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The Impact of the C. L. E. A. R. (Challenge Leading to Engagement, Achievement, and Results) Curriculum Model on Reading Achievement at the Third Grade Level

Robin Gale Puryear
Old Dominion University

THE IMPACT OF THE C. L. E. A. R. (CHALLENGE LEADING TO ENGAGEMENT, ACHIEVEMENT, AND RESULTS) CURRICULUM MODEL ON READING ACHIEVEMENT AT THE THIRD GRADE LEVEL

by
Robin Gale Puryear
B. A. May 1991, Virginia Polytechnic Institute and State University
M. S. December 1995, Old Dominion University
M. S. August 2006, Old Dominion University
Ed. S. July 2009, Virginia Polytechnic Institute and State University

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Approved by:

Charlene Pleener (Chair)

Linda Bol (Member)

Thomas Bean (Member)

ABSTRACT

THE IMPACT OF THE C. L. E. A. R. (CHALLENGE LEADING TO ENGAGEMENT, ACHIEVEMENT, AND RESULTS) CURRICULUM MODEL ON READING ACHIEVEMENT AT THE THIRD GRADE LEVEL

Robin Gale Puryear
Old Dominion University, 2015
Dissertation Chair: Dr. Charlene Fleener

The purpose of this mixed-methods study, employing a quantitative component, utilizing a quasi-experimental design, and a qualitative component, utilizing a post-positivist research paradigm and phenomenology research tradition, was to determine the potential impact of the C. L. E. A. R. (Challenge Leading to Engagement, Achievement, and Results) Curriculum Model on reading achievement at the third grade level. Additionally, the purpose of this study was to better understand both students and teachers perceptions of the C. L. E. A. R. Curriculum Model. Results indicated that there were no statistically significant findings between treatment group students and control group students, following an Analysis of Covariance comparing the treatment group to the control group in terms of post-SRI scores using Pre-SRI scores as the covariate. Treatment group students outperformed control group students on the standards-referenced benchmark, by item. Data attained from student surveys and teacher interview protocols of treatment group participants suggest improvement in skills pertinent to non-fiction reading achievement. Data also suggests an increased interest in reading non-fiction texts. Implications for future research are discussed. A review of pertinent literature is presented.

Dissertation Committee Members: Dr. Linda Bol
Dr. Thomas Bean

DEDICATION

I dedicate the culmination of my doctoral studies to my grandfather, whose love has carried me throughout my life. To my mother, who always told me and really believed that I could accomplish anything I wanted to accomplish. To my husband, for his unwavering support. To my daughter, for her encouragement.

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There are many people who have contributed to the successful completion of this dissertation. I extend many, many thanks to my committee members for their patience and hours of guidance on my research and editing of this manuscript.

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CHAPTER 1

INTRODUCTION

The National Reading Panel (NPR), charged by the director of the National Institute of Child Health and Human Development (NICHD), in collaboration with the secretary of education, conducted an analysis of the research literature on reading and its implications for reading instruction. The panel selected to conduct the assessment was comprised of scientists, faculty from various colleges of education, teachers of reading, administrators, and parents. The panel first delineated a methodology for their research review, which focused only on "evidence-based analyses of the experimental and quasi-experimental research literature relevant to a set of selected topics judged to be of central importance in teaching children to read" (National Reading Panel, 2000, p. 1). Next, the panel decided to focus on researching "alphabetics, including phonemic awareness instruction and phonics instruction, fluency, comprehension, including vocabulary instruction, text comprehension instruction, teacher preparation and comprehension strategies instruction, teacher education and reading instruction, and computer technology and reading instruction" (p. 3).

The panel submitted its report to Congress in February of 1999. In its concluding remarks, the panel emphasized that "omissions of topics such as the effects of predictable and decodable text formats on beginning reading development, motivational factors in learning to read, and the effects of integrating reading and writing … are not to be interpreted as determinations of unimportance of ineffectiveness" (National Reading Panel, 2000, p. 19). While the panel conducted a thorough assessment of the research, which addressed a variety of approaches to teaching reading; and, while the panel utilized

selective, experimental and quasi-experimental research, the panel recognized its own omissions. Unacknowledged omissions of the National Reading Panel include the potential impact of higher-order thinking strategies and higher-level thinking questions on reading achievement.

Adhering to the report of the National Reading Panel, the No Child Left Behind Act (NCLB), "an extension of the original Elementary and Secondary Education Act of 1965" (Russo and Osborne, 2008, p. 17) was signed into law in 2002. This legislation was similar to the previous Individuals with Disabilities Education Act (IDEA), as it focused on individualized student advancement. However, it included components punitive to entire schools and entire school systems, such as the closing of schools that are unable to meet accreditation criteria. Based upon the report of the National Reading Panel, George W. Bush's No Child Left Behind Act of 2001 required that schools administer standardized assessments to students in grades 3-8. While many researchers, such as Gail E. Tompkins (2009), emphasize the importance of incorporating activities which "challenge students to use higher order thinking," (Tompkins, 2009, p. 254), teachers were often found to instead teach to the test, using test prep materials and drill, due to the punitive nature of the legislation. Just as the impact of higher-order thinking strategies and higher-level thinking questions on reading achievement is omitted from the report of the National Reading Panel, it was omitted from NCLB legislation as well.

Following the No Child Left Behind Act (NCLB) of 2001, the Individuals with Disabilities Act (IDEA) was reauthorized in 2004, and emphasized "prevention-focused instructional practices to be used in the regular education classroom" (Staff Development

for Educators, 2008, p. 4). This reauthorization of IDEA is often referred to as Response to Intervention (RtI) and includes Early Intervening Services (EIS), designed to reduce the number of students requiring special education services. CORE phonics is also referenced within the Five Essential Elements of Response to Intervention (RtI); however, the impact of higher-order thinking strategies and higher level thinking questions is omitted from this reauthorization of the Individuals with Disabilities Act.

An extensive study, of computer assisted tutoring in Success for All (SFA) focused on several aspects of reading emphasized in the report of the National Reading Panel, including word identification, word attack, oral reading fluency, and passage comprehension (Chambers, Abrami, Tucker, Slavin, Madden, Cheung, & Gifford, 2008). Researchers found that results were positive for schools rated as "fully implementing" for three of the group independent measures (Woodcock Letter-Word Identification, Woodcock Word Attack, and GORT fluency); however, no significant differences were indicated for GORT comprehension. Though this study was well-aligned with the findings of the National Reading Panel, students were not found to perform better on passage comprehension, as previously hypothesized. Further, this study did not supplement omissions of the National Reading Panel.

However, studies conducted by Reis, renown in the field of gifted education, have begun to supplement omissions of the National Reading Panel. A pilot study, conducted by Reis in 2007, demonstrated "the positive effects of independent reading on oral reading fluency, particularly given the enrichment approach as compared to the remedial and test-preparation work that control group students completed" (Reis, 2007, p.

19). This same study, comprised of participants, grades 3-6, also demonstrated "statistically significant treatment effects in students' attitudes toward reading favoring the SEM-R (the School-wide Enrichment Model – Reading) treatment group" (p. 19).

Encouraged by the results of her pilot study, Reis (2010) conducted an expanded study, increasing her sample size. Results of Reis's expanded study indicated that the differences in reading fluency in two schools significantly favored SEM-R; and, significant differences favoring the SEM-R were found in reading comprehension among the high-poverty urban schools. Essentially, this demonstrated that differentiated instruction, provided through an enrichment approach to teaching reading was just as effective or more effective compared to the traditional basal approach to teaching reading. Reis's study began to supplement omissions of the National Reading Panel.

Purpose

The objective of this mixed- methods, quasi-experimental study was to determine the impact of the implementation of higher-order thinking strategies and higher-level thinking questions, through participation in the C. L. E. A. R. (Challenge Leading to Engagement, Achievement and Results) Curriculum Model, on reading achievement at the third grade level. While the C. L. E. A. R. Curriculum Model was developed at the National Research Center on the Gifted and Talented, located at the University of Virginia, and is designed to be utilized with students identified as academically gifted, the researcher believes the curriculum model has the potential to positively impact students not receiving services in a gifted cluster setting or inclusion setting, at the third grade level. In this study, students in the treatment group were engaged in higher-order

thinking strategies and higher –level thinking questions, through participation in the C. L. E. A. R. Curriculum Model, currently used with students identified as academically gifted, in the school division where the study took place. Focused on the concept, exploration, the C. L. E. A. R. Curriculum Model "incorporates elements from three research-based curriculum models: Differentiation, Depth and Complexity, and the School-wide Enrichment Model by Carol Tomlinson, Sandy Kaplan, and Joseph Renzulli respectively" (National Research Center on the Gifted and Talented + University of Virginia, 2008-2009, page 9).

This study was guided by the following research questions:

1. What is the impact of the C.L.E.A.R. Curriculum Model on the reading achievement of students not receiving services in a gifted cluster setting or inclusion setting, at the third grade level?
2. What are students' perceptions of the C. L. E. A. R. Curriculum Model?
3. What are teachers' perceptions of the C. L. E. A. R. Curriculum Model?

Significance of the Study

Following the report of the National Reading Panel (NPR), No Child Left Behind (NCLB) and Response to Intervention (RtI) legislation, and influential studies, such as the Success for All (SFA) study, all of which are based upon the report of the National Reading Panel, students' standardized test scores, particularly in the area of reading comprehension, continue to be a concern for most school divisions. This study further supplements omissions of the National Reading Panel.

Overview of Methodology

The mid-Atlantic metropolitan school division in which this study took place is comprised of twenty-eight schools, designated as primary, elementary, or intermediate, ten middle schools, and seven high schools. The three specific schools in which this study took place were designated as elementary, with grades ranging from kindergarten through fifth grade. The three schools ranged in socioeconomic status rankings; and, the three schools ranged in state accreditation ratings, with school two rated as accredited and schools one and three accredited with warning.

In this mixed-methods, quasi-experimental study, the researcher employed a convenience sample of schools, and there was a treatment group and a comparison group within each school. The treatment group was comprised of three third grade classes, consisting of approximately 10-24 students per class (n = 51) in three diverse schools, varying in socio-economic status and accreditation status, within the researcher's respective school division, wherein all participants were participating in the C. L. E. A. R. Curriculum Model. These students' reading achievement scores were compared to a control group of three third grade classes, consisting of approximately 10-24 students per class (n = 42), in the same three diverse schools within the researcher's respective school division, wherein participants had not been participating in the C. L. E. A. R. Curriculum Model. Neither the students in the treatment group or the control group were receiving services in a gifted cluster setting or inclusion setting, at the third grade level. Similar to the study conducted by Chambers (2008), regarding Success for All, the current study incorporated a one-phase design inherent in the C. L. E. A. R. Curriculum Model

designed by the National Research Center on the Gifted and Talented, through the University of Virginia.

Theoretical reading frameworks, which underpin the study, include Concept-Oriented Reading Instruction (CORI), the Question Answer Relationships (QAR) Framework, and Anticipatory Reading Guides (Ortlieb, 2013). Concept-Oriented Reading Instruction was designed to increase students' reading comprehension through increasing students' motivation to read, emphasizing relevance, choice, and self-efficacy (Guthrie, McRae, & Klaudia, 2007). The Question Answer Relationships Framework fosters text-to-self, text-to-theme, and text-to-world connections, "gaining access to reading comprehension and higher level thinking with text" (Raphael & Au, 2005, p. 220). An Anticipatory Reading Guide is used at the beginning of the implementation of the C. L. E. A. R. Curriculum Model; and, use of anticipatory reading guides promotes higher levels of reading achievement (Ortlieb, 2013.

Definition of Key Terms

The knowledge of several terms is essential for understanding the purpose and methodology of this study.

Differentiation "is applied to design various learning opportunities for students who differ in their readiness levels (what they know, understand, and can do in relation to the content), their interests and their learning profiles" (National Center on the Gifted and Talented + University of Virginia, 2008, pages 9-10).

Depth and Complexity "is used to build layers of challenge and meaning onto standards-based learning opportunities," incorporating "elements of depth (big ideas; language of

the discipline; details; patterns; rules);" and complexity (multiple perspectives; interdisciplinary connections; unanswered questions; ethical issues, changes over time)" (National Center on the Gifted and Talented + University of Virginia, 2008, pages 9-10). *The School-wide Enrichment Model*, which "emphasizes opportunities for students to work with the tools and methods of practicing professionals in a field, and for students to engage in long-term, 'real-world' projects in an area of interest" (National Research Center on the Gifted and Talented + University of Virginia, 2008-2009, pages 9-10).

Summary

While much emphasis has been placed on improving reading achievement through studies, including the landmark study conducted by The National Reading Panel (2000), and legislation, including No Child Left Behind (NCLB) (2001) and Response to Intervention (RtI) (2004), concerns regarding students' reading achievement persists. Though most of the studies conducted and much of the legislation passed has emphasized alphabetics, including phonemic awareness instruction and phonics instruction, researchers investigating the potential impact of The School-wide Enrichment Model in Reading (SEM-R), have focused on the impact of higher-order thinking strategies and higher-level thinking questions on reading achievement (Reis, 2007, 2010). Through implementation of The C. L. E. A. R. Curriculum Model, developed at the National Center on the gifted and Talented, located at the University of Virginia, statistically significant benefits for students identified as academically gifted have been observed. The researcher of this study sought to determine the impact of The C. L. E. A. R.

Curriculum Model (2008) on the reading achievement of students not receiving services in a gifted cluster setting or inclusion setting, at the third grade level.

CHAPTER 2

LITERATURE REVIEW

Though children have been learning to read in the United States of America since the colonization of Jamestown in 1607, in the 21st century, only 51% of high school graduates meet the ACT's College Readiness Benchmark for Reading, indicating that these students are not prepared for college coursework (ACT, 2006). Further, according to ACT, our future's workforce will be poorly prepared to meet the demands of a knowledge-intensive workplace and unable to capitalize upon opportunities available in our economy (The Business-Higher Education Forum, as cited in ACT, 2006). According to ACT, if children aren't afforded systematic access to experiences created to foster background knowledge and vocabulary development, as well as to foster the capability of detecting and comprehending relationships among verbal concepts in order to utilize strategies for the purpose of comprehending and retaining material, reading failure will continue, regardless of advanced word recognition skills (Lyon, as cited in ACT, 2006). This often occurs due to the lack of emphasis on skills developed through higher-level, critical reading (Patterson, Happel, and Lyons, as cited in ACT, 2006).

While recommendations of the landmark study conducted by the National Reading Panel (NPR), emphasizes alphabetics, including phonemic awareness instruction, phonics instruction, fluency, and comprehension, emphasis on higher-order thinking strategies and higher-level thinking questions is omitted. Additionally, legislation, based primarily upon the report of the National Reading Panel, including No Child Left Behind (NCLB), signed into law in 2002, and Response to Intervention (RtI)

(2004), a reauthorization of the Individuals with Disabilities Act, continues to focus, essentially, on word recognition skills, rather than on the higher-level skills essential for critical reading. According to ACT, it is necessary that students be able to comprehend, analyze, and synthesize texts of complexity in all subject areas, whether in college or the workplace (ACT, 2006, p. 24), as "what matters most in reading achievement is the ability to comprehend complex texts" (ACT, 2006, p. 28). This belief is further supported by L'Allier, Elish-Piper, and Bean (2010), who emphasize the need for "higher levels of thinking," (p. 551), as well as Bean and Isler (2008), who recommend "increasing the numbers of higher-level thinking questions" (p. 2).

