Effect of a Reader’s Workshop Model on Intermediate Students’ Achievement and Attitudes about Reading

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Abstract

The purpose of this study was to determine the impact of a Reader’s Workshop model on the reading achievement scores and attitudes about reading of fourth and fifth-grade students. The study aimed to determine the difference in fourth and fifth-grade reading achievement scores, as measured by the Normal Curve Equivalent (NCE) scores of the STAR Reading Assessment, between students in Reader’s Workshop model classrooms and students in basal-centered model classrooms. The study examined both the total population of fourth and fifth-grade students as well as the students identified as reading below grade-level. The study also examined the difference in fourth and fifth-grade students’ attitudes about reading, as measured by the Elementary Reading Attitudes Survey (ERAS), between students in Reader’s Workshop model classrooms and students in basal-centered model classrooms. A quasi-experimental, quantitative research design was used for the current study. The sample population included approximately 2,900 fourth and fifth-grade students in a public, suburban school district in the Midwest. The students included in the sample completed the fall and spring STAR Reading Assessment and Elementary Reading Attitudes Survey during the 2012-2013 school year. The results of the study revealed a statistically significant difference existed between the fall and spring mean NCE STAR scores for the below grade-level students who experienced the Reader’s Workshop model of reading instruction indicating the model was effective for struggling readers. The results also revealed a statistically significant difference existed between the fall and spring ERAS scores for both the Reader’s Workshop and basal-centered groups, though the scores went down indicating a regression in attitudes about reading. In other areas, statistically significant differences did not exist.
Dedication

This dissertation is dedicated first and foremost to my Lord and Savior, Jesus Christ. He is my strength, my redeemer, the author and perfecter of my faith. The desire of my heart is to bring honor and glory to Him through loving, dedicated service in the honorable field of education. He led me to the doctoral program and was faithful to see me through it. I look forward with excitement and anticipation to the service He has in store for me.

Secondly, I would like to dedicate this dissertation to my children, Lily, Adam, Sadie, and Emma. You are the faces I have in my mind and heart while working to help improve education for all students. I pray that instead of listening to the negative voices in the world and the doubts in your head that tell you the task ahead is impossible, that you will look only to the Lord, for through Him all things are possible (Philippians 4:13).

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commitment to me as a person, our marriage, and our sweet little family is a beautiful thing to behold. I love you.

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Chapter One

Introduction

Learning to read is critical for lifelong success. Literacy skills are important for success in the classroom and to live a productive life. Spellings, former United States Secretary of Education, stated, “Reading is the foundation of all learning, a key factor in earning a high school diploma, and a ticket to success in the 21st century” (U.S. Department of Education, 2006, p. 1).

Although educators would agree that reading skills are important, students across the country struggle to demonstrate reading proficiency as measured by standardized reading assessments (National Assessment of Educational Progress [NAEP], 2013). Proficient is one of three achievement levels set by the NAEP and represents students who have demonstrated “solid academic performance for each grade assessed” (NAEP, n.d., para. 27). According to the 2013 NAEP report, only 34% of fourth grade students scored at proficient or advanced on the national reading assessment. Out of a range of 0-500 points, the average reading scores at fourth grade have shown little overall change since 1992, fluctuating slightly from 217 points in 1992 to a twenty-one year low of 213 points in 2000, to the most recent score of 222 points in 2013 (NAEP, 2013).

Reading proficiency by the end of third grade is a solid predictor of high school graduation rates, leading many educators to focus on the intermediate grades of third, fourth, and fifth (Hernandez, 2011). “Students who fail to reach this critical milestone often falter in the later grades and drop out before earning a high school diploma” (Hernandez, 2011, p. 3). Beginning in the third grade, students transition from learning to read to reading to learn (Chall, Jacobs, & Baldwin, 1990). More concerning is that the
gap between proficient and non-proficient readers widens in fourth grade. This is often referred to as the fourth grade slump (Chall, Jacobs, & Baldwin, 1990). In fourth and fifth grade, students who have mastered reading skills begin to analyze information and increase vocabulary (O’Brien, 2008). This strong correlation between third grade reading proficiency and graduation rates has prompted an urgent need for an effective reading instructional model in the third, fourth, and fifth grades.

**Background**

The ability to read is a powerful skill set necessary to lead a productive life. According to the International Literacy Association (ILA), (n.d.) “the ability to read, write, and communicate connects people to one another and empowers them to achieve things they never thought possible” (para. 2). However, the lack of this set of skills is equally powerful, even predicting a child’s future. Elementary students who are not reading proficiently “are at high risk for later school failure and behavioral problems, for dropping out of high school, and for a host of negative life outcomes once they reach adulthood” (Mead, 2013, para. 9). These negative outcomes go beyond unemployment, even predicting jail time because “poor reading skills in the early elementary grades are highly correlated with later delinquency” (Mead, 2013, para. 9).

Many of these predictions are made by examining reading achievement data of students in third grade, an important turning point in the elementary years. The results of a longitudinal study of 3,975 students conducted by Hernandez, (2011) supported by the Annie E. Casey Foundation and Center for Demographic Analysis, found that “those who don’t read proficiently by third grade are four times more likely to leave school without a diploma than proficient readers” (p. 3). This has created a sense of urgency to examine
the unique needs of the intermediate reader. In the intermediate grades, grades 3-5, the reading level of textbooks becomes more difficult. Students are required to utilize previously acquired skills and access background knowledge (Gelzheiser, Scanlon, Vellutino, Hallgren-Flynn, & Schatschneider, 2011). Research also shows that in third, fourth, and fifth grade motivation and engagement play an important role in reading comprehension (Guthrie, 2004). A study of a reading instructional program that combined motivation support and strategy instruction showed that “motivational practices are likely to have positive effects on students’ conceptual knowledge acquisition and strategic development as well as on their motivational dispositions and behaviors” (Guthrie, 2004, p. 416). Intermediate readers must be motivated to continue overall reading improvement because “motivated students usually want to understand text content fully and, therefore, process information deeply” (Guthrie, 2004, p. 403). A 2009 study in the Journal of Learning Disabilities went further, identifying the specific characteristics of reading motivation for intermediate struggling readers that affect reading comprehension. The study found that reading comprehension is directly impacted by “students’ self-efficacy for reading and intrinsic motivation to read” (Guthrie et al., 2009, p. 196).

In light of this research, school districts across the country must re-examine the programs and instructional models used to teach reading in the intermediate grades (Hernandez, 2011). Even with advanced knowledge and research on how students learn to read, the current reality is that “a shocking number of our nation's children are not learning to read anywhere near as well as they need to in order to succeed in school and negotiate the realities of our increasingly information-based and verbal world” (Mead,
Sound instructional models that effectively teach students how to read and then continue to support the unique needs of the intermediate reader are imperative to improve reading achievement scores. This is not an easy task. Educators are finding that “there are no easy answers or quick solutions for optimizing reading achievement” (Armbruster, Lehr, Osborn, Adler, & National Institute for Literacy, 2001, para. 2).

One reading instructional model used by 74% of American teachers is the basal-centered reading model (Dewitz & Jones, 2013). A publication by the ILA, formerly known as the International Reading Association, described the basic components of a traditional basal-centered program.

Teachers who use them typically teach from a manual, use an anthology of stories, and employ practice books and worksheets to drill students in specific reading and writing skills. Students who experience these programs typically work quietly at their desks on identical assignments, take part in whole-group classroom routines, and read from the anthology as a full class or in small groups. (Weakland, 2014, p. 1)

The teacher’s manual is an integral part of the basal-centered model. It typically includes scripted reading comprehension questions strategically placed throughout the lesson to elicit student thinking and discussion (McKeown, Beck, & Blake, 2009).

Reader’s Workshop is another instructional model that has been examined and adopted in classrooms. Atwell, a classroom teacher, shared her ideas, methods, and classroom experiences in her 1987 book, In the Middle: Writing, Reading and Learning with Adolescents. In the second edition of her book, Atwell (1998) shared the specific elements of the 90 minute combined reading and writing workshop.
Reading and discussion of a poem, from the easel pad, an overhead transparency, or photocopies (five minutes), writing-reading minilesson (five to twenty minutes), status-of-the-class conference about individuals’ plans for writing workshop (three minutes), independent writing and conferring (thirty-five to fifty minutes), read-aloud from a chapter book for short story (ten minutes), independent reading, including roving status-of-the-class record keeping while my students are reading (fifteen minutes). (p. 140)

In 2010, Calkins published a reading workshop curriculum that shared the basic components of Atwell’s workshop structure, titled Units of Study for Teaching Reading. According to a publication by the Teachers College Reading and Writing Project (TCRWP), Reader’s Workshop includes a minilesson that focuses on “teaching higher order comprehension strategies with explicit, direct instruction in foundational skills” (n.d., para. 17). Another important component to the Reader’s Workshop model is the independent reading time that is to include at least 35-45 minutes each day (TCRWP, n.d.). Reading materials are on the student’s independent reading level, which refers to the difficulty level of the text when the student is able to read “with at least 96% fluency, accuracy, and comprehension” (TCRWP, n.d., para. 6). Reading instruction is individualized through flexible small groups and one-on-one conferring (TCRWP, n.d.).

The current study took place in a large suburban school district located in the Midwest, which is henceforth referred to as Anytown School District. In 2012, the school district served approximately 14,000 students housed in three high schools, four middle schools, and 18 elementary schools. Total district enrollment was comprised of 68.5% white students, 13.4% Hispanic students, and 11.0% black students. As of 2012,
approximately 66.2% of students in Anytown School District qualified for free or reduced-price lunch (Department of Elementary and Secondary Education [DESE], n.d.).

Anytown School District made a change in reading instructional models at the beginning of the 2012-2013 school year. The district had been using a basal-centered reading program to teach elementary students to read before adopting a Reader’s Workshop model. District leaders chose a three-year implementation process to allow for the time and resources necessary to train teachers on the Reader’s Workshop model (District Office Staff, personal communication, November 2, 2015). Specifically, the Reader’s Workshop curriculum chosen was Calkins’ *Units of Study for Teaching Reading*.

**Statement of the Problem**

Teaching reading has both fascinated and frustrated educators through the years. This complex topic has been researched to identify the skills and dispositions necessary for students to achieve reading success. Over time, reading instructional models like the basal-centered reading model and Reader’s Workshop model have been studied but have found mixed results. Despite the fact that over 100,000 research studies related to reading have been conducted over the last fifty years, students in America continue to struggle (National Institute of Child and Human Development [NICHD], 2000). Though moderate improvements have been made over the last ten years, two-thirds of fourth graders in the U.S. continue to read below the proficient level (NAEP, 2013). Eighty percent of low-income fourth graders are not reading proficiently (NAEP, 2013). The importance of reading, combined with the continued high percentage of struggling readers in the U.S., warrants further study of this topic. There is a need for continued
research on the Reader’s Workshop model and its impact on reading achievement and students’ attitudes about reading.

**Purpose Statement**

The purpose of this study was to determine the impact of a Reader’s Workshop model on the reading achievement scores and attitudes about reading of fourth and fifth-grade students. The NCE generated by Renaissance Learning’s STAR Reading Assessment was used to measure reading achievement in the current study. The study aimed to determine the difference in fourth and fifth-grade reading achievement scores between students in Reader’s Workshop model classrooms and students in basal-centered model classrooms. A second purpose of the study was to determine the difference in fourth and fifth-grade reading achievement scores between students in Reader’s Workshop model classrooms and students in basal-centered model classrooms reading who were reading below grade-level. A third purpose of the study was to determine the difference in fourth and fifth-grade students' attitudes about reading, as measured by the Elementary Reading Attitudes Survey (ERAS), between students in Reader’s Workshop model classrooms and students in basal-centered model classrooms.

**Significance of the Study**

In 2000, the National Reading Panel (NRP) published the report *Teaching Children to Read* including a review of reading research and implications for instruction (NICHD, 2000). However, despite the research presented and the recommendations for teaching reading, students in America continue to struggle (NAEP, 2013). The majority of teachers in America continue to rely on basal reading programs to meet the needs of elementary readers, with school districts spending over one billion dollars on basal
reading programs each year (Dewitz & Jones, 2013; Walsh, 2003). Even though basal reading programs marketed in the U.S. claim to be research based, they are weak in the area of reading comprehension instruction (Walsh, 2003). Reading comprehension is crucial to overall reading success and must be a strong component of any reading program (NICHD, 2000). A 2010 study examined the first, third, and fifth-grade teacher manuals and student anthologies of five popular basal reading programs to determine the level of reading comprehension instruction (Pilonieta, 2010). Though there were minor differences between programs “the absence of systematic introduction and application of comprehension strategies and the unbalanced distribution of instructional suggestions among strategies limit the efficacy of basal readers” (Pilonieta, 2010, p. 168). Given basal reading programs’ weakness in such a critical area, educational leaders and researchers must investigate alternative reading instructional models. Some research has been done to determine the effectiveness of the Reading Workshop model since its initial popularity in the 1990s (Bitner, 1992; Hewitt, Niego, & Van Ryn, 1996; Mitev, 1994; Puorro, 1997; Shiavone, 2000; Swift, 1993) but research comparing the Reading Workshop model with the basal-centered reading model with regard to impact on reading achievement is lacking (Miller & Higgins, 2008). The results of the current study could provide educators with the information necessary to choose a reading instructional model, regarding the effectiveness of the Reader’s Workshop and the traditional basal-centered model. The current study is important to the field because the achievement test used to measure reading achievement (STAR) “is the most widely used assessment in K12 schools” (Renaissance Learning Inc., n.d., para. 1). The current study could also add to the field through addressing the impact of a Reader’s Workshop model on below grade-
level readers. This study’s inclusion of the effect of reading instructional models on the reading attitudes of fourth and fifth-grade readers could also add valuable insight for educators as they work to teach students to read.

