THE IMPACT OF GUIDED READING INSTRUCTION ON ELEMENTARY STUDENTS' READING FLUENCY AND ACCURACY

by

Agnes Jean Teets

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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APPROVED BY:

Rick Bragg, Ed.D., Committee Chair

Karla Swafford, Ed.D., Committee Member

Cheyre Estep, Ed.D., Committee Member

ABSTRACT

This study examined the impact of Guided Reading instruction on elementary students' ability to read with fluency and accuracy. A one-way analysis of covariance with pre and posttest design was performed and applied to determine the impact of Guided Reading instruction on elementary students' reading fluency and accuracy. The sample of subjects included 108 elementary students in the fourth and fifth grade. To examine the impact of Guided Reading instruction, students' Developmental Reading Assessment (DRA2) pre and posttest scores to include words per minute and accuracy percentage were compared. The analyses revealed proportionate differences in students' fluency and accuracy. As direct implementation of Guided Reading was applied to student instruction, a significant difference was noted in the words per minute students read. However, as direct implementation of Guided Reading instruction was applied to student instruction, a significant difference was not noted in the accuracy rate of words per minute read. This research of Guided Reading instruction affords educators a multi-modality instructional strategy to impact the reading formation and foundation of elementary students. Recommendations to compliment this study to further benefit reading instruction could include the application of Guided Reading as it relates to and impacts student reading comprehension.

Dedication

This quest began as a natural block to check and ended as a culmination of reflections of those many people, interactions, and prayers to support the construction of this final composition. Bylining those notable people who supported the pursuit of my educational goal to its finality serves as a dedication to honor their effort to help me.

First, thanks to God for bestowing on my life all that is good. Help me achieve the happiness of beholding you face to face for all eternity.

Initially, my great uncle, the late Joseph T. Oliverio, insisted from the inception of this doctorate idea, that I finish what I start. Each time we shared a conversation as I infrequently visited my hometown, progress as to my dissertation was one of the first questions he would pose to me. He would also remind me how his pursuit of a doctorate remains unfinished and I must alter the outcome for our family. Finally, Uncle Josie, my work is done.

Secondly, Fisher and Hunter Boone, this manuscript serves as an indication to you that once you identify the goal you will achieve, distractions, obstacles, and sleepless nights serve as directional changes and positive adversaries to your life by which to increase your faith in God and cultivate your strength and humility as an individual. Life is truly enriched and blessed because of your existence in mine. I love you both dearly.

Extended gratitude to you TJ, for the many days and nights you positively contributed to the boys' lives in the absence me while writing this manuscript.

Further thankfulness I attribute to my dissertation committee team of Dr. Rick Bragg, Dr. Karla Swafford, and Dr. Cheyre Estep who have all provided professional and educational support to conclude this personal goal. It is with sincere gratitude that I offer my profound thanks to each of them for their personal guidance.

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TABLE OF CONTENTS

Appendix

List of Tables

List of Abbreviations

Analysis of Covariance (ANCOVA)

Developmental Reading Assessment (DRA2)

Multiple Intelligences (MI)

No Child Left Behind (NCLB)

School-wide Enrichment in Reading Framework (SEM-R)

Zone of Proximal Development (ZPD)

CHAPTER ONE: INTRODUCTION

Overview

Reading is a means by which to perpetuate a society. As children and adults read, information can be shared, processed, and communicated. With the synthesizing of this information, discovery may occur by which to impact the lives of others. So it is here, that reading is a foundational skill and necessary when interacting within an organization, bureaucracy, and team. Teaching reading to students requires a certain set of skills. Proper technique paired with an individualized approach promotes a positive learning environment. Success in reading largely depends upon how the teacher organizes the learning lesson according to how the student learns. Strategic approaches paired with the student's learning style often produce maximum results. As students possess the confidence to read text amid the challenges of unfamiliar words and concepts, they will read more words per minute.

Background

American children have inconsistently demonstrated progress with overall reading abilities within the past 15 years. This stagnant trend could possibly be attributed to the overall lack of student dedication to reading for pleasure during their free time versus surfing the Internet, playing highly interactive video games, or watching television programs. While schools seem efficient at teaching students how to read, teachers must "consistently challenge students to broaden those skills by reading nonfiction" (Dillon, 2010, p. 1). While students read at varying levels with accompanying needs, the instruction must "meet the different needs of

learners in a given classroom" (Kosanovich, Ladinsky, Nelson, & Torgensen, 2006). As instructors better equip lesson preparation with Guided Reading instructional strategies, students can "learn independently and absorb information on a variety of topics" (U.S. Department of Education, 2010). Guided Reading instruction is a teaching strategy to support the reading fluency and reading accuracy needs of learners.