Recent studies have expanded beyond the development of word recognition skills, incorporating "(1) broad exposure to areas in which students might have interests, such as architecture and history; (2) training in areas such as critical thinking, problem solving, and research methods; and (3) opportunities to pursue self-selected topics of interest" (Reis, 2007, p. 8). While these studies begin to supplement the report of the National Reading Panel and recent legislation, the potential impact of the implementation of higher-order thinking strategies and higher-level thinking questions on reading achievement has yet to be determined.

The National Reading Panel

One of the most influential studies in the 21st Century has been *TEACHING CHILDREN TO READ: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction*, conducted by the National Reading Panel (NPR). This panel was charged by the director of the National

Institute of Child Health and Human Development (NICHD), in collaboration with the Secretary of Education, following a directive from Congress (1997), to "identify effective instructional reading approaches and determine their readiness for application in the classroom" (National Reading Panel, 2000, p. 1). Comprised of 14 people, including scientists, renown in the field of reading research, faculty from various colleges of education, teachers of reading, administrators, and parents, this panel submitted its report to Congress in February of 1999.

Determination of Topics, Guiding Questions, and Methodology

To begin, the panel delineated a methodology for their research review, focusing on "evidence-based analyses of the experimental and quasi-experimental research literature relevant to a set of selected topics judged to be of central importance in teaching children to read" (National Reading Panel, 2000, p. 1), which began with 100,000 studies published since 1966 and 15,000 published prior to 1966. This panel then categorized the research into over-arching topics important to the process of learning to read, including "alphabetics, fluency, and comprehension" (National Reading Panel, 2000, p. 2). They then talked with their stakeholders, including teachers, parents, students, and policy-makers, in geographically-based public hearings, regarding their needs and their understanding of available research. Following these public hearings, the panel received input from additional stakeholders, including citizens, teachers, parents, students, faculty from a variety of colleges and universities, experts on educational policy, and scientists. Throughout the panel's interactions with these stakeholders, several over-arching themes were expressed:

- The importance of the role of parents and other concerned individuals, especially in providing children with early language and literacy experiences that foster reading development;
- The importance of early identification and intervention for all children at risk for failure;
- The importance of phonemic awareness, phonics, and good literature in reading instruction and the need to develop a clear understanding of how best to integrate different reading approaches to enhance the effectiveness of instruction for all students;
- The need for clear, objective, and scientifically based information on the effectiveness of different types of reading instruction and the need to have such research inform policy and practice;
- The importance of applying the highest standards of scientific evidence to the research review process so that conclusions and determinations are based on findings obtained from experimental studies characterized by methodological rigor with demonstrated reliability, validity, replicability, and applicability; the importance of the role of teachers, their professional development, and their interactions and collaborations with researchers, which should be recognized and encouraged; and
- The importance of widely disseminating the information that is developed by the Panel (National Reading Panel, 2000, p. 2).

The panel decided to focus on researching "alphabetics, including phonemic awareness instruction and phonics instruction, fluency, comprehension, including vocabulary instruction, text comprehension instruction, teacher preparation and comprehension strategies instruction, teacher education and reading instruction, and computer technology and reading instruction" (National Reading Panel, 2000, p. 3) through seven guiding questions:

- Does instruction in phonemic awareness improve reading achievement? If so, how is this instruction best provided?
- Does phonics instruction improve reading achievement? If so, how is this instruction best provided?
- Does guided oral reading instruction improve reading achievement? If so, how is this instruction best provided?
- Does comprehension strategy instruction improve reading achievement? If so, how is this instruction best provided?

- Do programs that increase the amount of children's independent reading improve reading achievement and motivation? If so, how is this instruction best provided?
- Does teacher education influence how effective teachers are at teaching children to read? If so, how is this instruction best provided? (National Reading Panel, 2000, p. 3)

In order for the panel to consider including a particular study, the study had to meet select criteria. Selected studies had to have been published in a refereed journal in English, had to focus on the reading development of children (preschool to twelfth grade), and had to utilize an experimental or quasi-experimental design, control group method or multiple-baseline method. Studies meeting such methodological criteria were then subject to coding, including coding of the characteristics of those participating in the study, the transferability and effectiveness of interventions presented in the study, the fidelity of the methods of the study, and the quantitative and qualitative outcomes of the study (National Reading Panel, 2000).

Alphabetics, Including Phonemic Awareness Instruction and Phonics Instruction

In regards to alphabetics, focusing on phonemic awareness instruction, the panel reviewed 52 of 2,040 studies, which met the criteria for methodology, from which 96 treatment groups and control groups were determined. Here, studies indicated that "teaching children to manipulate phonemes in words was highly effective under a variety of teaching conditions with a variety of learners across a range of grade and age levels and that teaching phonemic awareness to children significantly improves their reading more than instruction that lacks any attention to phonemic awareness" (National Reading Panel, 2000, p. 7). However, the panel also cautioned that phonemic awareness instruction is not a comprehensive reading program; rather, additional competencies are

essential in order that all children learn to read and write. Further, the panel expressed the numerous ways in which phonemic awareness can be taught and encouraged educators to research the methods that would best meet the needs of their respective populations. The panel emphasized that "motivation of both students and their teachers is a critical ingredient for success" and "research has not specifically focused on this" (p. 8).

In regards to alphabetics, focusing on phonics instruction, the panel reviewed 38 of 1,373 studies, which met the criteria for methodology, from which 66 treatment groups and control groups were determined. Here, studies indicated that phonics instruction "produces significant benefits for students in kindergarten through sixth grade and for children having difficulty learning to read" (National Reading Panel, 2000, p. 9). However, the panel also cautioned that programs that focus solely on letter-sound relationships, rather than on utilizing those relationships, are not likely to be effective (p. 10). Further, the panel expressed concern that while "some phonics programs showing large effect sizes require teachers to follow a set of scientific instruction provided by the publisher; while this may standardize the instructional sequence, it also may reduce teacher interest and motivation" (p. 10). Herein, a complete reading program should integrate phonics instruction, phonemic awareness, fluency, and comprehension, wherein children's reading abilities are not judged "solely on the basis of their phonics skills" (p. 11), and children's interest in books is not devalued due to their lack of accuracy when decoding.

In regards to fluency, the panel reviewed 16 of 364 studies, which met the criteria for methodology. The panel utilized 21 additional studies for qualitative purposes. Here,

the panel concluded that "guided repeated oral reading procedures that included guidance from teachers, peers, or parents had a significant and positive impact on word recognition, fluency, and comprehension across grade levels," with results "[applying] to all students – good readers as well as those experiencing reading difficulties" (National Reading Panel, 2000, p. 12). While hundreds of studies, correlational in nature, indicate that children's fluency, vocabulary, and comprehension improve when they read, these studies were not considered to imply causation.

Pertaining to comprehension, including vocabulary instruction and text comprehension instruction, 50 of 20,000 studies on vocabulary instruction and 205 of 481 studies on text comprehension instruction, which met the criteria for methodology, were reviewed by the panel. The panel identified seven categories of text comprehension instruction for improving comprehension, including "comprehension monitoring, cooperative learning, use of graphic and semantic organizers (including story maps), question answering, question generation, story structure, and summarization" (National Reading Panel, 2000, p. 15); and, in general, the evidence indicated that "teaching a combination of reading comprehension techniques is the most effective. When students use them appropriately, they assist in recall, question answering, question generation, and summarization of texts" (p. 15). Further, when evaluating teacher preparation and comprehension strategies instruction, the panel reviewed four of 635 studies and concluded that "teachers required instruction in explaining what they are teaching, modeling their thinking processes, encouraging student inquiry, and keeping students engaged" (p. 16).

In its concluding remarks, the panel emphasized that "omissions of topics such as the effects of predictable and decodable text formats on beginning reading development, motivational factors in learning to read, and the effects of integrating reading and writing … are not to be interpreted as determinations of unimportance or ineffectiveness" (National Reading Panel, 2000, p. 19). Hence, while the panel conducted a thorough assessment of the research regarding the effectiveness of a variety of approaches to teaching reading, utilizing selective experimental and quasi-experimental studies, the panel admittedly recognized some of its omissions.

No Child Left Behind (NCLB)

Following this influential, yet admittedly exclusionary study, conducted by the National Reading Panel, the No Child Left Behind Act (NCLB) was enacted, which increased the urgency of determining approaches to facilitate the development of academic language of all children (Tompkins, 2009). Signed into law in 2002, NCLB is "an extension of the original Elementary and Secondary Education Act of 1965" (Russo and Osborne, 2008, p. 17). This legislation targets the academic advancement of economically-disadvantaged pupils, emphasizing better instruction for English Language Learners and holding school divisions accountable through annual yearly progress goals, which demand that school systems utilize research-based, evidence-based teaching methods and hire "highly qualified" personnel (Russo and Osborne, 2008, p. 17). Similar to the previous Individuals with Disabilities Education Act (IDEA), NCLB targets individual students' advancements; however, dissimilar to IDEA, NCLB is most interested in advancements of entire schools, as well as entire school systems. In order

for schools to receive federal funding, states must demonstrate that their schools have achieved adequately yearly progress (AYP). Schools that do not make AYP for two or more consecutive years may lose federal funding, experience restaffing, or encounter closures (Vacca, Vacca, and Mraz, 2011). Due to such potentially punitive consequences, state level departments of education have increased their involvement in the development of curricula, and individual school systems have aligned their curriculum guides to the curricula developed by their respective state departments of education, often far-removed from individual schools and individual teachers (Glickman, Gordon, & Gordon, 2009).

The No Child Left Behind Act of 2001 is based upon the report of the National Reading Panel and requires that schools conduct system-wide standardized tests for students in grades 3-8 in order to monitor their advancements and hold schools accountable for their advancements. Due to this legislation, many school divisions have students focus only on grade-level standards and have their educators utilize basal reading programs, often scripted in nature, in order to ensure that students meet grade-level standards on such standardized tests (Tompkins, 2009). Hence, rather than engaging students in meaningful language arts activities, teachers frequently teach to the test. In these instances, the regular curricula is often replaced by worksheets, drill, and test prep materials (Glickman, Gordon, & Gordon, 2009). While many researchers, including Tompkins (2009), emphasize the importance of challenging students to utilize higher order thinking when listening, talking, reading, and writing, the impact of higher-

order thinking strategies and higher-level thinking questions on reading achievement at the elementary level is omitted from NCLB legislation.

Response to Intervention

Following the No Child Left Behind Act of 2001, the Individuals with Disabilities Act (IDEA) was reauthorized in 2004, incorporating an essential new component, the implementation of "prevention-focused instructional practices to be used in the regular education classroom" (Staff Development for Educators, 2008, p. 4). Referred to as Response to Intervention (RtI), this includes Early Intervening Services (EIS), which are intended to assist pupils not yet identified for special education services, who require additional support, academically or behaviorally, in the regular classroom. The goal of EIS is to reduce the number of students requiring special education services through the infusion of best practices in regular education classrooms, and districts are permitted to utilize fifteen percent of their funding for special education on "on-going professional development that enables teachers and other school staff to develop greater expertise in the delivery of scientifically based academic instruction and behavioral interventions" and "providing educational and behavioral evaluations, services, and supports" (p. 4). Within the Response to Intervention model, students receive research-based intervention and assessment, through "differentiated instructional strategies, expert-driven instruction, and a scientifically validated curriculum" (p. 4). However, to date, no specific Response to Intervention model is legally prescribed or detailed. Though, there are "eight non-negotiable essential components of RtI," including: "Evidence-based curriculum and instruction, Ongoing assessment, Collaborative teaming, Data-based decision-making,

Fidelity of implementation, Ongoing training and professional development, Community and family involvement, and Strong leadership" (Montana Office of Public Instruction, 2009, p. 4). These components are expected to be applied to every student within a multi-tiered model of instruction. Tier One is designed to meet the needs of all students; Tier Two, incorporating "strategic targeted instruction," is designed to meet the needs of some students; and Tier Three, incorporating intensive targeted instruction," is designed to meet the needs of few students (pp. 4-5).

Sixteen schools, within Virginia, piloted Response to Intervention during the 2008-2009 academic year. In classrooms implementing the Response to Intervention model, differentiated instruction, including standards-based, student-centered instruction and offerings of multiple venues through which students can demonstrate mastery of essential content and skills is expected. Additionally, "lesson plan formats, grade books, portfolios, and other recordkeeping systems" are expected to reflect such "responsive teaching practices," systematically monitoring students' rate of improvement (ROI) (Staff Development for Educators, 2008, p. 7). Further, the data derived from students' responses to interventions are expected to be utilized to evaluate the effectiveness of instructional interventions, provide a vision for future plans, and assess students' needs for more extensive support. While educators play a critical role in the implementation of Response to Intervention, administrators are expected to ensure that "time, personnel, and resources are used flexibly for maximum student benefit" (p. 6).

While CORE phonics is referenced within the Five Essential Elements of Response to Intervention (RtI), additional Response to Intervention (RtI) research

emphasizes the importance of student engagement with texts and interventions incorporating comprehension-related strategies, as well as the need for both "direct and indirect instruction to learn new vocabulary and concepts that can lead to improved comprehension" (Vacca, Vacca, & Mraz, 2011, p. 240). Further research recommends the inclusion of learning logs, exploratory writing, and double-entry journals as supports for students considered at-risk in the area of writing.

Many researchers, including Tompkins (2009), emphasize the importance of teachers assisting students in the development of academic language through establishing rigorous goals for themselves, as well as for their students, through incorporating activities which "challenge students to use higher order thinking as they listen, talk, read, and write" (p. 254). Tompkins further explains that "whether students use higher-order thinking is dependent on the level of questions teachers ask and on the types of activities in which students are involved" (p. 254). There are researchers who emphasize the potential positive impact of higher-order thinking strategies and higher-level thinking questions on reading achievement at the elementary level, both are omitted from this authorization of the Individuals with Disabilities Act (IDEA), 2004, including Response to Intervention (RtI).

Success for All (SFA)

A study, focused on computer assisted tutoring in *Success for All* addressed several aspects of reading emphasized in the report of the National Reading Panel, including word identification, word attack, oral reading fluency, and passage comprehension (Chambers, Abrami, Tucker, Slavin, Madden, Cheung, & Gifford, 2008).

The researchers hypothesized that through student participation in an intervention, wherein tutors were paired with computers, students would perform better on assessments of word identification, word attack, oral reading fluency, and passage comprehension, than students who participated in an intervention, wherein tutors were not paired with computers.