**Delimitations**

According to Lunenburg and Irby, “delimitations are self-imposed boundaries set by the researcher on the purpose and scope of the study” (2008, p. 134). The following delimitations were utilized by the researcher to narrow the focus of the study:

- The population included one public, suburban school district in the Midwest.
- The sample population only included fourth and fifth-grade students during the first year of implementation of Reader’s Workshop.
- The study was narrowed to the 2012-2013 school year.
- Reading achievement was limited to a single measure, the STAR Reading Assessment.
- The STAR Reading Assessment achievement measures were limited to the NCE.
- The measure of students’ attitudes about reading was limited to the ERAS.

**Assumptions**

“Assumptions are postulates, premises, and propositions that are accepted as operational for purposes of the research,” (Lunenburg & Irby, 2008, p. 135). The study included the following assumptions:

- Teachers who utilized the basal-centered reading model did so with fidelity.
- Teachers implementing the basal-centered reading model were provided with adequate professional development and resources.
- Teachers who utilized the Reader’s Workshop model did so with fidelity.
• Teachers implementing Reader’s Workshop were provided with adequate professional development and resources.

• Students gave their best effort during both fall and spring STAR tests.

• Students answered all ERAS questions honestly.

**Research Questions**

Following the advice of Lunenburg and Irby, the research questions provide focus and serve as the “directional beam for the study” (2008, p.126). The following research questions were addressed to determine the effectiveness of the Reader’s Workshop model of reading instruction:

**RQ1.** To what extent is there a difference in reading achievement, as measured by the NCE pre and post scores of the STAR Reading Assessment, for fourth and fifth-grade students categorized by Reader’s Workshop model classroom and basal-centered model classroom assignments?

**RQ2.** To what extent is there a difference in reading achievement, as measured by the NCE pre and post scores of the STAR Reading Assessment, for fourth and fifth-grade students reading below grade-level categorized by Reader’s Workshop model classroom and basal-centered model classroom assignments?

**RQ3.** To what extent is there a difference in students’ attitudes about reading, as measured by the pre and post composite scores of the ERAS, for fourth and fifth-grade students categorized by Reader’s Workshop model classroom and basal-centered model classroom assignments?
Definition of Terms

The following terms were defined for the investigation:

**Basal-centered reading model.** The basal-centered reading model is an instructional model that utilizes a purchased basal reading program that includes student books with a collection of reading selections, teacher resources with worksheets and assessments, and leveled readers (Dewitz & Jones, 2013). The instruction includes scripted lessons on reading skills, guided and independent practice of those skills, and assessments related to the skills of the lesson or unit (Dewitz & Jones, 2013).

**Minilesson.** A minilesson is short lesson at the beginning of the Reader’s Workshop in which the teacher demonstrates a reading skill or reading strategy (Calkins & Tolan, 2010).

**Normal Curve Equivalent (NCE).** The NCE score is scaled to have a normal distribution. In the normative sample for a given test, the mean is 50 and a standard deviation is 21.06. The NCE scores range from 1-99 and are based on an equal interval scale meaning “the difference between two successive scores on the scale has the same meaning throughout the scale” (Renaissance Learning Incorporated, 2012, p. 115).

**Reader’s Workshop model.** The Reader’s Workshop model is a reading instructional model that includes instruction of reading and writing skills together through explicit instruction and modeling in a skill-based minilesson. The structure of Reader’s Workshop provides time daily for independent reading of self-selected reading materials (Calkins & Tolan, 2010).

**STAR Reading Assessment.** The STAR Reading Assessment is a computer adaptive standards-based test created by Renaissance Learning Incorporated that
measures reading comprehension and overall reading achievement (Research Foundation for STAR Assessments, 2014).

**Overview of the Methodology**

A quasi-experimental, quantitative research design was used for the current study to determine the extent of differences in reading achievement and attitudes about reading between utilizing a Reader’s Workshop model of reading instruction and a basal-centered model. The population for this study was fourth and fifth-grade students in the Anytown School District during the 2012-2013 school year. The sample population was placed in either a Reader’s Workshop model classroom or basal-centered reading model classroom. Archived data was secured from the district for the purpose of the current study. The Instructional Reading Level (IRL) scores from the fall 2012 STAR Reading Assessment were used to determine the number of students reading at or above grade-level and the number of students reading below grade-level at the beginning of the school year. The fall NCE scores and ERAS scores were also collected as pretest data. The NCE scores from the spring 2013 STAR Reading Assessment and ERAS scores were also collected as posttest data for comparison. The STAR Reading Assessment data and the ERAS data was downloaded and imported into IBM SPSS® Statistics Faculty Pack 23 for Windows for analysis. Two-sample t tests were used to test the hypotheses.

**Organization of the Study**

Chapter one included an introduction to the study, the problem statement, and background information on the basal-centered model and a Reader’s Workshop model of reading instruction as well as demographic information about the Anytown School District. The significance of the study, purpose statement, delimitations, and assumptions
of the study were also provided. The three research questions that guided the current study were identified as well as key terms. Finally, chapter one included an overview of the methodology of the study. A review of the literature is provided in chapter two outlining key learning theories. The essential components of reading instruction are presented along with reading instructional models. Chapter two concludes with an overview of students’ motivation and attitudes about reading and the impact on reading achievement. Chapter three provides the research design, population and sample, and sampling procedures. The instrumentation, measurement, validity and reliability, data collection procedures, data analysis and hypothesis testing as well as the limitations of the study are included. Chapter four includes the descriptive statistics, hypothesis testing, results, and additional analyses when appropriate. Chapter five focuses on the findings related to the literature, conclusions, implications for action, and recommendations for future research.
Chapter Two

Review of the Literature

Despite legislative and instructional efforts, elementary students are falling behind in reading by fourth grade (NAEP, 2013). Though slight gains have been made, the majority of fourth-grade students in America are not reading proficiently (NAEP, 2013). According to the 2013 NAEP report, about 65% of fourth-grade students are performing below the proficient level. Teaching reading is a complex endeavor, so it is important for educational leaders to review foundational learning theories and research-based instructional methods when making decisions to improve student achievement.

This chapter presents the literature on reading instruction related to the current study. First, the key learning theories of Behaviorism and Constructivism are discussed. Second, a review of research-based components of reading instruction is presented. Third, reading instructional models are discussed. Finally, student motivation and attitudes about reading are examined.

Learning Theories

According to The National Research Council, (NRC, 2002) it should be a goal for educational researchers to have a generalized understanding of foundational theories. Researchers must explore the theoretical background of a study to refine research questions, determine what has and has not already been studied on the topic, and ultimately shape the direction of the study (NRC, 2002). Theories seek to explain a phenomenon and are based on a set of beliefs (Tracy & Morrow, 2012). In education, a theory is used to define a “well-documented explanation for a phenomenon related to teaching and or learning” (Tracy & Morrow, 2012, p. 4). Theories of learning are the
foundation for reading instruction (Tracy & Morrow, 2012). When conducting research in the field of education, knowledge of the theoretical foundation for the study is critical (Tracy & Morrow, 2012). Though many teachers may not be aware of the theories and philosophies they hold, teachers’ beliefs about learning are important and will “impact on perception, practice, and effectiveness” (Hickey, 2014, p. 18). Two foundational learning theories, Behaviorism and Constructivism, have greatly influenced education.

**Behaviorism.** Pavlov, a Russian physiologist, is credited with laying the foundation of Behaviorism through his work in the 1890s, using behavior conditioning to study salivation in dogs (Saunders, 2006). Behaviorism is based on the belief that the observable behavior is a direct response to stimuli and stimuli can be manipulated to affect change in behavior (Boghossian, 2006; Tracy & Morrow, 2012). In academics, the observable behavior is typically students’ correct verbal responses (Boghossian, 2006).

Skinner continued the work of behaviorists Pavlov, Watson, and Thorndike and developed the Operant Conditioning theory that uses reinforcement and punishment to change behavior (Tracy & Morrow, 2012). Skinner’s classroom application of Operant Conditioning known as programmed instruction, aimed to break down instruction into carefully designed small steps. When each step was accomplished, the students were given immediate feedback (Tracy & Morrow, 2012). Correct responses were reinforced through rewards.

With regard to reading instruction, the influence of Behaviorism changed the “depiction of reading from one of perceptual processing to one of reading as a behavior composed of isolated skills, each of which could be reinforced to increase student achievement” (Tracy & Morrow, 2012, p. 41). Behaviorists place the responsibility of
learning on the teacher (Boghossian, 2006; Jones & Brader-Araje, 2002; Stahl & Hayes, 1997; Tracy & Morrow, 2012). In a behaviorist classroom “the focus is on teacher-to-student exchange” (Hickey, 2014, p. 17). There are clear learning objectives and it is the responsibility of the teacher to impart that knowledge to the students (Hickey, 2014).

A belief that stimuli affect behavior and that reading could be broken down into simpler tasks led to direct instruction (Boghossian, 2006; Jones & Brader-Araje, 2002; Stahl & Hayes, 1997; Tracy & Morrow, 2012). Direct instruction is a prevalent teaching approach in classrooms today and includes the following six steps: “(1) specifying the objectives, (2) devising instructional strategies, (3) developing teaching procedures, (4) selecting examples, (5) sequencing skills, and (6) providing practice and review” (Tracy & Morrow, 2012, p. 50). Teacher modeling and thinking aloud are used to demonstrate the desired outcome while guided practice and independent practice provide opportunities for practice (Rosenshine, 2008).

**Constructivism.** Constructivism is a learning theory based on the belief that learning is an active process by which knowledge is constructed through assimilating new information with pre-existing knowledge (Harris & Graham, 1994). This theory of constructing knowledge is primarily based on the work of Piaget. Piaget was a psychologist who developed the concept of cognitive development, the study of changes in children’s reasoning and thinking (Jovova, Chudy, Neumeister, Plischke, & Kvintova, 2015; Oakley, 2004; Piaget, 1997). He defined four stages, the Stages of Cognitive Development, that children progress through toward adult thinking which include sensorimotor, preoperational, concrete, and formal (Piaget, 1997).
Piaget’s work was the foundation for a view of learning that directly opposed the theory of Behaviorism. Instead of a focus on teachers, Constructivism places the emphasis back on the learner. Naylor and Keogh (1999) explained that “learners can only make sense of new situations in terms of their existing understanding. Learning involves an active process in which learners construct meaning by linking new ideas with their existing knowledge” (p. 93). Instead of focusing on the observable behaviors, constructivists focus on the process of learning (Jones & Brader-Araje, 2002; Tracy & Morrow, 2012).

The theory of Constructivism continues to influence the field of education (Hickey, 2014). Educators who ascribe to the constructivist theory understand that each student uses his or her experiences and background knowledge to construct new knowledge (Jones & Brader-Araje, 2002). Teachers encourage students’ active engagement in the learning process, requiring them to integrate new knowledge and preconceptions (Boghossian, 2006; Jovova et al., 2015; Tracy & Morrow, 2012). The role of the teacher in a constructivist-minded classroom is one of a collaborative partner with the student with a goal of discovering knowledge together (Boghossian, 2006; Hickey, 2014).

Constructivism in the field of education was refined through the work of Dewey (Jones & Brader-Araje, 2002; Tracy & Morrow, 2012). Dewey was an American constructivist who “emphasized the growth of the individual, the importance of the environment, and the role of the teacher in students’ learning” (Tracy & Morrow, 2012, p. 59). His philosophy, known as Inquiry Learning, aimed to create students who were active participants in their learning and environment through curricula that focused on
problem solving, reasoning, and decision making (Cobb & Kallus, 2010; Tracy & Morrow, 2012). Instructional applications included cooperative and collaborative learning groups with a problem-based learning approach wherein students were asked to work together, ask questions, and challenge each others’ thinking to create their own learning (Boghossian, 2006; Jones & Brader-Araje, 2002; Tracy & Morrow, 2012).

Rojas-Drummond, Mazon, Littleton, and Velez (2014) conducted a study to examine the effect of collaborative learning activities on students’ reading comprehension. The study included sixth-grade students attending two different public schools in Mexico City. From the original sample of 120 students, 24 students were randomly selected including 12 students for the experimental group and 12 students for the control group (Rojas-Drummond, Mazon, Littleton & Velez, 2014). The experimental group experienced the Learning Together (LT) program that focused on collaboration, oral communication and text comprehension over a period of seven months. The LT program included eighteen 90 minute sessions. An important component of the LT program is the completion of a small group literacy project (Rojas-Drummond et al., 2014). The literacy project was based on a topic of their choice. Each group researched and published an article and created a PowerPoint presentation to be shared at an end of the year cultural fair. The control group did not experience the LT program but experienced the regular literacy instruction. A psycholinguistic assessment called the Test of Textual Integration (TTI) was given to measure and compare comprehension growth (Rojas-Drummond et al., 2014). The TTI consisted of three different text types about the same theme. Students were then asked to write a summary of the texts, integrating information and providing an original title. The TTI was
administered individually, and another version of the test was also administered in groups of three (triads) (Rojas-Drummond et al., 2014). The mean difference in scores was statistically significant for both the individual TTI results and the triad TTI results (Rojas-Drummond et al., 2014). The control group showed little to no improvement in posttest results. The researchers concluded that many of the skills derived from working collaboratively not only improved students’ comprehension when working in triads but also translated to individual comprehension and strategy implementation in independent work (Rojas-Drummond et al., 2014).

**Components of Reading Instruction**

In 1997, Congress asked the Director of the NICHD to create the NRP that would be charged with determining research-based reading skills and methods for teaching reading (NICHD, 2000). The NRP reviewed over 100,000 studies on reading instruction to determine what evidence-based instructional methods consistently led to student success (Armbruster et al., 2001). The panel identified five components of effective reading instruction. In this section, a review of the five areas of reading instruction will be presented which include: phonemic awareness, phonics, fluency, vocabulary, and text comprehension (NICHD, 2000).