While Guided Reading instruction increases student motivation by embedding topics and activities of interest into the curriculum, teacher implementation is challenging. Classroom instruction delivery typically consists of teacher instruction and student participation within a large group setting to include various environmental variables to distract student attention. This traditional approach can be observed in many classrooms with consistent outcomes paired with effective classroom management plans. Yet, with the onset of "community and collaboration" (Richardson, 2009, p. 9), elementary instruction and assessment take on a new methodology to include "exploring creative ways of learning academic material" (Diaz-Lefebvre, 2006, p. 136). Learning stations that include "puzzles, manipulatives, clay, coloring books, blocks and art projects" (Richardson, 2009, p. 9) which match the creativity, experience, and attitude of the teacher to the interest of the student encourage independent student engagement. These caveats are initially challenging for the teacher to organize for each lesson but with continued practice by the teacher, "literacy centers provide an opportunity for students to engage in purposeful learning activities while individuals or a small group" (Richardson, 2009, p. 9) receive teacher support become best practice approaches. Students are also exposed to working with a small group of peers to compete their assigned reading task to support their learning independent of the teacher prompts or cues provided in a whole group lesson.

One theoretical framework that will be utilized for this study will focus on the importance of various instructional designs and curricular strategies to improve reading fluency and reading accuracy rates for elementary students. As children experience incidentally in their daily activities, "they show a remarkable propensity to rapidly and effectively acquire words" (Justice, L., Meier, J., & Walpole, S., 2005, p. 18). Guided Reading instruction is the strategy by which teachers generate multi-leveled lessons and activities based on students' level and interest and engage the students in the reading lesson. One theory that will be utilized for this study is Howard Gardner's Theory of Multiple Intelligences. As asserted by Gardner, "learning/teaching should focus on the particular intelligences of each person" (Gardner, 1983). This theory provides information on how instructional lessons should appeal to the various intelligences of students. Additionally, teachers should assess their students from a variety of the seven multiple intelligences.

The foundational principle of the Multiple Intelligences Theory encompasses the notion that each individual possesses certain forms of intelligences by which they retrieve to navigate a response. These intelligences are represented in the forms of "linguistic, musical, logical-mathematical, spatial, body-kinesthetic, intrapersonal (e.g., insight, metacognition) and interpersonal (e.g., social skills)" (Gardner, 1983). Therefore, as students read, they can respond to text comprehension in post-reading activities by "reading through writing, discussion, dramatic activities, and extended research" (Bukowiecki, 2007, p. 63). While this may craft teacher encouragement, "there are multiple ways to present the world and to be in the world" (Hall, 1998, p. 184) by investigating "the world of the text in relation to their own reality" (Fisher, 2008, p. 26). In order to define and experience these relationships, a student must utilize more than one of the intelligences to critically develop primary response to the story. Further

intelligences can be unlocked as students understand, through analysis and synthesize the findings.

A second theoretical framework that will be utilized for this study will focus on the teacher to student interaction as both approach and participate in the reading process to further independence and self-extension reading at the elementary level when reading fluency and reading accuracy rate increase. Guided Reading instruction incorporates read-alouds, shared reading, and independent, self-selected reading to "encourage reflective thinking by discussing the text, increase reading fluency, learn content information, support developing readers, increase volume reading, improve automaticity with sight words, discuss book selection, teach needed skills, and evaluate progress" (Richardson, 2009, p. 7-8). All of the aforementioned skills can and do occur within a structured social or independent academic environment dependent on interactions between the students and teacher.

In simple terms, social constructivism occurs when "ideas are constructed through interaction with the teacher and other students" (Powell & Kalina, 2009, p. 241). Interaction with the teacher and other students during small group instruction and discussion is a foundational principle embedded in the Guided Reading Framework. As students connect with explicitly presented ideas, the learning, discussing, and understanding is authentic. One aspect of the Constructivist Theory is the Zone of Proximal Development (ZPD). The ZPD has been defined as "a zone where learning occurs when a child is helped in learning a concept in the classroom" (Vygotsky, 1962). For example, a child is provided assistance by the teacher when learning a new concept. Once the goal is achieved, the student can demonstrate or replicate the learned skill with confidence, fewer prompts, and proficiency. Vygotsky also proposed that learning is made easy when children have opportunities to participate in learning activities that

are guided and paced by a more capable person. As others support the student, the theory continues that students learn more effectually.

Problem Statement

Guided Reading instruction is an individualized and group instructional approach to teaching and assessing students with varying strengths and needs. This approach provides teachers the opportunity to assess student development then supply information to the student "to use reading strategies when they encounter reading difficulties by teaching skills that are necessary and appropriate for a specific reading stage" (Richardson, 2009, p. 4). As students are grouped according to reading ability, various grouping instruction can be implemented. Evidence suggests that grouping instruction, or instructional groups that consist of multi-leveled reading abilities, improves student achievement. While traditional methods of needs based and interest based grouping show that group arrangement matters, "it is what the teacher does with each group that makes the difference" (Ankrum & Bean, 2009, p. 134). Therefore, the problem statement is Guided Reading instruction impacts the fluency and accuracy of elementary students.

