be alienated. In 2006, the American Library Association, conscious of the need to reach reluctant male readers, used two and a half times as many male celebrities as females (Stauffer, 2007). Adult bias should never influence what children read, and stereotypes do not belong in the classroom or in literature. Stauffer staunchly “advocated promoting nonfiction books to girls while encouraging boys to read more fiction,” (p. 420).

The comprehension gap. A way to determine if students are finding success or falling behind is through assessment, and comprehension of text read or heard is often measured on literacy assessments (Prado & Plourde, 2011). Comprehension is usually considered a process that hinges upon several sub skills, including word identification, prior knowledge, and engagement (Prado & Plourde). Comprehension, to a constructivist, is “the construction of the meaning of a written or spoken communication through a reciprocal, holistic interchange of ideas between the interpreter and the message in a particular communicative context” (McLaughlin &

Overturf, 2013, p. 66). Logan and Johnston (2010) identified two skills that are essential for reading: decoding/phonological skills and linguistic comprehension. Simply put, students need to be able to sound out words and then determine the words' meanings to be able to read. Interestingly, they found no gender differences in either of these subskills in five-year-olds (Logan & Johnston, 2010).

Strategy use also can enhance student comprehension. These strategies can vary for different types of text but typically include: (a) making mental pictures of what is read; (b) connecting new information to background knowledge; (c) stopping asking questions before, during, and after reading; (d) inferring while reading; (e) identifying the main idea; (f) transforming the information; and (g) monitoring comprehension and making adjustments when the reading does not make sense (Gear, 2008). Again, strategy use is often dependent upon the type of text, and students must be taught how to approach each genre and which strategies are more suitable (Prado & Plourde, 2011). Curiously, no one strategy seems to rise above the others in helping all students comprehend text (Logan & Johnston, 2010).

Another issue that affects comprehension is the interest in the topic. A study conducted by Oakhill and Petrides (2007) found that what students read can significantly influence their reading levels. Girls did score higher in comprehension while reading both fiction and non-fiction. However, it was the interest level in the topic that had the greatest effect on students' comprehension levels, particularly the boys'. With a choice of two texts, one about spiders and a narrative about children during WWII, boys overwhelmingly wanted to read about spiders. "The boys in this study showed significantly better comprehension for a text that was considered to be the more 'boy-friendly,' and which they themselves expressed a greater interest in reading" (Oakhill & Petrides, 2007, p. 231). Conversely, the girls' scores were not as affected by their

interest in the reading. Whether they expressed an interest in reading the article or not, the girls' reading scores remained consistent. Oakhill and Petrides concluded that girls are more likely to persist reading a text, even if it is initially viewed as less interesting, and perform well, whereas boys are not. Interestingly, one suggestion that has emerged from reading interest studies is for test creators to make sure the reading achievement tests are using passages that appeal to both genders, in hopes that the reading achievement of boys will be measured more accurately (Boltz, 2007; Oakhill & Petrides, 2007). In summary, it appears that while girls will attempt to read and engage with nearly any type of text, boys struggle to engage with certain types of text, which may result in comprehension scores that are lower than the girls.

Consequences for Students who Struggle

Whether a student chooses not to read because it is a struggle, or it is viewed as a feminine activity, or because the student cannot find a book that is engaging, the results of not reading are negative and long-lasting. The lack of reading results in poor academic performance, which results in a negative self-image and a continuing cycle of failure (Brozo, 2002). Zambo and Brozo (2009) pointed out that the motivation and drive of a student can be squelched by failure, while the drive to try harder can be improved with success.

As noted earlier, struggling readers tend to be boys, but the outcomes are the same regardless of gender. Many schools have implemented remedial reading classes to help struggling readers. Unfortunately, these classes cause their own unique set of problems. Remedial classes often enhance the feelings of failure and stupidity (Frey & Fisher, 2008) and confirm the notion that the student is a bad reader (Brozo, 2002). These programs also allow the readers few choices or control over what is read, again contributing to the lack of motivation to read (Brozo, 2002).

Brozo (2002) also pointed out that good reading skills pave the way for success in other academic areas. Poor readers struggle in all academic areas of school and the effects can be seen in the secondary level of school and into college. College is not for everyone, but those who do not go to college after high school graduation are more likely to: be unemployed or underemployed; depend more on the government for assistance; and leave life goals and dreams unaccomplished (Gurian & Stevens, 2005). The evidence clearly shows students who struggle in reading in elementary school continue to struggle in high school, and often become young adults who struggle in various arenas of life.

Changes in Curriculum

Considering what is known about the various types of readers and their differing preferences in reading, teachers must decide how to alter instruction so fewer students struggle in the classroom (Zambo & Brozo, 2009) and later in life. There are many factors a teacher cannot change; the teacher can, however, control how literature is used in the classroom so all students achieve to their highest abilities (Barksdale-Ladd & King, 2000). The genre that may engage students who were previously unmotivated may soon find a place in classrooms across America because of the adoption of the Common Core State Standards (CCSS).

The Common Core State Standards. The implementation of the CCSS may provide all students with more opportunities to read informational text. The CCSS effort was led by the Council of Chief State School Officers (CCSSO) and the National Governors Association (NGA) (CCSS Initiative, 2010). Since the advent of No Child Left Behind, states have been assessing students yearly, with each state having its own unique set of standards and its own assessments. Yet on international exams, U.S. students continued to stay behind their international counterparts (Newkirk, 2009). Education and government leaders were asking for common

standards that could more adequately prepare students for life after high school, preparing students so they would be college and career ready. The CCSSO and NGA responded by creating standards in English for Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects, which were reviewed by state departments, teachers, students, and members of the public (CCSS Initiative, 2010). The standards are research based, aligned with what is expected for college and career readiness, rigorous, and benchmarked internationally, according to the CCSS Initiative. Similar to No Child Left Behind, the CCSS focus on student achievement. The CCSS do not advocate for a national curriculum; rather, “the CCSS focus on results, on what students should know and be able to do rather than the specific means for achieving learning goals” (Williams, Homan, & Swofford, 2011, p. 9).

With 42 states, the District of Columbia, and four territories adopting the CCSS (corestandards.org, September 2015), many administrators and teachers are acknowledging that the curriculum will need to change. CCSS suggests students in the fourth grade spend 50% of their literacy time exploring and reading informational text (CCSS Initiative, 2010). Currently, it is believed as little as 15% of literacy time in schools is spent on informational text at the elementary level (Calkins et al., 2012). Goodwin and Miller (2012) determined students were only reading non-fiction four minutes a day outside of school. Notably, Williams et al. (2011) reminded educators and administrators that, “The standards for history/social studies, science, and technological subjects demonstrate how responsibility for reading nonfiction should be spread across multiple courses” (p. 11). The CCSS advocate for a combination of non-fiction and fiction, with more non-fiction added to the curriculum in content areas like science and social studies, as well as more non-fiction added to the traditional English/Language Arts classes (William et al., 2011). Goodwin and Miller noted, “Students need to read and comprehend

informational texts as often – and as fluently – as they do narrative texts,” (p. 81). The reading of informational text should be occurring in all subjects throughout the day, not only in reading, English, or language arts classes. The CCSS asks for all teachers to become responsible for helping students read informational texts.

Informational text. Informational text is defined as a type of reading that is non-fiction, although not all nonfiction is informational text (Duke & Bennett-Armistead, 2003). For example, biographies are a type of nonfiction, but they lack the text structures that informational texts possess. Biographies are often used as a bridge to informational text because they have aspects of fiction with a character and a story line but the facts of nonfiction (Stein & Beed, 2004).

Informational text is written to inform the reader and does not contain any fictional characters, although it may contain historical figures and actual people. Often, this type of non-fiction also utilizes specific structures such as bold-faced words, pictures and graphics, glossaries, table of contents, and an index so that readers can find information quickly and easily (Duke & Bennett-Armistead, 2003). Informative text also contains challenging vocabulary and word choice that is very different from what students encounter during narrative readings (Duke & Bennett-Armistead, 2003).

Informational text is often considered to be more challenging for readers. Teachers have acknowledged that

...the majority of students had not understood a great deal of what they had read on their own or as a group. Many were not able to find information that did not appear in bold lettering or that was explained in diagrams or captions. (Moehlman, 2013, p. 68)

Reading informational text is not only harder, it requires the reader to approach the material with requires a different stance (Giouroukakis, 2014). An efferent stance is used when analyzing ideas and information, while an aesthetic stance is used when readers live the story and acknowledge how it makes them feel.

Certain texts may evoke a more dominant stance – informational texts an efferent stance and literary works a more aesthetic stance. However, in order for students to gain the full benefits of reading, teachers should teach a balance of the two approaches and the ability to read either text in either stance. (Giouroukakis, 2014, p. 27)

Camp (2000) noted the explosion of informational text in the last decade. “The many outstanding informational books now available for children can make content area material come alive. Many of them use the conversational tone similar to that of fiction books” (Camp, 2000, p. 400). The standards are asking for students to read more informational text, and this type of material is more prevalent than it once was, paving the way for many students to find greater access to this type of reading both in and out of school.

Strategies to help students meet the Common Core Standards. CCSS asks for a higher level of comprehension than educators are accustomed to using in classrooms. For this type of learning to occur, teachers will need to adapt strategies or find new ones. Brozo (2010) noted, “In the hands of skillful classroom teachers, content literacy strategies can be mediated in ways that differentiate instruction to meet the reading, writing, and learning needs of students with diverse abilities and backgrounds” (p. 147). Owocki (2012) acknowledged, “from the start we must take hold of these standards, use them as a guide rather than a formula, and supplement then, all in ways that have research support and that maintain students’ engagement and deep learning” (p. xvii). Simply reading more informational text may not be enough for students to

make gains. Students in America read more than most students internationally, yet are far from the top in NAEP scores (Toppings et al., 2008). Instead, specific strategies and interventions need to be considered.

Owocki (2012) suggested students should have much more open-ended types of questioning. Instead of fill-in-the-blank worksheets or multiple choice questions, open-ended questions asking students to identify the main ideas and reference the reading are utilized. Graphic organizers help students make connections between multiple text readings and viewings (Gear, 2008).

There are reading strategies that are especially helpful when reading informational text. Gear (2008) identified strategies that help students read informational text, and she has also identified strategies that help students comprehend narrative text. Strategies for reading informational text include zooming in, questioning, determining importance, connecting, and again are unique to reading informational text. Zooming in asks readers to find the important facts. Questioning and inferring asks students to use the textual evidence to answer questions, while determining importance helps students identify the main idea and supporting details. Connecting asks readers to connect the text to previous knowledge and previous readings. Transforming reminds the reader that every reading should leave them changed and asks them to determine how their own thinking has been altered. These strategies should be taught in the order listed as they progress in difficulty, and could be considered thinking strategies, as they encourage readers to focus and stay connected to the text as they read (Gear, 2008).

Calkins et al. (2012) encouraged teachers to help students identify the main idea, or even several main ideas, and then find the supporting details. With the CCSS, students must show evidence from the text to support their answers (CCSS Initiative, 2010). No longer are students

asked to only make connections to themselves, relating the information to their own lives. Instead, many connections will now be made using only the text itself (Calkins et al., 2012).

To help students begin to make connections, text sets may be used. Text sets, or Twin Texts, are informational readings matched with narrative stories, videos, newspaper clippings, various readings, and on-line resources that students can use to encourage deeper reading, understanding, and connecting (Calkins et al., 2012). The fiction can answer students' questions, while the fictional story is likely to be easier for students to comprehend (Camp, 2000). Additionally, "teachers who use fiction and nonfiction trade books together may be rewarded with students who are excited about learning. Twin Texts help teachers encourage the enjoyment of reading while capitalizing on students' fascination with facts" (Camp, 2000, p. 400). Websites such as readingandwritingproject.com provide pre-designed text sets to help teachers get started.

Finally, teachers will need to look for ways to help grow all students' independence (Williams et al., 2011). Teachers need to be providing less pre-reading and background knowledge. College and career learners often go into informational reading knowing little about a topic. Similarly, students, through adequate practice and appropriate scaffolding, should work towards reading without much teacher help and reading more difficult texts as the school year progresses (Calkins et al., 2012). Text complexity, or helping students make progress in their reading and helping them read more complex text, is a major component of the CCSS (CCSS Initiative, 2010), and will be a challenge for many teachers. Again, knowing informational literature, being widely read, and having a plethora of informational texts will be essential for student growth in independence and text complexity. All of this carefully planned, additional

time spent exploring informational text is likely to benefit readers who had previously been unmotivated to read.