**Phonemic awareness.** The panel chose to review phonemic awareness because phonemic awareness and letter knowledge at the beginning of kindergarten have shown to be strong predictors of children’s ability to learn to read during the first two years of instruction (NICHD, 2000). Phonemes are the smallest units of the spoken language and differ from graphemes, which represent phonemes in written language (NICHD, 2000). Phonemic awareness encompasses both the understanding that words are made up of
phonemes and the ability to notice and work with individual phonemes in spoken language (Armbruster et al., 2001). Students apply an awareness of phonemes during reading by blending individual phonemes together (Chapman, 2003).

Foorman, Francis, Fletcher, Mehta, and Schatschneider (1998) conducted a study of 285 first and second-grade readers in an urban school district. The students were identified as low achieving readers by the district’s emergent literacy assessment. All of the students had a 90-minute literacy block each day but experienced one of three reading instructional methods (Foorman, Francis, Fletcher, Mehta & Schatschneider, 1998). The three reading instructional methods used were direct instruction of letter-sound correspondences utilizing decodable texts, less direct instruction using connected text, and indirect instruction of alphabet in connected text (Foorman et al., 1998). Though the mean differences on comprehension were not statistically significant, the mean differences and effect sizes were large, supporting direct instruction (Foorman et al., 1998). The results supported direct instruction with 84% of students demonstrating reading growth compared to 56% of students in the less direct instruction group and 54% of students in the indirect instruction group (Foorman et al., 1998).

The NRP examined 96 cases that compared groups of students who received phonemic awareness instruction to groups of students who either received a different treatment or no treatment (NICHD, 2000). A large effect size of 0.86 was found for the phonemic awareness outcomes, demonstrating a strong positive impact of direct phonemic awareness instruction on phonemic awareness (NICHD, 2000). The meta-analysis determined that direct phonemic awareness instruction had a moderate effect on reading (0.53 effect size) and spelling (0.59 effect size) (NICHD, 2000). The NRP
determined that understanding and noticing phonemes helped students decode challenging words and remember how to read familiar words (NICHD, 2000).

Melby-Lervag (2012) conducted a meta-analysis of seven studies, including 589 students ranging from 5-10 years of age. The studies included in the meta-analysis were conducted between 1993 and 2004. There was a strong correlation between phonemic awareness and reading with a total effect size of 0.56 (Melby-Lervag, 2012). Overall, the study supported phonemic awareness as a predictor of reading skills.

**Phonics.** Phonics is the ability to match sounds with the corresponding letters in written language and recognize the predictable pattern between them when reading words both in isolation and in context (Armbruster et al., 2001; NICHD, 2000). The NRP included 66 comparison cases of systematic phonics instruction to either nonsystematic phonics instruction or no phonics instruction at all (NICHD, 2000). The systematic phonics instruction included explicit instruction of a set of letter-sound relationships along with practice through application of those letter-sound relationships through decoding (NICHD, 2000). Nonsystematic phonics instruction is a more informal approach to phonics instruction without a systematic method of teaching the letter-sound relationships. Instead, phonics instruction is embedded within the language arts curriculum without opportunities for students to apply and practice the letter-sound relationships (Armbruster et al., 2001; NICHD, 2000). A moderate overall effect size of 0.44 was produced by phonics instruction leading the NRP to conclude that systematic phonics instruction has a positive impact on children’s growth in reading (NICHD, 2000). Systematic phonics instruction proved to be more effective with younger students who were not yet reading independently and were at risk of having reading difficulties with an
effect size of 0.58 for kindergarteners and 0.74 for first graders compared to an effect size of 0.15 for students in second through sixth grade (Armbruster et al., 2001; Hammill & Swanson, 2006; NICHD, 2000).

Three types of phonics instruction were identified and compared through the NRP’s meta-analysis:

(1) synthetic phonics programs which emphasized teaching students to convert letters (graphemes) into sounds (phonemes) and then to blend the sounds to form recognizable words; (2) larger-unit phonics programs which emphasized the analysis and blending of larger subparts of words (i.e., onsets, rimes, phonograms, spelling patterns) as well as phonemes; and (3) miscellaneous phonics programs that taught phonics systematically but did this in other ways not covered by the synthetic or larger-unit categories or were unclear about the nature of the approach. (NICHD, 2000, section 2, p. 93)

Of the three types of phonics instruction identified, the synthetic approach had the largest effect size (0.45) (NICHD, 2000). Effective phonics instruction includes a logical sequence of introducing letter-sound relationships and provides students with many opportunities for practice (Armbruster et al., 2001).

Foorman, Francis, Novy, and Liberman (1991) conducted a study of 80 first grade students. The study sought to determine the effect of direct letter-sound correspondence phonics instruction over the course of a school year. Half of the students were taught letter-sound correspondences through a nonsystematic approach embedded in the basal reading program, with 0 minutes per day of direct letter-sound correspondence instruction (Foorman et al., 1991). The other 40 students received direct phonics instruction for
approximately 45 minutes per day and were given practice opportunities (Foorman et al., 1991). The researchers found that the students receiving direct phonics instruction improved reading and spelling accuracy at a significantly faster rate than students not receiving direct phonics instruction (Foorman et al., 1991).

Noltemeyer, Joseph, and Kunesh, (2013) conducted a study including six kindergarten students identified as struggling to develop basic decoding skills. The students were randomly assigned to two treatment groups: phonics instruction using flash cards and the control group. In the phonics instruction group, the experimenter worked with a group of three students for a duration of 10 minutes (Noltemeyer, Joseph, & Kunesh, 2013). The experimenter read the word, pronounced individual sounds, and blended the sounds together. The students in the control group also worked in a group of three and were assessed by their ability to read the six control words during each session without phonics instruction (Noltemeyer et al., 2013). The results showed that direct phonics instruction positively effected students’ ability to read and recall new words in a short amount of time. Students in the experimental group were able to read a mean of 4.20 words out of 6 (Noltemeyer et al., 2013).

**Fluency.** Reading fluency is the ability to read smoothly and accurately with appropriate expression (NICHD, 2000). Fluency has been directly linked to comprehension (Pinnell et al., 1995). Achieving reading fluency allows readers to go from simply recognizing words to simultaneously decoding and comprehending text (Armbruster et al., 2001). When students can decode automatically instead of struggling to read word by word, they can focus on reading comprehension (Pinnell et al., 1995; Rasinski, 2014). The Common Core State Standards supported the importance of fluency
by including it as a foundational reading skill (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010).

The NRP examined the effects of guided oral reading (NICHD, 2000). Guided oral reading, a practice in which the teacher listens to students read out loud while providing feedback, had a moderate effect on reading achievement (0.41 effect size) (NICHD, 2000). A 2004 study published since the release of the NRP’s report supported their conclusions concerning guided oral reading and fluency. Griffith and Rasinski (2004) compared the reading achievement of struggling fourth-grade students who received fluency instruction through guided oral reading with struggling fourth-grade students who did not receive fluency instruction. Though the average instructional reading level at the beginning of the school year was about the same for both groups (2.93 for the group that received fluency instruction and 3.0 for the group that did not receive fluency instruction) the end of the year scores for the group that received fluency instruction were significantly higher (Griffith & Rasinski, 2004). The group that received fluency instruction had an average instructional reading level of 5.8 compared with an average instructional reading level of 4.17 for the group that did not receive fluency instruction (Griffith & Rasinski, 2004).

The NRP also examined the effects of independent silent reading on fluency. Fourteen studies of independent silent reading were reviewed but there was not enough evidence directly linking silent independent reading to increased reading fluency. Independent silent reading was therefore left off of the fluency instruction recommendations (NICHD, 2000). The NRP acknowledged that independent silent reading may have a positive impact on reading achievement and should be researched
further. Despite the acknowledgment of the potential value of independent silent reading, many school districts around the country have removed independent silent reading time from the daily schedule in elementary grades (Reutzel & Juth, 2014).

Fluency is typically measured by having a student read a grade-level passage for one minute while the teacher records any errors made. The teacher totals the number of words read correctly and compares it to grade level norms (Armbruster et al., 2001; Hasbrouck & Tindal, 2006; NICHD, 2000; Rasinski, 2014). Effective fluency instruction includes teacher modeling fluent reading, repeated oral reading with teacher guidance, and opportunities for reading practice on students’ independent reading levels and can positively impact overall reading achievement (Armbruster et al., 2001; NICHD, 2000).

**Vocabulary.** Vocabulary refers to knowledge and understanding of the meaning of words which is necessary for effective oral and written communication (Armbruster et al., 2001). Vocabulary instruction is an important part of reading instruction and should be taught directly and indirectly (Armbruster et al., 2001; NICHD, 2000). Direct instruction of vocabulary includes explicitly teaching the spelling of the word, its meaning, and examples of the word’s use in context (Armbruster et al., 2001). Students gain vocabulary indirectly when exposed to a literature and vocabulary rich environment that includes independent reading, listening to adults read, and engaging in conversations with adults (Armbruster et al., 2001; NICHD, 2000). Though the initial research conducted by the NRP led to the overall conclusion that comprehension cannot be fully examined without consideration of vocabulary, the panel was not able to conduct a formal meta-analysis of vocabulary studies because the methodologies and variables of the identified studies were so vastly different (NICHD, 2000). The NRP included
vocabulary instruction in their recommendations based on trends in the data instead of a formal meta-analysis of the studies (NICHD, 2000).

Vocabulary acquisition is a critical piece of reading success, demonstrated by a high correlation of preschool students’ vocabulary and later reading success (Storch & Whitehurst, 2002). The majority of vocabulary is indirectly taught but vocabulary that is not part of students’ daily lives must be taught directly (Armbruster et al., 2001; NICHD, 2000). Directly teaching specific words and word-learning strategies like utilizing context clues, noticing word parts, and using reference books, strengthens vocabulary (Armbruster et al., 2001).

Horn and Feng (2012) conducted a study that examined the effect of direct vocabulary instruction on seventh-grade students. The control group included 29 students who were in a reading class that did not include direct vocabulary instruction. The experimental group consisted of 29 students who were in a reading class and were exposed to direct vocabulary interventions (Horn & Feng, 2012). Direct vocabulary instruction included meaning and application of a focused list of content vocabulary words (Horn & Feng, 2012). Both groups were given the Criterion-Referenced Competency Test as a pretest and posttest measure of comprehension. The median test scores of the control group increased an average of 9.82 points while the median test scores of the direct vocabulary instruction group increased an average of 17.77 points, an increase of almost twice as much as the control group (Horn & Feng, 2012). Though the analysis of the results did not demonstrate that direct vocabulary instruction had a statistically significant effect on comprehension, a comparison of the median test scores was favorable for including direct vocabulary instruction (Horn & Feng, 2012).
Text comprehension. Comprehension is the central purpose for reading (Armbruster et al., 2001; NICHD, 2000). In the 2000 report, the NRP detailed the cognitive perspective of the reading process. The cognitive perspective includes students’ purpose for reading including reading to learn, to gain information, or to be entertained (NICHD, 2000). Readers are required to use their knowledge of the world which includes language and print. With this knowledge, the reader is able to “to make meaning of the text, to form memory representations of these meanings, and to use them to communicate with others information about what was read” (NICHD, 2000, p. 39).

Though comprehension is a complex process that is not observable by teachers, research has shown that explicit comprehension instruction can help students make sense of text, remember what is read, and effectively communicate it to others (Armbruster et al., 2001). One way to teach comprehension strategies is to model questioning strategies (NICHD, 2000; Rosenshine, 2012). Effective teachers model question prompts for checking understanding during oral reading, then provide guided practice using those prompts with support and feedback from the teacher (NICHD, 2000; Rosenshine, 2012). It is also important for comprehension instruction to include monitoring strategies that teach students to be aware of their thinking and understanding (metacognition) during reading (Armbruster et al., 2001).

Carlisle, Kelcey, Berebitsky, and Phelps (2011) conducted a study to determine the effect of third grade teachers’ instructional actions on students’ reading comprehension. The teachers were observed during reading lessons over the course of a school year, and each lesson was used as a unit of analysis for the study (Carlisle, Kelcey, Berebitsky, & Phelps, 2011). Lessons were determined to be in support for student
learning (SSL) meaning the lesson included teacher actions that sought to engage students and assess their responses (Carlisle et al., 2011). Teacher actions promoting student engagement included: giving students meaningful feedback on their reading, providing opportunities for students to ask questions, and encouraging students to share their ideas (Carlisle et al., 2011). Another comprehension lesson type was labeled as teacher directed instruction (TDI). In TDI lessons, teachers explicitly taught text features and modeled comprehension strategies. Students were given opportunities for guided practice (Carlisle et al., 2011). TDI and SSL had a significant impact on reading achievement (Carlisle et al., 2011). The results of the study supported the NRP’s report that direct comprehension instruction, including strategies and modeling with guided reading, is effective for increasing students’ reading comprehension.

**Instructional Models**

An instructional model is a manner in which learning is facilitated (Reigeluth, 2009). Learning theories can be explained and represented through instructional models (Tracy & Morrow, 2012). As previously noted, decisions regarding reading instruction, from large scale, district-wide decisions to daily choices made by classroom teachers, are guided by learning theories (Tracy & Morrow, 2012). This section will further detail the basal-centered model, Reader’s Workshop model, and Whole Language model.

**Basal-centered model.** Basal-centered refers to the reading instructional model that accompanies basal reading programs. The term basal, which means the base, is used in education to describe the reading textbooks that have been used to teach basic reading skills for centuries (Dewitz, Leahy, Jones, & Sullivan, 2010). Through the years, basal readers have reflected the cultural, political, and social agendas of the time including
religion, patriotism, and industrialism (Dewitz et al., 2010). The 21st century has brought many changes to basal-centered reading programs. Basal readers were greatly influenced by balanced literacy in the 1990s, the 2000 report from the NRP, and the No Child Left Behind Act of 2001 (Dewitz et al., 2010). Basal-centered reading programs continue to reflect the behaviorist belief that learning happens as a response to stimuli and are widely used in American classrooms (Dewitz et al., 2010; Dewitz & Jones, 2013; Fawson & Reutzel, 2000; Pilonieta, 2010; Weakland, 2014).