While students with varying backgrounds and instruction read and comprehend at various levels as they enter Kindergarten, teachers can tailor instruction to meet student needs and interest therefore increasing student sustainability, motivation, and overall reading comprehension. The significant solution to positively impacting and promoting reading fluency and reading accuracy rate for elementary students is the implementation of Guided Reading instruction. As students participate in "early educational experiences of high-quality preschool

programs that build a strong base of language and storytelling, positive experiences provide the information children need to access as they encounter the world of print (Pinnell & Fountas, 2009, p. 4). When students are given the tools and utensils they require to synthesize increasingly complex reading material, the assumption is that they will be fundamentally prepared to face these comprehension challenges. Therefore, to promote the "process of simultaneously extracting and construction meaning through interaction and involvement with written language" (U.S. Department of Education, 2010) at the elementary level, teachers must employ Guided Reading instructional strategies.

Purpose Statement

The purpose of this study is to evaluate the impact of Guided Reading instruction on elementary students' reading fluency and accuracy rate. One strategy to developing a "framework for further literacy learning" (Schulman & Payne, 2000, p. 7) is to implement the practice of Guided Reading instruction. As tailored "direction instruction to students' specific reading needs and help to deepen their understanding and processing of a variety of texts" (Schulman, 2006, p. 7), Guided Reading instruction can impact the overall fluency and accuracy rates of elementary students when they read. Knowledge of student interests and deficits provide the teacher with information to instruct students. Therefore, assessment must be frequent. By applying Guided Reading instructional strategies in reading within elementary reading classrooms, this study will attempt to measure changes in reading fluency and accuracy rate scores in elementary students' over the course of approximately four to five months.

Significance of Study

The goal of reading fluency and reading accuracy rate is to prepare students to become active participants in society. Literacy does not "automatically guarantee a high quality of life,

but low levels of literacy can seriously undermine it" (Pinnell & Fountas, 2009, p. x). As a result, educational institutions acknowledge the means by which to perpetuate society and have identified best practice instructional strategies to improve reading fluency and accuracy rates with elementary students. Guided Reading instruction is one such strategy. As teachers expel information to students based on their level of readiness and interest, students can "make connections, visualize, ask questions, and infer" (Gregory & Cahill, 2010, p. 518) at an early age. All of these skills require one or more of the multiple intelligences asserted by Howard Gardner. As elementary students replicate these comprehensive strategies while using multiple intelligences, they are apt to utilize these same skills as they mature. Thus, Guided Reading instruction promotes high order thinking.

The significance of this study is to determine if Guided Reading instruction impacts reading fluency and reading accuracy rates in elementary students' reading abilities. When students are engaged, they can learn. "Engaged readers actively interact with the text, seeking to understand what they have read" (Kelley & Clausen-Grace, 2009, p. 313). As teachers individualize their reading lessons based on on-going assessment and student interest, students are more likely to participate in the reading assignment thus, actively respond to comprehensive measures with their Zone of Proximal Development and individual multiple intelligences.

Research Questions

This study will aim to investigate factors that correlate with reading fluency and reading accuracy when Guided Reading instruction is implemented. The objectives of the study will be to:

- Determine the impact of Guided Reading instruction on elementary students' reading fluency, and

- Determine the impact of Guided Reading instruction on elementary students' reading accuracy rate.

The research findings will support examination of Guided Reading instruction and the impact it may have on elementary students' reading fluency and reading accuracy. As data is collected based on scores reports of reading fluency and reading accuracy, practitioners, theorists, and lawmakers can make informed decisions with regard to reading instruction with elementary schools. Based on the collected data, the following questions are revealed:

- How does Guided Reading instruction impact reading fluency for elementary students?
- How does Guided Reading instruction impact reading accuracy rate for elementary students?

Definitions

Accuracy (Reading) – "the percentage of words the child reads aloud correctly" (Pinnell & Fountas, 2009, p. 543).

Automaticity – "rapid, accurate, fluent word decoding without conscious effort or attention" (Pinnell & Fountas, 2011, p. 187).

Direct Instruction – The explicit and direct one to one (one teacher to one student) teaching, remediation, or review of reading skills and strategies to students.

Fluency (Reading) – "to read continuous text with good momentum, phrasing, appropriate pausing, intonation, and stress" (Pinnell & Fountas, 2009, p. 544).

Guided Reading - "students read a teacher-selected text in a small group; the teacher provides explicit teaching and support for reading increasingly challenging texts with accuracy, understanding and fluency" (Pinnell & Fountas, 2011).

Independent Reading Level – "the level at which the child reads the text with 95% accuracy or higher and excellent or satisfactory comprehension or 98% or higher accuracy with excellent or satisfactory comprehension" (Pinnell & Fountas, 2009, p. 545).

Instructional Strategies – Approaches teachers utilize and implement based on student interest to maximize student learning.

Literacy Learning – The learning of reading sub-skills in order to demonstrate reading proficiency and "viewed as a set of practices (Barton, 1994) that are learned within the shared space of a community" (Street & Street, 1991).