Reading Interventions that Benefit Reluctant Readers

Perhaps the key to reaching the struggling readers is to try to motivate all readers through strategies and various genres of literature. Countless strategies have been tried over the years to reach the reluctant readers who do not seem to want to read even though they can, but no one strategy has shown universal appeal or been widely researched. Research has shown that girls are often willing to at least attempt to read various types of texts and genres (Oakhill & Petrides, 2007), but boys may require more support. Many of the activities that educators use emphasize one of two areas: motivating students to read more and providing a wider range of books for students to read, including the use of informational text.

Motivating all students. Using literature to connect with reluctant readers is crucial because it is the first step in engagement (Brozo, 2002), and “engagement leads to achievement” (Fredrick, 2006, p. 154). Motivating readers is also at the crux of creating good readers (Gurian & Stevens, 2005). “Studies have consistently demonstrated that children’s reading motivation is significantly associated with their reading skill” (McGeown et al., 2012, p. 309). Schools must realize that different genre and literacy activities will motivate different learners, and some learners will need more help seeing that reading can be enjoyable (Cappon, 2006). A reluctant reader who lacks self-confidence may need to be approached individually with a variety of books that the teacher thinks speak to him, allowing him choice and a chance at engagement while saving his self-esteem (Kent, 2004; Lipsyte, 2011).

Reaching out to boys and girls this way can have a powerful effect. Reichert and Hawley (2010) stated, “Successful teachers are often willing to make an extra . . . effort to connect to the

students. Boys are quick to sense their teachers' willingness to extend themselves" (p. 216). Motivating boys to read is more difficult than motivating girls; girls consistently have a higher motivation to read than boys. Complicating matters, a boy's motivation to read is often closely tied to his interests and skills (McGeown et al., 2012). As Allyn (2011) noted, it is up to teachers to listen to each of the students and then create a literacy environment that is friendly to all the readers in the classroom.

Teachers can provide students with excellent books that may appeal to them, but it is still up to the student to read. Jenkins (2009) recommended building on success, so reluctant readers are able to see they are making progress and are capable. The CCSS addresses text complexity and the need for teachers to move kids into more difficult text at a steady pace (Calkins et al., 2012). Tracking this growth would show reluctant readers just how much they are improving and that they are capable.

Jenkins (2009) also encouraged allowing students choice so they feel a sense of ownership and thus buy into the program. Fredrick (2006) indicated being masculine means making choices and controlling one's destiny, so allowing boys to choose their reading materials (as opposed to being handed something to read by the teacher, which is often what happens with struggling readers) enables boys to feel more masculine in a subject which often feels very feminine. Senn (2012) suggested teachers always try to offer students opportunities to choose the topics about which they read and write. Some students need to see the value of reading and how it could directly benefit or impact their own lives (Love and Hamston, 2003). Some students, particularly boys, do not read to develop new interests; rather, they read to further explore their existing interests (Senn, 2012). Letting boys and girls choose their books, books they feel might affect their lives in some way, could motivate them to read.

Teachers can use books that speak to certain students in literature circles, where like-minded students can discuss the merits of the book in small groups. In a study conducted by Camp (2000), results demonstrated that students who read non-fiction in a literature circle group had a strong motivation to read and a better appreciation for non-fiction. “For many of them, learning new, real-life information seemed to be very important. Their behaviors suggested that nonfiction reading gave them a new purpose for reading” (Camp, 2000, p. 517).

Collaborative learning like Owocki (2012) suggested allows students to work together to both read and comprehend text. Sharing a reading experience with a group of peers can motivate all students (Roe & Smith, 2011). Bringing books into the schools that motivate boys and girls, edgy books that they can discuss with one another, may be a way to keep all students reading. Reaching reluctant readers may require teachers “going beyond weepy Newberry winners and including high interest topics [which] will make boys fall in love with the experience of sharing a good story” (Allyn, 2011, p. 31). Kush and Watkins (1996) identified four factors that can influence a student’s motivation to read: (a) experience with books prior to school, (b) access to books, (c) social interactions while using books, and (d) the choice of books.

An entry point for reading must be found for all students, particularly the reluctant reader. It may be that with the implementations of CCSS and the inclusion of more informational readings, boys and other reluctant readers will experience the engagement that occurs when reading a good book. Brozo (2002) believed all learners are more likely to learn at a deeper level and internalize the new information when they are motivated, and has suggested that a primary focus of any reading curriculum should be the development of motivation in readers and the encouragement of independent reading. As Kent (2004) noted, “we must think in

terms of interest and engagement – we must try to think like the boys we teach” (p. 7), while also keeping in mind the various interests of the girls in the class.

Using informational text. All students have reading preferences, and many are particularly drawn to nonfiction and informational text. Although students are currently asked to read very little informational text in schools (Calkins et al., 2012), using informational text may be a way to reach more students who have yet to find their place at the reading table.

Teachers, many of whom are female and likely to prefer narratives, must be knowledgeable regarding all published books and what may speak to even the most reluctant of readers (Newkirk, 2009). Teachers need to recognize the reading preferences of all students and then scrutinize the books used in their classrooms and found on their shelves (Farris et al., 2009). Although the books preferred by some students might not appeal to the teacher, care must be shown to conceal negative feelings about a text, or hide prejudice or partiality towards certain books or a particular genre (Miller, 2009). According to Moss and Hendershot (2002), students were most motivated to read when they had a choice in reading material and there were various genres to choose from, including ample amounts and varieties of non-fiction. If students are going to read, teachers must have well-stocked and distinguished classroom libraries and show excitement for and interest in various genres and forms of literature. School libraries must also be scrutinized, so all students have access to a variety of text (Calkins et al., 2012).

It is possible that broad reading and exposing students to various texts and genres will also expand students’ vocabularies. Senn (2012) indicated that an additional benefit of using informational text was that students are exposed to academic vocabulary, the type of vocabulary that is useful in various content areas as they move through school.

These texts will need to cover a variety of levels so the needs of all readers can be met. Most textbooks written for a specific grade level are written two grade levels higher than those for whom they are intended (Calkins et al., 2012). Teachers will need to find sets of texts that cover the same information but are written on a variety of levels and should include more magazines, digital readings and on-line resources as part of the students' informational reading experience (Duke, 2012).

Teachers need to read informational books aloud (Calkins et al., 2012), making all students more comfortable with this type of text and more likely to check them out and read them independently. If girls tend to read less informational text, then it is imperative that teachers diligently expose girls to the various forms of this genre—the CCSS demand it. Many girls have a tendency to read only fiction and may need ample encouragement to diversify their reading choices (Doiron, 2003). Read-alouds and book talks are possible entry ways to show all students the benefits of informational text.

Newkirk (2009) contended that readers read because they love the engagement of reading, and non-readers do not read because they have not been completely pulled into a book and do not know that feeling. Many students are not reading because they have not felt that unique pull that comes from being engaged in a good book. Perhaps being exposed to various genres of literature will encourage students to read on their own later. Teacher read-alouds and book talks are easy ways to quickly share a book with many kids and expose them to the interesting facts that might motivate the student to read the book independently (Calkins et al., 2012).

Adding to the complexity of reaching the reluctant reader, many are boys who struggle to find anything to read, regardless of genre. Boys' reading activities are often pragmatic, with a

focus on what will immediately help them, and related to where they are now (Love & Hamston, 2003). Farris et al. (2009) encouraged the consideration of several factors, including the following, when helping reluctant readers, especially boys, find books to read:

- They like books with an interesting cover, lots of white space around the margins, interesting and generous fonts and pictures that match the story.
- They tend to enjoy books that are part of a series, or various books by the same author.
- Boys particularly like fallen figures, characters similar to themselves who are experiencing a problem and must overcome a challenge.
- Informational books should have interesting pictures, short paragraphs and should somehow connect with what is going on in the classroom.
- Read-alouds that the teacher uses should be made available for the students to read later.
- When the reluctant readers have an established relationship with the adult who is helping them, they are more likely to read and share their feelings about the books.

McKool (2007) found that boys and girls who were reluctant readers gravitated towards books that fell in a series. Students may read every book in a series because of the comfort of familiar story structure, characters, and writing style. Additionally, McKool discovered all of the reluctant readers, regardless of gender, preferred scary stories, comic books (graphic novels), and magazines.

The teacher, the availability of a variety of books, and free choice are what are most likely to get students to read. Teachers must know a variety of books within each genre, including the informational genre, to help the most reluctant readers find an entry to engaged reading.

Conclusion

Ample evidence suggests today's classrooms are filled with various types of readers, and these differences may be contributing to the achievement gap. Physiological differences, unique experiences at school, confidence issues and a lack of motivation, along with academic preferences may also play a role in the disparate reading scores. It is likely that the combination of these differences is contributing to some students having a less positive attitude about themselves as readers. The results of students not reaching their potential in reading are far-reaching and long-lasting. Teachers may be unfamiliar with ways to differentiate their instruction to meet the needs of reluctant readers. They may unwittingly be contributing to the problem by using a preponderance of literature that is less appealing to certain students. Boys are more often found to be struggling or reluctant readers, although girls can also fit into these categories. With the adoption of the CCSS, it will be necessary for schools to add more informational reading into the school day, the type of literature that is often more appealing to struggling or reluctant readers.

Adding more informational reading into the curriculum will not be an easy task, however. Teachers will need to expand their knowledge and acquisition of informational texts, along with acquiring strategies to promote engagement and comprehension to help boys and girls work with this less familiar type of reading. Topping et al. (2008) commented, "Simply increasing reading practice time might not consistently improve reading achievement. Other mediating variables might include actual pupil engagement during this time and quality (rather than the quantity) of reading practice" (p. 506).

The push to add more informational text may engage readers who have been reluctant or unmotivated to read. What is unknown, however, is if this additional exposure to informational

text will improve student motivation and comprehension. Additionally, students who are already flourishing in classrooms filled with narratives may struggle staying motivated in a classroom suddenly rich in informational text. Research supports the idea that the more kids read the better they are at reading and the better they do on all measures of academic success. “Students who read a lot score better on every imaginable test – the NAEP [National Assessment of Education Progress, an internationally benchmarked exam], the SAT, the ACT” (Calkins et al., 2012, p. 70). It is possible that as students are exposed to additional informational text, they will be more motivated to read and read more, possibly improving comprehension scores.

CHAPTER THREE: METHODS

While some gains can be seen when looking at how students perform on standardized reading tests, American students' reading achievement scores continue to lag behind those of students in other countries. Like many activities, students will only get better at reading if they read more, but research shows students are reading less than ever before when they have free time (Gurian & Stevens, 2005). To entice students into reading, teachers need to have a variety of reading materials available in their classrooms so that all students can find something to read. For example, boys actually prefer to read informational text over narrative text (Brozo, 2002; Jenkins, 2009; Zambo & Brozo, 2009), but most classrooms have far more narrative text than informational text (Calkins et al., 2012). With the nearly nation-wide adoption of the Common Core State Standards (CCSS Initiative, 2010), more informational text reading will be required of all students. Little research is available, however, to determine if students who read more informational text actually read it with more accuracy. The purpose of this study is to determine if students who receive explicit instruction and additional time reading informational text improve their reading levels and motivation scores more than students who do not receive such instruction. This section will examine the research design, questions, hypotheses, the participants, the setting, the instruments, procedures, and the data analysis.

Design

For this study, the researcher chose to use a quantitative non-equivalent control group design, which is the most commonly used of the quasi-experimental research designs (Gall, Gall, & Borg, 2007). The sample population could not be randomly assigned since the students were already placed with a teacher for reading, thus the need for a quasi-experimental study. Gall et al. (2007) indicated that although randomly assigning participants to the groups strengthens the

experiment, “this type of experiment, if carefully designed, yields useful knowledge” (p. 416). The essential features of a nonequivalent control-group design are the nonrandomization of the participants into the groups and a pretest and posttest given to all participants (Gall et al., 2007), and those two features were present in this study. The pretest and posttest allowed for growth to be more accurately determined (Gall et al., 2007). Although the pretest-posttest control group design for experimental research is one of “the most commonly used designs in educational research” (Gall et al., 2007, p. 404), randomization is required for this type of research design. The placing of students in ability groups by the principal and literacy coach made that research design impossible for this study, hence the need for a quasi-experimental research design. The research questions could best be met through a comparison of mean gains which necessitated a pretest and posttest, another reason why a pretest-posttest research design was necessary (Gall et al., 2007). The test that was used to measure reading level was, at that time, given district-wide three times yearly, providing a natural pretest and posttest. The district already provides the results of this test to teachers, parents, and students. Examining gains, or growth, is a necessity in today’s educational environment and this comprehension test provided a reading level for each student, allowing for tracking and monitoring. The attitude survey was given in minutes, providing a brief but accurate measure of changes in reading attitude.