In the basal-centered model, reading and writing instruction are taught separately (Klatt, Mathieu, & Whitney, 1996). Instruction includes scripted lessons found within the teacher manuals (Dewitz & Jones, 2013). The lessons in a basal-centered model aim to teach multiple reading skills through a compilation of stories, articles, and skill-based worksheets (Dewitz & Jones, 2013; Fawson & Reutzel, 2000; Klatt et al., 1996; Pilonieta, 2010; Puorro, 1997). The student textbook, or anthology, is a collection of simple stories with one core story per week (Dewitz et al., 2010). The texts in the anthologies are often criticized for being chosen for the sole purpose of decoding practice and are not the rich texts with domain-specific vocabulary necessary for developing deep levels of comprehension (Walsh, 2003). In addition to the anthology, basal-centered reading programs include leveled readers for independent reading that relate to the topic or theme of the core story of the week (Dewitz et al., 2010; Dewitz & Jones, 2013). Pre-made assessments and independent practice worksheets are also included to check basic story comprehension and reading skills (Dewitz & Jones, 2013).

Basal reading programs typically include a five day plan organized into six week units (Dewitz et al., 2010). Each lesson is divided into four sections: “oral language
(sharing literature), skills and strategies (comprehension and vocabulary), reading
(guided comprehension, independent reading, cross-curriculum connections), and
language arts (writing, grammar, and spelling)” (Dewitz et al, 2010, p. 229). Teachers
begin the week with pre-reading strategies before reading the weekly core story. While
reading the core story later in the week, the teacher models and teaches during-reading
strategies. At the end of the week the focus becomes post-reading comprehension
strategies and activities (Dewitz et al., 2010).

Borman, Dowling, and Schneck (2008) conducted a study of the 2005 edition of
Open Court Reading, a basal reading program published by SRA/McGraw Hill. The
study included 49 first through fifth-grade classrooms. Twenty-seven classrooms utilized
the basal-centered program that included Open Court Reading curriculum and resources
along with professional development for the teachers. Twenty-two classrooms served as
the control group and did not receive Open Court Reading materials or professional
development (Borman et al., 2008). The Terra Nova literacy posttests were administered
to evaluate the program’s effectiveness and a multilevel analysis was conducted. The
mean composite score for the intervention group was 612.77. The mean composite score
was 604.82 for the comparison group. A positive effect size of 0.16 ($p < 0.05$) was
determined for the Open Court Reading program (Borman et al., 2008).

Dewitz, Jones, and Leahy (2009) conducted a content analysis of comprehension
instruction of basal reading programs. The study examined the five best-selling basal
reading programs in the United States: McGrawHill Reading, SRA Open Court, Harcourt
Trophies, Houghton Mifflin Reading, and Scott Foresman Reading. Only third, fourth,
and fifth grades were included. The unit of measure in the study was referred to as
instructional moves, which included the skill or strategy taught, what the teacher was
directed to do, and when the instructional move occurred in the lesson. The teacher
action component of instructional moves included skill mentioned, skill and explanation,
modeling, information, questions, questions and model, guided practice, direct
explanation, independent practice, and discussion (Dewitz et al, 2009). The placement of
the instructional move in the lesson included two codes: inside the text (strategies taught
while reading the text) or outside the text (strategies taught in preparation for reading or
post-reading strategies) (Dewitz et al., 2009). Teacher questions with a modeled
response was the most often used instructional move, accounting for 60% of all lessons.
Less than 10% of instructional moves included independent practice. Along with
insufficient time for independent skill practice, all of the programs were lacking in
opportunities for guided practice (Dewitz et al., 2009). The researchers concluded that
many research-based comprehension strategies were included, but “are not taught with
the rigor, persistence, or design principles to ensure students’ acquisition of these
strategies” (Dewitz et al., p. 121).

Piloneta (2010) conducted a content analysis of five basal programs by the
Court, and Scott Foresman. The first, third, and fifth grade teacher manuals and student
anthologies were examined. It was found that a third of the instructional lessons in the
basal programs were not research-based strategies (Piloneta, 2010). Similar to the study
conducted by Dewitz et al. (2009), Piloneta found that teacher questioning was the
predominant teaching strategy of the basal programs studied. Overall, Piloneta found that
the basal-centered model seriously lacked in domain vocabulary development and
comprehension instruction. The five basal-centered programs examined did not include systematic introduction and application of comprehension strategies (Piloneta, 2010).

**Reader’s Workshop model.** The Reader’s Workshop model is an instructional model that engages students in authentic reading experiences. In a Reader’s Workshop classroom, the goal of reading instruction is to create lifelong readers who are both skilled and passionate (Atwell, 2007). The Reader’s Workshop model has been built upon and adapted from the work of classroom teacher Nancie Atwell. Atwell, a middle school English teacher, began developing a workshop model of writing and reading instruction in the 1980s and published her first book in 1987 (Atwell, 1998). The book, *In the Middle: Writing, Reading, and Literature with Adolescents*, detailed the importance of student choice and workshop components including teacher read aloud, minilesson, individual conferring, independent reading time with self-selected literature, and students’ written and oral responses to literature (Atwell, 1987). During the same time that Atwell was refining the Reader’s Workshop model, Lucy Calkins was working as a writing development researcher for the National Institute of Education. Calkins became the founding director of the TCRWP at Columbia University (TCRWP, n.d.). Calkins went on to create a Reader’s Workshop language arts curriculum that shares Atwell’s philosophy and components of reading instruction. The *Units of Study for Teaching Reading* was published in 2010 and has been adopted in school districts across the country (TCRWP, n.d.)

Rooted in Constructivism, the workshop model encourages students to construct meaning from what they read and write (Towle, 2000). A critical aspect of the Reader’s Workshop is that students self-select their books. Teachers “help children choose books,
develop and refine their literary criteria, and carve out identities for themselves and readers” (Atwell, 2007, p. 46). For this reason, the Reader’s Workshop classroom includes a classroom library full of high-interest books at various reading levels (Calkins & Tolan, 2010). Sufficient time for students to read self-selected texts is also critical. According to Calkins, the most important thing educators can do is protect time in the school day for children to “learn to read by reading” (Calkins & Tolan, 2010, p. 7). Though students are immersed in a literature-rich environment, the skills and process of proficient reading is explicitly taught and modeled in focused minilessons (Calkins & Tolan, 2010). Along with independent reading time and explicit reading instruction, the Reader’s Workshop includes daily opportunities for students to talk about what they read in “discussions that incorporate thinking under, between, and around texts” (Calkins & Tolan, 2010, p. 11).

Reader’s Workshop time begins with a minilesson focused on a specific reading skill. Instead of relying on exposure to quality texts alone to improve reading comprehension, teachers explicitly teach reading skills and strategies that students can use to better comprehend various texts (Calkins & Tolan, 2010). The minilesson is only 10-15 minutes long and is meant to demonstrate how to utilize the skill during reading (Calkins & Tolan, 2010). Next, students engage in reading self-selected books for approximately 40 minutes. During this time, the teacher works to individualize instruction through one-on-one conferences and small guided reading groups. The information gathered during one-on-one conferences and small groups guides the teacher to the necessary mid-workshop teaching point that could benefit all readers (Calkins & Tolan, 2010). This short check-in is meant to focus students’ thinking for the rest of their
independent reading time. Students write their thinking on Post-it notes or in a response journal during independent reading. The workshop ends with time for students to collaborate with other readers, share thoughts and insights from their Post-it notes, and for the teacher to share student successes (Calkins & Tolan, 2010).

After the development of Reader’s Workshop, research studies were conducted comparing the relatively new instructional model with the traditional basal approach. One study focused on eighth-grade students, 40 of which received Reader’s Workshop instruction and 63 who received basal-centered instruction (Bitner, 1992). The students were given the Gates-MacGinitie Reading Test as a pretest to assess comprehension (Bitner, 1992). After 90 school days of instruction, the two groups were given the Gates-MacGinitie Reading Test as a posttest. The results were then compared (Bitner, 1992). Though the Reader’s Workshop group had slightly higher scores, the differences were not statistically significant (Bitner, 1992).

Mitev (1995) conducted a study comparing four classes of fourth-grade students taught using a basal reading series with four classes of fourth-grade students taught using the Reader’s Workshop model (Mitev, 1995). The measure of achievement used was the Stanford Achievement Test that was given as a pre and a posttest for both groups of students (Mitev, 1995). The pretest scores of both groups were not significantly different (Mitev, 1995). The mean posttest score for the control group was 58 percentile points compared to the mean posttest score of 62 percentile points for the experimental group (Mitev, 1995). While both the integrated curriculum group and the Reader’s Workshop group demonstrated growth, the results were not statistically significant (Mitev, 1995).
Swift (1993) also examined the difference in reading achievement between the Reader’s Workshop model and a basal-centered model. During the 1989-1990 school year, 83 sixth-grade students participated in the study. The students were split into two groups: Group 1 was taught using the Reader’s Workshop model for the first semester, and Group 2 was taught using the basal-centered model during the first semester (Swift, 1993). At semester the model of instruction was switched for both groups, meaning that Group 1 switched to the basal-centered model and Group 2 then switched to the Reader’s Workshop model (Swift, 1993). The students were given the Gates-MacGinitie test in September before instruction began, in January after exposure to one model of reading instruction, and in May after exposure to a different instructional model (Swift, 1993). The students in Group 1 (Reader’s Workshop group) showed greater growth from the September test to the January test than did Group 2 (the basal-centered group) (Swift, 1993). However, after the instructional models were switched Group 1 actually regressed while Group 2 showed significant growth (Swift, 1993). When the scores were compared, regardless of the time of the year, the difference in the mean improvement was found to be statistically significant in favor of the Reader’s Workshop (Swift, 1993).

Hewitt et al. (1996) conducted a study to examine the effect of the Reader’s Workshop model on struggling first, second, and third grade readers. Decoding skills and reading comprehension were measured by oral reading samples and skill checklists. Students’ attitudes about reading were assessed through surveys and teacher observations. The results of the oral reading samples and skill checklist showed significant growth in decoding, fluency, expression, and comprehension (Hewitt, et al.,
The surveys also showed improvements in student attitudes about reading (Hewitt, et al., 1996).

In 2008, a study was conducted to evaluate the effect of Reader’s Workshop on the reading levels and reading comprehension of first-grade students (Mounla, Bahous, & Nabhani, 2011). Stratified and random samplings were used to select three students from the class that were representative of the whole. Researchers used running records and the reading continuum created by Calkins and the TCRWP to determine the reading and comprehension level of each student. Students were grouped into the three different strata based on the benchmarks set by the TCRWP for determining reading level: needs support, meets standards, exceeds standards (Mounla et al., 2011). One student from each group was randomly selected. The reading continuums were used again in June to assess the reading achievement growth of the three students. Student A from the “needs support” group went from reading level A to reading level K on the TCRWP’s reading continuum, which was considered meeting standards for first grade (Mounla et al., 2011). Student B who met the first grade standards in September went from level D to reading level N which is Grade-Three level of reading on the TCRWP’s continuum. Student C, who exceeded expectations in September, went from level Q to the Grade-Seven reading level of U in June. The researchers found the Reader’s Workshop model to be effective for students of all reading levels (Mounla et al., 2011).

**Whole Language model.** Whole Language first became popular in the 1980s (Tracy & Morrow, 2012). Bergeron (1990) conducted an analysis of literature about Whole Language resulting in the following definition:
Whole language is a concept that embodies both a philosophy of language development as well as the instructional approaches embedded within, and supportive of, that philosophy. This concept includes the use of real literature and writing in the context of meaningful, functional, and cooperative experiences in order to develop students’ motivation and interest in the process of learning. (p. 319)

A central theme of Whole Language is that children learn reading through a process much like language acquisition, naturally through immersion in a literacy rich environment (Tracy & Morrow, 2012). Language is valued as a whole entity: reading, writing, listening, and speaking are all equally important components of language that should be taught together instead of in isolation (Ekwall & Shanker, 1989; Hsu, 1994; Klatt, Mathieu, & Whitney, 1996; Turbill & Cambourne, 1997; Wheeler, 1995). Whole Language is considered an authentic approach to literacy instruction that seeks to create critical thinkers and learners (Boran & Comber, 2001).

The Whole Language model includes “authentic pieces of high quality children's literature rather than commercially prepared basal reading series as the primary materials for the language arts program” (Tracy & Morrow, 2012, p. 70). The belief is that through authentic experiences with rich literature a student “constructs knowledge about the world, the function of symbols, and communication strategies” (Johnson, 2004, p. 74). In Whole Language classrooms, children are engaged in high-quality literature as well as authentic reading and writing activities that encourage collaboration (Hsu, 1994; Jeynes & Littell, 2000). An important aspect of the Whole Language model is students’ choice when selecting reading materials (Jeynes & Littell, 2000; Wheeler, 1995). Whole
Language educators value each student’s strengths and seek to develop those strengths by providing meaningful reading and writing experiences as well as opportunities for deep conversations (Turbill & Cambourne, 1997). There is an emphasis on text comprehension and personal meaning constructed through the reading process (Boran & Comber, 2001).

Despite its popularity, the Whole Language model is not without harsh criticism. The foundational beliefs of the Whole Language model have been refuted by recent research on the importance of phonics and phonemic awareness in learning to read (Moats, 2007). Since the Whole Language model relies on exposure to authentic literature to teach students how to read in a natural process, it lacks the NRP’s recommended direct and explicit phonemic awareness and phonics instruction (Moats, 2007). Despite this, Whole Language continues to be evident in teacher manuals and teacher preparation programs across the country (Moats, 2000).