Learning Stations – High interest and reading level appropriate learning concepts organized to accommodate a small group of students to independently apply and practice newly taught reading strategies.

Meaning – "refers to meaning derived from words, meaning across a text or texts, and meaning from personal experience or knowledge" (Pinnell & Fountas, 2009, p. 545).

Multiple Intelligences – These consist of more than one method by which an individual learns and retrieves information. These include: linguistic, musical, logical-mathematical, spatial, body-kinesthetic, intrapersonal, and interpersonal.

Multi-leveled – Students are assessed to determine their current reading level and grouped according to these reading levels, likes, and interests.

Read Aloud – "students engage in discussion with one another and the teacher about a text that they have heard read aloud or one they have read independently to build a deeper meaning" (Pinnell & Fountas, 2011).

Shared Reading – “an instructional technique in which the teacher involves a group of students in the reading of a particular big book in order to introduce aspects of literacy” (Pinnell & Fountas, 2011, p. 190).

Structure – “refers to the way words are put together in phrases and sentences” (Pinnell & Fountas, 2009, p. 547).

Visual – “refers to the letter that represents the sounds of language and the way they are combined to create words” (Pinnell & Fountas, 2009, p. 548).

Zone of Proximal Development – the developmental difference between what a student can demonstrate independently versus what a student can demonstrate with teacher support.

CHAPTER TWO: LITERATURE REVIEW

Overview

The purpose of this study is to understand how Guided Reading instruction impacts the Fundamentals of Literacy. In the wholesome form, Guided Reading instruction is a step by step teaching framework methodology implemented to a small group of students with like abilities in the context of reading in an instructional setting that encompasses students of similar reading levels, reading strengths, and reading needs. The teacher instructs the students from a foundational text in which they will require individual and perhaps one to one support to read. This is known as the students' instructional reading level. The teacher continues to provide direct and "explicit instruction to help the children read the text proficiently and at the same time, learn more about the reading process" (Pinnell & Fountas, 2009, p. 8). At the conclusion of each lesson, the teacher again explicitly directs the student with "word work" that incorporates multiple activities to include but not limited to word exposure, word learning, word frequency, word parts, word integration, and word writing. These intentional teaching points are continually observed, reviewed, and analyzed by the teacher directives due to on-going reading assessment which has identified these particular teaching points are identified as individual or group deficits.

Teaching points are reviewed until the individual or group achieves reading fluency success to the point of student mastery paired with the confidence to independently apply the newly learned reading strategies with the individual application of the teaching points.

Theoretical Framework

Howard Gardner noted, "seven kinds of intelligence would allow seven ways to teach and powerful constraints can be mobilized to introduce a particular concept in a way children are most likely to learn it" (Hatch & Gardner, 1993). So as teachers instruct students to include accommodations tailored to their individualized needs and interests while incorporating the seven types of intelligences, students' growth and development with respect to reading instruction should be positively impacted over time. Schulman and Payne asserted "Guided Reading is a way of matching instruction to the diverse individual readers at varying rates of development" (Schulman & Payne, 2000, p. 12). Now that classrooms exceed 30 students to one general education teacher, it remains imperative that teachers assess individual student reading abilities and levels to thus determine how to identify and implement instructional strategies to meet the reading needs of the many students educated within just one classroom. Multiple instructional frameworks can be located in the literature relative to the implementation of Guided Reading Theories at the elementary level. These theories include Differentiated Instruction, Multiple Intelligences, and Constructivism.

Differentiated Instruction

A best practice approach to incorporate instructional methods in elementary reading classrooms is to employ differentiated instruction. Differentiated Instruction, paralleled with

Gardner's Theory of Multiple Intelligences (1999) "means that you observe and understand the differences and similarities among students and use this information to plan instruction" (Tomlinson, 1999). Teachers continually assess their students to identify areas of strengths and weaknesses to then use the information to develop, organize, and implement individualized plans to move the student forward when selecting reading strategies to assist with reading comprehension and independent reading. As students move forward in the reading process, they can be observed utilizing reading strategies to decipher what were once their reading complexities and challenges. An observer could also notice behavioral changes in the student to include his eagerness or motivation to decode what was once an unfamiliar words. Further, the student may begin to integrate self-correcting into his read aloud ability. This means, as the student decodes unfamiliar words, the student realizes his error(s) of substitution, insertion, and/or omission and almost simultaneously correctly reads the word. Once the student incorporates this strategy as a habit, he continues to matriculate further within the reading process. Because the student reading confidence increases over time due to the many reading successes he has experientially accumulated, he reads more and more. As reading challenges are placed in front of the student either in reading aloud or in isolation, the student overcomes the adversity and maintains reading performance. As barriers to reading are removed, the student becomes a more independent reader. Independent reading time in the classroom environment promotes a time for the class to read with their peers and model for each other the importance of reading. Other "key principles that form the foundation of differentiating instruction include on-going formative assessment, recognition of diverse learners, group work problem solving, and choice" (Robb, 2008, p. 13-14). As the teacher acknowledges the diverse learning needs of the students, student reading needs can be challenged and met through consequential instruction.