Research Questions and Null Hypotheses

The purpose of this study was to explore the differences in motivation and reading level between fifth grade students who received targeted instruction in reading informational text and those who do not receive the eight week intervention. Additionally, it also examined the differences in motivation to read for pleasure and to read for academic purposes, and the effects on the reading level of students three months after the intervention.

RQ1: Is there a difference in the motivation scores between fifth grade students who receive additional strategy instruction in reading informational text and fifth grade students who do not?

H₀1.A: There will be no statistically significant difference in the means of the Elementary Reading Attitude Survey (ERAS) scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.

H₀1.B: There will be no statistically significant difference in the means of Elementary Reading Attitude Survey (ERAS) motivation recreational reading scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.

H₀1.C: There will be no statistically significant difference in the means of Elementary Reading Attitude Survey (ERAS) motivational academic reading scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.

RQ2: Is there a difference in the reading scores of fifth grade students who receive additional strategy instruction in reading informational text and fifth grade students who do not?

H₀2.A: There will be no statistically significant difference in the post-study means of Scholastic Reading Achievement Lexile reading scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.

H₀2.B: There will be no statistically significant difference in the three month post-study means of Scholastic Reading Achievement Lexile scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.

Variables in the Study

The key independent variable was the instruction using informational text the teachers provided; some taught following the typical Success For All (SFA) program while the intervention group of teachers expanded the SFA curriculum and added elements of the CCSS, specifically adding more informational readings into the curriculum and teaching to deeper and more critical analysis of informational text.

The dependent variables were reading levels, as identified as a Lexile score received on the Scholastic Reading Inventory (SRI), and motivation scores, as defined by the score on the Elementary Reading Attitude Survey, (ERAS). Posttest means were compared, with the pretest means factored into the comparison.

Participants

The target population the researcher was interested in studying was upper elementary students and how they responded to informational text reading and instruction. The accessible population was the students who attended Winter Intermediate School (all names are pseudonyms). The sample for this study was all fifth graders (ten- and eleven-year olds) who currently read on level or one grade level above or below and had signed permission slips. As students were ability grouped for reading, the reading facilitator for the building had this information readily available. The researcher chose not to include students who read

significantly above or below level for this study as the curriculum needed to be differentiated too much from what the other students received, weakening the internal validity of the study.

The researcher met with all of the teachers who were working with the eligible students and asked for volunteers to participate in the study; these teachers signed consent forms and pseudonyms were used. The teachers were shown examples of what their lesson plans might look like if they were in the study group, and it was made clear that those in the control group would have no changes to their curriculum. It was important teachers fully understood the support they would be given if they chose to participate and were subsequently placed in the study group. Teachers could also choose not to participate in the study and that was acceptable without any penalty.

The fifth grade teachers at Winter Intermediate School worked in groups of three with a total of nine teachers. Pod A had three teachers who were committed to participating in the study, while Pods B and C had at least one teacher who did not want to participate or only wanted to be in the control group. For that reason, Pod A was chosen for the treatment group. Pod B had one teacher who did not want to be in the treatment group but was willing to participate if in the control group. Thus, all three of the teachers in Pod B agreed to be in the control group. Pod C had two teachers who did not want to participate at all. The remaining teacher in Pod C did want to be in the study; her class was utilized so there were more participants. She planned with Pod A and shared resources with them. After receiving Institutional Review Board (IRB) approval and permission to conduct the study, the researcher met with the four teachers involved in the treatment group. All of the teachers were females, with one in her 20s, another in her 30s, one in her 40s, and another in her 50s. All had been life-long educators and their ages were indicative of how long they had taught. The youngest teacher

was in her second year of teaching while the woman in her 50's had been teaching for over 25 years.

The teachers informed students of the study and those who were interested met with the researcher. Permission forms were then sent out and students were given a small "thank you" for returning the forms, whether they were participating in the study or not. Fewer than 60 forms were originally returned, so the researcher called some of the parents to gain permission to use their child's information.

The teachers met with the researcher prior to the first day of instruction. They discussed how the ERAS would be given and that instruction in the informational text strategies would begin the day the ERAS was given. The researcher met with the teachers working with the study group every five to ten days. Lesson plans were reviewed, discussion over how strategy instruction was evolving, and the rotation of the books being utilized during the study were the primary topics. The researcher provided them with informational texts on the topics they chose, which included understanding the brain and human body, and wildfires. Additionally, the researcher provided each of them with a poster that was depicted in the book and an initial lesson plan. The researcher regularly corresponded with the teachers working with the study group through email and also emailed the teachers working the control group to remind them of the procedures at the end of the study.

Class-sizes hovered near 16 students, providing the researcher with roughly 55 students in the study group and 55 in the control group if every student returned a signed permission slip. All students in these classes needed a consent form signed by both the student and a parent/guardian to participate in the study (see Appendix A). The researcher was unable to acquire the necessary 30 students per group, requiring her to make phone calls to parents and

seek permission through email. Eventually, the researcher was able to obtain permission slips for 30 students in the study group and 30 students in the control group.

The teachers in the study group were given resources to facilitate the implementation of the CCSS strategies in informational reading, while the control group continued to use the SFA curriculum as it was written.

Setting

The study was conducted in a small town of 12,000 in the Midwest (www.city-hyphendata.com, 2012). The town is predominantly middle-class, with 88% of the population identifying their race as White. There are several elementary schools, with all of them converging at Winter Intermediate School, which houses roughly 330 fifth and sixth graders and is the only public school for fifth and sixth graders in the town. The school received the Standard of Excellence in five areas on State Assessments in 2012, a huge achievement for both the school and the district. The school had 194 fifth graders in 2012-2013, but the 2013-2014 class enrollment was closer to 160. The gender split was nearly 50/50; there were four more girls than boys. The school had 35 students who were classified, per their enrollment form, as African-American, Asian, Hispanic, Native American or Multi-ethnic (ksde.org, 2012). Over half of the students were receiving free or reduced lunches (ksde.org, 2012).

The pretest and posttest were given in the students' usual classroom for reading/SFA time. The SRI was a part of the school curriculum and was given in September, January, and May to all students at Winter Intermediate School. The ERAS, however, was not given to all students and took twenty minutes of instruction time each time it was given. The study was conducted in the classroom, and teachers were in their own classrooms with their own students for the length of the study. While the ERAS did take instructional time, the teachers then had

information available to them on who needed more motivation to read at the conclusion of the study. This type of information could be used by librarians in connecting kids with books and increasing the motivation to read, and used by the teachers to more closely monitor the reading habits of individual students. The use of class time during the school day was offset by the valuable information teachers felt they could obtain from the survey.

As the CCSS have only been adopted in the last few years, the schools were still using their current reading program, SFA. It was not aligned with the CCSS. The researcher investigated the CCSS and could see that these new standards would require schools to alter the way reading was taught or it would be difficult for students to attain satisfactory results on the subsequent CCSS assessments which was scheduled to begin in the spring of 2015.

The teachers in the study group were guided by the researcher, who used two texts to guide the strategy development. Owocki (2012) and Calkins et al. (2012) have published books that provide significant guidance in developing and shaping existing curriculum to more adequately address the CCSS. Additionally, Gear (2008) has written a book that provides teachers with a framework for teaching nonfiction reading strategies. The researcher had seen these strategies implemented in a nearby district with very favorable results. The researcher provided each of the treatment group teachers a copy of the Gear (2008) book; the district had already purchased grade-level copies of the Owocki (2012) and Calkins et al. (2012) books.

Additionally, objectives and formative assessments were provided and utilized to provide continuity and consistency to the study groups' curriculum. These came out of the texts. A time line for strategy implementation is included (see Appendix B), and a sample lesson plan is also provided (see Appendix C). The strategies taught to the study-group students were zooming in, questioning and inferring, determining importance, connecting, and transforming (Gear, 2008).

Zooming in asks readers to find the important facts. Questioning and inferring asks students to use the textual evidence to answer questions, while determining importance helps students identify the main idea and supporting details. Connecting asks readers to connect the text to previous knowledge and previous readings. Transforming reminds the reader that every reading should leave them changed and asks them to determine how their own thinking has been altered. Each strategy was studied for two weeks, with a review of previous strategies as new ones were introduced.

Instrumentation

The Scholastic Reading Inventory (SRI)

Comprehension is one of the Five Pillars of Literacy as identified by the National Reading Panel in 2000 (Cassidy, Valadez, & Garrett, 2010). Often considered the essence of reading (Cassidy et al., 2010), the comprehension abilities of students came to the forefront of education in 2003. Congress passed and then President George W. Bush signed into law the No Child Left Behind legislation in 2001. In 2003, federal funding was given to programs that were being used to demonstrate the achievement of children in reading, like Reading First (Cassidy et al., 2010). Comprehension can be measured in many ways, but many schools use standardized testing to determine if students are making gains. The Scholastic Reading Inventory (SRI) is a test that is often used, providing students with a reading score. The higher the level of reading the student comprehends accurately, the higher their reading score.

The SRI “is a reading assessment program which provides immediate, actionable data on students' reading levels and growth over time. *The SRI* helps educators differentiate instruction, make meaningful interventions, forecast growth toward grade-level state tests, and demonstrate accountability” (Scholastic Reading Inventory, 2013, para. 1). The SRI provides teachers and

students with a Lexile score ranging from 200L-1700L using a computer-adaptive assessment program. It can be given to students in kindergarten through twelfth grade. The typical fifth grade reader would have a reader range of 565L-910L (MetaMetrics, Inc., 2008). A Lexile score is used to evaluate both readers and text difficulty (Scholastic Reading Inventory, 2013), providing appropriate matching between students and texts. This matching is a crucial component of the CCSS as the standards ask for students to read on the appropriate level and that is “appropriately complex” (CCSS Initiative, 2010, p. 13). Although the SRI provides a reading score, it is based on the student’s ability to comprehend material at a given level.

In a study of various reading comprehension assessments, Morsy, Kieffer, and Snow (2010) found the SRI to be useful for measuring growth over time in reading comprehension. They also commented on how the test uses a good mix of narrative and expository text. They did see some drawbacks to the test, however. The SRI is not diagnostic, meaning it does not provide teachers with detailed information on how to improve reading comprehension. Additionally, the reading passages are shorter than some used in other assessments (Morsy et al., 2010).

Validity on the SRI is measured with a content validity, criterion-related validity, and construct validity. Each is scored separately. For the purpose of this study, the construct is the most important validity score. The SRI is a test that measures reading comprehension and the publishers acknowledge it is the critical aspect for validity (Technical Guide, 2007). It is important to note that Scholastic defines reading comprehension as “the process of independently constructing meaning from the text” (Technical Guide, 2007, p. 84). The SRI reported similar Lexiles as the Stanford Achievement Test, with a correlation of .824, .800, .789, and .821 over the course of four years (Technical Guide, 2007). It was also compared during those same years

to the Sunshine State Standards and had a correlation of .835, .823, .817, and .825. Morsy et al. (2010) measured the SRI's validity at .91.

The SRI had a norming sample of 512,224 students and had an analysis of gender, race, and ethnic differences on 19,000 fourth through ninth graders. The reliability of the SRI has been exhaustively studied. Because it is an adaptive test, the students receive questions that are targeted for their unique level. Questions should not be too easy or too hard. Scholastic Reading Inventory's Technical Guide (2007) stated, "It bears repeating that because each student takes a unique test and the results rely partly on prior information, the error associated with any one score or student is also unique" (p. 64). The standard errors of measurement (SEMs) decrease as the test is retaken and adjusted for the student; the uncertainty decreases. Maximum uncertainty is measured at 225L but decreases to about 54Ls as more items are known about the student. In general, however, the typical reader measures a standard error of measurement of 70L.

Additionally, Morsy et al. (2010) noted the standard error of measurement was between 55 and 83 Lexile points, which they found made the test strongly reliable because the range of scores, 200-1700, was large. To demonstrate reader consistency, the assessment results should exhibit a reliability coefficient of at least .85 (Technical Guide, 2007). Morsy et al. (2010) found the scores for the SRI most reliable and accurate for students reading close to their grade level when they looked specifically at sixth graders.

The SRI was given district wide so there was no additional cost for the students to take this assessment for this study.

The Elementary Reading Attitude Survey (ERAS)

The ERAS was developed by McKenna and Kear (1990) as a quantitative way to measure individuals' attitude about reading but in a group setting. Previously, it was difficult to

measure students' attitudes in a quantitative way and most surveys were qualitative and used for individual purposes. "Our purpose was to produce a public-domain instrument that would remedy these shortcomings and enable teachers to estimate attitude levels efficiently and reliably" (McKenna & Kear, 1990, p. 626). Although the survey can be given to the class in a few minutes as it is only twenty questions, it is important that the procedures are carefully followed, mimicking the norming group. On the survey, Garfield the cat is in four different poses, from happy to mad. The teacher reads the students a series of questions and they follow along on their own paper. The students then circle the Garfield that matches how they feel. The survey is read to the students so that those who struggle reading the text of the survey can still understand and complete it. The survey can provide a profile for an individual but it also provides a group profile. It can also be used to monitor the "attitudinal impact of instructional programs" (McKenna & Kear, 1990, p. 628).