Jeynes and Littell (2000) conducted a meta-analysis of fourteen studies that examined the impact of Whole Language instruction on struggling readers in kindergarten through third grade compared to traditional basal-centered instruction. The studies included in the meta-analysis varied greatly in sample size but were similar in lengths with half of the studies conducted over one school year. The students receiving basal-centered instruction performed better on all measures than students receiving whole language instruction. The total effect size of -0.65 was statistically significant for basal-centered instruction.
**Students’ Reading Motivation and Attitudes**

Students who are motivated believe they have the ability to achieve, have a purpose for reading, are both intrinsically and extrinsically motivated, have achievement goals, and are influenced by social motivation (Guthrie, Wigfield, & You, 2012; Wigfield & Guthrie, 1997). Intrinsic motivation is “the enjoyment of reading for its own sake and the disposition to read frequently” (Cox & Guthrie, 2001, p. 117). Extrinsic or outside motivation includes goals of competition and recognition (Cox & Guthrie, 2001). The correlation between motivation and reading achievement is linked through time spent reading in that “motivation increases reading amount, which then increases text comprehension” (Guthrie, Wigfield, Metsala, & Cox, 1999, p. 250).

Motivation plays an important role in the amount of time spent reading (Cox & Guthrie, 2001; Guthrie & Wigfield, 2000; Wigfield & Guthrie, 1997; Wigfield, Guthrie, Tonks, & Perencevich, 2004). Cox and Guthrie (2001) conducted a study of factors that affect the amount of time students spent reading. Students’ motivation, use of reading strategies, and past achievement were examined. The study included 251 students from three elementary schools in the mid-Atlantic states with 113 third grade students and 138 fifth-grade students. Levels of student motivation were assessed by administering the Motivation for Reading Questionnaire (MRQ). The Strategy Self-Report Measure was used to determine the students’ use of strategies while reading. Time spent reading was assessed by administering the Reading Activity Inventory (RAI) developed by Guthrie, McGough, and Wigfield (1994). The RAI measures both time spent reading at school and reading for enjoyment. The results of the study of third-grade students demonstrated a statistically significant correlation between motivation and time reading for enjoyment.
(0.32, \( p < .01 \)), and motivation and time reading at school (0.43, \( p < .01 \)). The results of the study of fifth grade students also showed a statistically significant correlation between motivation and time spent reading for enjoyment (0.39, \( p < .01 \)) but there was not a significant correlation between motivation and time spent reading at school (0.22, \( p < .05 \)). The results indicated that if students are highly motivated to read, they will spend more time reading for enjoyment even if their prior reading achievement and strategy use is low. Motivation pushes the student to engage in reading and utilize cognitive strategies to comprehend (Guthrie et al., 2012).

There is a correlation between student motivation and reading achievement (Baker & Wigfield, 1999; Guthrie & Wigfield, 2000; Guthrie et al., 2012; Wigfield et al., 2004). Though reading skills and strategies are important, students must be motivated to access those skills to persevere when faced with difficulties (Afflerbach, Cho, Kim, Crassas, & Doyle, 2013). Ho and Guthrie (2013) conducted a study of 255 seventh-grade students to determine the correlation between multiple aspects of motivation and reading achievement for both information text and literary text. This decision was based on the understanding that motivation and achievement are multifaceted and it is possible that multiple patterns may occur simultaneously (Ho & Guthrie, 2013). A canonical correlation analysis was conducted which enabled the researchers to use multiple dependent and independent variables. Motivation was measured by administering the Adolescent Motivations for School Reading questionnaire (AMSR) which assesses six aspects of motivation: intrinsic motivation, efficacy, prosocial interactions in reading, avoidance, perceived difficulty, and antisocial interactions in reading (Ho & Guthrie, 2013). Reading achievement was assessed through multiple measures: reading fluency
was assessed by the Woodcock Johnson III Reading Fluency test, reading comprehension was assessed by the Gates-MacGinitie Comprehension Test and grades from the students’ Reading and Language Arts class. The results revealed a relationship between perceived difficulty and self-efficacy for literary texts with all achievement variables. When reading literary texts, student achievement was higher for students who had higher levels of self-efficacy and were intrinsically motivated (Ho & Guthrie, 2013). The canonical correlation between motivation and comprehension of literary texts was statistically significant (0.59) (Ho & Guthrie, 2013).

Engagement in reading is an indicator of the student’s motivation and is linked to persistence and effort (Marchand & Furrer, 2014; Skinner, Furrer, Marchand, & Kindermann, 2008). Guthrie, Schafer, and Huang (2001) investigated whether reading achievement was impacted by students’ engagement in reading. The study included fourth-grade students in Maryland who attended public and private schools (Guthrie et al., 2001). The students took the 1994 NAEP which included a 37 item survey about reading engagement in addition to the achievement test (Guthrie et al., 2001). Survey questions sought to determine various aspects of reading engagement including intrinsic motivation to read for enjoyment and information, time spent reading, and self-selection of books (Guthrie et al., 2001). The analysis of the data showed that engaged reading was a statistically significant predictor of achievement. Through his extensive study in the area of students’ motivation and engagement, Guthrie (2004) determined that students who were motivated and engaged spent 500% more time reading than students who are disengaged.
Student self-selection of reading materials is a highly effective way to increase students’ motivation toward reading (Guthrie & Humenick, 2004; Wigfield et al., 2004). Guthrie and Humenick (2004) conducted a meta-analysis of 22 studies to determine what motivates students to read. They compared “conditions expected to increase motivation with conditions not expected to increase motivation” (p. 331). There were 131 experimental comparisons made from the 22 studies. Students having knowledge goals had an overall effect size of 0.72. Students being able to make choices in their reading materials had an overall effect size of 0.95. The effect size for the nature or type of text was 1.15. Collaboration for reading had an overall effect size of 0.52. All four classroom practices had a moderate to high effect size indicating they are important components of reading instruction (Guthrie & Humenick, 2004).

Summary

Chapter two presented the literature on reading instruction related to this study. First, Behaviorism and Constructivism learning theories were discussed. Second, research-based components of reading instruction were presented. Third, reading instructional models were discussed. Finally, the impact of students’ motivation and engagement in reading was examined.
Chapter Three

Methods

The purpose of this study was to compare two reading instructional models, a Reader’s Workshop model and the basal-centered model. Specifically, the purpose of the study was to determine the difference in fourth and fifth-grade reading achievement scores between students in Reader’s Workshop model classrooms and students in basal-centered model classrooms. A second purpose of the study was to determine the difference in fourth and fifth-grade reading achievement scores between students in Reader’s Workshop model classrooms and students in basal-centered model classrooms reading below grade-level. The final purpose was to determine the difference in fourth and fifth-grade students’ attitudes about reading between students in Reader’s Workshop model classrooms and students in basal-centered model classrooms. Chapter three presents an explanation of the methodology used during the study. The chapter also includes a description of the sample population, instrumentation, validity and reliability, data collection techniques, and data analysis procedures.

Research Design

A quasi-experimental research design was used to investigate the research hypotheses. A structured pretest-posttest data collection method was used. Archival data was collected from the Anytown School District. The independent variables in the study were the models by which students received reading instruction (Reader’s Workshop or basal-centered model). The dependent variables were the fall and spring NCE and ERAS scores.
Population and Sample

The population for this study was comparable fourth and fifth-grade students who attended the 18 elementary schools in the Anytown School District during the 2012-2013 school year. The sample population were fourth and fifth-grade students who completed the fall and spring STAR Reading Assessments as well as the fall and spring ERAS. Anytown School District is a large suburban district located in a major Midwest metropolitan area. The sample size for this study was comprised of 2,972 fourth and fifth-grade students who met the criteria set for population sampling as described above. Approximately half of the sample population was taught using a Reader’s Workshop model and approximately half of the sample population was taught with the basal-centered model. This sampling method resulted in a nonequivalent group sample.

Sampling Procedures

Purposive sampling was used in the study to identify students from the overall population, based on the knowledge of the group to be sampled (Lunenburg & Irby, 2008). The entire population of students enrolled in fourth and fifth-grade in the Anytown School District was considered. The sample population included fourth and fifth-grade students who completed the STAR Reading Assessment and ERAS during the testing windows set the by Anytown School District.

Students were first classified into two groups based on their placement in either Reader’s Workshop model classrooms or basal-centered model classrooms. The IRL scores of the STAR Reading Assessment collected in fall 2012 were used to classify students further: reading at or above grade-level and below grade-level. To be considered reading at or above grade-level, fourth-grade students had to have a fall IRL score of 4.0
or above. Fifth-grade students had to have a fall IRL score of 5.0 or above. Students in fourth and fifth-grade with scores falling below the IRL scores were categorized as reading below grade-level.

**STAR Instrumentation**

The STAR Reading Assessment is a standards-based test that measures student performance in key reading skills (Research Foundation for STAR Assessments, 2014). The STAR Reading Assessment is a computer adaptive test that adjusts the level of questions based on the accuracy of student answers to previous questions (Research Foundation for STAR Assessments, 2014). Renaissance Learning, the company that created the STAR Reading Assessment, explained that students take the STAR Reading Assessment individually at a computer and answer questions in a multiple-choice format (Renaissance Learning Incorporated, 2010). The test includes 34 questions designed to evaluate reading skills for all students in grades K-12 (Research Foundation for STAR Assessments, 2014). The test questions are generated from an item bank that includes more than 5,000 questions (Research Foundation for STAR Assessments, 2014). When the test is completed, the STAR Reading Assessment software automatically calculates a score that can immediately be viewed and analyzed by teachers and administrators (Renaissance Learning Incorporated, 2010). The assessment consists of two different formats. Both formats include a missing word and four answer choices for questions developed at a second-grade level and above (Renaissance Learning Incorporated, 2010). One format includes a single sentence with a missing word. The student must choose the best word to complete the sentence. The second format includes a passage of text from children’s literature with one word missing from a sentence (Renaissance Learning
Incorporated, 2010). The student must choose the best word to complete the sentence. Third through twelfth grade students are given 20 single-sentence items and five passage items in each assessment (Renaissance Learning Incorporated, 2010).

**STAR Measurement.** The STAR Reading Assessment created by Renaissance Learning measured reading growth for this study. The collection of 2,048 items included 1,620 vocabulary-in-context items and 428 authentic text passage items (Renaissance Learning Incorporated, 2012). This collection is large, ensuring that test items are not repeated during a school year (Renaissance Learning Incorporated, 2012). The Research Foundation for STAR Assessments further explained the process of constructing the multiple-choice assessments in their 2014 report titled *The Science of STAR*.

Renaissance Learning constructs multiple-choice items to represent a balanced range of cognitive complexity. Item specifications require verifying the accuracy of all content; using grade-level-appropriate cognitive load, vocabulary, syntax, and readability; including only essential text and graphics to avoid wordiness and visual clutter; and employing standards for bias, fairness, and sensitivity.

(Research Foundation for STAR Assessments, 2014, p. 35)

The STAR Reading Assessment Student Report provides multiple scores including criterion-referenced and norm-referenced scores (Renaissance Learning Incorporated, 2015). The criterion-referenced IRL was used to classify students into two groups: reading below grade-level or reading at or above grade-level. In the current study the NCE score was used to measure reading achievement growth. The NCE scores are based on an equal interval scale reflecting the student’s performance on a normal curve distribution.
STAR Validity and Reliability. The STAR Reading Assessment has been tested for validity and reliability both through Renaissance Learning and independent studies. Construct validity was tested by comparing the results of the STAR assessment with the results of the Degrees of Reading Power comprehension assessment. A raw correlation of 0.89 and an adjusted correlation of 0.96 was found (Renaissance Learning Incorporated, 2011). When compared to the 9th edition of the Stanford Achievement Test, the correlation coefficients in fourth grade (0.79) and fifth grade (0.80) were both statistically significant (Renaissance Learning Incorporated, 2011). Renaissance Learning used the generic reliability estimation method to calculate the internal consistency reliability for each grade level (Renaissance Learning Incorporated, 2011). In fourth grade, the sample size was 193,126 with a generic reliability of 0.92 (Renaissance Learning, 2011). For fifth grade the sample size was 189,988, and there was a generic reliability of 0.92 (Renaissance Learning, 2011). When all grades were considered an overall generic reliability of 0.97 was determined from the total sample size of 1,287,139 (Renaissance Learning, 2011). In 2014, the Center on Response to Intervention at American Institutes for Research examined the STAR Reading Assessment as part of the fifth annual review of screening tools, finding similar results. The Technical Review Committee for the Center on Response to Intervention (RTI) reported that the generic reliability coefficient for grades 1 through 5 was 0.89 to 0.91 with a median reliability coefficient of 0.90 (Center on RTI Technical Review Committee, n.d.). The reliability coefficients for the STAR Reading Assessment show that it was a valid instrument for the analysis conducted in the study.
ERAS Instrumentation

The Elementary Reading Attitudes Survey (ERAS) is a norm-referenced survey instrument designed to measure the attitudes about reading of elementary students, grades 1 through 6 (McKenna & Kear, 1990). It is a twenty question survey that includes statements about recreational and academic reading (McKenna & Kear, 1990). The statements are read aloud by the teacher and students are instructed to circle one of the four pictures of the cartoon character Garfield™ that most accurately match their feelings about each statement. The pictures were intended to depict four emotional states ranging from very positive to very negative (McKenna & Kear, 1990).

ERAS Measurement. The ERAS was designed with an even number of survey responses to prevent neutral feedback (McKenna & Kear, 1990). The four responses are given a point value to provide teachers with quantitative data to quickly assess the attitudes of students (McKenna & Kear, 1990). The most negative depiction of Garfield™ is scored as 1 point, the slightly negative depiction of Garfield™ is scored as 2 points, the slightly positive depiction of Garfield™ is scored as 3 points, and the most positive depiction of Garfield™ is scored as four points (McKenna & Kear, 1990). A score sheet is included with the instrument to calculate the recreational, academic, and total reading scores as well as the correlated percentile ranks (McKenna & Kear, 1990).