From this and when paired with teacher to student conferences, children begin to understand how they read to include their strengths and weaknesses. Teachers can share with each student how she intentionally and directly instructs them in reading based on how they learn. This conversation may solidify the teacher and student rapport thus encouraging further student to teacher trust when the teacher employs new reading approaches, unfamiliar concepts, and/or challenging material. Implementing differentiated instructional strategies further supports the notion to support student learning and growth by teaching directly related to their learning style.

Student membership of the instructional group will change over time due to student individual development and growth over time. Students grasp concepts and master them at varying rates thereby the need for constant assessments to identify measures of growth. Students will also participate in the engagement of group work to participate in social changes with their peers to glean meaningful insight. The teacher can be the direct leader of the group by outlining goals and expectations of the group. Yet, as students complete the assigned task in a unit, the teacher role may shift to that of facilitator and observer. This change affords peers the opportunity to work collaboratively for a common outcome and allow the groups to function as a partnership dynamic. Continued problem solving "on issues and concepts rather than 'the book'" (Robb, 2008, p. 14) afford the student chances of idea exploration and discussion of their current knowledge base. As ideas are announced and discussed with other group members, children begin to have innovative conversations of potential strategies that could occur within the reading process. Additionally, students can share their personal experience to draw each one into their background familiarities and understanding to thus, extend the reading conversation. Ultimately, this leads to a new meaningful reading experience for the entire group.

One final effective principle of differentiated instruction is the student choice of how to demonstrate their comprehensive mastery of a topic. At the end of a themed unit of instruction, a teacher may typically administer a summative assessment to discern how much information of the content the student can recall within a written assessment. This type of comprehensive measure may be suitable for many students. However, those students who are artistically driven may prefer to comprehensively draw a mural to represent what she has learned. Moreover, the student may narrate a video to include the murals with captions and characters to further present their understanding of the unit. Because the teacher practices on-going assessment, the instructor can negotiate and pair the medium of activity and project the responses based on on-going instruction to motivate the students for assignment completion to the best of their reading and writing ability.

Differentiated Instruction incorporates various elements and practices into lesson development so that students can be individually supported within the instructional sessions. The more teachers "discover about the students they teach, the more information they gain about how to help each one achieve autonomy and independence" (Narvaez & Brimijoin, 2010, p. 2). Modification of "the content, process, or product for individual learners while teaching all students the same skill or concept" (Witherell & McMackin, 2005, p. 5) can support students with task simplification or challenge. Read-alouds, or sample text the group reads and discusses aloud, provides the student with background information to develop a common language for further discussion. The utilization of various texts at individual readability levels encourages students to assemble information they can read independently. As the instruction is tailored to the varying reading levels, the teacher must organize instruction around the unit of students versus the unit of teaching text. Independent reading time needs to incorporate books that match

the student levels so they remain comfortable with reading plus, enable them to improve and challenge their critical and analytic skills as they read. Further modeling of how to read for meaning fosters better readers because students can then "think about the text" (Robb, 2008. P. 18) when they discuss the passage with the reader or their peers. Group discussions provide individual students the opportunity to clarify meaning, apply knowledge, encourage discussion, and increase comprehension. As students absorb the learned information differently, their ability to write the information will demonstrate their overall understanding of what they have read. Little to write within their on-going assessment offers the teacher much information to future lesson development and implementation. Finally, as lessons are planned finitely, supplies to foster the reading process can be readily identified and assembled.

Multiple Intelligences

Howard Gardner, creator of the Multiple Intelligences Theory (MI), asserted that individuals are equipped with personal intelligences. These included "linguistic, logical mathematical, musical, bodily-kinesthetic, spatial, interpersonal, intrapersonal, and naturalistic" (Gardner, 1999, p. 41-34). This theory is related to the Guided Reading Framework in that "students must know how to work in teams, solve problems without asking for help, and how to use work stations and other literacy activities" (Richardson, 2009, p. 4). Gardner continued to espouse that the number of intelligences ascertains the equal amount of "ways to teach" (Gardner, 1999). Therefore, as teachers instruct to the mode of intelligence to particular students, they are more "likely to learn it and less likely to distort it" (Gardner, 1999). Thus, an authentic form of learning is established.

Teachers and policymakers alike positively promote MI because "the theory validates educators' everyday experience that students think and learn in many different ways and it also

provides educators with a conceptual framework for organizing and reflecting on curriculum assessment and pedagogical practices" (Knowles, 2001, p. 276). Students vary in ability and interest in the classroom and can demonstrate strength in one or more multiple intelligences. One intelligence may be profoundly observed, blended, or not at all observed in various environmental settings. As children academically, socially, and emotionally develop due to their matriculation of school participation, these intelligences can and do manifest themselves in different ways. Once the child articulates how to address and respond to various situations, "the more strategies he will have to reach his greatest potential" (Lorenzi, 2011, p. 93). As academic demands are placed on the student, multiple intelligences can emerge as a coping strategy in order to formulate a correct response or product.