The test was normed on 18,138 students in grades one through six, making it an appropriate test for fifth graders. There are ten questions on attitude towards recreational reading and ten questions about attitude towards academic reading. The reliability for the 3,374 fifth graders was .86 for recreational reading, .82 for academic reading, and a .89 for the full scale. For this study, the researcher used the full scale.

The reliability was checked by determining which students used the public library and which did not. Those who did use the library, as evidenced by use of a library card, were compared to the noncardholders. The cardholders had significantly higher recreational scores than the noncardholders" (McKenna & Kear, 1990). The groups of students who had books currently checked out from the library versus those who did not were also compared, with those who currently had a book scoring significantly higher in attitude towards reading than those who

did not have books checked out. Another study compared high achieving readers to low achieving readers, with the high ability readers' attitudinal mean significantly exceeding the mean of the low achieving readers (McKenna & Kear, 1990). Both of these studies showed that students who did read more and had higher reading achievement scores did score higher on the ERAS.

The test was designed to measure two factors: The student's interest in reading at school and their interest in reading on their own time. "To tell more precisely whether the traits measured by the survey corresponded to the two subscales, [education reading and recreational reading] factor analyses were conducted" (McKenna & Kear, 1990, p. 642). "With one exception, all items loaded cleanly on factors associated with the two subscales. . . Taken together, the factor analyses produced evidence extremely supportive of the claim that the survey's two subscales reflect discrete aspects of reading attitude" (McKenna & Kear, 1990, p. 642). The above data indicate that the test items do correlate to the two factors, which are reading for academic reasons and reading for pleasure.

Kazelskis et al. (2004) examined the results of 718 fourth through sixth graders who took the ERAS and found adequate internal consistency in gender. Kush (1995) found the results stable when he tested the same 289 first through fifth grade students at the beginning of two separate academic years, indicating there were significant correlations in the retests. The ERAS has been proven to be consistent over time and is reliable with both genders.

This test was photocopied for each student, costing roughly twenty dollars total. The researcher purchased a book with the survey in it; it was able to be copied. The following was provided in an email to the researcher:

The Elementary Reading Attitude Survey by Michael C. McKenna and Dennis J. Kear first appeared in the May 1990 issue of *The Reading Teacher*. Permission to copy was first granted by United Feature Syndicate, who held the copyright on the Garfield character featured in the survey. That permission to copy expired in 1995. It was extended until 1999. The copyright is now held by Jim Davis' company, Paws, Inc. and a new *permission has been extended until further notice*. PLEASE PASTE the following statement on each page of the survey prior to reproducing it. (D. J. Kear, personal communication, November 15, 2013)

Although the ERAS was not a standard part of the curriculum and took roughly 40 minutes total to give, the teachers believed it could provide them with valuable information on who likes to read and who does not, and also give them a deeper look as to reasons why students may not like to read. The principal expressed an interest in using the test with his entire building. He has not committed to that at this point, but was supportive of the test being used because of the information it could provide teachers and was provided a copy.

Procedures

1. Teachers who were in the study group began working with the researcher on the first two weeks of lessons, focusing on the strategy of zooming in, as soon as IRB permission was given. Each strategy was given 5-10 days, depending on student response and informal assessment. The order of the strategies was zooming in, questioning and inferring, determining importance, connecting, and transforming. The book written by Gear (2008) had detailed lesson plans for teaching students the given strategy.

2. Students interested in participating in the study were given a consent form (see Appendix A) and also met with the researcher. Parents were notified of the study through teacher emails. The researcher was available to answer parents' questions through email or phone calls.
3. Phone calls and emails were used to get as many permission slips returned as possible.
4. The study started in late March and lasted until the end of the semester, which was late May.
5. During the study, students received instruction on the five strategies and had pre-determined days for reading more informational text (Information Text Tuesdays and Thursdays).
6. The SRI was given in the winter district wide. This was the pretest and determined students' initial reading level. The teachers had the option to look at the results and use them to guide instruction.
7. The ERAS was given by the teachers at the beginning of reading class the first day of the study. The teachers looked at the results and used them to guide instruction. However, after one week, the ERAS were picked up and given to a colleague and locked in her office for the remainder of the study.
8. During the length of the study, the researcher met weekly with the teachers in the study group to provide guidance in using the aforementioned strategies. Consistency between teachers was paramount so there was an emphasis on using the supplied books for lesson plans.
9. The study concluded at the end of the semester, three days before school ended.
10. The SRI and the ERAS were given again, with the SRI following the district calendar and given in late-May, and the ERAS given that same week. The SRI was also taken when those students returned from summer break as sixth graders, per the district guidelines.

11. At the conclusion of the study, the ERAS was scored by hand by a professor at the local college. The researcher was present but felt another professor should be present to prevent experimenter bias (Gall et al., 2007), which could be a threat to internal validity.
12. Data for the SRI were available through the school district. The literacy coach agreed to provide the researcher with the winter, spring, and fall scores for the students.
13. Gain scores were computed and means between the groups compared.
14. The computer that housed all of the information for this study was password protected. Hard copies of the ERAS were stored in the researcher's home in a safe at the conclusion of the study.

Threats to Validity

There are several extraneous variables that could have influenced the internal validity of this study, as identified by Gall et al. (2007), that need to be addressed. History could have been an issue, as this course took place during a semester and lasted nearly eight weeks. Many unknown things have happened during that time to influence the study. Other curriculum changes, a more positive learning environment, or a new student who dramatically influences others could all have impacted the study. Statistical regression could also have occurred, although the researcher attempted to eliminate that threat by choosing not to include the highest and lowest achieving students. Differential selection could have been an issue. The group of teachers who participated in the study was known to be excellent teachers; they were professionals and brought their best to their students each day. The strength of the teachers could certainly have impacted the results of the study. As noted in Chapter 2, nothing impacts a child's education more than a teacher. An excellent teacher could certainly have motivated a child to read more.

Compensatory rivalry was also a threat. Of the nine teachers asked to participate, four wanted to be in the study group. The teachers in the control group might have been motivated to work extra hard with students in other areas to try to favorably compare with the study group. While the extra work was likely a benefit to students, it could be a threat to validity for this study. Finally, population validity could also have played a role in the study. As noted earlier, the experimentally accessible population was primarily White. Because of that, the generalization of the results was lessened. The target population remained large, particularly in certain parts of the country, but the results cannot be generalized to all fifth graders.

The researcher attempted to lessen the impact of the extraneous variables so the external validity, or “the extent to which the findings of an experiment can be applied to individuals and settings beyond those which were studied” (Gall et al., 2007, p. 388), is strong.

Data Analysis

ANCOVA was the test used to analyze the data. “To adjust for initial differences in pretest means, analysis of covariance should be used” (Gall et al., 2007, p. 440). A Levene’s test was necessary initially. Howell (2011) defined a Levene’s test as “a test on the assumption that the population variances are equal” (p. 433). The researcher was familiar with SPSS and used that program to run the data. Gall et al. (2007) noted the ANCOVA can be a difficult test to run and analyze. The researcher had a statistics professor at a local college look over the results to determine if they were analyzed accurately and also to verify the appropriate test was used to study the data. This also eliminated observer bias. Means were readily identified for the groups, and the researcher was comfortable looking at those and determining who improved and who did not. The comparisons of means with the use of pretests are more complicated, thus the need for help.

CHAPTER FOUR: FINDINGS

Research Questions and Null Hypotheses

The purpose of this study was to explore the differences in motivation and reading level between fifth grade students who received targeted instruction in reading informational text and those who did not receive the eight week intervention. Additionally, it also examined the differences in motivation to read for pleasure and motivation to read for academic purposes, and the effects on students' reading levels three months after the intervention.

All data were analyzed utilizing the SPSS PASW Statistical 22.0 software. The following research questions were used.

RQ1: Is there a difference in the motivation scores between fifth grade students who receive additional strategy instruction in reading informational text, and fifth grade students who do not?

H₀1.A: There will be no statistically significant difference in the means of Elementary Reading Attitude Survey (ERAS) scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.

H₀1.B: There will be no statistically significant difference in the means of Elementary Reading Attitude Survey (ERAS) recreational reading scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.

H₀1.C: There will be no statistically significant difference in the means of Elementary Reading Attitude Survey (ERAS) academic reading scores for the treatment group, which used

additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.

RQ2: Is there a difference in the reading scores of fifth grade students who receive additional strategy instruction in reading informational text and fifth grade students who do not?

H₀2.A: There will be no statistically significant difference in the post-study means on Scholastic Reading Achievement Lexile reading scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.

H₀2.B: There will be no statistically significant difference in the three month post-study means of Scholastic Reading Achievement Lexile scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.

This was a quasi-experimental quantitative study and the data collected were examined to determine if there was a significant difference in mean scores between the treatment and the control group. The results were analyzed to determine if the additional strategy instruction in reading informational text improved ERAS scores and SRI scores when compared to students who did not receive the additional reading instruction and instead followed the traditional SFA curriculum.

The dependent variable was the post-study scores on the ERAS and SRI, and the independent variable was the additional strategy instruction in reading informational text. Four classes were in the treatment group and three classes were in the control group.

Descriptive Statistics

This study utilized a nonrandomized control group, pretest-posttest design. This design was selected because the chosen groups were already organized into classes; they could not be reorganized for the study.

The study lasted seven weeks and the procedures listed in Chapter 3 were followed. The SRI was given to all students in the building in December, following the school's protocol, in May, and in August, again following the school's protocol. Those students who participated in the study took the ERAS in March and then again at the conclusion of the study in mid-May.

The sample involved included 60 ($N = 60$) students with thirty students in each group. Thirty-two students were female and 28 were male. The control group had 17 girls and 13 boys while the treatment group had 15 girls and 15 boys. In the final post-study SRI test, there were 27 students in the control group with 14 girls and 13 boys, and 26 students in the treatment group with 14 girls and 12 boys. Seven students moved or changed schools during the summer. All of the scores are as reported by SPSS Version 22.

The control group scaled a statistics report as ($N=30$) $M = 53.17$, $SD = 11.02$ on the ERAS pretest. The treatment group's descriptive statistics were reported as ($N=30$) $M = 53.00$, $SD = 10.08$ on the ERAS pretest. On the posttest ERAS, the control group's descriptive statistics were reported as ($N = 30$) $M = 48.90$, $SD = 10.30$. The treatment group had a scaled statistics report on the posttest ERAS as ($N = 30$) $M = 55.33$, $SD = 12.68$ (see Table 1 and Figure 1). On the ERAS posttest, the treatment group scored higher on the full-scale ERAS than the control group even though both groups started with nearly identical pretest scores. Notably, the control group's scores on the ERAS actually decreased.