ERAS Validity and Reliability. Construct validity was gathered for the recreational subscale by grouping the national norming group by whether a public library was available to them and whether they currently had a library card (McKenna & Kear, 1990). The recreational scores of the group of cardholders were compared to the group without library cards. Cardholders had significantly higher ($p < .001$) recreational scores
than non-cardholders ($M = 28.9$) (McKenna & Kear, 1990). These results varied predictably, demonstrating the validity of the subscale. Another test of validity grouped students by whether or not they presently had library books checked out from the school library. The results were significantly varied ($p < .001$) and scores were higher ($M = 29.2$) for students with books checked out (McKenna & Kear, 1990). The third test of recreational reading validity compared students by the average reported time television was watched per night. Students who reported watching less than one hour of television per night were compared with students who reported watching more than two hours per night (McKenna & Kear, 1990). The group who reported watching less than one hour had a mean score of 31.5 (McKenna & Kear, 1990). This exceeded ($p < .001$) the mean score of the group that reported watching more than two hours per night, 28.6 (McKenna & Kear, 1990). The academic reading subscale validity was also tested.

The validity of the academic subscale was tested by examining the relationship of scores to reading ability. Teachers categorized norm-group children as having low, average, or high overall reading ability. Mean subscale scores of the high-ability readers ($M = 27.7$) significantly exceeded the mean of low-ability readers ($M = 27.0, p < .001$), evidence that scores were reflective of how the students truly felt about reading for academic purposes. (McKenna & Kear, 1990, p. 639) Cronbach’s alpha was calculated at each grade level yielding coefficients 0.74 to 0.89 (McKenna & Kear, 1990).

The reliability and validity of the ERAS was also tested in 1995 (Kush, Watkins, McAleer, & Edwards, 1995). The study found that overall the instrument was a reliable measure of children’s attitudes about reading with moderate one-year stability of
students’ reading attitudes. The study also found the ERAS to be reliable and accurate across grade levels and for both girls and boys.

In 2005, Kazelskis et al. examined the reliability and stability of the ERAS across gender, race, and grade level. A total of 718 fourth, fifth, and sixth-grade students were included in the study. The ERAS was administered two times, seven days a part. Adequate internal consistency was found across gender, race, and grade level with alpha coefficients ranging from 0.76 to 0.90 for the ERAS subscales and total scale. These results corroborated the internal consistency findings of McKenna and Kear.

**Data Collection Procedures**

The researcher contacted the Assistant Superintendent of the Anytown School District and was granted approval to access archival data in August 2015 (Appendix A). The researcher submitted an Institutional Review Board (IRB) form to Baker University to gain approval for the study and data collection. Appendix B includes the IRB form. Approval to perform the study was granted by Baker University in December 2015, and the approval letter is included in Appendix C.

Elementary students in the Anytown School District completed the STAR Reading Assessment during two testing windows set by the district for the 2012-2013 school year. The testing windows were fall 2012 and spring 2013. The school district archived the scores in the Renaissance Learning Company database and on the district’s network server. The district’s Assistant Superintendent of Curriculum Instruction and Assessment provided the IRL and NCE scores of fourth and fifth-grade students in Reader’s Workshop model classrooms and basal-centered classrooms for the fall 2012 and NCE scores for the spring 2013 tests. The mean NCE scores for fourth grade and
fifth grade were determined to serve as pretest data for the Reader’s Workshop group and the basal-centered group. The students’ IRL scores from the fall were used to classify students further as at or above grade-level or below grade-level. The mean spring 2013 NCE scores for fourth and fifth grade were compared with the fall 2012 mean NCE scores to determine the mean NCE growth for the Reader’s Workshop group and the basal-centered group. The mean posttest NCE scores were compared between the Reader’s Workshop group and the basal-centered group. The NCE scores of below grade-level students were compiled and compared from fall to spring to determine the effectiveness of the Reader’s Workshop model on below grade-level students compared to the growth of at or above grade-level students.

The results of the fall and spring ERAS were collected by the district and provided for the purpose of this study. The raw composite scores of the fall ERAS were converted to percentile ranks using the conversion table provided by the authors, McKenna and Kear (1990). The same process was followed in the spring to compare the mean percentile rank scores of fourth and fifth-grade students in the Reader’s Workshop group and the basal-centered group for comparison.

**Data Analysis and Hypothesis Testing**

The following research questions and hypotheses guided the study. A $t$ test statistical method was used for all hypotheses with three different statistical analysis strategies described below.

**RQ1.** To what extent is there a difference in reading achievement, as measured by NCE fall and spring scores of the STAR Reading Assessment, for fourth and fifth-
grade students categorized by Reader’s Workshop model classroom and basal-centered model classroom assignments?

**H1.** There is a difference in reading achievement between fall and spring fourth and fifth-grade student NCE scores assigned to Reader’s Workshop model classrooms.

**H2.** There is a difference in reading achievement between fall and spring fourth and fifth-grade student NCE scores assigned to basal-centered model classrooms.

**H3.** There is a difference in reading achievement between fourth and fifth-grade student fall NCE scores assigned to Reader’s Workshop model or basal-centered model classrooms.

**H4.** There is a difference in reading achievement between fourth and fifth-grade spring NCE scores using Reader’s workshop model or basal-centered model.

The two-independent sample *t* test method was used to determine the extent of growth between fall and spring scores for each instructional method to address H1 and H2. To address H3 the two-independent sample *t* test was applied to evaluate fall to fall score mean differences for each instructional method. The two-independent sample *t* test was applied to evaluate spring to spring score mean differences for each instructional method, to address H4.

**RQ2.** To what extent is there a difference in reading achievement, as measured by NCE fall and spring scores of the STAR Reading Assessment, for fourth and fifth-grade students reading below grade level categorized by Reader’s Workshop model classroom and basal-centered model classroom assignments?
**H5.** There is a difference in reading achievement between fall and spring reading below grade level fourth and fifth-grade student NCE scores assigned to Reader’s Workshop model classrooms.

**H6.** There is a difference in reading achievement between fall and spring reading below grade-level fourth and fifth-grade student NCE scores assigned to basal-centered model classrooms.

**H7.** There is a difference in reading achievement between reading below grade-level fourth and fifth-grade student fall NCE scores assigned to Reader’s Workshop model or basal-centered model classrooms.

**H8.** There is a difference in reading achievement between reading below grade-level fourth and fifth-grade spring NCE scores using Reader’s workshop model or basal-centered model.

The two-independent sample *t* test method was used to determine the extent of growth between fall to spring scores for each instructional method to address H5 and H6. To address H7 the two-independent sample *t* test was applied to evaluate fall to fall score mean differences for each instructional method. The two-independent sample *t* test was applied to evaluate spring to spring score mean differences for each instructional method, to address H8.

**RQ3.** To what extent is there a difference in students’ attitudes about reading, as measured by the fall and spring composite scores of the ERAS, for fourth and fifth-grade students categorized by Reader’s Workshop model classroom and basal-centered model classroom assignments?
**H9.** There is a difference in students’ attitudes about reading between fall and spring fourth and fifth-grade student ERAS composite scores assigned to Reader’s Workshop model classrooms.

**H10.** There is a difference in students’ attitudes about reading between fall and spring fourth and fifth-grade student ERAS composite scores assigned to basal-centered model classrooms.

**H11.** There is a difference between students’ attitudes about reading between student fall ERAS composite scores before assignment to Reader’s Workshop model or basal-centered model classrooms.

**H12.** There is a difference between student spring ERAS composite scores using Reader’s workshop model or basal-centered model.

The two-independent sample *t* test method was used to determine the extent of growth between fall and spring ERAS scores for each instructional method to address H9 and H10. To address H11 the two-independent sample *t* test was applied to evaluate fall to fall ERAS score mean differences for each instructional method. The two-independent sample *t* test was applied to evaluate spring to spring ERAS score mean differences for each instructional method, to address H12.

**Limitations**

Limitations are factors that may affect the researcher’s ability to generalize the results of the study (Lunenberg & Irby, 2008). The study included two limitations. First, there are multiple models for teaching students to read, however, this study looked only at a Reader’s Workshop model and the basal-centered model. A second limitation was that the reading instructional model may not be the only factor influencing reading
achievement scores and students attitudes about reading. Many variables outside the control of the researcher could have impacted students’ ability to read and their attitudes about reading. The scores may have been influenced by environmental or instructional factors such as parent support at home, experience level and effectiveness of the teacher, and health of the student.

**Summary**

Chapter three provided an overview of the current quantitative research study. The chapter also included the research questions and hypotheses as well as information on the population, sample, and sampling procedures. The tool used in the study to measure reading achievement, the STAR reading assessment, as well as the instrument used to measure students’ attitudes about reading, the ERAS, were fully explained as well as the possible limitations of the present study. The results of the hypothesis tests are discussed in chapter four.
Chapter Four

Results

The primary purpose of this study was to compare a Reader’s Workshop model with the basal-centered model of reading instruction. Specifically, the purpose of the study was to determine the difference in fourth and fifth-grade reading achievement scores between students in Reader’s Workshop model classrooms and students in basal-centered model classrooms. A second purpose was to determine the difference between below grade-level readers in fourth and fifth-grade reading achievement scores between students in Reader’s Workshop model classrooms and students in basal-centered model classrooms reading below grade-level. The final purpose of the study was to determine the difference in fourth and fifth-grade students’ attitudes about reading between students in a Reader’s Workshop model classrooms and students in basal-centered model classrooms.

The three research questions that guide the current study are addressed through the quantitative data analysis provided in chapter four. First, an explanation of the descriptive statistics are presented, followed by the results of the hypotheses testing.

Descriptive Statistics

The population for the present study included fourth and fifth-grade students in the Anytown School District during the 2012-2013 school year. The sample (N=2,972) included only fourth and fifth-grade students who completed the STAR Reading Assessment during the fall 2012 testing window. The number of students per grade and per reading instructional model are presented in Table 1.
Table 1

*Fall 2012 STAR Scores Included Per Grade and Per Instructional Model*

<table>
<thead>
<tr>
<th></th>
<th>Fourth Grade</th>
<th>Fifth Grade</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basal</td>
<td>725</td>
<td>681</td>
<td>1,406</td>
</tr>
<tr>
<td>Workshop</td>
<td>702</td>
<td>864</td>
<td>1,566</td>
</tr>
</tbody>
</table>

*Note:* Anytown School District archived STAR data.

The students in the sample were categorized further by reading level to address RQ2. The number of students identified as below grade-level by the fall 2012 IRL scores are presented in Table 2.

Table 2

*Students Reading Below Grade-Level Based on Fall 2012 IRL Scores*

<table>
<thead>
<tr>
<th></th>
<th>Fourth Grade</th>
<th>Fifth Grade</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basal</td>
<td>439</td>
<td>266</td>
<td>705</td>
</tr>
<tr>
<td>Workshop</td>
<td>424</td>
<td>312</td>
<td>736</td>
</tr>
</tbody>
</table>

*Note:* Anytown School District archived STAR data.

**Hypothesis Testing**

This section includes the results of the hypotheses testing. The three research questions and twelve hypotheses are discussed. Two-sample *t* tests were used to determine the difference of the means for each research question. Fall and spring groups were treated as two separate samples for each hypothesis below because matched pair data were not available. The IBM Statistics 19.0 Faculty Pack for Windows program was used to analyze the data for the research questions.
RQ1. To what extent is there a difference in reading achievement, as measured by NCE fall and spring scores of the STAR Reading Assessment, for fourth and fifth-grade students categorized by Reader’s Workshop model classroom and basal-centered model classroom assignments?

H1. There is a difference in reading achievement between fall and spring fourth and fifth-grade student NCE scores assigned to Reader’s Workshop model classrooms.

H2. There is a difference in reading achievement between fall and spring fourth and fifth-grade student NCE scores assigned to basal-centered model classrooms.

H3. There is a difference in reading achievement between fourth and fifth-grade student fall NCE scores assigned to Reader’s Workshop model or basal-centered model classrooms.

H4. There is a difference in reading achievement between fourth and fifth-grade spring NCE scores using Reader’s Workshop model or basal-centered model.

To address H1 the two-sample \( t \) test was applied to evaluate the extent of growth between fall and spring STAR NCE scores for Reader’s Workshop classrooms. The results of the two-sample \( t \) test for the fall and spring Reader’s Workshop STAR NCE scores (displayed in Table 3) did not indicate a statistically significant difference between the two values, \( t = 1.27, df = 1545, p = 0.20 \). The sample mean for fall \( (M = 48.28, SD = 19.82) \) was slightly greater than the sample mean for spring \( (M = 47.01, SD = 19.35) \). H1 was not supported.

The two-sample \( t \) test was used to address H2 to evaluate the extent of growth between fall and spring STAR NCE scores for basal-centered classrooms. Table 3 also shows the results of the two-sample \( t \) test for the fall and spring basal STAR NCE scores.
The scores indicated there was not a statistically significant difference between the two values, $t = 0.22$, $df = 2905$, $p = 0.82$. The sample mean for fall ($M = 47.30$, $SD = 20.93$) compared to the sample mean for spring ($M = 47.13$, $SD = 20.04$) showed almost no change. H2 was not supported.

To address H3 the two-sample $t$ test was applied to evaluate the extent of difference in fall STAR NCE scores between Reader’s Workshop classrooms and basal-centered classrooms. The results of the two-sample $t$ test (displayed in Table 3) did not indicate a statistically significant difference between the two values, $t = 1.07$, $df = 2187$, $p = 0.28$. The sample mean for Reader’s Workshop ($M = 48.28$, $SD = 19.83$) was slightly greater than the sample mean for basal ($M = 47.30$, $SD = 20.93$). H3 was not supported.

The two-sample $t$ test was used to address H4 to evaluate the extent of difference in spring STAR NCE scores between Reader’s Workshop and basal. Table 3 shows the results of the two-sample $t$ test for the Reader’s Workshop spring and basal-centered spring STAR NCE scores. The scores did not indicate a statistically significant difference between the two values, $t = 0.13$, $df = 2263$, $p = 0.89$. The sample mean for Reader’s Workshop ($M = 46.40$, $SD = 19.35$) was slightly less than the sample mean for basal-centered ($M = 47.13$, $SD = 20.04$). H4 was not supported.