Following a pilot study conducted by Chambers et al. (2008), which employed a quasi-experimental design, the researchers employed an experimental design using random assignment of tutored children within schools to receive tutoring with or without "embedded technology." The study took place in 25 schools, implementing *Success for All*, in eight states. Participants included 412 at-risk students from 25 schools, comprised collectively of a population represented as follows: 49% white, 30% African-American, 18% Hispanic, and 3% other. Collectively, 71% of the students received free or reduced-price lunches. There were 224 students tutored in the treatment group, while there were 118 students tutored in the control group. Twenty-three percent of the tutors were certified teachers, and seventy-seven percent of the tutors were paraprofessionals. The tutors were randomly assigned to the treatment group or the control group. Based on the results of a *Success for All* (SFA) diagnostic assessment, students were randomly assigned to the control group or the treatment group. Tutors were assigned to both the treatment group and the control group and received essentially the same one-day training, which provided an overview of the SFA tutoring program, focused on the objective of tutoring, process of assessment, target planning, and communication between teacher and

tutor. According to the researchers, the utilization or non-utilization of the technology was the sole factor differentiating between the experimental group and the control group.

Participants were pre-tested in September and post-tested in May by specialized assessors, who utilized the *Woodcock-Johnson III Tests of Achievement* and the *Gray Oral Reading Tests I* in the following manner: Woodcock Letter-Word Identification (pre, post), The Letter-Word Identification scale of the Woodcock-Johnson III was used as a pretest; Woodcock Word Attack (post); Gray Oral Reading Test-Fluency (post); Gray Oral Reading Test-Comprehension (post); and Gray Oral Reading Test – Total (post). Tutors then rated the implementation of the treatment group during three visits made over the course of the school year, rating the treatment group implementation as fully, partially, and/or poorly implementing. Additionally, telephone interviews were conducted by both the trainers and the facilitators to verify their evaluations of the tutoring, and there were no differences amongst those rated as fully, partially, and/or poorly implementing (Chambers et al., 2008).

First, the data were analyzed using a multivariate analysis of covariance (MANCOVA), wherein all four dependent variables were examined together, controlling for Letter-Word Identification pretests. Next, the data were analyzed using analyses of covariance (ANCOVA) for each dependent variable, controlling for Letter-Word Identification; and, there were no differences at pretest. At first, following MANCOVA analyses of four posttests and controlling for Letter-Word Identification at pretest, the Wilks's lambda was not significant. Further analyses for each posttest, individually, did not show significant differences. Because implementation was variable, as some tutors

(assigned to the treatment group) never actually implemented the "embedded technology" component, a separate analysis was conducted of the schools that did fully implement the experimental treatment, based on the previous ratings of "fully implementing," "partially implementing," and/or "poorly implementing." The separate analyses did not indicate impacts for partial or poor implementers. However, for schools previously rated as "fully implementing," results were positive for three of the group independent measures (Woodcock Letter-Word Identification, Woodcock Word Attack, and GORT fluency). Once again, however, no significant differences were noted on GORT comprehension (Chambers et al., 2008).

Hence, outcomes dependent upon the quality of implementation experienced statistically significant achievement increases on three of the four independent measures, with a median effect size of +0.27, which the researchers felt should be considered in light of the second study (Chambers et al., 2008). However, the second study demonstrated an effect size of +1.02 on the GORT comprehension measure. Therefore, the researchers believe that when well implemented ("fully implemented"), this program can have a positive impact on students' reading performance, due to "embedded technology."

While this study (Chambers et al., 2008) exhibits a number of strengths, including the researchers' utilization of experimental design, which positively impacts internal validity; the researchers' utilization of 25 schools in eight states, which positively impacts external validity; the researchers' utilization of both a MANCOVA and ANCOVA, which further positively impacts internal validity, there were many

limitations as well. There was a disparity in the ratio of treatment group students (224) and control group students (118); and, confounding variables exist in regards to some students being tutored by certified teachers and other students being tutored by paraprofessionals. Additionally, the same pre-tests and post-tests weren't utilized at the beginning of the study and the end of the study. Most importantly, while this study is well-aligned with findings of the National Reading Panel, students were not found to perform better on passage comprehension, as previously hypothesized; and, the study did not supplement omissions of The National Reading Panel.

School-wide Enrichment Model in Reading (SEM-R) (Pilot Study)

In a pilot study, *Using Planned Enrichment Strategies with Direct Instruction to Improve Reading Fluency, Comprehension, and Attitude Toward Reading: An Evidence-Based Study*, Reis (2007), begins to supplement omissions of The National Reading Panel (Reis, McCoach, Coyne, Schreiber, Eckert, Gubbins, 2007). This pilot study, utilizing an experimental design, focused on 226 randomly-assigned urban elementary students, third grade through sixth grade, and 14 randomly-assigned teachers located in 2 elementary schools. The treatment group participated in the School-wide Enrichment Model in Reading (SEM-R), while the control group received remedial reading instruction; and, both the treatment group and the control group participated in *Success for All* for 90 minutes each morning.

The National Reading Panel asserted that "'based on the existing evidence, the NRP can only indicate that while encouraging students to read might be beneficial, research has not yet demonstrated this in a clear and convincing manner'" (Reis, 2007, p.

6). Reis's pilot study sought to determine whether or not students participating in SEM-R would attain statistically significant increases in the areas of oral reading fluency, comprehension, and attitude toward reading, in comparison to students who participated in typical test preparation activities. After two principals volunteered to participate in the study, randomly selected educators teaching the treatment group, participated in professional development for one day. During this time, they were assigned a research team, who would work with them throughout the course of the study; additionally, they received a variety of leveled books for their respective classrooms, as well as a reading list designed for the twelve-week study.

Some irregularities did occur during the study. In one situation, a treatment group teacher was absent for four weeks, due to illness, and the substitute teacher was not able to maintain the study. Additionally, a control group teacher began using interventions designed to be utilized with the treatment group in lieu of remedial work. Further, due to parent requests, one principal at one school moved seven students into treatment classrooms (Reis, 2007).

Based on Renzulli's (1977) Enrichment Triad Model, students in the treatment group participated in three levels of enrichment "(1) broad exposure to areas in which students might have interests, such as architecture and history; (2) training in areas such as critical thinking, problem solving, and research methods; and (3) opportunities to pursue self-selected topics of interest" (Reis, 2007, p. 8), and the research team was available daily for support. Treatment classes were observed daily, and control classes were observed twice each week. Each day, field notes were summarized and then

developed into observation notes included in weekly reports of both classes. In phase one, field notes focused on higher-order thinking skills, as well as differentiated questioning and reading skills. In phase two, field notes focused on support received during independent reading time, the environment, the conferences conducted, and the tiering of literature. Finally, in phase three, field notes focused on choice activities, as well as the intricacy of choices.

The *Iowa Tests of Basic Skills* (ITBS) (1990) reading comprehension subtest (Form J), utilized to "'measure how students derive meaning from what they read'" was administered as a post-assessment; however, no pre-assessment was administered due to the randomization and brief duration of the intervention (ITBS, form J, 1990) (Reis, 2007, p. 11). Both a pre- and post- assessment of the Elementary Reading Attitude Survey (ERAS), utilized to "'serve as a means of monitoring the attitudinal impact of instructional programs'" (p. 12) were administered to both the treatment and the control group; and both pre- and post- oral reading fluency assessments were administered and scored by research team members. "There were no statistically significant differences between the treatment group and the control group on either fluency or attitudes toward reading;" additionally, "there were no statistically significant differences between the schools on measures of reading fluency or attitudes toward reading" (p. 13). Further, "the school X treatment interaction was not statistically significant for either reading fluency or reading attitudes prior to the start of the study" (p. 14), which validated the equivalency of the two randomized groups.

After the researchers controlled for pretreatment fluency scores, it was determined that the treatment group students outperformed the control group students (.125), which is statistically significant, and quite significant for an intervention lasting only twelve weeks. After controlling for pretest attitudes, the researchers executed a multilevel regression analysis, wherein results were not statistically significant. After the researchers controlled for pretest reading comprehension, results were not statistically significant. However, in general, the treatment groups outperformed the control groups in reading fluency and attitude toward reading (Reis, 2007).

Reis's (2007) study demonstrated "the positive effects of independent reading on oral reading fluency, particularly given the enrichment approach as compared to the remedial and test-preparation work that control group students completed" (p. 19), as well as "statistically significant treatment effects in students' attitudes toward reading favoring the SEM-R treatment group" (p. 19). Encouraged by the results of this brief intervention, Reis decided to replicate this study, increasing sample size and allowing for better control of teacher effects, in order to increase generalizability.

School-wide Enrichment Model in Reading (SEM-R) (Expanded Study)

In Reis's (2010) extended study, she continued to supplement omissions of The National Reading Panel, as well as ameliorate limitations noted in her pilot study (Reis, McCoach, Little, Muller, Kaniskan, 2010).

This expanded study, utilizing an experimental design, focused on 1,192 randomly-assigned urban elementary students, second grade through fifth grade, and 63 randomly-assigned teachers, located in 5 elementary schools (Reis, McCoach, Little,

Muller, Kaniskan, 2010). The schools represented different geographic regions, and the students were reflective of a variety of backgrounds, including rural, urban, and suburban, as well as a variety of achievement levels. The treatment group participated in the School-wide Enrichment Model in Reading (SEM-R), while the control group participated in the two-hour regular language arts program, previously implemented within their respective school/division, which lasted twenty-four weeks.

Similar to Reis's (2010) pilot study, this extended study sought to determine whether or not students participating in SEM-R would attain statistically significant increases in the areas of oral reading fluency and comprehension, in comparison to students who participated in the regular language arts curricula. In order to increase generalizability, this study utilized "cluster-randomized assignment to groups" (p. 8) and was comprised of thirty-seven treatment classes and thirty-three control classes. Both pre-test and post-test data on students' reading fluency and comprehension were collected, and "the quantitative procedures of hierarchical linear modeling (HLM) and multivariate analysis of variance were used to investigate the effects of the SEM-R intervention on these reading outcomes" (p. 9).

In this study (Reis, 2010), control group teachers had an average of 15.9 years of experience, while treatment group teachers had an average of 13.8 years of experience. Treatment group teachers participated in six hours of professional development during the summer prior to the implementation of SEM-R. During this time, treatment group teachers were assigned a coach from the research team, who would work with them throughout the course of the study. The treatment group teachers received a collection of

250 leveled, fiction and non-fiction books for their respective classrooms, as well as a collection of bookmarks, listing higher-order questions, and student and teacher logs. Additionally, they were given information about Fountas and Pinnell (2001) Guided Reading Level, Development Reading Assessment Level (MetaMetrics, 2004), and Lexile Levels (Scholastic, 2007), and utilization of conferences and student read-alouds for determination of text complexity.

While the control group participated in the two-hour regular language arts program previously implemented within their respective school/division, the treatment group participated in one hour of the regular language arts program and one hour in SEM-R. Utilizing procedures described by Hasbrouck and Tindal (2005), oral reading fluency (ORF) was assessed; "test-re-test reliability from pre- to post- measures of ORF in this sample was .94, and the internal consistency reliability as determined by Cronbach's alpha for both pre and post fluency was .98" (Reis, 2010, p. 13). Reading comprehension was assessed prior to and following the intervention, using the Iowa Tests of Basic Skills (ITBS) Reading Comprehension subtest (Form A). The language arts subscales of the ITBS, reliability coefficients are greater than .95. The ITBS is vertically scaled, thus "students' scores on the different forms of the ITBS were comparable across grade levels" (p. 13). *Teaching and Reading: Attitudes and Practices Survey* (TRAPS) (Fogarty, Little & Reis, 2005) was utilized before and after the intervention to determine teachers' attitudes toward reading.

In Reis's (2010) study, the research team was available via e-mail and phone; one to two observations were conducted in each classroom, each month, and field notes

focused on an observation scale, *Treatment fidelity Checklist for the School-wide Enrichment Model-Reading*, denoting whether or not SEM-R elements were present, including:

> Phase 1
> - Provided exposure by introducing books with a book discussion
> - Read aloud from books that appeared to be selected in advance
> - Integrated reading strategies and/or higher level thinking questions (e.g., bookmark questions)

> Phase 2
> - Provided time for students' supported independent reading
> - Established an environment in which students utilized self-regulation for supported, independent reading time
> - Listened to students read in individual conferences
> - Provided differentiated reading strategies and/or literary discussions during conferences

> Phase 3
> - Made time available for Phase 3 independent or small group enrichment choices
> - Provided 3-4 choices for students such as creativity training, Renzulli Learning, opportunities for individual reading, buddy reading, and other choices.

> (p. 15).

All observers received training on the use of the form, and measures were taken to ensure reliability amongst observers. Observations of treatment classrooms revealed elements of SEM-R, as exhibited on the observation form, *Treatment fidelity Checklist for the School-wide Enrichment Model-Reading.* In general, however, observations of control classrooms revealed whole-group, teacher-led work and students reading from basal books, as well as teachers' implementation of test prep activities and workbook exercises, often extracted from both books and workbooks affiliated with the basal series. Qualitative data included interviews of each principal, as well as all thirty-two teachers,

data from classroom observations, student logs, and site visit observations conducted by researchers, and all qualitative data were triangulated. Further, data were coded into three levels of coding techniques, including open, axial, and selective (Reis, 2010).

Results of Reis's (2010) expanded study indicated that "significant differences favoring the SEM-R were found in reading fluency in two schools (Cohen's d effect sizes of .33 and .10) and in reading comprehension in the high-poverty urban school (Cohen's d = .27), with no achievement differences in the remaining schools" (p. 1). These findings demonstrate that "an enrichment reading approach, with differentiated instruction and less whole group instruction, was as effective as or more effective than a traditional whole group basal approach" (p. 1).

Throughout the course of her study, Reis (2010) controlled for potential limitations, including monitoring of "treatment diffusion from treatment to control classes," (p. 33), as well as monitoring of treatment fidelity, Reis found it difficult to quantify the use of individualized reading strategies and differentiation. Additionally, because the SEM-R model involves three aspects of instruction in reading, including: "broad exposure to appropriate texts and areas of possible interest, higher order thinking skills training and methods of instruction, and opportunities to pursue self-selected activities," (Reis and Fogarty, 2006, p. 32), it is difficult to detect the aspect(s) of SEM-R which directly impact student achievement. Further, while all schools that participated in the study were classified as Title 1, variations amongst schools did exist, but the data collected, regarding socio-economic status (SES) was limited. Hence, Reis plans to conduct a future study, in which SEM-R will be monitored for an entire academic year,

during which researchers will also monitor "student engagement in reading" and focus on subgroups, such as "identified gifted students and students receiving special education services" (Reis, 2010, p. 34).

Rationale and Support for Current Study

Reis's (2010) research begins to supplement research conducted by The National Reading Panel, as it exhibits that "SEM-R has been shown to be effective at increasing reading comprehension and fluency scores" (p. 4), through focusing, in some aspects of SEM-R, "on engaging students in challenging reading accompanied by instruction in higher-order thinking and strategy skills," (Reis & Fogarty, 2006, p. 32). The current study focused strategically on the impact of the implementation of higher-order thinking strategies and higher-level thinking questions, through implementation of the C. L. E. A. R. (Challenge Leading to Engagement, Achievement and Results) Curriculum Model, on reading achievement at the third grade level. This current study could further supplement the study conducted by The National Reading Panel by incorporating omitted methods, including higher-order thinking strategies and higher-level thinking questions.