Table 1

Descriptive Statistics for Scaled Scores – ERAS Pretests and Posttests

Group	<i>N</i>	Pretest		Posttest		<i>Diff</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Control	30	53.17	11.02	48.90	10.30	-4.27
Treatment	30	53.00	10.08	55.33	12.63	+2.33

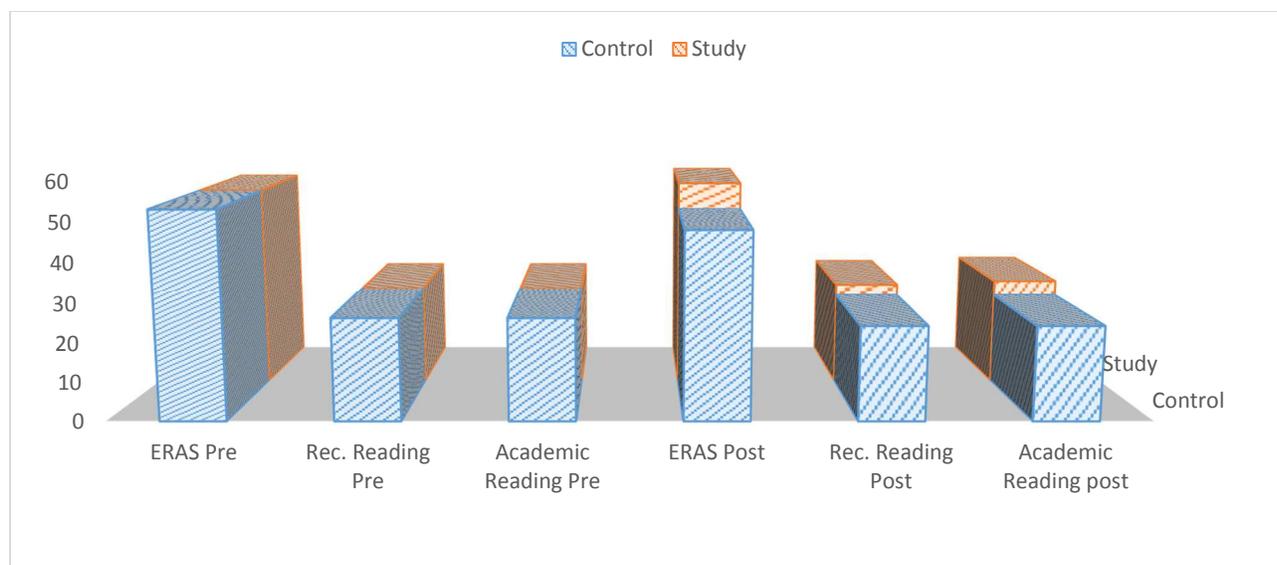


Figure 1. ERAS, Recreational Reading, and Academic Reading - Mean Comparison

The control group's pretest SRI descriptive statistics were reported as ($N = 30$) $M = 858.83$, $SD = 157.10$. On the SRI pretest, the descriptive statistics for the treatment group were reported as ($N = 30$) $M = 807.63$, $SD = 147.46$. The control group's May SRI descriptive statistics were reported as ($N = 30$) $M = 896.63$, $SD = 194.35$; an August SRI report was ($N = 26$) $M = 885.11$, $SD = 194.03$. The descriptive statistics for the treatment group on the May SRI were reported as ($N = 30$) $M = 851.33$, $SD = 169.66$; a scaled report on the August SRI as ($N = 27$) $M = 839.64$, $SD = 174.53$; (see Table 2 and Figure 2). The treatment group and the control group both had higher means on the posttest SRI in May, and then both groups dropped over 20 points on the August SRI. The control group continued to score higher than the study group on the SRI both in May and August. However, the net gains were higher for the treatment group both in May and in August.

Table 2

Descriptive Statistics for Scaled Scores – SRI Pretests and Posttests

Group	Pretest			Posttest (May)			Posttest (Aug.)		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>Diff</i>	<i>M</i>	<i>SD</i>	<i>Diff</i>
Control	30	858.83	157.10	896.63	194.36	+37.80	885.11	194.013	+26.28
Treatment	30	807.63	147.46	851.33	169.66	+43.70	839.64	174.53	+32.01

Note. The students who moved after the May SR had their pretests removed and were not included in the August SRI. Thus, for the August SRI N=27 in the control group and N=26 in the study.

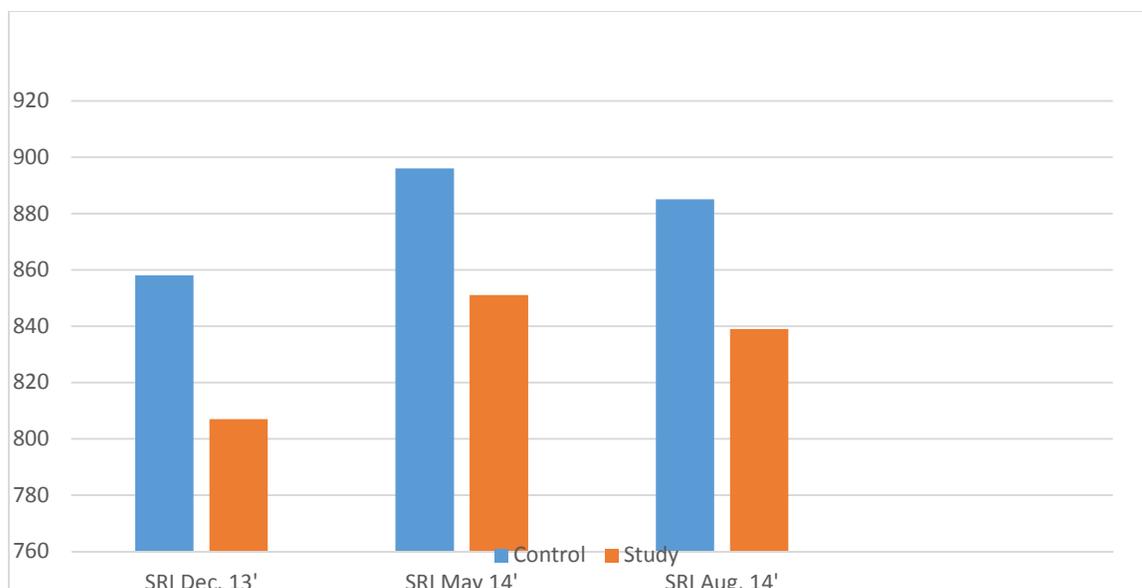


Figure 2. SRI Pretest-Posttest 1 and Posttest 2 - Mean Comparisons

Assumption Tests

ANCOVA was used in analyzing the data for each of the null hypotheses, listed previously. According to Pallant (2013), there are five assumptions that must be checked prior to running ANCOVA. Normality and homogeneity of variance were checked, in addition to the measurement of the covariate (the covariate was always the pretest), the reliability of the covariate, linearity (see Figures 1 and 2), and homogeneity of regression slopes (see Figures 3 and 4). These tests determined if there was an interaction between the covariate, or the pretest in this study, and the treatment, which was the additional strategy instruction in reading informational text.

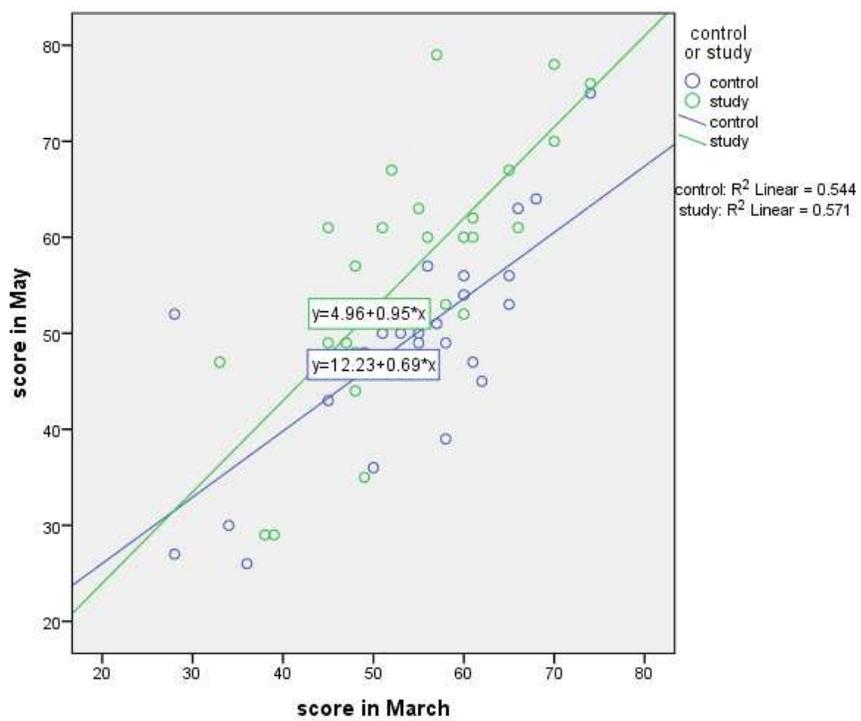


Figure 3. Homogeneity of Regression Slopes - ERAS

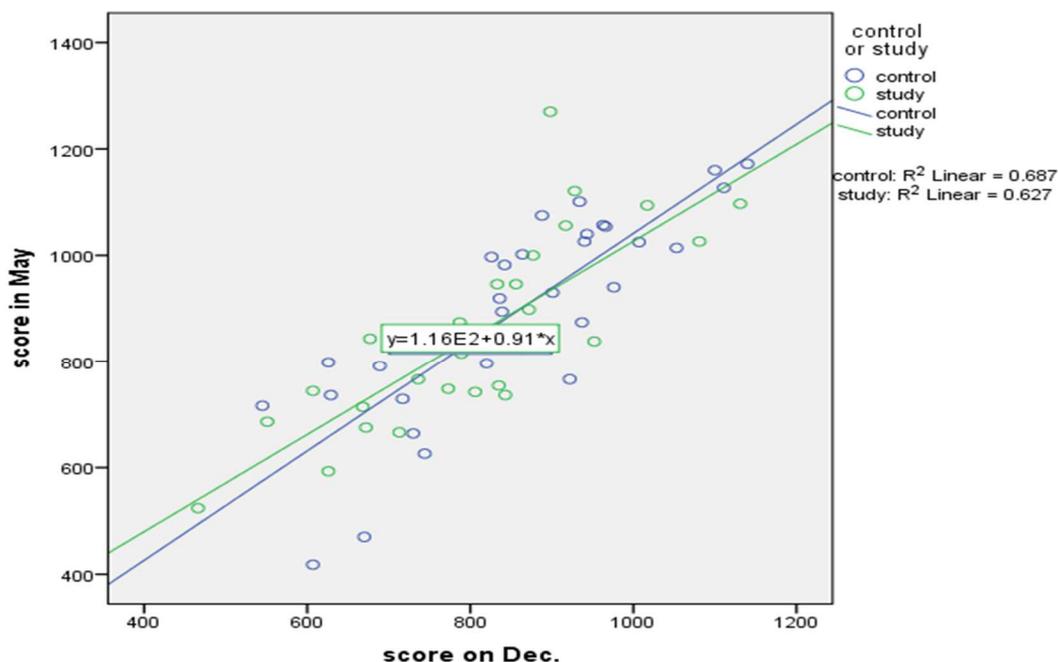


Figure 4. Homogeneity of Regression Slopes – SRI

With the homogeneity of regression slopes, the interaction needed to be greater than the alpha level of $p > .05$; this is a test where the goal is to have an interaction that is not significant. In this study, the assumption of homogeneity was not violated because the interaction, or p -value, of group*ERASpre was .186, and the p -value of group*SRIpre was .544. Since only one covariate was used in each data analysis, correlations among the covariates were not checked. After verifying the assumptions above, an ANCOVA analysis could be used to examine the differences between the treatment group and control groups. Additionally, a Levene's test was conducted prior to ANCOVA analysis to determine if the groups were similar enough for comparisons to be made. See Table 3 for the analysis of those tests.

Table 3

Levene's Test Results

Test 1	Dec. SRI - .528	May SRI - .331
Test 2	Dec. SRI - .624	Aug. SRI - .521
Test 3	ERAS pre - .979	ERAS post - .118
Test 4	ERAS rec. reading pre. -.528	ERAS rec. reading post - .064
Test 5	ERAS academic reading pre. -.801	ERAS academic reading post - .854

Results

Research Question One

Research question one sought to determine if there was a difference in the motivation scores between fifth grade students who received additional strategy instruction in reading informational text, and fifth grade students who did not. The results demonstrated that there was a significant difference in the overall motivation scores, the recreational reading scores, and the academic reading scores of students who received additional strategy instruction.

Null hypothesis 1.A. The first null hypothesis attempted to ascertain whether or not students who received additional strategy instruction in reading informational text scored significantly higher on the ERAS. Null hypothesis 1.A states, "There will be no statistically significant difference in the mean of Elementary Reading Attitude Survey (ERAS) scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text." To determine the answer to this question, the treatment group and the control group took the ERAS in March of 2014 at the beginning of the study and again at the conclusion of the study in

May of 2014; the means were compared to determine if there was a significant difference between them. The students were not given the ERAS in August as they were no longer in the same classes and it would have been disruptive to too many students to give it to those students involved in the study.

A one-way between-groups analysis of covariance was conducted to compare the effectiveness of the intervention on the reading attitude of the control group to the treatment group. The independent variable was the type of instruction (SFA or SFA with additional informational text and strategy instruction), and the dependent variable consisted of ERAS scores after the intervention was completed. Pre-intervention ERAS scores were used as the covariate in this analysis but had to be adjusted to identify the level of change that is due to the intervention and not the pre-intervention scores. After adjusting for pre-intervention scores, there was a significant difference between the two intervention groups on post-intervention ERAS, $F(1, 57) = 10.50, p = .002$, partial eta squared = .16. The partial eta squared “represents the proportion of the variance in the dependent variable that can be explained by the independent variable” (Pallant, 2013, p. 305). If turned into a percent, 16% of the variance in ERAS scores could be explained by the additional strategy instruction. This suggests that students who did receive additional instruction in reading informational text did have improved attitudes towards reading on the overall ERAS score than those who did not receive such instruction. Notably, the mean of the control group was lower at the end of the study than at the beginning; the students had a lower score in their attitude towards reading than they did at the beginning. The null hypothesis was rejected (see Table 4).