Table 3

<table>
<thead>
<tr>
<th>H#</th>
<th>Comparison</th>
<th>Mean $D$</th>
<th>$t$ Test</th>
<th>$df$</th>
<th>$p$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Fall to Spring Workshop</td>
<td>1.27</td>
<td>1.27</td>
<td>1545</td>
<td>0.20</td>
<td>n</td>
</tr>
<tr>
<td>H2</td>
<td>Fall to Spring Basal</td>
<td>0.17</td>
<td>0.22</td>
<td>2905</td>
<td>0.82</td>
<td>n</td>
</tr>
<tr>
<td>H3</td>
<td>Fall Workshop v. Basal</td>
<td>0.98</td>
<td>1.07</td>
<td>2187</td>
<td>0.28</td>
<td>n</td>
</tr>
<tr>
<td>H4</td>
<td>Spring Workshop v. Basal</td>
<td>0.11</td>
<td>0.13</td>
<td>2263</td>
<td>0.89</td>
<td>n</td>
</tr>
</tbody>
</table>

*Note: Significant when $p = <0.05$.  

**RQ2.** To what extent is there a difference in reading achievement, as measured by NCE fall and spring scores of the STAR Reading Assessment, for fourth and fifth-grade students reading below grade-level categorized by Reader’s Workshop model classroom and basal-centered model classroom assignments?

**H5.** There is a difference in reading achievement between fall and spring reading below grade-level fourth and fifth-grade student NCE scores assigned to Reader’s Workshop model classrooms.

**H6.** There is a difference in reading achievement between fall and spring reading below grade-level fourth and fifth-grade student NCE scores assigned to basal-centered model classrooms.

**H7.** There is a difference in reading achievement between reading below grade-level fourth and fifth-grade student fall NCE scores assigned to Reader’s Workshop model or basal-centered model classrooms.

**H8.** There is a difference in reading achievement between reading below grade-level fourth and fifth-grade spring NCE scores using Reader’s Workshop model or basal-centered model.

In order to draw the most accurate conclusions for RQ2 regarding the effects of the reading instructional methods on below grade-level readers, the researcher chose to conduct random sampling. Two-hundred students were randomly sampled from the total population of below grade-level fourth and fifth-grade students in basal-centered classrooms, 100 students to comprise the fall group and 100 students to comprise the spring group. The random sample was approximately 14% of the total population of below grade-level students in basal-centered classrooms and had a confidence level of +/-
6.4%, suggesting a sufficient sample size. Two-hundred students were randomly sampled from the total population of below grade-level fourth and fifth-grade students in Reader’s Workshop classrooms, 100 students to comprise the fall group and 100 students to comprise the spring group. The random sample was approximately 13% of the total population of below grade-level students in Reader’s Workshop classrooms. The two-sample t test method was used to determine the extent of growth between fall and spring below grade-level students’ scores for each instructional method to address H5 and H6. The results of the two-sample t test for the below grade-level workshop fall and spring STAR NCE scores indicated a statistically significant difference between the two values, $t = 2.40$, $df = 174$, $p = 0.02$. The sample mean for fall ($M = 32.59$, $SD = 15.18$) compared to the sample mean for spring ($M = 38.21$, $SD = 15.72$) indicated significant growth (Mean $D = 5.62$). H5 was supported.

The results of the two-sample t test for the below grade-level basal fall and spring STAR NCE scores did not indicate a statistically significant difference between the two values, $t = 1.48$, $df = 182$, $p = 0.14$. The sample mean for fall ($M = 33.81$, $SD = 15.15$) was less than the sample mean for spring ($M = 37.06$, $SD = 14.49$). H6 was not supported.

To address H7 the two-sample t test was applied to evaluate the mean differences between below grade-level Workshop and basal students’ fall STAR NCE scores. The results of the two-sample t test did not indicate a statistically significant difference between the two values, $t = 0.57$, $df = 198$, $p = 0.57$. The sample mean for Reader’s Workshop ($M = 32.59$, $SD = 15.18$) was nearly identical to the sample mean for basal-centered ($M = 33.81$, $SD = 15.15$). H7 was not supported.
The two-sample t test was used to address H8 to evaluate the mean differences between below grade-level Reader’s Workshop and basal-centered students’ spring STAR NCE scores. The results of the two-sample t test did not indicate a statistically significant difference between the two values, \( t = 0.48, df = 158, p = 0.63 \). The sample mean for Reader’s Workshop (\( M = 38.21, SD = 37.06 \)) was slightly greater than the sample mean for basal-centered (\( M = 37.06, SD = 14.49 \)). H8 was not supported.

Table 4

**Summary t Test Results for Research Question 2 for all Hypotheses, STAR NCE Scores**

<table>
<thead>
<tr>
<th>H#</th>
<th>Comparison</th>
<th>Mean D</th>
<th>t Test</th>
<th>df</th>
<th>p</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5</td>
<td>Fall to Spring Workshop</td>
<td>5.62</td>
<td>2.40</td>
<td>174</td>
<td>0.02</td>
<td>y</td>
</tr>
<tr>
<td>H6</td>
<td>Fall to Spring Basal</td>
<td>3.25</td>
<td>1.48</td>
<td>182</td>
<td>0.14</td>
<td>n</td>
</tr>
<tr>
<td>H7</td>
<td>Fall Workshop v. Basal</td>
<td>1.22</td>
<td>0.57</td>
<td>198</td>
<td>0.57</td>
<td>n</td>
</tr>
<tr>
<td>H8</td>
<td>Spring Workshop v. Basal</td>
<td>1.15</td>
<td>0.48</td>
<td>158</td>
<td>0.63</td>
<td>n</td>
</tr>
</tbody>
</table>

*Note:* Significant when \( p = <0.05 \).

**RQ3.** To what extent is there a difference in students’ attitudes about reading, as measured by the fall and spring composite scores of the ERAS, for fourth and fifth-grade students categorized by Reader’s Workshop model classroom and basal-centered model classroom assignments?

**H9.** There is a difference in students’ attitudes about reading between fall and spring fourth and fifth-grade student ERAS composite scores assigned to Reader’s Workshop model classrooms.

**H10.** There is a difference in students’ attitudes about reading between fall and spring fourth and fifth-grade student ERAS composite scores assigned to basal-centered model classrooms.
**H11.** There is a difference between students’ attitudes about reading between fourth and fifth-grade student fall ERAS composite scores before assignment to Reader’s Workshop model or basal-centered model classrooms.

**H12.** There is a difference between students’ attitudes about reading between fourth and fifth-grade student spring ERAS composite scores using Reader’s Workshop model or basal-centered model.

The two-sample *t* test method was used to determine if there was a difference between fall and spring ERAS scores for Reader’s Workshop to address H9 and for basal to address H10. The results of the two-sample *t* test for Reader’s Workshop ERAS scores indicated a statistically significant change in the two values, *t* = 2.81, *df* = 1255, *p* = 0.00. The sample mean for fall (*M* = 61.79, *SD* = 11.47) was greater than the sample mean for spring (*M* = 54.49, *SD* = 11.80). H9 was supported. The results of the two sample *t* test for basal ERAS scores indicated a statistically significant change in the two values, *t* = 8.39, *df* = 877, *p* = 0.00. The sample mean for fall (*M* = 57.22, *SD* = 10.94) was greater than the sample mean for spring (*M* = 50.28, *SD* = 12.89). H10 was supported.

To address H11 the two-sample *t* test was applied to evaluate the fall ERAS score mean differences for each instructional method. The results of the two-sample *t* test for the fall ERAS scores indicated a statistically significant difference between the two values, *t* = 7.51, *df* = 1408, *p* = 0.00. The sample mean for Reader’s Workshop (*M* = 61.79, *SD* = 11.47) was greater than the sample mean for basal-centered (*M* = 57.22, *SD* = 10.94). H11 was supported.

The two-sample *t* test was used to address H12 to evaluate the spring ERAS score mean differences for each instructional method. The results of the two-sample *t* test for
the spring ERAS scores indicated a statistically significant difference between the two values, $t = 4.21$, $df = 724$, $p = 0.00$. The sample mean for Reader’s Workshop ($M = 54.49$, $SD = 11.80$) was greater than the sample mean for basal ($M = 50.28$, $SD = 12.89$).

H12 was supported.

Table 5

*Summary $t$ Test Results for Research Question 3 for all Hypotheses, ERAS Composite Scores*

<table>
<thead>
<tr>
<th>H#</th>
<th>Comparison</th>
<th>Mean $D$</th>
<th>$t$-Test</th>
<th>df</th>
<th>$p$</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>H9</td>
<td>Fall to Spring Workshop</td>
<td>7.30</td>
<td>10.56</td>
<td>1255</td>
<td>0.00</td>
<td>y</td>
</tr>
<tr>
<td>H10</td>
<td>Fall to Spring Basal</td>
<td>6.93</td>
<td>8.39</td>
<td>877</td>
<td>0.00</td>
<td>y</td>
</tr>
<tr>
<td>H11</td>
<td>Fall Workshop v. Basal</td>
<td>4.58</td>
<td>7.51</td>
<td>1408</td>
<td>0.00</td>
<td>y</td>
</tr>
<tr>
<td>H12</td>
<td>Spring Workshop v. Basal</td>
<td>4.21</td>
<td>4.56</td>
<td>724</td>
<td>0.00</td>
<td>y</td>
</tr>
</tbody>
</table>

*Note:* Significant when $p = <0.05$.

**Summary**

Chapter four included a summary of the statistical testing and analysis results.

Two-sample $t$ tests were conducted for the eight hypotheses under RQ1 and RQ2 to determine to what extent a difference exists in reading achievement between Reader’s Workshop and basal-centered reading instruction classrooms, as measured by STAR NCE scores. A statistically significant difference was found between the fall and spring Reader’s Workshop STAR NCE scores, however the scores went down from fall to spring, indicating students did not reach the expected level of growth. A statistically significant difference was also found after comparing the mean scores for below grade-level students fall and spring scores in Reader’s Workshop classrooms. The below grade-level scores for students in basal-centered classrooms were also compared from fall to spring but a statistically significant difference was not found. One hypothesis was supported and seven hypotheses were not supported.
Two-sample \( t \) tests were conducted for the four hypotheses under RQ3 to determine to what extent a difference exists in students’ attitudes about reading between Reader’s Workshop and basal-centered reading instruction classrooms, as measured by the composite scores of the ERAS. Although a statistically significant difference was found between the fall and spring ERAS composite scores of both instructional models, the mean scores went down from fall to spring indicating an overall decline in students’ attitudes about reading. There was a statistically significant difference between the Reader’s Workshop and basal-centered fall ERAS composite scores for fall with the Workshop group starting off the school year with higher attitude composite scores. This result was mirrored in the spring, as a statistically significant difference was also found between the Reader’s Workshop and basal ERAS composite spring scores. All four of the hypotheses were supported, however the scores went down. Chapter five includes a summary of the study, overview of the problem, purpose statement research questions, review of the methodology, major findings, findings related to the literature, conclusions, implications for action, and recommendations for future research.
Chapter Five

Interpretation and Recommendations

Students in the United States continue to struggle to reach a level of proficiency in reading (NAEP, 2013). Though educators agree that reading proficiency is vital to students’ overall success, various theories and contradicting research exist as to the best reading instructional model that should be used to help students reach this critical goal. The purpose of this study was to determine the impact of a Reader’s Workshop model and traditional basal model on reading achievement scores, as measured by the STAR NCE, and attitudes about reading, as measured by the composite score of the ERAS, of fourth and fifth-grade students. The researcher also examined the impact of a Reader’s Workshop model and traditional basal model on below grade-level fourth and fifth grade students. This chapter includes a summary of the study, overview of the problem, purpose statement, research questions and review of the methodology. Chapter five also presents the major findings of the study and how they relate to the literature. Finally, this chapter includes implications for action, recommendations for future research, and concluding remarks.

Study Summary

This study compared the impact of a Reader’s Workshop model and traditional basal model on the reading achievement scores of fourth and fifth-grade students. The study compared the impact of a Reader’s Workshop model and traditional basal model on the reading achievement scores of below grade-level students in fourth and fifth grade. The study also compared the impact of both the Reader’s Workshop and basal-centered model on the attitudes about reading of fourth and fifth-grade students.
Overview of the problem. Reading education continues to be a priority topic for educators. Even though over 100,000 research studies have been conducted over the past fifty years related to reading, the truth is that American students are still struggling to reach a level of reading proficiency (NICHD, 2000). The NAEP reported in 2013 that a staggering 80% of low-income fourth grade students were not proficient readers with two-thirds of the total population of assessed fourth-grade students reading below the proficient level. The importance of reading in light of these discouraging numbers warrants further study into the models of reading instruction used in American schools. Reader’s Workshop and the traditional basal are two models of reading instruction that are widely used (Dewitz & Jones, 2013).

Purpose statement and research questions. The purpose of this study was to examine the Reader’s Workshop model of reading instruction and it’s impact on student achievement and attitudes about reading, as compared to the traditional basal-centered model.

Review of the methodology. A quasi-experimental research design was used to conduct a quantitative study to determine the extent of differences in reading achievement and attitudes about reading between a Reader’s Workshop model and a basal-centered model of reading instruction. The population for this study was fourth and fifth-grade students in the Anytown School District during the 2012-2013 school year. The sample included fourth and fifth grade students who were enrolled in the Anytown School District in the fall of 2012 and who completed the STAR Reading Assessment and ERAS during the fall testing window set by the district. To test the hypotheses, two-sample t tests of the means were conducted, addressing the three research questions.
Major findings. Though this study sought to compare the impact the Reader’s Workshop model and a basal-centered model of instruction had on reading achievement, a statistically significant difference in reading achievement between fall and spring Reader’s Workshop STAR NCE scores was not evident. The basal-centered group yielded similar results. The mean NCE scores did not show growth from fall to spring and a statistically significant difference was not evident. With regard to below grade-level students, the fifth hypothesis stated that the difference in below grade-level fourth and fifth-grade students would be affected by the Reader’s Workshop model of instruction. The test revealed a statistically significant difference in reading achievement scores from fall to spring. Unlike the total workshop sample population, statistically significant growth was evident in the below grade-level group with a 17% increase in the mean STAR NCE scores. In contrast, though the change in mean NCE scores for the below grade-level students who experienced the basal-centered instructional model increased by 10%, the test results did not reveal a statistically significant difference. In addition to reading achievement, the results of the study also found a statistically significant change in composite ERAS scores for both instructional groups. The mean ERAS composite score for the Reader’s Workshop and basal-centered both went down from fall to spring and was negatively statistically significant.