Constructivism

In simple terms, social constructivism is when "ideas are constructed through interactions with a teacher and other students" (Powell & Kalina, 2009, p. 241). Interaction with the teacher and other students during small group instruction and discussion is a fundamental principle embedded in the Guided Reading Framework. As students connect with explicitly presented ideas, the learning, discussing, and understanding is authentic. One aspect of the Constructivist Theory is the Zone of Proximal Development (ZPD). The ZPD has been defined as "a zone where learning occurs when a child is helped in learning a concept in the classroom" (Vygotsky, 1962). For example, a child is provided assistance by the teacher when learning a new concept. Once the goal is achieved, the student can demonstrate more at a more proficient level. Vygotsky also proposed that learning is made easy when children have opportunities to participate in learning activities that are guided and paced by a more capable person. As others support the students, the theory continued that students learn more effectually.

Related Literature

As early as the 1940s, the term guided reading was defined when a prominent educator, Emmett Betts "elaborated on the importance of providing students with direction in order to best help them learn how to read" (Ford & Opitz, 2011, p. 226). He insisted this instructional strategy was one step of a four procedural approach to teaching children to read. It was here that in 1967, Lillian Gray and Dora Reese further defined Guided Reading as "story skills and drills for word analyses and vocabulary" to purport the ability to teach learning to read. As reverberated from Betts, Gray, and Reese demarcated the purpose within the second step of Guided Reading as "children see a reason for reading, helps build self-reliance because the children rely on themselves to find answers, and helps children to satisfy their need to achieve and to share" (Ford & Opitz, 2011, p. 227).

Subsequently in 1969, The National Assessment of Educational Progress (NAEP) had administered a nationwide assessment to determine the reading achievement of students over time in the United States. In the essence, this national assessment was "our nation's reading report card" (McKenna & Stahl, 2003, p. 33) over a period of time. The reason this information is valuable to reading experts is that states can compare their scores to national averages and also measure their results when compared to benchmark criteria.

In the 1980s, American education received "brutal criticism" (Routman, 1996, p. 3) when the U.S. Department of Education released A Nation at Risk. This document discussed the importance of literacy in a free society to perpetuate democracy. While literacy absolutely impacts innovation and the American way of life, at that time, approximately 23 million people were considered functionally illiterate based on simple reading and reading comprehension measures.

Also during this historical period in reading, “as beginning readers were viewed as emergent in their understandings about literacy rather than novices at a new skill, the body of literature on children’s concepts about print began to grow” (Brown, 2012, p. 262). Researchers and instructors began to observe and understand that children’s perceptions toward reading were in direct relationship with their developing reading abilities and they “mentioned the importance of sounding out words but are observed to use this strategy infrequently” (Brown, 2010, 262). In other words, as students focused on their immediate reading task of phonetic application, the less conceptual thinking they applied to broad notion that print makes sense and is laced with a meaningful significance.

During the same era though, one of the most electrifying trends emerged to include “the increase in and emphasis on quality nonfiction for all age levels” (Jacobs & Tunnell, 2004, p. 59). The trailblazers of this era were acknowledged from the late 1950s coupled with the reprint of beloved classics.

Educators in the 1990s observed the need for reading practice to occur in “relatively homogeneous groups in terms of strengths and weaknesses” (Harp, 1993, p. 71). Students can matriculate in and out of groups to account for their growth in progress or their need for support when reading challenges become too independently difficult. Once students apply their reading skill set at a proficient level, these same students are more apt to take reading risks when presented with unfamiliar reading challenges due to the confidence they have gained with the aforementioned application of practice.

National monitoring by the National Department of Education during the early to mid-eighties included the suggested spread of the Reading Recovery Program. This program emphasized the importance of student reading running records to examine and detail explicit

information on how a student read. These records would include reading accuracy rate, reading words per minute, students' errors based on meaning, structure, visuals orientations, and student monitoring. As the "teacher monitors the changes that are occurring in the individual learner" (Clay, 1993, p. 81), a fine-tune of the program can occur to meet the reading needs of each individual learner. Running records over time develop an accumulated reading profile of student reading behaviors that suggests strategies and teaching points for future small group instruction.

An accompaniment to the Reading Recovery Program is outlined in steps to prevention. These include "good preschool experiences available to all children, a good curriculum for literacy learning in the early years, and an early intervention" (Clay, 1993, p. 1).

In 1995, a task force of experts from the state of California gathered to review and develop a recommended plan to improve the overall achievement of students. Outwardly, the goal was to assist students to read in order to learn, instead of still learning to read as they exited the third grade. One major recommendation included "a call for an organized, explicit program that includes phonemic awareness, phonics, and decoding skills to address the needs of emergent readers" (Routman, 1996, p.20).