C. L. E. A. R. Curriculum Model (Challenge Leading to Engagement, Achievement and Results)

Focused on the concept, exploration, the C. L. E. A. R. Curriculum model "incorporates elements from three research-based curriculum models: Differentiation, Depth and Complexity, and the School-wide Enrichment Model by Carol Tomlinson, Sandy Kaplan, and Joseph Renzulli, respectively" (National Research Center on the Gifted and Talented + University of Virginia, 2008-2009, p. 9). While maintaining

consistency with state and national standards, the C. L. E. A. R. Curriculum Model "[builds] layers of challenge and opportunities for more in-depth study, authentic to the work of professionals within a discipline, to better meet the needs of all students" (p. 9).

In a study conducted by researchers from the University of Virginia, over the course of three years, 683 students from 56 classrooms in 19 states participated in the implementation of the C. L. E. A. R. Curriculum Model. Following a multivariate analysis, results indicated a significance difference, which favored the treatment group. Hence, this study provided evidence to support the researchers' hypothesis that gifted learners, participating in the implementation of the C. L. E. A. R. Curriculum Model, outperform comparably able learners, not participating in the implementation of the C. L. E. A. R. Curriculum Model (SREE, Fall 2012, Conference Abstract Template). Similar to the researchers from the University of Virginia, the researcher conducting this hypothesized that students, not identified as academically gifted, participating in the implementation of the C. L. E. A. R. Curriculum Model, would outperform comparably able learners, also not identified as academically gifted, not participating in the implementation of the C. L. E. A. R. Curriculum Model, in the area of reading achievement at the third grade level.

The C. L. E. A. R. Curriculum Model, designed to be utilized with students, identified as academically gifted, is also grounded in reading research and exhibits elements of Concept-Oriented Reading Instruction (CORI) (Guthrie, 2004), Question and Answer Relationships (QAR) (Raphael and Au, 2005), and Anticipatory Reading Guides (Ortlieb, 2013).

Participation in the implementation of the C. L. E. A. R. Curriculum Model (National Research Center on the Gifted and Talented + University of Virginia, 2008-2009) holds the potential to increase the reading achievement of students, not identified as academically gifted, as it is aligned with growth constructs, such as comprehension, as opposed to mastery constructs, such as alphabet knowledge. Additionally, it requires that students utilize both strategies, "deliberate actions," and skills, "automatic, smooth-running processes" (Duke and Carlisle, 2011, p. 201). Also, comprehension is viewed as a "receptive language process" (p. 201), as opposed to a product or outcome. As participation in the implementation of the C. L. E. A. R. Curriculum Model culminates with a presentation of the students' research findings, evidence of alignment with growth constructs, viewing comprehension as a receptive language process, is apparent.

Concept-Oriented Reading Instruction (CORI), Question Answer Relationships (QAR) Framework, and Anticipatory Reading Guides

The C. L. E. A. R. Curriculum Model is also grounded in reading research and exhibits elements of Concept-Oriented Reading Instruction (CORI), Question and Answer Relationships (QAR), and Anticipatory Reading Guides. CORI, which was designed to increase students' reading comprehension through increasing students' motivation to read, emphasizes relevance, choice, and self-efficacy (Guthrie, McRae, & Klaudia, 2007). When participating in CORI, students are immersed in hands-on activities and utilize relevant texts (relevance). Students also read specific texts on a topic (choice) and establish realistic goals (self-efficacy). Similarly, when participating in the implementation of the C. L. E. A. R. Curriculum Model, students act as researchers

and consult pertinent texts (relevance) on their selected topic (choice), and develop goals (self-efficacy) in order to attain their research milestones.

Concept-Oriented Reading Instruction (CORI)

Concept-Oriented Reading Instruction (CORI) is designed to increase students' reading comprehension through increasing students' motivation to read, emphasizing relevance, choice, and self-efficacy. Students in CORI classrooms, on measures of reading comprehension, reading motivation, and reading strategies have outperformed students in classrooms focused on strategy instruction (SI), as well as students in classrooms focused on traditional instruction (TI) (Guthrie, Wigfield, Barbosa, Perencevich, Taboada, Davis, Scafiddi, Tonks, 2004). Further, when the impact of CORI on standardized tests of reading comprehension (primarily the Gates-MacGinitie Reading Comprehension Tests) was calculated, the mean was significant (Guthrie, McRae, & Klaudia, 2007). This indicates that CORI "had a relatively substantial impact on standardized tests of reading comprehension" (p. 246). This is quite rare, as "most reading intervention programs have shown effects with experimenter-designed tests but not with standardized tests" (p. 246). Because the C. L. E. A. R. Curriculum model exhibits elements of CORI, students, not identified as academically gifted, participating in the implementation of the C. L. E. A. R. Curriculum Model, may experience an increase in reading achievement.

Question Answer Relationships (QAR) Framework

Additionally, the C. L. E. A. R. Curriculum Model exhibits elements of the Question Answer Relationship (QAR) framework. Just as students immersed in the QAR

framework make "Text-to-self," "Text-to-theme," and "Text-to-world" connections, students immersed in the C. L. E. A. R. Curriculum Model also make "Text-to-self" and "Text-to-world" connections, while acting as experts in the field. However, rather than making "Text-to-theme" connections, students make Text-to-concept connections, which affords students the opportunity to process more abstractly. The concepts upon which the C. L. E. A. R. curriculum model is based, exploration and communication, are timeless, universal, broad, and abstract. For students, participating in the QAR framework, "the benefit lies in gaining access to reading comprehension and higher level thinking with text" (Raphael & Au, 2005, p. 220). Because the C. L. E. A. R. Curriculum Model exhibits elements of the QAR framework, students, not identified as academically gifted, participating in the implementation of the C. L. E. A. R. Curriculum Model may also benefit from being afforded the opportunity to gain access to higher level thinking with text.

Anticipatory Reading Guides

Finally, the C. L. E. A. R. Curriculum Model incorporates an Anticipatory Reading Guide. In a study conducted by Ortlieb (2013), a statistically significant rate on reading and content area measures was observed as the control group was outperformed by the experimental treatment group. Adhering to cognitivist learning theories, Ortlieb stated that researchers have suggested that instruction, focused on higher level thinking strategies, will promote higher levels of reading achievement. In Ortlieb's study, the treatment group increased by 13.5 points, while the control group increased by 6.8 points, following eight weeks of instruction in using anticipatory reading guides.

Though the C. L. E. A. R. Curriculum Model was designed to be utilized with students identified as academically gifted, it has the potential to positively impact the reading achievement of students, not identified as academically gifted, at the third grade level. While the model includes the implementation of higher-order thinking strategies and higher-level thinking questions, it is also grounded in reading research and exhibits elements of Concept-Oriented Reading Instruction (CORI), Question and Answer Relationships (QAR), and Anticipatory Reading Guides.

Summary

Since publication of the landmark study, conducted by The National Reading Panel (2000), some researchers have sought to study the impact of higher-order thinking strategies and higher level thinking questions on reading achievement. Such studies have begun to supplement omissions of The National Reading Panel. A pilot study, conducted by Sally Reis (2007), sought to determine whether or not students participating in SEM-R would attain statistically significant increases in the areas of oral reading fluency, comprehension, and attitude toward reading, in comparison to students who participated in typical test preparation activities. In this study, the treatment groups outperformed the control groups in reading fluency and attitude toward reading. In an expanded study, Reis (2010) sought to determine whether or not students participating in SEM-R would attain statistically significant increases in the areas of oral reading fluency and comprehension, in comparison to students who participated in the regular curricula. Results of this expanded study indicated significant differences, favoring SEM-R, in reading fluency at two schools and in reading comprehension at the high-poverty urban

school where SEM-R was implemented. In a study conducted by researchers from the University of Virginia, gifted learners, participating in the implementation of the C. L. E. A. R. Curriculum Model, outperformed comparably able learners, not participating in the C. L. E. A. R. Curriculum Model (Callahan, 2014). While Reis's studies sought to determine the potential impact of SEM-R on students' oral reading fluency and comprehension, Callahan's studies sought to determine the potential impact of the C.L.E.A.R. Curriculum Model on students identified as academically gifted. Blending components of both Reis's studies and Callahan's studies, the researcher of this study sought to determine the impact of the C. L. E. A. R. Curriculum Model on the reading achievement of students not receiving services in a gifted cluster setting or inclusion setting, at the third grade level. The researcher hypothesized that participation in the C. L. E. A. R. Curriculum Model would improve reading achievement of students (not identified as academically gifted, nor receiving special education service) not receiving services in a gifted cluster setting on the Scholastic Reading Inventory (SRI) and/or division-wide standards-referenced benchmark assessment (non-fiction domain) at the third grade level. Further, the researcher hypothesized that both students and teachers participating in the implementation of the C. L. E. A. R Curriculum Model would find the model to be beneficial.

CHAPTER 3

METHODOLOGY

The methods chapter for this study includes both a quantitative section and a qualitative section. The quantitative component of this study employed a quasi-experimental design in order to determine the impact of the C. L. E. A. R. Curriculum Model on the reading achievement of students not receiving services in a gifted cluster setting or inclusion setting, at the third grade level. The qualitative component of this study utilized a post-positivist research paradigm and phenomenology research tradition in order to better understand students' perceptions of the C. L. E. A. R. Curriculum Model, as well as teachers' perceptions of the C. L. E. A. R. Curriculum Model.

Using a quasi-experimental design, the researcher sought to determine how participation in the C.L.E.A.R. (Challenge Leading to Engagement, Achievement, and Results) Curriculum Model impacted reading achievement, of students not being served in a gifted cluster setting or inclusion setting, on the Scholastic Reading Inventory (SRI), as well as on the non-fiction component of the division's standards-referenced benchmark assessments, at the third grade level.

Quantitative Methods

The quantitative portion of this study utilized two measurements, the Scholastic Reading Inventory (SRI) and the non-fiction component of the school division's standards-referenced benchmark assessments at the third grade level. The independent variable was operationalized using students' dependent variable SRI scores, on which students were assessed at the beginning of the treatment and at the end of the treatment.

The dependent variable was the difference in students' respective reading achievement, based on data collected through administration of the Scholastic Reading Inventory (SRI) and division-wide standards-referenced benchmark assessment (non-fiction domain) at the end of treatment, utilizing the Pre-SRI (Lexile) as a covariate. To minimize anticipated confounding variables, one treatment group and one control group at each of three diverse, urban elementary schools, based upon SES rankings and accreditation ratings, at the third grade level were established. Neither the treatment group nor the control group were comprised of students found eligible for special education services or identified as academically gifted.

Participants

As previously stated, the mid-Atlantic school division in which this study took place is comprised of twenty-eight schools, designated as primary, elementary, or intermediate, ten middle schools, and seven high schools. The three specific schools in which this study took place were designated as elementary, with grades ranging from kindergarten through fifth grade. The three schools ranged in socioeconomic status rankings; and, the three schools ranged in state accreditation ratings, with school two rated as accredited and schools one and three accredited with warning. The researcher in this study served as each school's elementary gifted education specialist and implemented the treatment.

The present study employed a convenience sample, comprised of three third grade classes, consisting of approximately 10-24 students per class (n = 49, the treatment group) in three diverse schools within the researcher's school division, wherein all

participants were engaged in the C.L.E.A.R. Curriculum Model. Students' reading achievement scores were compared to three, randomly-selected third grade classes, consisting of approximately 10-24 students per class (n = 42, the control group) in three diverse schools within the researcher's school division, wherein participants had not been participating in the C.L.E.A.R. Curriculum Model.

Table 1

Participants, by Group and School

SCHOOLS	C. L. E. A. R. TREATMENT GROUP	C. L. E. A. R. CONTROL GROUP/ COMPARISON GROUP
School A	10	11
School B	24	22
School C	15	9
Total	49	42

Achievement Measures

Similar to the study conducted by Reis (2010), regarding SEM-R, the current study employed reliable and valid measures, such as the *Scholastic Reading Inventory* (SRI). Regarding construct validity, the SRI correlates with other tests measuring similar

constructs; and, correlations range from 0.60 to 0.93. Its correlation with the Iowa Tests of Basic Skills, the assessment employed in Reis's studies, which aligns with grades 3, 5, 7, 9, and 11, is 0.88 (Scholastic Reading Inventory, Technical Guide, 2007, p. 19) Additionally, regarding reliability, there is ample evidence to support the internal consistency of the test, as the SRI was developed utilizing the "Rasch one-parameter item response theory model to relate a reader's ability to the difficulty of the items" (p. 61).

Following an analysis of students' pre- and post-SRI scores, the division's standards-referenced benchmark assessments, which are aligned with the Virginia Standards of Learning, were utilized as an additional post-test. These were used to analyze learning outcomes on items pertaining to the non-fiction domain of the division's standards-referenced benchmark assessments, designed to correlate with the state's standards of learning. The division's standards-referenced benchmark assessments are designed to measure the learning outcomes of all students within the division, including students participating in the treatment. Neither the researcher, nor the teachers implementing the C.L.E.A.R. Curriculum Model, had knowledge of the questions in any domain of the standards-referenced benchmark assessment. Hence, the content standards covered on the division's standards-referenced benchmark assessments did not favor students in the treatment condition. Additionally, concepts, principles, and skills assessed were weighted the same on the post-assessment.

Procedure

Following attainment of IRB approval and the permission of the respective school division, and having ensured the permission, protection and confidentiality of all participants, the researcher administered the SRI to students in six third grade classes.

The elementary gifted education specialist assigned to each school (the researcher), in collaboration with the third grade classroom teachers assigned to the treatment group began implementation of the C.L.E.A.R. Curriculum Model as indicated in Table 2.

Table 2

Curriculum Implementation / Intervention Overview

Week	Activity	Description of Processes
Week One	Anticipation Guide	Whole Class/Small Group
Week Two	Exploration of Concepts	Whole Class/Small Group
Week Three	Analysis of Expository Texts	Whole Class
Week Four	Development of Research Questions	Whole Class/ Individualized Support
Week Five	Analysis of Print/ Internet Expository Texts	Whole Class/Partners
Week Six	Application of the INSERT strategy	Whole Class/Partners
Week Seven	Location of Print Expository Texts	Whole Class
Week Eight	Location of Internet Expository Texts	Whole Class
Week Nine	Identifying Plagiarism/ Developing Paraphrasing Skills	Whole Class/Small Groups
Week Ten through Week Nineteen	Research and Synthesis of Research/ Culminating Research Gala	Whole Class/ Individualized Support

Note. Activities require a minimum of one hour/week; and, it may take students longer than 10 weeks (one hour/week) to finalize their research. Students were immersed in the regular curriculum the remainder of the time.

Throughout the implementation of the C. L. E. A. R. Curriculum Model, students used a variety of materials for their respective knowledge expeditions. Resources

included, but were not limited to books, magazine articles, newspaper articles, electronic articles found in the school division's online library, information from museums, and information from interviews with experts in the field, etc. One student was interested to learn the plan for the future colonization of Mars. This particular student read an article published in *National Geographic*, an article published in the local newspaper, and an electronic article, found in the school division's online library and written by an individual at NASA. This particular student also discussed his topic with a docent at the Hampton Air and Space Museum. Following, this student synthesized his findings into a PowerPoint presentation to be shared with his classmates.