Table 4

ANCOVA for ERAS

ANCOVA for Comparisons of Means							
Sig.	Partial η^2		Pretest M	Posttest M	SD	95% Confidence Interval of the Difference	
						Lower	Upper
.002	.16	Control	53.17	48.90	10.30	45.96	51.70
		Treatment	53.00	55.33	12.68	52.53	58.27

Null hypothesis 1.B. The second null hypothesis of research question one attempted to determine whether or not adding additional strategy instruction in reading informational text had a significant effect on the subdomain recreational reading ERAS scores. Null hypothesis 1.B states, “There will be no statistically significant difference in the mean of Elementary Reading Attitude Survey (ERAS) recreational reading scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.” To answer this question, both the treatment group and the control group took the ERAS before the study in March of 2014 and at the conclusion of the study in May of 2014; the change in mean was evaluated to determine if there was a significant difference.

A one-way between-groups analysis of covariance was conducted to compare the effectiveness of the intervention on the recreational reading attitude of the control group to the study group. The independent variable was the type of instruction (SFA or SFA with additional informational text and instruction), and the dependent variable consisted of ERAS scores on the recreational reading portion after the intervention was completed. Pre-intervention ERAS scores

were used as the covariate in this analysis. After adjusting for pre-intervention scores, there was a significant difference between the two intervention groups on post-intervention ERAS, $F(1, 57) = 12.08, p = .001$, partial eta squared = .18. Eighteen percent of the variance in post-intervention ERAS scores could be explained by the additional strategy instruction in reading informational text. Again, at the end of the school year, the control group mean was lower on the attitude toward recreational reading portion of the ERAS than when the study began. This study suggests that students who received additional strategy instruction in reading informational text did have a significantly higher mean on the recreational reading portion of the ERAS. The null hypothesis was rejected (see Table 5).

Table 5

ANCOVA for Recreational Reading

ANCOVA for Comparisons of Means							
Sig.	Partial η^2		Pretest M	Posttest M	SD	95% Confidence Interval of the Difference	
						Lower	Upper
.001	.18	Control	26.68	24.60	5.26	22.86	25.59
		Treatment	26.09	27.20	6.86	26.21	28.94

Null hypotheses 1.C. The third null hypothesis for research question one attempted to determine whether or not adding additional strategy instruction in reading informational text had a significant effect on the subdomain recreational reading ERAS scores. Null hypothesis 1.C states, “There will be no statistically significant difference in the mean of Elementary Reading Attitude Survey (ERAS) academic reading scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.” To answer this question, both the treatment group and the control group took the ERAS before the study in March of 2014 and at the conclusion of the study in May of 2014, and the change in mean on the academic portion of the ERAS was evaluated to determine if there was a significant difference.

A one-way between-groups analysis of covariance was conducted to compare the effectiveness of the intervention on the academic reading attitude of the control group to the treatment group. The independent variable was the type of instruction (SFA or SFA with additional informational text and instruction), and the dependent variable consisted of ERAS scores on the academic portion after the intervention was completed. Pre-intervention ERAS

scores were used as the covariate in this analysis. After adjusting for pre-intervention scores, there was a significant difference between the two intervention groups on post-intervention ERAS, $F(1, 57) = 11.27, p = .001$, partial eta squared = .17. Seventeen percent of the variance in post-intervention ERAS scores could be explained by the intervention. Once again, students in the treatment group had an increased mean at the end of the study, while those in the control group had a decreased mean, indicating they enjoyed reading less at the end of the study than they did at the beginning. This study suggests that students who did receive additional strategy instruction in reading informational text did have significantly higher means on the academic reading portion of the ERAS than the students who did not receive such instruction. The null hypothesis was, therefore, rejected (see Table 6).

Table 6

ANCOVA for Academic Reading

ANCOVA for Comparisons of Means							
Sig.	Partial η^2		Pretest M	Posttest M	SD	95% Confidence Interval of the Difference	
						Lower	Upper
.001	.17	Control	26.71	24.30	5.97	22.90	25.87
		Treatment	26.12	28.99	6.49	26.43	29.41

Research Question Two

The second research question sought to determine if there was a difference in the reading scores of fifth grade students who received additional strategy instruction in reading informational text and fifth grade students who did not. The results indicated there was not a significant difference in reading scores of students who did receive additional strategy instruction and students who did not.

Null hypothesis 2.A. The first null hypothesis for research question two attempted to determine whether or not adding additional strategy instruction in reading informational text had a significant effect on the SRI scores at the conclusion of the study. Null hypothesis 2.A states, “There will be no statistically significant difference in the post-study means in Scholastic Reading Inventory Lexile reading scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.” To answer this question, both the treatment group and the control group took the SRI before the study in December of 2013 and at the

conclusion of the study in May of 2014, and the change in mean was evaluated to determine if there was a significant difference.

A one-way between-groups analysis of covariance was conducted to compare the effectiveness of the intervention on improving the May SRI scores of fifth grade students. There were 30 students in each group. The independent variable was the type of instruction (SFA or SFA with additional informational text and instruction), and the dependent variable consisted of the May SRI scores after the intervention was completed. Scores on the pre-intervention SRI were used as the covariate in this analysis. After adjusting for pre-intervention scores, there was not a significant difference between the two intervention groups on the May post-intervention SRI, $F(1, 57) = .03, p = .88, \text{partial eta squared} = .00$. This suggests that the intervention had no effect on the May SRI scores, and students who received additional strategy instruction in reading informational text did not have scores significantly different from students who did not receive such instruction. The researcher failed to reject the null hypothesis (see Table 7).

Table 7

ANCOVA for SRI May Posttest

ANCOVA for Comparisons of Means							
Sig.	Partial η^2		Pretest M	Posttest M	SD	95% Confidence Interval of the Difference	
						Lower	Upper
.88	.00	Control	858.83	896.63	194.36	832.16	911.35
		Treatment	807.63	851.33	169.66	836.31	915.80

Null hypothesis 2.B. The second null hypothesis for research question two attempted to determine whether or not adding additional strategy instruction in reading informational text had a significant effect on the SRI scores three months post-study. Null hypothesis 2.B states, “There will be no statistically significant difference in the three month post-study means in Scholastic Reading Inventory Lexile reading scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not use additional strategy instruction in reading informational text.” To answer this question, both the treatment group and the control group took the SRI before the study in December 2013 and three months after the conclusion of the study in August of 2014, and the change in mean was evaluated to determine if there was a significant difference.

Table 8

ANCOVA for SRI August Posttest

ANCOVA for Comparisons of Means							
Sig.	Partial η^2		Pretest M	Posttest M	SD	95% Confidence Interval of the Difference	
						Lower	Upper
.60	.01	Control	858.83	885.11	194.03	805.00	903.40
		Treatment	807.63	839.64	174.53	821.84	924.29

A one-way between-groups analysis of covariance was conducted to compare the effectiveness of the intervention on the August SRI scores of fifth grade students. The independent variable was the type of instruction (SFA or SFA with additional informational text and strategy instruction), and the dependent variable consisted of the August SRI scores after the intervention was completed and the students returned from summer break. Scores on the pre-intervention SRI were used as the covariate in this analysis. After adjusting for pre-intervention scores, there was not a significant difference between the two intervention groups on the August post-intervention SRI, $F(1, 49) = .276, p = .60$, partial eta squared = .006. This study suggests that there was not a significant difference in three month post-study SRI scores of students who received additional strategy instruction reading informational text and students who did not receive such instruction. The researcher failed to reject the null hypothesis (see Table 8).

CHAPTER FIVE: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Discussion

The purpose of this nonequivalent control-group design study was to compare the differences in motivation and reading level of fifth grade students who were provided additional strategy instruction in reading informational text to those who were not provided additional instruction. The Elementary Reading Attitude Survey (ERAS) was used to compare motivational scores in academic reading, recreational reading, and an overall score. A Lexile score, obtained through the Scholastic Reading Inventory (SRI) was used to compare comprehension scores. A total of 60 students participated in the study. Data were gathered and analyzed comparing changes from the pretest scores to the posttest scores.

Research has proven that engaged students are motivated to read (Kush & Watkins, 1996; Logan & Johnston, 2010; Taylor et al., 1990). Students who are motivated to read actually read more (Zambo & Brozo, 2009) and then tend to perform better on comprehension tests (Gillespie & Deacon, 2010). Different students are engaged and then motivated to read by different types of literature, however. This means that teachers must have a variety of genres present in their classrooms in order to motivate the various reader preferences. Additionally, different genres require different approaches for successful comprehension. This study sought to determine if providing students with more strategy instruction in reading informational text, the preferred but often neglected genre of many students, would increase students' motivation to read and increase their comprehension scores.

The first research question, "Is there a difference in the motivation scores between fifth grade students who receive additional strategy instruction in reading informational text, and fifth grade students who do not?" was created to determine if the overall scaled scores between the

treatment group and the control group were significantly different on the ERAS. The data showed there was a significant difference in the mean overall scaled score of the treatment group compared to the control group.

It is believed that prior to the nationwide adoption of the Common Core, teachers spent up to 80% of the day working with narrative text (Calkins et al., 2012). For many students, working with narrative text is not engaging (Brozo, 2002). The CCSS are asking for teachers to devote 50% of their text time to informational text (CCSS Initiative, 2010). This switch is likely to engage some readers but may disengage others. In this particular study, those students who did read more informational text did enjoy reading more at the end of the study. The students in the control group actually liked reading less, both academically and recreationally; their ERAS scores went down in every area. This is important to know because engaged and motivated readers connect more deeply to text (Zambo & Brozo, 2009), and engagement helps with comprehension (Tovani, 2006). Getting students to enjoy reading may encourage them to read more, and students who read more are often better readers, as measured on comprehension tests (Taylor et al., 1990). One of the greatest concerns in today's schools is the alliterate reader, or the student who can read but does not (Thomas & Moorman, 1983). This study showed that providing students with a variety of genres and strategy instruction in reading those genres does increase students' attitudes towards reading. The researcher worked carefully with the teachers in choosing informational texts that were appropriate and interesting for the given topics, locating a variety of books at various levels. (The topics were Wildfires, The Human Body, and Your Amazing Brain.) Additionally, the teachers found other informational texts and shared those, and students also tried to find books to fit the given topics. Everyone worked together to build the classroom libraries for these units. This constructivist thinking, considering the

learning needs of each learner in regards to informational text, is what the researcher believed helped every student find an engaging piece of text and motivated them to keep reading. The researcher believed the additional time spent reading engaging informational text and working with it was the reason the treatment group had an increase in full scale ERAS scores while the control group did not.

The overall scaled score of the ERAS was composed of two subtests: recreational reading and academic reading. The second research question, “Is there a difference in the recreational reading scores between fifth grade students who receive additional strategy instruction in reading informational text, and fifth grade students who do not?” was designed to ascertain if the reading subtest scores differed significantly between the treatment group and the control group. The ERAS recreational reading scores of students who received additional instruction in reading informational text did differ significantly from the students who did not receive such instruction.

Recreational reading is considered reading the student chooses to do outside of school, and the reading can be of any genre. Currently, the average boy reads for about eight minutes a day outside of school, while the average girl reads only slightly more (Bauerlein & Stotsky, 2005). This study indicated that the students were enjoying recreational reading more and reading more outside of school, although exactly how much more is unknown. Taylor et al. (1990) indicated the relationship between out of school reading has been tied to increases in vocabulary, fluency, and comprehension. If students enjoy reading more and then choose to read more outside of the school day, educators may eventually see a rise in comprehension scores. By the improvement of the scores in this section, and answering the questions in a more favorable way, the data suggests students were enjoying reading more and were reading more outside of school.

It is unknown what students in the study were reading outside of school time, but their overall opinion of reading outside of school, or recreational reading, improved with the additional exposure to informational text while in school. Perhaps the reminder that there are many types of reading material gave some students the confidence to read different material in their free time, and they enjoyed this reading more. This study concurred with studies conducted by researchers like Zambo and Brozo (2009), who suggested that many students do prefer informational text and will enjoy reading more if they are exposed to more material in this genre.

The second subtest measured a student's motivation to read academically. The third research question was, "Is there a difference in the academic reading scores between fifth grade students who receive additional strategy instruction in reading informational text, and fifth grade students who do not?" There was a statistically significant difference in the mean of Elementary Reading Attitude Survey (ERAS) academic reading scores for the treatment group, which used additional strategy instruction in reading informational text, and the control group, which did not receive additional strategy instruction in reading informational text.