Findings Related to the Literature

The researcher conducted a review of literature related to reading instruction and two instructional models, a Reader’s Workshop model and the basal-centered model. Literature on students’ motivation and attitudes about reading were also reviewed. Though literature exists on the Reader’s Workshop model, the results of the effectiveness
of the model with regard to reading achievement were conflicting (Bitner, 1992; Hewitt et al., 1996; Mitev, 1994 Swift, 1993).

In 1992, Bitner compared the Reader’s Workshop model with the basal model of reading instruction, using the Gates-MacGinitie Reading Test as the achievement measure. Eighth-grade students participated in the study and were given the posttest after 90 days of instruction. The difference between the Reader’s Workshop and basal-centered groups were not statistically significant.

Mitev (1994) examined fourth-grade students to compare the impact of the Reader’s Workshop and basal-centered models over the course of a school year. The Stanford Achievement Test was used as the achievement measure and did not yield a statistically significant difference between the two models.

Contrary to the current study and the findings of Bitner (1992) and Mitev (1994), Swift (1993) found that the Reader’s Workshop model made a statistically significant impact on reading achievement, as measured by the Gates-MacGinitie test. Swift compared the impact of the Reader’s Workshop and the basal model on sixth-grade students. One unique aspect of Swift’s study was that students were placed in two groups, basal or workshop, for first semester and then switched for the second semester. Reading achievement growth was assessed at the beginning of the school year, after semester one, and then again after semester two and the results were compared. Regardless of the time of year the Reader’s Workshop model was experienced, the mean improvement was statistically significant in favor of the workshop model.

Hewitt et al. (1996) examined the impact of the Reader’s Workshop model on first, second, and third grade students identified as struggling readers from September to
January. Though the study did not compare the impact of Reader’s Workshop and basal-centered instruction, the students did demonstrate growth in decoding skills and reading comprehension as evident in oral reading samples and skill checklists. The current study also supported Reader’s Workshop as an effective instructional model for readers identified as struggling, or below grade-level. The below grade-level fourth and fifth-grade students demonstrated statistically significant growth after fall and spring mean NCE scores were compared.

Much research has been done to correlate student motivation and attitudes with reading achievement (Baker & Wigfield, 1999; Guthrie & Wigfield, 2000; Guthrie et al., 2012; Wigfield et al., 2004). Guthrie and Humenick (2004) conducted a meta-analysis of 22 studies to determine the total effect size of various factors on reading motivation. Student self-selection of reading materials was found to be highly correlated to reading motivation. The total effect size was 0.95. Though an important aspect of the Reader’s Workshop model of reading instruction is student self-selection of reading materials, the current study did not support the findings of Guthrie and Humenick. The change in mean composite ERAS scores for the Workshop group from fall to spring was statistically significant though the mean scores went down, indicating a regression in students’ attitudes about reading.

Conclusions

This section includes implications to assist educational leaders assess the best instructional model to teach reading to intermediate students. The implications of this study could also be used for identifying components of a reading instructional model that are most effective for below grade-level readers. As a result of the findings,
recommendations for further research are also presented. This chapter ends with concluding remarks.

**Implications for action.** The findings of this study have implications for district leadership seeking to make decisions regarding reading instructional models and curriculum resources, as well as classroom teachers seeking to meet the diverse needs of students. The data from the current study reveals that despite differing components and formats, the Reader’s Workshop model and basal-centered model of reading instruction yield comparable reading achievement results. Though both models are widely used, neither model made a statistically significant impact on reading achievement. In fact, the mean NCE scores went down from fall to spring in the total population. It is important that district leaders and classroom teachers do further research to determine why students are not making growth using either model. Instead of seeking to find a perfect instructional model for these grades, it is important for district leadership to identify and communicate effective components of reading instruction. Each component of both models should be studied to determine what supports reading growth and what does not.

The Reader’s Workshop model did, however, have a significant impact on the reading achievement scores of below grade-level readers demonstrated by the statistically significant change in achievement scores. This indicates a need for educational leaders to consider the unique needs of struggling readers when making district-wide decisions on reading instructional models, instead of only looking at the impact on the total population. If not examined separately, the impact of an instructional model on struggling readers may be overlooked. The Reader’s Workshop model of reading
instruction positively impacted struggling readers in the intermediate grades in the current study.

The current study also examined the impact of the Reader’s Workshop model and basal-centered model on students’ attitudes about reading. The results were statistically significant for both models but the mean composite ERAS scores decreased from fall to spring indicating the students did not demonstrate the expected growth. Although the Reader’s Workshop model includes more student choice and self-selection of reading materials, it did not positively impact the students’ attitudes about reading, as measured by the ERAS. The implications of the decrease in ERAS scores, regardless of reading model, indicates additional components are necessary to effectively engage students and, in turn, improve attitudes about reading. Teachers who seek to engage elementary students in active reading must work to develop students’ extrinsic motivation through reading incentives and recognition as well as their intrinsic motivation by helping them cultivate enjoyment in reading. More research needs to be done concerning the correlation between teacher-student relationships and student reading engagement and positive attitudes about reading.

**Recommendations for future research.** The researcher in the current study examined the impact of a Reader’s Workshop model on reading achievement and attitudes about reading as compared to the basal-centered model. Below are recommendations for future research on reading instructional strategies and student attitudes and motivation.

1. It is recommended that future researchers replicate the current study examining the impact of Reader’s Workshop and basal-centered models
over a minimum of a two-year period. Doing so may bring to light the cumulative effects of this instructional model on both reading achievement and attitudes about reading.

2. It is recommended that future researchers replicate the current study to determine if the Reader’s Workshop and basal-centered models resonate better with one gender. It is possible that one model is more effective at positively impacting reading achievement and or attitudes about reading for one gender over the other.

3. It is recommended that future researchers replicate the current study with the addition of studying the components of the models to determine which instructional components have the most impact on achievement and attitudes.

4. It is recommended that future researchers replicate the current study but only include teachers who have two years of more of experience using the Reader’s Workshop model. The current study utilized teachers who had received training but were in their first year of implementation. More experience with the model could impact the effectiveness of the teacher and the effect on student achievement.

5. It is recommended that future researchers replicate the current study but examine the impact of the Reader’s Workshop and basal-centered models on fourth and fifth grade separately. It is possible a difference exists between the impacts of the Reader’s Workshop model on the two grade levels.
6. It is recommended that future researchers replicate the current study utilizing an achievement measure different from the STAR Reading Assessment.

7. It is recommended that future researchers replicate the current study including younger students in second and third grade. It is possible the Reader’s Workshop model could have a positive impact on reading attitudes before students enter the intermediate grades.

8. It is recommended that future researchers replicate the current study and examine students’ attitudes about reading using the recreational and academic subscores of the ERAS. This will provide further information as to the impact instructional model has on the attitudes of each type of reading.

Concluding remarks. Though much research has been done on the topic of reading and reading instruction, the achievement data of American students continues to prove it is a topic worthy of careful study and examination. Reading instructional models are important to study because they guide how educational time is spent and are evident of school districts’ beliefs about learning. States will continue to set rigorous standards for reading achievement and school districts will continue to spend money on educational resources to try to meet those standards. This research suggests there is a need for more research to be done on the effect the instructional model has on reading achievement. It also reveals a need for decision-makers to dig deeper into the specific components of quality reading instruction that engage and motivate readers.
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Appendices
Appendix A: Request for Information from Anytown School District
August 5, 2015

Dear Dr. [Name]

I respectfully submit this letter to officially request permission from the [School District name] to conduct the current proposed research study as a partial fulfillment for my doctoral degree in Educational Leadership from Baker University. Only archival data will be used for this study, therefore no direct contact will be made with students.

The purpose of this study is to determine the effect of the Reader’s Workshop model of instruction on intermediate students’ achievement scores as compared to a basal reading model. Archival STAR data from the 2012-2013 and 2013-2014 school years will be used. Names of students and teachers will be removed from all data to ensure confidentiality and privacy.

I request your permission to conduct this study as proposed. It is my intent to complete my dissertation by February 29, 2016.

Sincerely,

[Signature]

[Name]

District Representative Granting Study Permission

Position: [Title]
Appendix B: Proposal for Research to Baker University
IRB Request
Proposal for Research
Submitted to the Baker University Institutional Review Board

I. Research Investigator(s) (Students must list faculty sponsor first)

Department(s)       School of Education Graduate Department

Name                  Signature        Major Advisor
1. Dr. Verneda Edwards  \[Signature\]         
2. Dr. Phillip Messner        \[Signature\]       Research Analyst
3. Dr. Sharon Zoellner    \[Signature\]         University Committee Member
4. Dr. Beth Savidge      \[Signature\]         External Committee Member

Principal Investigator: Jennifer Timlick
Phone:                  
Email:                  
Mailing address:       

Faculty sponsor:       
Phone:                  
Email:                  

Expected Category of Review:  \[X\] Exempt  ___ Expedited  ___ Full

II: Protocol: (Type the title of your study)

The Effect of a Reader's Workshop Model on Intermediate Students' Reading Achievement and Attitudes about Reading
Summary

In a sentence or two, please describe the background and purpose of the research. Students continue to struggle to read proficiently, many of which are falling behind by third grade. It is important for school districts to carefully re-examine the instructional model being used to teach reading. The purpose of the current study is to determine the impact of the Reader’s Workshop model on reading achievement and students’ attitudes about reading, as compared to a basal-centered instructional model. The study will expand the small body of research on the Reader’s Workshop model and its impact on reading achievement.

Briefly describe each condition or manipulation to be included within the study. There is no manipulation in this study.

What measures or observations will be taken in the study? If any questionnaire or other instruments are used, provide a brief description and attach a copy. Archival data will be used for the current study. The archival data used from the school district includes Renaissance Learning’s STAR Reading Assessment data to measure reading achievement. Elementary Reading Attitudes Survey data will also be retrieved from the school district as archival data.

Will the subjects encounter the risk of psychological, social, physical or legal risk? If so, please describe the nature of the risk and any measures designed to mitigate that risk. The subjects will not encounter psychological, social, or legal risks.

Will any stress to subjects be involved? If so, please describe. The subjects will not encounter any stress.

Will the subjects be deceived or misled in any way? If so, include an outline or script of the debriefing. None of the participants will be deceived or mislead in this study.

Will there be a request for information which subjects might consider to be personal or sensitive? If so, please include a description. Subjects will not be asked to volunteer any sensitive or personal information.
Will the subjects be presented with materials which might be considered to be offensive, threatening, or degrading? If so, please describe.
The subjects will not be contacted as part of this study.

Approximately how much time will be demanded of each subject?
The study will not ask for any time from the subjects.

Who will be the subjects in this study? How will they be solicited or contacted?
Provide an outline or script of the information which will be provided to subjects prior to their volunteering to participate. Include a copy of any written solicitation as well as an outline of any oral solicitation.
All data will be archived. Therefore, no subjects will be solicited or contacted for this study.

What steps will be taken to insure that each subject’s participation is voluntary?
What if any inducements will be offered to the subjects for their participation?
No solicitation or participation will take place.

How will you insure that the subjects give their consent prior to participating? Will a written consent form be used? If so, include the form. If not, explain why not.
No consent is required for this study. All data is archived so consent form are not needed.

Will any aspect of the data be made a part of any permanent record that can be identified with the subject? If so, please explain the necessity.
No aspect of the data will be identified with any subjects.

Will the fact that a subject did or did not participate in a specific experiment or study be made part of any permanent record available to a supervisor, teacher or employer? If so, explain.
All data is archived. Subject participation is not necessary.
What steps will be taken to insure the confidentiality of the data? Where will it be stored? How long will it be stored? What will be done with it after the study is completed?
Data generated for this study will not be used for any other purposes. No names or other identification will be available to identify the subjects in the study. The data will be stored on a password-protected Google cloud account. The data will be stored for one year. Afterwards, the data will be destroyed.

If there are any risks involved in the study, are there any offsetting benefits that might accrue to either the subjects or society?
There is not a risk to the subjects involved in this study.

Will any data from files or archival data be used? If so, please describe.
Archival data will be provided by the school district in the study. Archival data will include fourth and fifth grade STAR Reading Assessment scores from the fall 2012 testing window and the spring 2013 testing window. Archival data will also include ERAS survey data from fourth and fifth grade students from the fall 2012 survey window and the spring 2013 survey window.
Appendix C: IRB Letter of Approval
December 3, 2015

Dear Jennifer Timlick and Dr. Edwards,

The Baker University IRB has reviewed your research project application and approved this project under Exempt Status Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

Please be aware of the following:

1. Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
2. Notify the IRB about any new investigators not named in original application.
3. When signed consent documents are required, the primary investigator must retain the signed consent documents of the research activity.
4. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.
5. If the results of the research are used to prepare papers for publication or oral presentation at professional conferences, manuscripts or abstracts are requested for IRB as part of the project record.

Please inform this Committee or myself when this project is terminated or completed. As noted above, you must also provide IRB with an annual status report and receive approval for maintaining your status. If you have any questions, please contact me at CTodden@BakerU.edu or 785.594.8440.

Sincerely,

Chris Todden EdD
Chair, Baker University IRB

Baker University IRB Committee
  Verneda Edwards EdD
  Sara Crump PhD
  Erin Morris PhD
  Scott Crenshaw