While early reading literacy is definitely a complex process, trained professionals in today's classrooms can observe reading behaviors to guide the process. As readers "process instructional level texts, they engage their systems as they problem solve" (Fountas & Pinnell, 2009, p. 1). Therefore, the fundamentals to literacy that include phonics, phonemic awareness, vocabulary, fluency, and comprehension are critical fundamental elements to the reading process. These elements to reading build the foundation by which the students are guided to "think about the reading process and various reading strategies they need to make sense of the

text' (Schulman & Payne, 2000, p. 12). The ultimate goal to the Guided Reading Framework is to strengthen the students' ability to read independently.

Literacy Fundamentals

The Fundamentals of Literacy enlist a skill set known as the "Fab 5." The five fabulous reading skills are identified as phonics, phonemic awareness, vocabulary, fluency, and comprehension. Phonics, "focusing on the sounds produced by both vowels and consonants" (Pressley, 2006, p. 174) assist students to decode unfamiliar words by manipulating their sounds to form familiar words. Phonemic awareness can be observed by "teachers prompting students to hear the sounds in words, for example, by stretching the individual sounds of a word out during its pronunciation" (Pressley, 2006, p. 174). As a construct, "literacy is best understood by studying the learner as he or she engages in the activity of literacy learning as it occurs in the classroom" (Brown, 2010, p. 262). Vocabulary usage does reflect one's general intelligence but does not automatically imply that vocabulary usage purports a comprehensive understanding. Hart and Risley (1995) identified strong correlations between amount and quality of language experienced early in life and later in language development in particular. Fluency refers to the "accurate and fast reading at the word level with good prosody" (p. 195). This typically resembles a student reading a sample text aloud with expression while heeding most punctuation. Yet, fluency alone does not provide an accurate reflection of the level of reading the student understands. This understanding is known as comprehension. Comprehension of text includes the understanding of many isolated topics within the text. Some include character identification, setting of events, and sequence of story to encompass the beginning, middle, and end. Yet, other factors to include summary, reflection, inference, retelling, and interpretation can be measured.

Contingent on student response, a trained educator can effectively evaluate student comprehension.

Assessment Based Groups

A review of the literature reveals that assessment of students is critical to forming groups which consist of readers on the similar reading abilities. Assessment is typically thought of as data that is collected from a group written or oral test to determine the proficiency or comprehension of a student of a learned concept. Individually administered assessments lend themselves to the provision of "more dependable results than group assessments because the teacher can command the mental engagement of the student, to some extent" (McKenna & Stahl, 2003, p. 23). While this is true, it is only one measure method by which to assess students and gather information relevant to that particular student's perspective of the reading process. Teachers can observe students engaged in a particular lesson or even discuss the progression of a story to include characters, setting, important text sequence, and text implications. The information gathered from various assessment procedures provides invaluable information about "students' understandings, attitudes, interests, and previous learning experiences" (Schulman, 2006, p. 27). On-going assessment documents the progress of the reader over time and also identifies the student strengths, interests, and deficits by which to develop future instructional plans. The teacher and student can review these records and reflect on the learning experiences to identify mastered reading goals plus, increase student motivation.

Guided Reading Instruction

Once students are grouped according to their ability and interest levels, teachers can focus their instruction based on the needs of the group. Guided Reading instruction will "focus on the use of strategies to decode and comprehend with leveled readers" (Brown, 2010, p. 264).

The incorporation of these "just right texts and more word-level support" (Brown, 2010, p. 264) for struggling readers foster an environment to improve word identification, sight word automaticity, writing development, and reading fluency. Strategies which focus on the aforementioned contingent on the current reading ability level may include sight word review/writing, introduction of book, text reading, teaching point application, discussion prompt, sight word teaching, and guided writing practice. Further multi-sensory application of sight word recognition may include the incorporation of an interactive cumulative word wall, word dictation, pencil tracing, word boxes, and pyramids. These strategies reinforce sight word recognition and help students "learn a faster method to begin independent reading and writing" (Southall, 2006, p. 2).

When selecting a text for the group, the instructor must choose a focus that could include monitoring, decoding, retelling, or fluency according to the group need. Next, the teacher will lead the group to review known sight words. This can be accomplished by distributing "whiteboards and dictate 2-3 words for students to write" (Richardson, 2009, p. 116) to "imprint the word and control for serial code (Richardson, 2009, p. 116).

Next, students should be allowed to the preview the "just right" text prior to reading it aloud. This enables the student to acclimate to the pictures and begin to develop a sense of what the meaning of the story may encompass. Once the student begins to independently and softly read the text aloud, their focus will be to reread the text to improve their fluency. The teacher then pairs the read aloud with discussion to improve the student's comprehension of the text and immediate word recognition knowledge of various word complexities. "This task becomes more complex as teachers try to provide immediate feedback as they listen to one student or a group of students reading the story aloud" (Schwartz, 2005, p. 436) yet, critical to teach so students can

solve their particular reading enigmas. Self-monitoring, decoding, fluency, and comprehension teaching point prompts simultaneously occur as the child reads aloud to reinforce that print makes sense as higher order questions for critical thinking are posed as the teacher coaches the student when reading.