At the end of the second nine weeks, the researcher repeated administration of the SRI. The reading achievement of students participating in the C.L.E.A.R. Curriculum Model, was compared to the reading achievement, as measured by the SRI of students not participating in the C.L.E.A.R. Curriculum Model were measured using the SRI and an item analysis of the non-fiction domain of the division's standards-referenced benchmark assessments. As the duration of the treatment was equivalent to half of an academic year, data was collected at the beginning of the treatment and at the end of the treatment from both the treatment group and the control group.

The researcher also minimized threats to internal validity through administering the SRI herself and personally implementing the C.L.E.A.R. Curriculum Model. To further minimize threats to internal validity, the researcher spent one hour each week in the classrooms, wherein treatment was taking place, implementing the C.L.E.A.R. Curriculum Model to insure the fidelity of the treatment. To avoid threats to treatment

fidelity experienced by Reis, the researcher met with the principals of the schools, where the treatment was being implemented, and gained their assurance that no students would be permitted to transfer from the control group to the treatment group. Teachers, collaborating in the implementation of the model, were also instructed not to share any components of the C.L.E.A.R. Curriculum Model with those instructing the control group until after the treatment was complete. During this time, teachers providing instruction for the control groups (comparison groups) implemented the curriculum mandated by their respective school division.

Data Analysis

Following the conclusion of the treatment, an ANCOVA was employed, utilizing pre-SRI scores as a covariate. The scores of the students who received the treatment were compared to the scores of the students who did not receive the treatment. Hence, the dependent variable was operationalized through analysis of the students' final SRI scores. Afterwards, repeated measures ANOVA was run with SRI trial as repeated and group membership. An additional ANCOVA was employed, again utilizing pre-SRI scores as a covariate. Benchmark assessment scores in the non-fiction domain, of the students who received the treatment were compared to the scores of the students who did not receive the treatment. The benchmark assessment is typically comprised of multiple choice items, wherein students must select the best answer. The dependent variable was operationalized through item analysis of the students' final scores on the non-fiction domain of the benchmark assessment. Afterwards, repeated measures ANOVA were run with SRI trial as repeated and group membership.

Following analyses of all quantitative data, treatment group students were surveyed (see Appendix A) on their perceptions of the C.L.E.A.R. Curriculum Model, and treatment group teachers were interviewed (see Appendix B) regarding their perceptions of the C.L.E.A.R. Curriculum Model.

Qualitative Methods

The qualitative component of this study utilized a post-positivist research paradigm and phenomenology research tradition, which acknowledges that there are multiple truths regarding participants' experiences (Hays & Singh, 2012). The researcher acknowledges that the participants' and researcher's beliefs and values have an impact upon the research process, influencing both the research questions and the research design. From a rhetorical perspective, the researcher concurs that, once individuals share their experiences, allowing more narratives in order to emphasize participant voice, the essence of those experiences can be categorized and organized. Issues of validity, reliability, and alternative hypotheses were emphasized, as the paradigm concurs with post positivists' beliefs that though "reality or universal truths exist, they state that you cannot fully measure or understand them" (Hays & Singh, 2012, p. 39). Aligned with the post-positivist research paradigm, the phenomenology research tradition revealed commonalities amongst participants to ascertain how their lived experiences aligned with the respective phenomenon of interest, and captured the experiences of participants. Through utilization of this paradigm and tradition, the researcher was able to determine commonalities while capturing individual participants' perspectives of the phenomenon of interest.

Measures

Two measures were developed by the researcher, with assistance from an expert qualitative researcher serving on the researcher's dissertation committee. The first measure was a survey, which was completed by students in the treatment group. On the survey, students rated their skill level, following completion of their knowledge expeditions, rating themselves as "worse," "same," and/or "better" at (1) using non-fiction text features, (2) developing questions, (3) using print expository texts for the purpose of finding answers to questions, (4) using electronic expository texts for the purpose of finding answers to questions, (5) paraphrasing information, (6) synthesizing information, and (7) presenting information. Each item correlated directly with the intervention overview. Students also rated themselves as "less interested," "same," and/or "more interested" in reading non-fiction texts following completion of their knowledge expeditions (see Appendix A).

The second measure was an interview protocol, which was completed by treatment group teachers. Seven items correlated directly to the survey developed for student participants. Teachers rated their students' skill level, following completion of their knowledge expeditions, rating their students as "worse," "same," and/or "better" at (1) using non-fiction text features, (2) developing questions, (3) using print expository texts for the purpose of finding answers to questions, (4) using electronic expository texts for the purpose of finding answers to questions, (5) paraphrasing information, (6) synthesizing information, and (7) presenting information. Again, each item correlated directly with the intervention overview. Teachers also rated their students as "less

interested," "same," and/or "more interested" in reading non-fiction texts following completion of their knowledge expeditions. Additional interview protocol items consisted of a variety of question types. These types included, but were not limited to, experience/behavior, opinion, knowledge, feeling, and probing questions (see Appendix B).

Procedures

The researcher surveyed student participants and conducted interviews with the teacher participants. The interviews were semi-structured and designed using a variety of question types. These types included, but were not limited to, experience/behavior, opinion, knowledge, feeling, and probing questions, samples of which may be viewed in Appendix B; and, the teacher interviews took place via phone in order to accommodate the schedules of the respective teacher participants. Both the survey and interview protocol were reviewed and agreed upon by the researcher's methodologist prior to being administered to the participants, and the researcher thoroughly documented her analysis using transcripts and member-checking.

The researcher collected data over the course of 3 days. Each Teacher Participant was interviewed individually using the interview protocol, located in appendix B. These interviews were semi-structured with varied questions and were approximately 45-60 minutes in length. The interviews took place via phone, per the request of the participants. Once completed, the researcher transcribed each interview individually.

Once transcribed, the researcher employed member-checking to insure she had accurately documented her conversation with each Teacher Participant.

Data Analysis

The researcher transcribed each participant interview and matched the survey responses to the survey categories. Once transcribed, the interviews were coded, and the following coding procedures were implemented. First, the researcher and her colleague, a fellow doctoral candidate recruited by the researcher to assist with coding data, bracketed their assumptions, noting their biases and influence on the coding process. Second, the researcher and her colleague used horizontalization, which refers to the process of identifying direct quotes from the individual transcript that may answer or provide more information regarding the research questions. This phenomenological data analysis technique involves identifying nonrepetitive, nonoverlapping statements in participants' transcripts (Hays & Singh, 2012). Third, the researcher and her colleague used themes; wherein, the researcher described the identified quotes using key words in order to generate codes. Finally, structural themes were used; wherein, the researcher collapsed textural descriptions into patterns.

Coding was considered conclusive once the researcher and her colleague reached a point of saturation, where no other codes or themes emerged, and there was 95% agreement on the resulting codebook. A variation of frequency counting, tallying the number of times a code occurs from a data source, was utilized to assist with determining the point of saturation; however, low frequency counts were not discounted in order to ensure that voice was given to all pertinent perspectives.

Strategies for Trustworthiness

For the purpose of this study, trustworthiness was defined according to four criteria: credibility, transferability, dependability, and confirmability. Credibility was demonstrated through the use of member checking, prolonged engagement, and an audit trail. Transferability was demonstrated through the use of a diverse sample that met the predetermined criteria and the use of thick description. Dependability was demonstrated through the use of additional coders and/or readers, triangulating the data sources, and using member checking. Finally, confirmability was demonstrated through bracketing of the researcher's assumptions.

Summary

The quantitative component of this study employed a quasi-experimental design in order to determine the impact of the C. L. E. A. R. Curriculum Model on the reading achievement of students not receiving services in a gifted cluster setting or inclusion setting, at the third grade level. The qualitative component of this study utilized a post-positivist research paradigm and phenomenology research tradition in order to better understand students' perceptions of the C. L. E. A. R. Curriculum Model, as well as teacher' perceptions of the C. L. E. A. R. Curriculum Model.

Independent variables, dependent variables, and confounding variables were identified. A convenience sample of three third grade classes, consisting of 10-24 students per class, in three diverse schools within the researcher's respective school division comprised the treatment group. A convenience sample of an additional three

third grade classes, consisting of 9-22 students per class, in the same three diverse schools within the researcher's respective school division comprised the control group.

Treatment group students participated in the implementation of the C. L. E. A. R. Curriculum Model while control group students participated in the traditional curriculum. Following, the reading achievement of treatment group students was compared to the reading achievement of control group students on the Scholastic Reading Inventory (SRI) as well as division-wide, standards-referenced benchmark assessments, using the Scholastic Reading Inventory (SRI) (Pre-test) as a covariate.

Following the quantitative component, students responded to a survey and teachers to an interview protocol in order to help the researcher better understand both students' and teachers' perceptions of the C. L. E. A. R. Curriculum Model. Member-checking was employed and data was coded and triangulated. Horizontalization was utilized to identify textural description of experiences and to ultimately identify structural themes; wherein, the researcher and a colleague collapsed textural descriptions into patterns. Trustworthiness strategies included credibility, transferability, dependability, and confirmability.

CHAPTER 4

RESULTS

Quantitative findings, including results of the analyses of Scholastic Reading Inventory (SRI) scores, as well as analyses of Scholastic Reading Inventory proficiency bands, are addressed, following utilization of a univariate analysis of covariance (ANCOVA). Additional quantitative findings, including analyses of standards-referenced benchmark scores, also following utilization of a uivariate analysis of covariance (ANCOVA) are examined. Finally, qualitative findings, including analyses of student surveys and teacher surveys/interviews, are discussed.

Analyses of Scholastic Reading Inventory (SRI) Scores

Students Scholastic Reading Inventory (SRI) scores were first analyzed using a univariate analysis of covariance (ANCOVA) in order to discern statistical differences between the treatment group and the control group. Table 3 includes descriptive statistics associated with this ANCOVA.

Table 3

Descriptive Statistics for Pre- and Post-SRI, by Group

	Pre-SRI		Post-SRI	
	M	*SD*	*M*	*SD*
Treatment Group	522.57	178.32	590.47	190.18
Control Group	479.19	168.43	570.38	163.73

Table 4 summarizes results of the ANCOVA. After analyzing the results, there were no statistically significant differences between the treatment group (Group 1; n = 51) and the control group (Group 2; n = 42) at pre-test ($p > .05$). This indicates that the groups were statistically equivalent at pretest, minimizing the threat of selection bias.

Table 4

Analysis of Covariance Results Comparing Control Group to Treatment Group in Terms of Post-SRI Scores, with Pre-SRI Scores as the Covariate

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Group	9438.322	1	9438.322	1.669	.200	.018
Error	508824.023	90	5653.600			
Total	34353098.00	93				
Corrected Total	2916916.280	92				

Note. R Squared = .826 (Adjusted R Squared = .822)

An additional univariate analysis of covariance (ANCOVA) indicated there was no statistically significant interaction between groups (Control group n = 51; Treatment group n = 42) in school or between schools (School 1 n = 22; School 2 n = 46; School 3 n = 25; $p > .05$). Descriptive statistics associated with this analysis can be found in Table 5. Results of this ANCOVA can be found in Table 6.

Table 5

Descriptive Statistics for Pre- and Post-SRI, by Group and School

	Pre-SRI		Post-SRI	
	M	*SD*	*M*	*SD*
Treatment Group	522.57	178.32	590.47	190.18
Control Group	479.19	168.43	570.38	163.73
School 1	486	156.55	567	130.37
School 2	537.07	177.28	629.15	180.16
School 3	455.2	176.85	506.2	188.03

Table 6

Analysis of Covariance Results Comparing Control and Treatment Groups, by School, According to Post-SRI Scores, with Pre-SRI Scores as the Covariate

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Group	7654.827	1	7654.827	1.414	.238	.016
School	25783.743	2	12891.872	2.382	.098	.052
Group*School	10036.277	2	5018.139	.927	.400	.021
Error	456440.746	86	5412.102			
Total	34353098.00	93				
Corrected Total	2916916.280	92				

Note. *R Squared = .840 (Adjusted R Squared = .829)

Analyses of Scholastic Reading Inventory Proficiency Bands

Rating the bands according to proficiency: advanced (4), proficient (3), basic (2), and below basic (1), students in the treatment group experienced qualitatively stronger increases in proficiency bands.

In the treatment group at school 1, two students increased from basic to proficient; and, in the control group at school 1, one student increased from below basic to basic and two students increased from basic to proficient. Rating the bands according to proficiency: advanced (4), proficient (3), basic (2), and below basic (1), the mean of

student increases in the treatment group was 3.0, while the mean of student increases in the control group was 2.7, as summarized in table 7.

Table 7

Analysis of Increase in Lexile Bands, Comparing Control and Treatment Groups at School One

Group	Participant	Lexile Band Pre-	Lexile Band Post-	Rating	Mean
1.00	009	B	P	3	
1.00	010	B	P	3	3.0
2.00	012	BB	B	2	
2.00	015	B	P	3	
2.00	020	B	P	3	2.7

Advanced (4), Proficient (3), Basic (2), and Below Basic (1)

In the treatment group at school 2, one student increased from below-basic to basic, four students increased from basic to proficient, and four students increased from proficient to advanced; and, in the control group at school 2, one student increased from below basic to basic, five students increased from basic to proficient, and two students increased from proficient to advanced. Rating the bands according to proficiency: advanced (4), proficient (3), basic (2), and below basic (1), the mean of student increases in the treatment group was 3.3, while the mean of student increases in the control group was 3.1, as summarized in table 8.

Table 8

Analysis of Increase in Lexile Bands, Comparing Control and Treatment Groups at School Two

Group	Participant	Lexile Band Pre-	Lexile Band Post-	Rating	Mean
1.00	025	P	A	4	
1.00	029	P	A	4	
1.00	031	P	A	4	
1.00	032	P	A	4	
1.00	037	B	P	3	
1.00	038	B	P	3	
1.00	039	B	P	3	
1.00	041	B	P	3	
1.00	00R	BB	B	2	3.3
2.00	047	P	A	4	
2.00	050	P	A	4	
2.00	062	B	P	3	
2.00	063	B	P	3	
2.00	064	B	P	3	
2.00	065	B	P	3	
2.00	067	B	P	3	
2.00	071	BB	B	2	3.1

Advanced (4), Proficient (3), Basic (2), and Below Basic (1)

In the treatment group at school 3, two students increased from basic to proficient,; and, in the control group at school 2, one student increased from below basic to basic, two students increased from basic to proficient, and one student increased from proficient to advanced. Rating the bands according to proficiency: advanced (4), proficient (3), basic (2), and below basic (1), the mean of student increases in the treatment group was 3.0; and, the mean of student increases in the control group was also 3.0, as summarized in table 9.

Table 9

Analysis of Increase in Lexile Bands, Comparing Control and Treatment Groups at School Three

Group	Participant	Lexile Band Pre-	Lexile Band Post-	Rating	Mean
1.00	078	B	P	4	
1.00	080	B	P	4	3.0
2.00	088	P	A	4	
2.00	090	B	P	3	
2.00	091	B	P	3	
2.00	094	BB	B	2	3.0

Advanced (4), Proficient (3), Basic (2), and Below Basic (1)

Table 10

Summary Analysis of Increase in Lexile Bands, Comparing Control and Treatment Groups at Schools One, Two, and Three

By Ranked Lexile Bands	Treatment	Control
School 1	3.0	2.7
School 2	3.3	3.1
School 3	3.0	3.0

Advanced (4), Proficient (3), Basic (2), and Below Basic (1)

Analyses of Benchmark Items

Following analysis of the SRI proficiency bands, a univariate analysis of covariance (ANCOVA) was again employed for the purpose of analyzing students' standards-referenced benchmark scores, by item. After analyzing the results, there were no statistically significant differences between the treatment group (Group 1) and the

control group (Group 2) ($p > .05$). Once again, the Pre-SRI was used as the covariate, and this analysis is summarized in table 12, prefaced by the descriptive statistics, as summarized in table 11. Because control group participant 009 and control group participant 073 were unable to participate in the division-wide administration of the benchmark test, the number of participants, overall, decreased by two.