It is widely documented that girls prefer reading narrative text (Bauerlein & Stotsky, 2009), while boys prefer reading informational text (Zambo & Brozo, 2009). In this study, however, the students were boys and girls, and the entire group enjoyed reading more when informational text with strategy work was added. The researcher was unable to find research that showed girls dislike reading informational text, only research supporting that girls tend to like narratives better. While girls consistently show a more positive attitude towards reading than boys (Brozo, 2002), there are girls who simply do not enjoy reading. For those girls and boys who do not enjoy reading, or who enjoy reading from multiple genres, the exposure to more informational text may help in their engagement and motivation to read, as indicated by this

study. Students who had no change in their curriculum actually liked reading less by the end of May. A lack of motivation to read is not beneficial to students who are starting a three month break from school, as that attitude will affect their reading time at home.

By twelfth grade, the CCSS ask that seventy percent of students' reading time include informational text (CCSS, 2010). In this study, providing students with instruction in reading informational text improved their attitude about academic reading, the kind of reading required by the CCSS. The researcher firmly believed that the additional exposure to informational text that was appropriate for that age group and those readers, along with the strategy instruction, increased students' overall motivation to read, along with their motivation to read for pleasure and for academic purposes.

The researcher also examined the comprehension scores of students before the study, at the conclusion of the study, and three months post-study. The SRI was used, and it provided students with a Lexile score. The fourth research question, "Is there a difference in the immediate post-study reading scores of fifth grade students who receive additional strategy instruction in reading informational text and fifth grade students who do not?" was created to compare the comprehension scores of students in the treatment group and students in the control group. This research question examined the results at the conclusion of the study.

The results of the ANCOVA did not provide enough evidence to reject the null hypothesis at the given significance level. Further study may be needed to determine if a link exists between these variables. The mean Lexile scores did not differ significantly on the SRI, whether the students received extra instruction in reading informational text or not. Strategies were used that are known to support the comprehension of informational text. Graphic organizers, which can help students see the relationships between multiple texts, were utilized

(Gear, 2008). Students learned multiple strategies, including zooming-in, to help them identify the main idea and supporting details (Calkins et al., 2012). The students read more informational text than in previous quarters of the school year, which research has suggested may be the preferred genre of many students, particularly those who struggle (Brozo, 2010; Miller, 2009; Zehr, 2009). McGeown et al. (2012) believed that increasing the reading interests of children using books the children found engaging positively correlated with their reading skill. Kush and Watkins (1996) commented that a child's attitude towards reading may likely be the strongest affective factor influencing reading comprehension. This study would seem to contradict this research. While the students' attitudes did improve, their comprehension scores did not significantly improve. Gains were made, and the treatment group made more gains than the control group, but those gains were not significant.

Comprehension is difficult to measure; because comprehension is difficult to measure, a variety of tests are used to examine a student's ability to read and understand text. This version of the SRI measured the student's ability to infer both narrative and informational text by answering multiple choice questions over a small passage. It provided only one score; no subscores were presented. While the text does provide both narrative and informational text passages, the results are not disseminated that way. A different test would examine other facets of comprehension and would yield different results, possibly in multiple areas. Additionally, the SRI does not always include reading passages from authentic children's literature. The passages are often written and designed specifically for the SRI. Student interest in the reading may have been inhibited due to the short, contrived passages. It is possible that the students did in fact make significant gains, but this particular test was not sensitive enough to measure them.

The fifth and final research question asked, “Is there a difference in the three month post-study reading scores of fifth grade students who receive additional strategy instruction in reading informational text and fifth grade students who do not?” This question was created to compare the Lexile scores of the treatment group and the control group three months after the study concluded, at the end of the summer when school resumed.

Once again, the results of the ANCOVA did not provide enough evidence to reject the null hypothesis at the given significance level. Students who received additional instruction in reading informational text did not have significantly different scores from their counterparts three months after the study concluded. It is important to note that during the three months post-study, the students were not receiving instruction in reading informational text. It was summer break and students were not in school. As a result, how much students read over the summer could not be determined. The amount students read recreationally, which would be the reading that occurs in the summer, would impact comprehension scores (McGeown et al., 2012). Even though the treatment group left school in May enjoying reading more than their control group counterparts, it is unknown whether they actually did read more as a result of that increase in motivation.

Conclusions

This study added to the previous research on motivating students to read and showed that exposing students to multiple genres can increase their engagement with literature and informational text. The additional time spent immersed in various forms and levels of informational text, and being provided strategy instruction in reading such text, made a significant difference in students’ motivation to read for both recreational and academic purposes. The students in the treatment group’s mean scores were higher on the posttest ERAS

than those in the control group. Additionally, it demonstrated that all students, regardless of gender, enjoyed reading informational text.

Constructivists believe that true learning occurs when the learner is actively involved in creating connections (Barksdale-Ladd & King, 2000). Creating connections requires adjusting the curriculum to best fit the needs of the students so deeper learning can occur. During this study, the needs of reluctant readers were kept in mind with a curriculum designed to help students connect to and engage with reading. While the traditional curriculum at Winter Elementary was predominantly narrative in nature most of the school year, during the study the students read informational text and learned strategies to make reading such text more effective. This adjustment in curriculum was designed to help the reluctant reader make stronger connections and improve both their attitude and comprehension.

Students in the treatment group did enjoy reading more at the end of the study. Those who did not participate in the study enjoyed reading less. The ERAS scores increased when more informational text and strategy instruction in reading such text was added to the existing curriculum. With the ongoing implementation of the CCSS, school districts around the nation are looking at increasing the amount of time students spend reading informational text (CCSS Initiative, 2010). In a similar vein, most classrooms have been filled with narrative text (Tyre, 2009) and teachers are now looking at adding more informational text to their classroom libraries. While research suggests that this shift may benefit boys, this study showed that adding informational text benefitted an entire class of readers. This was a mixed gender class, so both genders were more motivated to read when there was an abundant availability of informational text and strategy work to support their reading. If students are going to meet the rigorous demands of the CCSS, then teachers are going to need to find ways to foster independent and

recreational reading in all learners (Williams et al., 2011). Adding more informational text into both the curriculum and into classroom libraries may help all readers reach the next level in reading independently by piquing their interest in reading.

Acquiring and keeping the interest of readers is essential if reading scores are going to improve. A child's attitude may be the strongest factor influencing reading achievement (Gillespie & Deacon, 2010; Kush & Watkins, 1996; Taylor et al., 1990). This study demonstrated that adding informational text can change students' attitudes towards reading. If Kush and Watkins (1996) are correct, this is the first step in increasing their reading achievement.

In this study, the students' SRI scores did not indicate that the increased exposure to informational text helped their comprehension of the text. Research indicates that students who like to read more should do better on comprehension tests (Kush & Watkins, 1996). The research does not indicate what tests are best to show such gains, how much students need to read to see such gains, or how many months of added pleasure reading would be necessary to see gains. It is possible that months and even years of pleasure reading provide the significant gains that can be noted in research and this study did not reach that threshold. It is also possible that the gains are best measured with a different type of test than the SRI.

While there may be physiological differences between the genders, along with differences in how boys and girls perceive school and their performance in school, in this study the boys and girls responded very similarly to the study. Students in the treatment group had an improved attitude towards reading after being exposed to more informational text and strategies to help with the reading of such text. The constructivist theory embraces the idea that all students need guidance in making connections, making the role of the teacher an important one. While all

students may not enjoy the same non-fiction reading materials or wish to read it more than narrative literature, teachers need to know their students and know what each of them wants to read. Making sure there is a variety of literature available in various genres to all students, and then looking for literature that speaks to each of them and matching students to texts, may be the way to motivate both boys and girls to read. This increase in motivation may not improve comprehension immediately, but research states students who are more motivated to read do score higher on reading assessments. Comprehension is difficult to measure; it is possible that ongoing guidance in reading a variety of texts for a variety of purposes would increase comprehension. It also may take a specific test to note the subtle increases in a reader's ability to comprehend text at a given level.

Implications

The constructivist theory reminds educators that all learners are different, and curriculum and strategy instruction must be adjusted to match the needs of the given learners. Educators should be mindful that even though data and research support various types of learning theories, every classroom is full of unique learners with unique backgrounds and unique experiences. Teachers must go into their classrooms prepared to adjust the curriculum to fit the needs of the learners who are present at that moment in that classroom.

There is a noted gap in how boys score on standardized reading tests and how girls score. From the Programme for International Student Assessment (PISA) to the National Assessment of Educational Progress (NAEP), girls are outscoring the boys (Zambo & Brozo, 2009). Closing this gap will take time, but if motivation to read is as important as researchers believe (Bauerlein & Stotsky, 2005; Kush & Watkins, 1996), then creating a desire to read may be the first step. In this study, teachers provided an abundance of both fiction and non-fiction for students to read

during free-choice time. They considered, along with the researcher, the needs of the learners and chose books accordingly. Students studied non-fiction and strategies to successfully read non-fiction during whole-group reading time. As a result, students' attitudes towards reading did improve. This study could provide teachers with the impetus to explore various genres with students, specifically informational text, with the goal of motivating students to read more and read more broadly. Additionally, teachers may have been concerned that adding informational text would motivate the boys but discourage the girls, who tend to prefer narratives. This study showed all students can benefit from genre exploration and exposure to interesting non-fiction coupled with strategy instruction.

While their reading comprehension scores did not improve significantly, they did improve. It is possible that scores might have significantly improved had a different assessment been used to measure comprehension. Teachers can benefit from this study in knowing that the additional strategy instruction in reading informational text, and the additional time spent reading it, did slightly increase comprehension scores, although not significantly, as measured with Lexile scores. Perhaps with a different comprehension assessment, or adequate time and a sustained interest in reading, scores might significantly increase.

The researcher met with the teachers informally for a post-study wrap-up. Notably, the teachers in the treatment group were very convinced their students benefitted from the study. They enjoyed having some additional material for the kids and liked teaching the strategies. While not all students who were in the treatment group had permission for the researcher to use their data, the teachers were convinced the boys were much more engaged than they had been previously. They also felt like the boys had stronger writing and made better connections to the text than they had in previous quarters. While these observations were not measurable and

writing was not evaluated for this study, it was noted by the teachers. One of the teachers thought that the students who benefitted the most from the study were the boys who never returned permission slips. These are boys who rarely return schoolwork, are often disengaged, and frequently get in trouble for minor infractions at school. Yet, these boys seemed to love learning about the human body, particularly the more gruesome aspects of how brains have been studied and researched. Again, while this is not information that can be measured, the teachers felt like it was worth noting. None of the teachers noted any female students complaining about the addition of informational text to the classroom, and because free choice reading time was still offered, students had time to read narratives if they chose to during recreational reading time. Swartz and Hendricks (2000) commented that choice and self-selection are key to creating life-long readers. In this study teachers did provide additional informational texts for their students during their free-reading time and encouraged the students to read whatever they wanted. This may have allowed students who preferred reading narratives to continue to enjoy reading both in and out of school. The teachers who worked with the study group enjoyed the study and spoke highly of the strategies. Many teachers noted a real apathy in their upper elementary students towards school and reading at the end of the school year. The teachers in the treatment group said their kids were involved with the reading class and actively reading until the end of the school year. The control group teachers did not see this level of engagement in their own classes and were excited to get the texts at the conclusion of the study so they could try some of the strategies later.

The district in which Winter Elementary School is located adopted a new reading series, based on the adoption of the CCSS, at the conclusion of the 2014 school year. All teachers, beginning in the fall of 2014, were mandated to utilize the new curriculum and were not allowed

to deviate from it for the first year. As expected with a new curriculum based on the CCSS, it had a strong emphasis on informational text. The teachers working with the treatment group felt confident with the new curriculum because many of the strategies they taught during the study were present in the new curriculum, while the teachers in the control group were more anxious about all the new text.

Equipping teachers for the changes in curriculum due to the CCSS is important, but connecting students with what they like to read may be the key to motivating students and ultimately raising reading scores, which supports the research of Gillespie and Deacon (2010), McKool (2007), and Kush and Watkins (1996). This study showed that altering the curriculum to include a breadth of genres was enough to increase the motivation of both male and female readers and might significantly increase their reading comprehension scores given appropriate assessments and time.

Limitations

There were both internal and external threats to the validity of this study. The study lasted seven weeks. That was how long the last quarter of the school year was. While a typical quarter is nine weeks, the school year was shortened due to budget issues and the school day lengthened. This was determined by the school board in the winter of 2014, with the study already planned for the spring. During the last quarter of the school year, the students had more reading time during the day as the school day was lengthened, but the number of days was decreased. The reading strategies for this study were primarily chosen from one book, and it recommended teaching each strategy for at least a week (Gear, 2008), which means the implementation could take as few as six weeks. Given this information, the researcher chose to

continue with the study and adjusted the delivery of the material so it was presented in seven weeks as opposed to nine weeks or more.