Table 11

Descriptive Statistics for Pre-SRI and Benchmark Assessment, by Group

	Pre-SRI		Benchmark Assessment	
	M	*SD*	*M*	*SD*
Treatment Group	522.57	178.32	67.86	17.77
Control Group	479.19	168.43	64.43	19.35

Table 12

Univariate Analysis of Covariance Analyzing Students' Standards-Referenced Benchmark Scores, by Item, Using the SRI-Pre as Covariate

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
LexilePre	440055.699	1	440055.699	25.605	.000	.225
Group	1516.458	1	1516.458	.088	.767	.001
Error	1512384.77	88	17186.191			
Total	27552500.00	91				

Note. *R Squared = .232 (Adjusted R Squared = .215)

Note. *Covariates appearing in the model are evaluated at the following values: LexilePre = 504.8242

Though there were no statistically significant differences, students in the treatment group attained a mean score of 67.86 on standards-referenced benchmark test items pertaining to reading non-fiction, while students in the control group attained a mean score of 64.43 on benchmark standards-referenced test items pertaining to reading non-fiction. Standards-referenced benchmark assessments included: 3.6a (Essential Skill: A) "identify the author's purpose (e.g., entertain, inform, persuade," 3.6d (Essential Skill: E3) "understanding that some questions are answered directly in the text," 3.6e (Essential Skill: C4) "visually and graphically represented information, such as charts, graphs, graphic organizers, pictures, and photographs, 3.6e (Essential Skill: E2) "understanding that sometimes two or more pieces of information need to be put together to answer a question," 3.6e (Essential Skill: F) "draw conclusions about what they have

read," 3.6e (Essential Skill: H) identify details that support the main idea of a nonfiction selection," 3.6f (Essential Skill: G) "summarize major points in a selection," and 3.6g (Essential Skill: I) state in their own words the main idea of a nonfiction selection."

An additional univariate analysis of covariance (ANCOVA) showed there was no statistically significant interaction between groups in school or between schools ($p > .05$), as summarized in Table 14 and prefaced by the descriptive statistics, summarized in Table 13.

Table 13

Descriptive Statistics for Benchmark Assessment, by Group and School

	Benchmark (Treatment Group)		Benchmark (Control Group)	
	M	*SD*	*M*	*SD*
School 1	70.63	37.90	53.41	43.41
School 2	67.71	40.92	70.45	40.10
School 3	66.25	40.56	63.19	44.40
Combined	69.74	39.87	64.43	42.02

		n
Group	1.00	49
	2.00	42
School	1.00	21
	2.00	46
	3.00	24

Table 14

Univariate Analysis of Covariance Analyzing Students' Standards-Referenced Benchmark Assessment Scores by Group and School, Using Pre-SRI as Covariate

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Group	9856.271	1	9856.271	.574	.451	.007
School	23283.068	2	11641.534	.678	.511	.016
Group*School	44530.231	2	22265.115	1.296	.279	.030
Error	1443027.268	84	17178.896			
Total	27552500.00	91				
Corrected Total	1969395.604	90				

Note. *R Squared = .267 (Adjusted R Squared = .215)

Table 15

Mean of Treatment Group Students' Standards-Referenced Benchmark Assessment Scores Compared to Mean of Control Group Students' Standards-Referenced Benchmark Assessment Scores in the Non-fiction Domain

			95% Confidence Interval	
Group	**Mean**	**Std. Error**	**Lower Bound**	**Upper Bound**
1.00	537.108	20.026	497.285	576.931
2.00	514.419	21.996	470.677	558.161

*Covariates appearing in the model are evaluated at the following values: Lexile Pre = 504.8242

Analyses of Student Surveys

Data from the student survey (see Appendix A), pertaining to research question 2: What are students' perceptions of the C.L.E.A.R. Curriculum Model? are summarized in tables 16, 17, and 18. The majority of students at all three schools (86.67%) indicated that, since having participated in the implementation of the C. L. E. A. R. Curriculum Model, they are better at using non-fiction text features (Item 1), developing questions (Item 2), using print expository texts for the purpose of finding answers to questions (Item 3), using electronic expository texts for the purpose of finding answers to questions (Item 4), paraphrasing information (Item 5), synthesizing information (Item 6), and presenting information (Item 7). Additionally, eighty-four percent of the students surveyed expressed that, since completing their knowledge expedition, they are now more interested in reading non-fiction texts.

Table 16

Summary of Treatment Group Students' Perceptions of the C. L. E. A. R. Curriculum Model, by School and Item

School	Item	Worse	Same	Better
School 1 (n = 10)	Item 1: utilization of non-fiction text features	10%	40%	50%
	Item 2: developing questions	10%	20%	70%
	Item 3: using print expository texts for the purpose of finding answers to questions	10%	30%	60%
	Item 4: using electronic expository texts for the purpose of finding answers to questions	10%	30%	60%
	Item 5: paraphrasing information	10%	50%	40%
	Item 6: synthesizing information	0%	20%	80%
	Item 7: presenting information	10%	20%	70%
School 2 (n = 24)	Item 1: utilization of non-fiction text features	0%	17%	83%
	Item 2: developing questions	0%	50%	50%
	Item 3: using print expository texts for the purpose of finding answers to questions	4%	33%	63%
	Item 4: using electronic expository texts for the purpose of finding answers to questions	8%	42%	50%
	Item 5: paraphrasing information	4%	42%	54%
	Item 6: synthesizing information	4%	25%	71%
	Item 7: presenting information	4%	38%	58%
School 3 (n = 15)	Item 1: utilization of non-fiction text features	0%	20%	80%
	Item 2: developing questions	7%	40%	53%
	Item 3: using print expository texts for the purpose of finding answers to questions	7%	13%	80%
	Item 4: using electronic expository texts for the purpose of finding answers to questions	7%	33%	60%
	Item 5: paraphrasing information	13%	13%	73%
	Item 6: synthesizing information	0%	53%	47%
	Item 7: presenting information	7%	27%	67%

Table 17

Summary of Treatment Group Students' Perceptions of their Interest in Reading Non-fiction Texts, by School

School	Item	Less Interested	Equally Interested	More Interested
School 1 (n = 10)	Item 8: interest in reading non-fiction texts	0%	10%	90%
School 2 (n = 24)	Item 8: interest in reading non-fiction texts	4%	8%	88%
School 3 (n = 15)	Item 8: interest in reading non-fiction texts	7%	20%	73%

Table 18

Mean and Standard Deviation of Treatment Group Students' Perceptions of Their Interest in Reading Non-fiction Texts, by School

School	Mean	Standard Deviation
School 1	86.00	13.75
School 2	87.42	7.16
School 3	85.93	10.58
Combined	86.67	9.65

Analyses of Teacher Surveys/Interviews

Analyses of teacher surveys/interviews pertained to teachers' perceptions of the C. L. E. A. R. Curriculum Model. Data from the teacher interview protocol (see Appendix B), pertaining to research question 3: What are teachers' perceptions of the C.L.E.A.R. Curriculum Model? are summarized in tables 19, 20, and 21. All of the teachers at all three schools (98.94%) indicated that, since having participated in the implementation of the C. L. E. A. R. Curriculum Model, their students are better at using

non-fiction text features (Item 1), developing questions (Item 2), using print expository texts for the purpose of finding answers to questions (Item 3), using electronic expository texts for the purpose of finding answers to questions (Item 4), paraphrasing information (Item 5), synthesizing information (Item 6), and presenting information (Item 7). One hundred percent of all of the teachers at all three schools indicated that, since having participated in the implementation of the C. L. E. A. R. Curriculum Model, their students are more interested in reading non-fiction texts.

Table 19

Summary of Treatment Group Teachers' Perceptions of the C. L. E. A. R. Curriculum Model, by School and Item

School/ Teacher	Item	Worse	Same	Better
School 1/ Teacher 1	1			X
	2			X
	3			X
	4			X
	5 – N/A			
	6			X
	7		X	
School 2/ Teacher 2	1			X
	2			X
	3			X
	4			X
	5			X
	6			X
	7			X
School 3 Teacher 3	1			X
	2			X
	3			X
	4			X
	5			X
	6			X
	7			X

Table 20

Summary of Treatment Group Teachers' Perceptions of their Students' Interest in Reading Non-fiction Texts, by School

School/ Teacher	Item	Less Interested	Equally Interested	More Interested
School 1/ Teacher 1	8			X
School 2/ Teacher 2	8			X
School 3/ Teacher 3	8			X

Table 21

Mean of Treatment Group Teachers' Perceptions of Their Students' Interest in Reading Non-fiction Texts, by School

School/ Teacher	Mean
School 1/ Teacher 1	96.83
School 2/ Teacher 2	100.00
School 3/ Teacher 3	100.00
Combined	98.94

Qualitative Findings

The purpose of the phenomenological study component of this mixed-methods study was to explore students' and teachers' perceptions of the C. L. E. A. R. Curriculum Model through conversational interviews, as well as through their written responses,

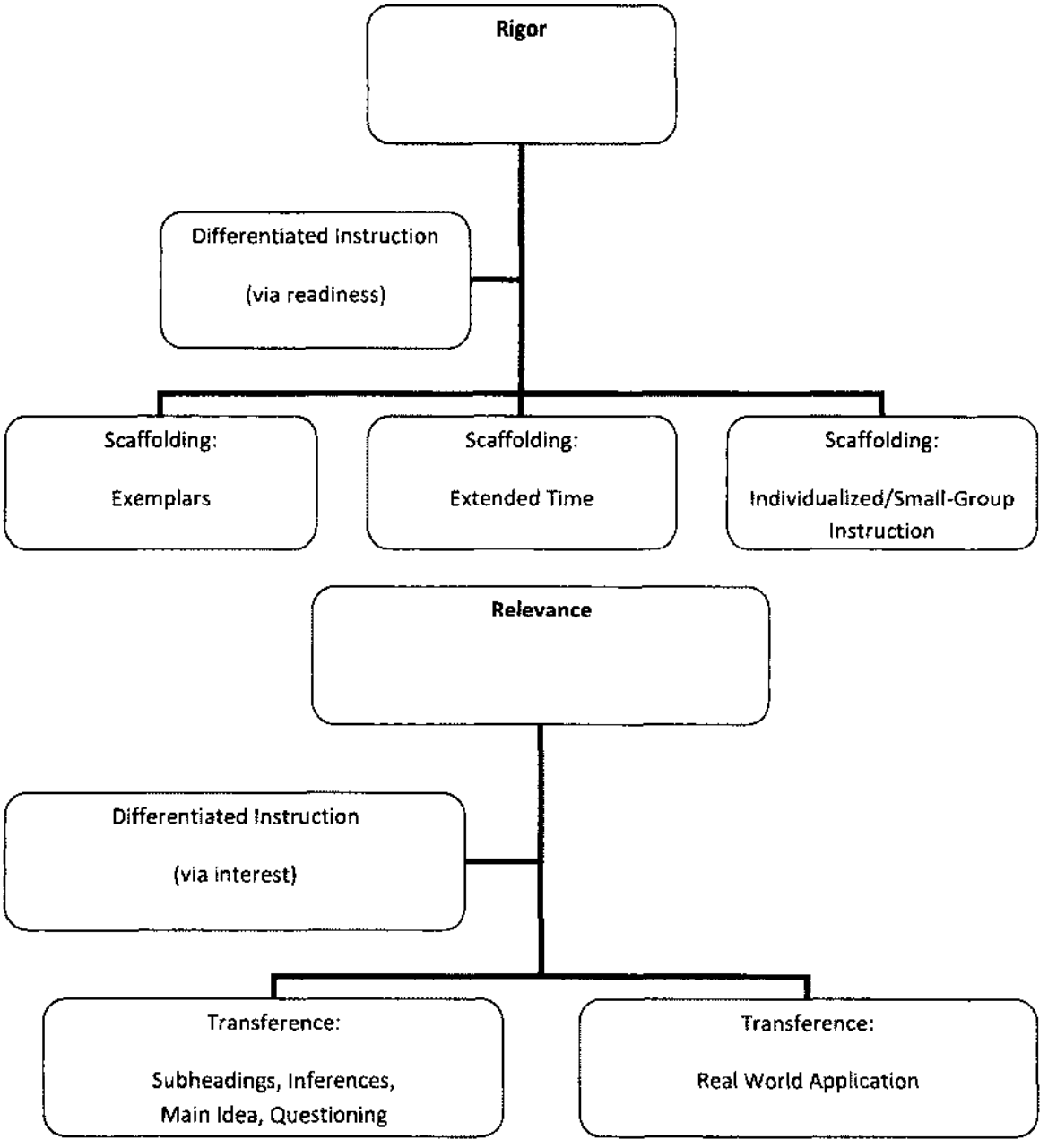
concerning their perceptions of the C. L. E. A. R. Curriculum Model. Teacher responses and student responses were gathered and examined separately.

Teacher responses were summarized, and then verified, employing member-checking. Teacher responses from conversational interviews were coded and collapsed into themes. Themes were framed by the study's research questions. A discussion of each theme follows.

The two structural macro themes which emerged were rigor and relevance. According to teacher participants, rigor was achieved through differentiated instruction (readiness), as exemplified by the emergence of the micro theme of scaffolding, achieved through the incorporation of exemplars, individualized and/or small group instruction, and extending the time needed for the implementation to take place. This is depicted in Figure 1. Also, according to teacher participants, relevance was achieved through differentiated instruction (interest), as exemplified by the emergence of the micro theme of transference, emphasizing subheadings, inferences, main idea, questioning, and real world application. This is also depicted in Figure 1. All three teacher participants referenced differentiated instruction (readiness).

Figure 1

Rigor and Relevance



Teacher participant statements, regarding rigor, achieved through differentiation, via readiness levels, are summarized in the table below. Participants' statements are

reflective of the scaffolding provided in order to maintain rigor while accommodating students' readiness levels, including, but not limited to, the provision of exemplars, individualized assistance, and time extensions. Participant 001's first statement depicts how the incorporation of exemplars, a form of scaffolding, assisted students with bridging the gap between the rigor of the C. L. E. A. R. Curriculum Model and their individual readiness levels. Participant 001's second statement, as well as Participant 002's statement, depicts how the incorporation of extended time, an additional form of scaffolding, assisted students with achieving the rigorous expectations of the C. L. E. A. R. Curriculum Model. Students were afforded more time to complete the implementation, again bridging the gap between the rigor of the C. L. E. A. R. Curriculum Model and students' individual readiness levels. Participant 001's final statement is reflective of how the provision of individualized and/or small group instruction further assisted students in bridging the gap between the rigor of the C. L. E. A. R. Curriculum Model and their individual readiness levels.

Table 22

Teacher Participant Statements, Regarding Rigor, Achieved through Differentiation, According Readiness Levels

Teacher Participant	Transcript	Statement
001	24-26	"Seeing a sample that had been done before changed their mindset because they saw the end result."
001	28-30	"Timing was the greatest limitation because the students [were] not identified as academically gifted, and they needed more time than the students identified as academically gifted."
002	6-7	"… take it slow and be patient with students who may not be able to totally grasp ideas at first."
001	9-10	"Some required a lot of special attention."

Teacher participant statements, regarding relevance, achieved through differentiation, via interest, are summarized in Table 22. Participants' statements are reflective of students' increased interest in non-fiction, as well as students' eagerness to take ownership of their own research. Participant 001's statements depict the relevance, achieved through the transference of real world application, as students are exhibiting more interest in reading non-fiction, including topics about which their classmates have written. Likewise, Participant 003's statements are also reflective of the relevance, achieved through the transference of real world application, also noting students'

increased interest in reading non-fiction, as well as their willingness to take ownership of their respective knowledge expeditions.

Table 23

Teacher Participant Statements, Regarding Relevance, Achieved through Differentiation, According to Interest

Teacher Participant	Transcript	Statement
001	12-13	"Students are now more interested in non-fiction." "They're interested in the topics their classmates have written about"
001	21-22	"The students wanted to work when the specialist was not there (i.e., during their lunch time and during their recess time)"
001	1-2	"Students have shown more interest in non-fiction texts." "They are checking out more books from the library on these topics."
003	2-3	"[She] thought it would be a disaster;" however, [her] students "enjoyed it," "took ownership of it," "told others about their topics," and "found non-fiction interesting."
003	11-14	"Students' interest in non-fiction changed significantly." When students go to the library, they "look for non-fiction," "[read] their social studies text books," and seek to "[use] World Book on the computer."

Not only did teachers reference relevance, related to differentiated instruction (via interest), but students did as well. Students said that they would tell a friend going on a knowledge expedition about how much fun it is to go on a knowledge expedition, how much work going on a knowledge expedition entails, and how nice the teacher leading the knowledge expedition is. However, a number of participants at school three, shared specific information regarding their experiences while participating in the C.L.E.A.R. Curriculum Model, and these statements are summarized in Table 24.

Table 24

Student Participant Statements, Regarding Relevance, Achieved through Differentiation, Via Interest

Student Participant	Statement
069	"you can learn things," "you can pick your own topic," and "you can pick almost anything."
070	"I [learned] more about the things that came before me, like Rosa Parks and Harriet Tubman."
080	"I [got] to learn new things about gray whales."
081	"I [learned] some new things about football."

Teacher participant statements, regarding relevance related to transference, emphasizing main idea, utilization of subheadings, and inferences are summarized in Table 25. Participant 001's statement, as well as Participant 002's statement, emphasizes how students' knowledge of headings and subheadings increased, as they had to use headings and subheadings throughout the implementation of the C. L. E. A. R. Curriculum Model. Similarly, Participant 002's statement depicts her students' emphasis on determining main idea. Information provided by these participants exhibits the relevance related to the transference of main idea and inferences, as well as utilization of headings and subheadings.

Table 25

Teacher Participant Statements, Related to Transference, Including Main Idea, Subheadings, and Inferences

Teacher Participant	Transcript	Statement
002	3-4	Students are now "reading passages and talking about main idea and which information is most important in answering questions."
001	6-8	Students "know headings and subheadings now, especially when using the computer" and students' "use of inferences and subheadings has increased."
003	6-9	Students "[pick] up on text features more," as "developing headings and subheadings for slides in their own PowerPoint presentations helped them to connect to the headings and subheadings they encounter when reading," "connecting their own work to reading."

Just as relevance, related to differentiation (via interest), was referenced, relevance, related to real world application, was also referenced. Teacher Participant 001 noted the conversations that now take place between and amongst students in her classroom: "'Does this support what you're saying?'" "'How can you prove it?'" "'Where did you get the information?'" "'Prove it.'" "'Support it.'"

Summary of Findings

The purpose of the phenomenological component of this mixed-methods study was to listen to the words of students and teachers concerning their perceptions of the C. L. E. A. R. Curriculum Model. Forty-nine students, who participated in the implementation of the C. L. E. A. R. Curriculum Model, and their three respective teachers, responded to a researcher-developed survey comprised of eight items, and open-ended questions, pertaining to aspects of the C. L. E. A. R. Curriculum Model.

The majority of students and all of the teachers indicated that students, following participation in the implementation of the C. L. E. A. R. Curriculum Model, were better at using non-fiction text features, developing questions, using print expository texts for the purpose of finding answers to questions, using electronic expository texts for the purpose of finding answers to questions, paraphrasing information, synthesizing information, and presenting information. Additionally, the majority of students and all teachers also indicated that students' interest in reading non-fiction texts had increased following participation in the implementation of the C. L. E. A. R. Curriculum Model.

Researcher inductive analysis identified structural themes, which included (1) Rigor, encompassing differentiated instruction, via readiness, incorporating scaffolding, provided in the form of exemplars and extended time, and (2) Relevance, encompassing differentiated instruction, via interest, incorporating transference of the utilization of subheadings, inferences, main idea, and questioning, as well as real world application, all of which are reflective of the core components of the C. L. E. A. R. Curriculum Model.

Rigor, encompassing differentiated instruction, via readiness, incorporating scaffolding, provided in the form of exemplars and extended time was referenced by every teacher participant. While students, identified as academically gifted, might have been able to successfully complete the implementation in the designated time, the students in this study required additional time in order to successfully complete the implementation. Teacher Participants 001 and 002 emphasized how time was extended during implementation of the C. L. E. A. R. Curriculum Model in order to adapt to students' respective readiness levels. Teacher Participant 001 also noted the incorporation of exemplars; and, Teacher Participant 002 referenced the incorporation of small groups, both of which assisted with adapting the implementation of the C. L. E. A. R. Curriculum Model to students' respective readiness levels.

Relevance, encompassing differentiated instruction, via interest, incorporating transference of the utilization of subheadings, inferences, main idea, and questioning, as well as real world application was also referenced by every teacher participant on twelve different occasions. Teacher Participant 001 emphasized the transference of skills, related to utilization of subheadings, drawing inferences, and developing questions, while Teacher Participant 002 emphasized the transference of skills related to determining main idea. Similarly, Teacher Participant 003 noted relevance associated with authentic, real world application.

Summary

Although statistically significant results were not observed between pre- and post-SRI / pre- and post-Lexile assessments, following participation in the implementation of

the C. L. E. A. R. Curriculum Model, students in the treatment group experienced qualitatively stronger increases on Scholastic Reading Inventory (SRI) proficiency bands. Treatment group students did out-perform the control group students on the standards-referenced benchmark assessment, though results were not statistically significant. Additionally, the majority of students at all three schools (86.45%) indicated that since having participated in the implementation of the C. L. E. A. R. Curriculum Model, they are better at using non-fiction text features, using print expository texts for the purpose of finding answers to questions, using electronic expository texts for the purpose of finding answers to questions, paraphrasing information, synthesizing information, and presenting information. Eighty-four percent (84%) of the treatment group students surveyed also expressed that, since completing their knowledge expedition, they are now more interested in reading non-fiction texts. Further, all of the teachers at all three schools (98.94%) indicated that, since having participated in the implementation of the C. L. E. A. R. Curriculum Model, their students are better at using non-fiction text features, using print expository texts for the purpose of finding answers to questions, using electronic expository texts for the purpose of finding answers to questions, paraphrasing information, synthesizing information, and presenting information. One hundred percent (100%) of these same teachers also indicated that, since having participated in the implementation of the C. L. E. A. R. Curriculum Model, their students are more interested in reading non-fiction texts.

CHAPTER 5

DISCUSSION

To date, great emphasis has been placed on reading achievement in the United States through organizations, such as the National Reading Panel (NPR) (2000) and the National Institute of Child Health and Human Development (NICHD), legislation, such as the No Child Left Behind Act (NCLB) (2001), the Individuals with Disabilities Act (IDEA) (2004), and Response to Intervention (RtI) (2004). Emphasis has also been placed on reading achievement in the United States through studies focused on interventions, such as the School-wide Enrichment Model – Reading (SEM-R) (Reis, 2007, 2010), and Success for All (SFA) (Chambers, 2008). However, students, nation-wide, continue to struggle with comprehension, particularly the comprehension of non-fiction texts, and particularly at the third grade level. The purpose of this mixed-methods, quasi-experimental study was to determine the potential impact of the implementation of higher-order thinking strategies and higher-level thinking questions through participation in the C. L. E. A. R. (Challenge Leading to Engagement, Achievement and Results) Curriculum Model (National Research Center on the Gifted and Talented + University of Virginia, 2008-2009), on reading achievement at the third grade level.

The Impact of the C. L. E. A. R. Curriculum Model on the Reading Achievement of Students Not Receiving Services in a Gifted Cluster Setting or Inclusion Setting at the Third Grade Level

The Research Center on the Gifted and Talented, located at the University of Virginia, and was designed to be utilized with students identified as academically gifted,

the researcher theorized that the curriculum model had the potential to positively impact students not receiving services in a gifted cluster or inclusion setting, at the third grade level. Following a study conducted by researchers, Callahan, Moon, Oh, Azano, and Hailey (2014), statistically significant findings were noted for students, identified as academically gifted, and participating in the implementation of the C. L. E. A. R. Curriculum Model . Though statistically significant findings were noted, these same researchers explain that "empirical evidence of the effectiveness of units based on such curricular and instructional interventions from large scale experimental studies in multiple settings are limited" (p. 1); and, settings, focused on students not identified as academically gifted are virtually non-existent.

Although "statistically significant differences favoring the treatment group over the comparison group on standards-referenced assessments" were observed in the study conducted by Callahan, et al. (2014, p. 31), these researchers expressed that "teachers in heterogeneous classrooms were unwilling or unable to implement the curriculum in their classrooms citing the difficulty of the content, the pace, and the lack of exact [assessments] parallel to the state assessments" (p. 31). Because of this, these researchers could not conclude that students "not identified and served in gifted programs would not benefit from the curriculum" (p. 31) and expressed that "it is important for future work to understand the extent to which C. L. E. A. R. Model units are equally responsive to all learners" (p. 30).

While hypotheses were not supported, as there were no statistically significant findings obtained in this current study, students in the treatment group, comprised of

students neither identified as academically gifted nor identified to be in need of special education services, did experience stronger increases in proficiency bands on the Scholastic Reading Inventory; and, students in the treatment group earned a higher mean on the standards-referenced division benchmark assessment, on items pertaining to non-fiction, than students in the control group.

Students' and Teachers' Perceptions of the C. L. E. A. R. Curriculum Model

Additionally, most treatment group students, as well as their respective teachers, perceived that they had improved their ability to use non-fiction text features, develop questions, use both print and electronic expository texts for the purpose of finding answers to questions, and paraphrase, synthesize, and present information, through participation in the implementation of the C.L.E.A.R. Curriculum Model. Further, almost all treatment group students indicated that, since participating in the implementation of the C.L.E.A.R. Curriculum Model, they are now more interested in reading non-fiction texts. Corroborating student findings, all three teachers, assigned to the treatment groups at all three schools, also perceived that their students had improved their ability to use non-fiction text features, develop questions, use both print and electronic expository texts for the purpose of finding answers to questions, and paraphrase, synthesize, and present information, through participation in the implementation of the C.L.E.A.R. Curriculum Model; and, all three teachers, assigned to the treatment groups at all three schools, also perceived that their students, since participating in the implementation of the C.L.E.A.R. Curriculum Model, are now more interested in reading non-fiction texts.

Students' and Teachers' Perceptions of the C. L. E. A. R. Curriculum Model, Pertaining to Rigor and Relevance

Though components of the C. L. E. A. R. Curriculum Model parallel current research in the field of literacy, exhibiting elements of Concept-Oriented Reading Instruction (CORI), Question and Answer Relationships (QAR), and Anticipatory Reading Guides, two themes were identified within teacher and student interview responses: Rigor, including differentiated instruction, via readiness, scaffolding, time, small groups, and exemplars, and Relevance, including differentiated instruction, via interest, transference, subheadings, inferences, main idea, questioning, and real world application. All three teacher participants referenced differentiated instruction, via readiness. Teacher Participants 001 and 002 both referenced time; and Teacher Participant 002 referenced small groups, while Teacher Participant 001 referenced exemplars. In order to incorporate exemplars, the researcher had fourth grade students, who had previously completed implementation of the C. L. E. A. R. Curriculum Model in third grade, present their research to treatment group students currently participating in the implementation of the C. L. E. A. R. Curriculum Model. Pertaining to relevance, all three teacher participants referenced differentiated instruction, via interest. Teacher Participants 001 and 003 referenced real world application; and Teacher Participant 001 referenced transference, including subheadings, inferences, and questioning, while Teacher Participant 002 referenced main idea. The researcher also noted Teacher Participant 001's references to best practice and confidence. However, this data did not align with the identified themes.

Findings and Interpretations

Though the C. L. E. A. R. Curriculum Model does not mention either Rigor or Relevance, one of its three key components is differentiation, wherein differentiation "is applied to design various learning opportunities for students who differ in their readiness levels (what they know, understand, and can do in relation to the content), their interests and their learning profiles" (National Center on the Gifted and Talented + University of Virginia, 2008, pages 9-10).

In a five-year research initiative, involving 75 high schools in 10 states, an initiative known as *Models, Networks and Policies to Support and Sustain Rigor and Relevance for All Students*, led by the International Center for Leadership in Education, in conjunction with the Quaglia Institute for Student Inspiration, researchers question how students can learn if they aren't academically engaged and how can they set and reach academic goals if they don't see the relevance of learning to their lives (McNulty, Quaglia, &Russell, 2007). Additionally, a framework, based on the six levels of Bloom's Taxonomy: "knowledge/awareness, comprehension, application, analysis, synthesis, and evaluation" (McNulty, Quaglia, & Russell, 2007, p. 1), was developed to ensure the inclusion of rigor and relevance. Rigor achieved through differentiation, according to readiness levels, and Relevance, achieved through differentiation, according to interest, were the most pronounced findings of this study.

According to Teacher Participant 001, a strength of the implementation of the C. L. E. A. R. Curriculum Model was the rigor achieved through differentiation, via readiness levels. This correlates with the finding that this curriculum model might be

more beneficial for students who have attained an SRI ranking of "Advanced," "Proficient," or "Basic," which should be a consideration for future instruction. Referencing exemplars, provided by the gifted education specialist, this participant noted that "seeing a sample that had been done before changed [his/her students'] mindset because they saw the end result." This participant also referenced the modeling, additional time, small group, and even one-on-one assistance afforded students, based upon individual readiness levels. Corroborating Teacher Participant 001's reflections, Teacher Participant 002 stated that the "small group work with different abilities" was an effective aspect of the model, which he/she felt had the most positive impact on her students. Teacher Participant 002 also recommended that the C. L. E. A. R. Curriculum Model be embedded into the current non-fiction curriculum to reach the "regular education population," and Teacher Participant 003 referenced the need for the "support of the gifted education specialist."