Additionally, many factors can influence a classroom during the course of several weeks. While the researcher was unaware of any major changes within the classrooms, undoubtedly there were some things occurring within the walls of the four classrooms that ultimately could have affected the external validity of the study.

The Winter Elementary School fifth grade students in the highest and lowest reading groups as determined by Lexile scores were not included in this study. This was to keep the disparity between scores from growing too large and to keep the focus of the study on students who were average readers. It is worth noting that the highest reading group at Winter Elementary had more girls than boys, and the lowest reading group had more boys than girls. In the middle groups, there was less disparity. Even then, however, there were some scores that were significantly higher than others. Several boys in the control group had pretest scores that were much higher than their classmates. While their scores did not change significantly during the study, they definitely influenced the mean. Their scores were high, so the room for improvement was limited; they were near the ceiling. It was not possible for them to make significant gains because they were already reading at such a high level – nearly two grade levels above the typical fifth grader. (This is exactly why the highest reading group was not included in first place.) The researcher was unwilling to trim the outliers in that group as it would have required a trimming on all groups and affected the total sample size. As a result, the mean SRI scores of the control group boys and the mean overall scores of the control group were likely inflated. If the control group's pretest scores were inflated, the ability to determine significance

could possibly have been compromised, with the lack of improvement at the upper end negating the improvement made by those in the middle.

This was a quasi-experimental study. The students could not be randomly assigned to the treatment and control groups because they were already assigned to classroom teachers when the study began. Consequently, the results cannot be generalized due to the lack of randomization.

Nothing impacts a classroom more than a teacher. In this study, the teachers were all more than willing to participate and followed the curriculum as prescribed. However, it is possible that, unbeknownst to the researcher, the teacher, to better meet the needs of her students, deviated from the curriculum. The researcher was never told this happened, but this external threat to validity was a possibility. Similarly, the researcher is unaware of any teacher attempting to bias the results by deviating from her role to thwart the study.

Finally, population validity should be addressed. This study involved sixty students in a small town in the mid-west. This sample population is typical of what is seen in small towns in this part of the country. As a result, these results could possibly be generalized to other adolescent learners in suburban and rural schools, if the two populations were determined to be “similar in critical respects” (Gall et al., 2007, p. 389). However, in this study, the results may not be representative of all fifth grade readers. The researcher chose a population from an “experimentally accessible population” (Gall et al., 2007, p. 389). Gall et al. explained that this type of population is typically local and within driving distance of the researcher’s office. That was the case in this study. Gall et al. stated that generalizing these results to a target population, or a larger group of students, would be “risky” (p. 389). Further, to clarify, this study was not action research and was a quasi-experimental quantitative study. The researcher was not a

teacher in the classroom, the teachers did not develop the research questions or develop the study, and the results were used by the researcher and not by the teachers.

Recommendations for Future Research

The Effects of Strategy Instruction in Reading Informational Text on Motivation and Reading Level of Fifth Grade Students was designed to add to the field of education. Research is available on motivation to read, and because of the CCSS, research continues to be published on the importance of students reading informational text. However, little was found examining the specific role of using informational text in motivating students to read, and how different students might respond to the various genres. The results of this study show that carefully adding informational text and strategy work will motivate students to read more, both for pleasure and for academic purposes. There is more work to be done, however. The researcher suggested the following in order to increase the empirical data in reading research.

This study could be conducted with more students, possibly in a bigger city. This would increase numbers as well as increasing the applicability of the study to other parts of the country. This would also allow for the results to be disaggregated by gender or ethnicity. Randomizing the study would also strengthen future studies.

This study could be conducted with a different comprehension assessment. The SRI is valid and reliable and provides scores that many teachers are comfortable using, but it is not the only comprehension test available. It strictly measures inferencing and is a multiple choice test. The school district in which this study took place no longer uses the SRI and has moved to a reading test that does, in fact, provide a score for reading informational text, and another for narrative. Additionally, the SRI was used in the initial grouping of the students. A more sensitive comprehension test would likely result in different student groupings. The researcher

noted earlier that the highest level of readers was not included in this study, and that group was predominantly female. The reading groups used in this study seemed to have a preponderance of boys with high scores, but their scores were not quite high enough to place them in the highest reading group. Research has proven girls will often try harder and read material they are uninterested in (Oakhill & Petrides, 2007). A different comprehension test, with interesting and authentic reading passages, may have changed the initial groupings and more accurately reflected the reading levels of the students. An assessment that is more thorough and includes subtests could be considered for future studies.

The study could be conducted for a longer period of time. The researcher would recommend lengthening the implementation of the strategies to see if that might significantly change the trajectory of the comprehension scores. Further, it would be interesting to note if the ERAS scores remained high or stagnated with a longer study. The novelty of the change in curriculum might wear off; a longer study would determine if the increase in ERAS scores was a result of that or a more long-term change in attitude towards reading.

This study found that increasing students' exposure to informational text improved their attitude toward reading outside of the school day. This information could be examined through a study to determine if there is a correlation between the addition of informational text and the outside reading habits of students.

This study could be conducted with older adolescents. Research is clear that the gap in scores often widens as students mature (Zambo & Brozo, 2009). The researcher recommended a study similar to this one with students in the seventh grade or ninth grade to see if the responses would be similar.

A Personal Summary

This study came about because a mom noticed her five sons never wanted to read fiction and only wanted to read informational text. Books about snakes, trains, boats, sharks, and war dominated the book bins at her house. Yet at school, the boys were often reading outside of their preferred genre, reading the *Little House* series and *Ramona* books. The boys liked to read at home but were disengaged at school with their reading. The mom also noticed that while her boys liked to read informational text, they did not really know how to read it. They tried to read all of every page, or just looked at the pictures and ignored the captions, and seemed unfamiliar with the index or glossary. The mom wondered if there was a way to bring informational text into the schools and get her boys, and maybe some others, reading.

Meanwhile, out in the schools, the CCSS were being adopted by many states. Even those states that were not using the CCSS were implementing standards that were requiring teachers to increase the amount of time students were spending with informational text. The need for explicit strategy instruction in reading informational text was great, with teachers around the country looking for ways to help connect their students to this genre. Prominent researchers like Shanahan and Fisher and Frey noted the need for strategy instruction in reading informational text.

A novice researcher saw an opening. She wondered if she could show that reading informational text would engage readers and motivate them to read, and then maybe those students would read more and become better readers. She hoped that her results might show teachers that whether they are part of a state that has chosen the CCSS or not, they needed to engage all readers and find motivating reading material of all kinds for every reader, and informational text needed to be a part of that equation. She looked at her results, and she found

that boys and girls alike **did** enjoy reading more when there was abundant informational text in their classrooms and they were given guidance in how to read it.

Boys and girls alike did enjoy reading more. Those words were music to the novice researcher's ears, who also happened to be the mom of those five boys.

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APPENDIX A: Parental Consent Form

Study: The Effects of Instruction in Reading Informational Text on Comprehension and
Motivation of Fifth Grade Students

Michelle Adler

Liberty University

Education Department

Your child has been invited to participate in a research study of how fifth graders respond to the addition of informational text into the standard (Success for All) SFA curriculum. Your child was selected as a possible participant because he/she is in the fifth grade and has SFA time with a fifth grade teacher. I ask that you read this form and ask any questions you may have before agreeing to let your child participate in the study.

This study is being conducted by Michelle Adler, Education Department, Liberty University.

Background Information:

The purpose of this study is to see how students who receive additional time and instruction on reading informational text compare in motivation and comprehension to those who follow the traditional SFA curriculum.

Procedures:

If you agree to let your child participate in this study, your child would do the following things:

1. All students in the ***** School District take the Scholastic Reading Inventory two or three times yearly. Students who participate in the study will have their winter and spring scores collected.
2. Students participating in the study will also take the Elementary Reading Attitude Survey (ERAS) in the spring and at the end of the semester. This survey will take about 15 minutes

to complete each time. The teacher reads the survey to the students and the students circle the character that best represents their feelings. The teacher has a copy of the survey if you would like to see it.

3. Students in the study group will receive, along with the traditional SFA curriculum, additional time reading informational text and learning strategies that can help with that type of reading. Strategies for reading informational text will also be woven into other parts of the day, particularly in science/social studies. Students in the control group will receive traditional SFA instruction only.

Risks and Benefits of being in the Study:

The study has minor risks: Students in the study group will receive less instruction time on the traditional SFA curriculum and will be learning new strategies. Additionally, students in the study group will spend extra time reading informational text, which can be more challenging for many students.

The benefits to participation are student exposure to the best strategies for reading informational text. Additionally, with the adoption of the Common Core State Standards, these strategies are very relevant. The benefit to education is that the results might prove helpful to educators as they look for ways to engage male readers, who tend to be more reluctant to read than females.

Compensation:

You will receive no payment, nor will your child.

Confidentiality:

The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely and only the researcher will have access to the records.

The results of the ERAS will be stored at my house in a safe; the SRI results are on the school's computer and can only be accessed by school personnel. The ERAS will be destroyed after three years.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to allow your child to participate will not affect his/her current or future relations with Liberty University or ***** Unified School District *****. If you decide to allow your child to participate, he/she is free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is Michelle Adler. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact Michelle at ***-***-****, or _____. You may also contact my faculty advisor ***** at _____.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the ***** or email them at _____.

You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read and understood the above information. I have asked questions and have received answers. I consent to allow my child to participate in the study.

Signature of parent or guardian: _____

Date: _____

IRB Code Number: 1827

IRB Expiration Date: March 24, 2015

APPENDIX B: Implementation Timeline

January 2014 – Defend proposal, seek IRB permission

February – Investigator speaks with students and sends notes home. Students who bring signed notes back will receive a piece of candy. The investigator will be available one evening at the school to answer parent questions.

March- May – Study begins. SRI is given to all students in the school and the ERAS is given to students participating in the study.

Weeks 1-2: Overview and Zooming-in

Weeks 2-3: Questioning and Inferring

Weeks 3-4: Determining Importance

Weeks 4-5: Connecting

Weeks 5-6: Either review or the strategy of Transformation. This strategy is very high level and the students may not be ready for it.

Week 7: Students take the Lexile and ERAS again.

Summer 2014 – Teachers and administration provided with results from the study.

Fall 2014 – The investigator has agreed to work with the 5th-6th grade teachers on non-fiction reading strategies if the administration believes the results show they were beneficial.

APPENDIX C: Sample Lesson Plan

Week 1 – Understanding the pieces of Informational Text Reading Power

Objective: The students will identify – using the brain cartoon – the five strategies that they can use when reading informational text. These strategies are zooming in, questioning, determining importance, connecting, and transforming.

Assessment: Formative, teacher observation of groups in wrap-up.

Materials: To be determined after we meet, but likely a visual and an anchor chart.

Procedures:

1. Ask students to define informational text. Consider a venn diagram comparing and contrasting informational text to narrative text. Determine, as a class, a definition for information text.
2. Provide students with a background story about a time you were reading informational text and didn't understand it. Be dramatic and honest.
3. Have students share in groups what their experiences have been reading informational text. Do they like it? Why or why not? Is it harder to read than a story? Why or why not?
4. Let me know that this semester they will be working on reading more informational text, because as they get older they will read more informational text than they do narrative. Provide an example of this – list all the reading you have done on the board so they kids can see how much of our lives is spent reading informational text, not stories/narratives.
5. A good way to learn the strategies for reading informational text is to picture a brain, and these 5 strategies fitting in to it. Show picture on page 29. Another way to explain it is to consider a tool box and each strategy is a tool – like a hammer, screwdriver, wrench, etc.

Each is necessary, but are some work better at certain times. *A visual will be necessary here, so we will decide as a group which you would prefer and how you would prefer to make it.*

6. On an anchor chart, write out each of the 5 strategies with a brief sentence that explains it. (See page 48.) You can either do this with the kids or have them help you make it, or make it ahead of time. You might want to leave space as this chart can be added to as you go. *We can discuss this when we meet.*
7. Let students know that they will be given more time to read information text during the week. They can certainly read it whenever they want, but they will all be reading informational text on Tuesdays during their free time and silent reading time. It will be called Info. Text Tuesday, and all students need to be ready to read from that genre on that day.
8. Refer back to your list on the board of all the reading you do during the day, and the amount that is informational text. This will remind them of all the things they can read from this genre, although most of their reading will likely come from magazines, internet sources, and books.
9. Remind students, again, of all the informational text that is available and how excited you are to spend extra time exploring it with them.
10. Wrap-up by having students, in their group, try to list the five strategies. Refer to the visual only as necessary.

During the remainder of the week, refer to these fix-up strategies as they tie in to other reading, and review them on Info Text Tuesday.