Hence, the researcher (the school's elementary gifted education specialist) was able to overcome implementation obstacles, such as time constraints and complexity, cited by teachers of heterogeneous classrooms in previous studies. Elements of the C. L. E. A. R. Curriculum Model pertaining to rigor include "use of more sophisticated and advance resource material" (Callahan, et al., 2014) and "allowing learners greater depth of learning" (p. 5), emphasizing that "learning should be focused on understanding of key knowledge and principles of the field of study rather than rote memorization of information" (p. 6). While on their "knowledge expeditions," students "[derived] information from, [analyzed], and [evaluated] a variety of non-fiction texts and

[expanded] their skills in research and writing and the use of reading comprehension strategies," "using the metaphor of researcher as explorer" (p. 15).

These curricular elements promote greater depth of learning; and, the importance of these curricular elements are evident in the teachers' responses, particularly responses emphasizing transference of knowledge, understanding, and real-world skills, fostered throughout the implementation of the C. L. E. A. R. Curriculum Model, as well as the students' willingness to take ownership of their respective authentic products developed over the course of the implementation of the C. L. E. A. R. Curriculum Model.

Another strength of the implementation of the C. L. E. A. R. Curriculum Model was the relevance achieved through differentiation, via interest, which was noted by teacher participants and student participants. Teacher Participant 001 stated that because students were able to select their own topics, "students are now more interested in non-fiction," and "they're interested in the topics their classmates have written about." This participant also indicated that students wanted to work on their knowledge expeditions "during their lunch time and during their recess time." Supporting Teacher Participant 001, Teacher Participant 002 emphasized that "students have shown more interest in non-fiction texts," particularly non-fiction texts pertaining to science; and, "they are checking out more books from the library on these topics." Teacher Participant 003 further emphasized how his/her students "took ownership" of their topics, "found non-fiction interesting," "begged to go on the computer," and "told others about their topics." This participant indicated that his/her students' interest in reading non-fiction texts had "changed significantly," stating that his/her students have been "reading their social

studies text books and using World Book on the computer." He/she did note that his/her class encountered a "lack of resources;" however, she/he also noted that "the gifted specialist provided articles on different topics to assist the students with finding information on their topics."

Teacher Participant responses are reflective of the relevance, achieved through differentiation (via interest) of the C. L. E. A. R. Curriculum Model. Another critical element of the C. L. E. A. R. Curriculum Model is "increased challenge through choice of content and skills" (Callahan, et al., 2014, p. 5), emphasizing "investigations and/or creation of products that reflect in-depth investigations into solving real problems in areas of student interest and ability" (p. 8). Such approaches are student-centered, "[encouraging] students to study topics of interest" (p. 8) and "[helping] students develop self-directed life-long learning skills with intrinsic motivation to learn" (p. 8). Such curricular elements, fostering relevance, were referenced by both teachers and students. Throughout their participation in the implementation of the C. L. E. A. R. Curriculum Model, students were afforded the opportunity to select their own topics; and, students researched their topics while also focusing on required topics of study. Topics ranged from how cheetahs are biologically designed to survive in the wild to scientists' theories regarding the creation of the universe. During this time, students focused on their self-selected topics during their free time; and, students even opted to focus on their self-selected topics during their recess.

Students surveyed expressed that, since completing their knowledge expedition, they are now more interested in reading non-fiction texts. While students, at school one,

stated that they would tell a friend going on a knowledge expedition about how much fun it is to go on a knowledge expedition, how much work going on a knowledge expedition entails, and how nice the teacher leading the knowledge expedition is, a number participants at school three, shared specific information regarding their experiences while participating in the C.L.E.A.R. Curriculum Model. Student Participant 069 stated that "you can learn things," "you can pick your own topic," and "you can pick almost anything." Student Participant 070's response correlated well with Student Participant 069, who stated, "I [learned] more about the things that came before me, like Rosa Parks and Harriet Tubman." Additionally, Student Participant 080's and Student Participant 081's responses further corroborated Student Participant 069 and Student Participant 070 when stating, "I [got] to learn new things about gray whales," (P080) and "I [learned] some new things about football" (P081). Here, these responses are reflective of relevance, achieved through differentiation, via interest through students participating in the implementation of the C.L.E.A.R. Curriculum Model.

Not only were Rigor and Relevance achieved through differentiation, via readiness levels, and through differentiation, via interest, respectively, rigor and relevance were also achieved through another component of the C. L. E. A. R. Curriculum Model, *Depth and Complexity*, which "is used to build layers of challenge and meaning onto standards-based learning opportunities," incorporating "elements of depth (big ideas; language of the discipline; details; patterns; rules);" and complexity (multiple perspectives; interdisciplinary connections; unanswered questions; ethical issues, changes over time)" (National Center on the Gifted and Talented + University of

Virginia, 2008, pp. 9-10). Rigor and Relevance were also achieved through a final component of the C. L. E. A. R. Curriculum Model, The School-wide Enrichment Model, which "emphasizes opportunities for students to work with the tools and methods of practicing professionals in a field, and for students to engage in long-term, 'real-world projects in an area of interest" (pp. 9-10). Teacher Participant 001 referenced the real-world application his/her students experienced acting as researchers on their respective knowledge expeditions when noting the conversations that now transpire in his/her classroom: "Does this support what you're saying?" "How can you prove it?" "Where did you get the information?" "Prove it." "Support it," indicative of the rigor and relevance experienced in his/her classroom.

Importance of Study

According to Susan Winebrenner, in *Rigor and Engagement for Growing Minds*, "strategies used to challenge and engage gifted students could and should benefit all students" (Kingore, 2013, p. xv). This includes "higher order thinking, inquiry and in depth study, using primary sources of information, flexible grouping by interest and learning strengths, and meaningful choices regarding content and process" (p. xv). Also noted is the belief that "engagement is guaranteed when students are actively interacting with a topic that interests them" (p. xv), allowing "all students to experience continuous learning at their highest capability levels" (p. xv).

The study conducted by Callahan, et al. (2014), while exhibiting statistical significance for students identified as academically gifted, does not assist with determining the extent to which the C. L. E. A. R. Curriculum Model is "equally

responsive to all learners" (p. 30), prompting researchers to note the need to implement the curriculum in heterogeneous classrooms.

While statistically significant results were not observed in this current study, treatment group students did experience a greater increase in proficiency bands on their post-SRI assessment, as compared to control group students; and, treatment group students achieved a higher mean score on their standards-referenced division benchmark assessment, as compared to control group students. Further, the qualitative data attained during this study depicts the strongest attributes of this study, the students' and teachers' perceptions of the C. L. E. A. R. Curriculum Model, emphasizing rigor and relevance.

This study contributes to a growing body of knowledge, indicating that models and strategies, designed to be used with students identified as academically gifted, may benefit students who have not been identified as academically gifted, particularly in regards to reading achievement, as this study went beyond theoretical research and included the voices of both students and teachers concerning reading achievement at the third grade level and their perception of their participation in the implementation of the C. L. E. A. R. Curriculum Model, designed to be used with students identified as academically gifted.

This study examined a small group of students and teachers, correlating both quantitative data and qualitative data to existing literature, focused on reading achievement. The researcher regards the results of this study as an opportunity for expanded qualitative and quantitative research focused on the potential benefits of models and strategies, designed for students identified as academically gifted, for

students who have not been identified as academically gifted, particularly pertaining to reading achievement of non-fiction texts in the comprehension domain, particularly at the third grade level.

Summary

Though no statistically significant findings were noted in this study, students in the treatment group, comprised of students neither identified as academically gifted nor identified to be in need of special education services, did experience stronger increases in proficiency bands on the Scholastic Reading Inventory; and, students in the treatment group earned a higher mean on the standards-referenced division benchmark assessment, on items pertaining to non-fiction, than students in the control group.

According to the student surveys, most treatment group students perceived that they had improved their ability to use non-fiction text features, develop questions, use both print and electronic expository texts for the purpose of finding answers to questions, and paraphrase, synthesize, and present information, through participation in the implementation of the C. L. E. A. R. Curriculum Model. Additionally, almost all treatment group students indicated that, since participating in the implementation of the C. L. E. A. R. Curriculum Model, they are now more interested in reading non-fiction texts.

Reflective of student findings, all three teachers, assigned to the treatment groups at all three schools, also perceived that their students had improved their ability to use non-fiction text features, develop questions, use both print and electronic expository texts for the purpose of finding answers to questions, and paraphrase, synthesize, and present

information, through participation in the implementation of the C. L. E. A. R. Curriculum Model. Further, all three teachers, assigned to the treatment groups at all three schools, also indicated that their students, since participating in the implementation of the C. L. E. A. R. Curriculum Model, are now more interested in reading non-fiction texts.

Once verified (member-checking), coded, and triangulated, two macro-themes were identified within teacher and student interview responses: Rigor and Relevance. Regarding rigor, participants referenced the theme: differentiated instruction (via readiness), including the micro-themes scaffolding, time extension, small groups, and exemplars. Regarding relevance, participants referenced the theme: differentiated instruction (via interest), including the micro-themes transference of skills, such as utilization of subheadings, drawing inferences, determining main idea, developing questions, and real world application.

Limitations

In order to reduce confounding variables and increase internal validity, the researcher had initially planned to employ participants from the same school. Recognizing that the sample size would have been too small and recognizing the increased threats to external validity and generalizability, the researcher modified the method proposal in order to increase sample size, as well as the diversity of the sample, in order to increase anticipated external validity and generalizability.

Because the researcher worked collaboratively with administrators and instructors and personally administered the treatment, treatment fidelity was enhanced and attrition was low, increasing internal validity. However, treatment group instructors might have

shared components of the treatment with control group instructors before the conclusion of the treatment, which might have negatively impacted internal validity.

Though measures were taken to reduce confounding variables and increase validity, the small sample size is a threat to external validity and generalizability, as it reduces statistical power.

Additional limitations include the fact that reliability and validity measures are not available for the student survey employed in the study, though the instrument was developed by the researcher, working with an expert in the field. Also, social desirability is a potential limitation, as students might have responded to the survey in a way in which the students thought the researcher would want them to respond.

Suggestions for Future Research

Future research needs to be multi-faceted, connecting previous research to current qualitative and quantitative studies. Studies citing statistical significance, pertaining to reading achievement, particularly of non-fiction texts in the comprehension domain, through utilization of models and strategies, designed for students identified as academically gifted, for students who have not been identified as academically gifted have been limited. And, studies citing statistical significance, pertaining to reading achievement, particularly of non-fiction texts in the comprehension domain, through utilization of models and strategies, designed for students identified as academically gifted, for students who have not been identified as academically gifted, comparing pre- and post- standardized assessments, have been virtually non-existent. Such studies need to continue to be conducted, using a larger number of participants in order to determine

generalizability. Expanded studies, analyzing increase in proficiency bands, as well as item analyses on standards-referenced state and/or common core assessments should also be conducted.

The need for prolonged engagement is recommended for a future study, as well as a potential longitudinal study, continuing to monitor the reading achievement of treatment group participants. It is also recommended that a future study consider the correlational aspects of the treatment to students' respective Scholastic Reading Inventory proficiency bands. It is possible that the treatment has greater benefits for students who have attained a Lexile Band of Advanced, Proficient, or Basic. Additionally, a more sensitive instrument might be needed, such as the instrument utilized in the study conducted by Callahan, et al. (2014), when conducting a similar study in a states implementing the Common Core.

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Appendix A Interview Protocol/Survey (Student Participants)

INTERVIEW PROTOCOL/SURVEY

(Student Participants)

Research Question(s):

What are students' perceptions about the C.L.E.A.R. Curriculum Model?

Since completing your knowledge expedition, are you worse at, the same at, or better at:	**WORSE**	**SAME**	**BETTER**
using non-fiction text features			
developing questions			
using print expository texts for the purpose of finding answers to questions			
using electronic expository texts for the purpose of finding answers to questions			
paraphrase information			
synthesizing information			
presenting information			
Since completing your knowledge expedition, are you less interested in, equally interested in, or more interested in:	**LESS INTERESTED**	**SAME**	**MORE INTERESTED**
reading non-fiction texts			
What would you tell a friend about going on a knowledge expedition:			

Appendix B Interview Protocol (Teacher Participants)

INTERVIEW PROTOCOL

(Teacher Participants)

Research Question(s):

What are teachers' perceptions about the C.L.E.A.R. Curriculum Model?

- How would you describe your students' experience(s) while participating in the C.L.E.A.R. Curriculum Model?
- Describe how your students' ability to use expository (non-fiction) text features (i.e., table of contents, index, headings and subheadings, etc.) has changed since participating in the C.L.E.A.R. Curriculum Model.
- I am now going to ask you about particular skills targeted … Please indicate whether?

Since implementing the C.L.E.A.R. Curriculum Model with your students, do think your students are worse at, the same at, or better at:	**WORSE**	**SAME**	**BETTER**
using non-fiction text features			
developing questions			
using print expository texts for the purpose of finding answers to questions			
using electronic expository texts for the purpose of finding answers to questions			
paraphrase information			
synthesizing information			
presenting information			
Since completing your knowledge expedition, are your students less interested in, equally interested in, or more interested in:	**LESS INTERESTED**	**SAME**	**MORE INTERESTED**
reading non-fiction texts			

- Describe how your students' interest in reading non-fiction texts has changed?
- Which aspects of the model do you think had the most positive impact on your students? What made them particularly effective?
- What advice would you give a colleague who was considering implementing the C.L.E.A.R. Curriculum Model with their students?
- What do you perceive to be strengths of the C.L.E.A.R. Curriculum Model?
- What do you perceive to be limitations of the C.L.E.A.R. Curriculum Model?
- What else would like to comment on that we have not discussed?

VITA

Robin Gale Puryear was born in Fredericksburg, Virginia. Robin earned her Bachelor of Arts in Education from Virginia Polytechnic Institute and State University in May of 1991 and has served Chesapeake Public Schools as an educator since the fall of 1991, currently serving as an elementary gifted education specialist. She earned her first Master of Science (Curriculum and Instruction) from Old Dominion University in 1995 and her second Master of Science (Reading) from Old Dominion University in 2006. She earned her Ed. S. (Administration) from Virginia Polytechnic and State University in 2009; and, she earned her Doctor of Philosophy (Literacy Leadership) from Old Dominion University in 2015.

Robin also serves as an adjunct professor for Old Dominion University, where she has taught *Reading to Learn across the Curriculum*, *Developing Instructional strategies PreK-6, Language Arts*, and *Language Acquisition and Reading for Students with Diverse Learning Needs*. She has presented at the Virginia Association for Supervision and Curriculum Development (VASCD), the Virginia State Reading Association (VSRA), the Virginia Association for the Gifted (VAG), and the National Association of Gifted Children (NAGC). Robin received the Betty Yarborough Outstanding Graduate Student in Reading Education Award (Spring, 2013), and her research, Perceived Successful Components of the University Reading Clinic, was published in *The Delta Kappa Gamma Bulletin International: Journal for Professional Educators*, 81-4, 92-101. Her research interests include literacy, gifted education, curriculum development, the professional development of pre-service and in-service teachers, and mentoring.