Finally, the teacher can expose the students to review existing familiarity and mastery of known sight words while introducing new ones through various practice activities. This lesson will conclude with the application of guided writing practice that encompasses a teacher generated sentence for the student to write or complete with the emphasis placed on formation, spacing, and independence.

Leveled Texts

One important aspect of Guided Reading is the organization of leveled books to match the student strengths, weaknesses, and individual reading interests to the text. A leveled system or leveled text is defined as a structural framework "used to sequence the books in literacy program" (Weaver, 2000, p. 5). The selection of the appropriate text to include various genres, literatures, and content must match the child's reading or writing competency to account for meaningful learning experiences.

A leveled text is a calculated based literary set on "the complexity of the writing terms of numbers of words in sentences and numbers of syllables in words and arrives at a grade level score" (Blasingame, 2007, p. 56) to identify the reading passage that would require a certain level of education. When selecting these texts to promote more insightful Guided Reading, Glasswell and Ford (2010) suggest teachers "be more concerned about organizing around areas of student need, keep smaller word counts to provide greater equity in instructional opportunities, and be intentional when organizing multi-leveled topical sets". As multiple

instructional personnel utilize these leveled texts within their reading lessons, a continuity and consistency are developed thereby promoting matriculated progress of reading instruction of successive school years.

Running Records

Guided Reading procedures support the learning of literacy fundamentals to children when utilizing leveled texts of gradient complexity to "build knowledge of letters, words, and how they are combined to form simple messages and texts" (Schwartz, 2005, p. 437). Once teachers assess student reading fluency using a running record, a clear picture emerges as to the student's ability to "recognize most words and reads them correctly and consistently reads at a natural, conversational pace" (Fry & Rasinski, 2011, p. 12). As teachers assess and review the word recognition and error rate that students make as they read, information from these rates propel teacher generated decision making choices as to future individualized reading instruction. Word recognition errors that impact the overall fluency of reading include "substitutions, mispronunciations, reversals, omissions, insertions, and refusal to attempt a word (teacher pronounces word" (Rasinski, 2003, p. 164). The word recognition error rate can be documented on what is identified as a running record. Running records are a recorded sheet of the student ability to read words with an error, accuracy, and self-correction rate coupled with written teacher anecdotal information as to how the student made errors based on the meaning, structure, or visual of the word.

Moreover, when refining the analysis of the student reading ability, a "one-minute reading probe may be all that you need for students who are developing along normal or expected lines" Rasinski, 2003, p. 162). Teachers can review these multiple reading samples "to guide them in their decisions about the evaluation of text difficulty, grouping of children,

acceleration of a child, monitoring progress of children, allowing children to move through different books at different speeds while keeping track of individual progress, and observing differences" (Clay, 1993). As the teacher frequently records their students' reading behaviors on running records and analyzes these results while "focusing on the strengths reflected in the student's errors" this allows one to "build on what the student can do and focus teaching decisions to extend that processing system" (Schwartz, 2005, p. 438). Once the student reads their "just right" book with a higher accuracy and self-correction and attends to all the information provided in the text, their reading ability can be further built.

Small Group Instruction

Further research indicates that as students participate in group reading sessions in Guided Reading Frameworks, teachers can "build on what students already know as independent readers" (Schulman, 2006, p. 49). The teacher can "introduce a text to a small group, work briefly with the individuals in the group as they read the text, select one or two teaching points to present to the group following reading" (Fountas & Pinnell, 1996, p. 2), and guide the extension and assessment of the lesson. Instructors dually monitor the progress of students in these small groups, assess what they require, and guide their development to deepen their understanding of what they have read.

Within the small group, "direct, explicit instruction occurs daily concentrating on some comprehension skill or strategy" (Sigmon, 2001, p. 75). The emphasis on this skill, strategy, or behavior is emphasized in some way and reviewed as necessary as the student demonstrates the ability to apply this concept within the context of reading. Strategies of good readers as observed by instructors include "visualization, book selection, making predictions, summarizing, retelling, rereading, questioning, using context clues, inferring, and self-monitoring" (Robb,

1996, p. 9). Behaviors of good readers as observed by teachers include "the use of imagery to understand, choice of book, adjust reading rate, clear up confusing parts, inquire to further understand, and seek help when needed" (Robb, 1996, p.9). Within these smaller group settings, teachers can enhance the reading process by either repeating the skills as needed, or transition to a new skill as the group members establish mastery. As application of the skill, strategy, or behavior becomes automatic, the teacher can introduce a new strategic reading tool based on assessment. Students can move in and out of various groups due to their progress over time as determined by on-going assessment. These small group sessions also set the stage for the purpose of reading and afford the educator an opportunity to "lay the groundwork for students to be successful at reading the text" (Sigmon, 2001, p. 81). Reading the text is the eventual next step prior to the post reading process of assessing the application of the previously taught reading strategy.

Hulan (2010) purports that a further definition of Guided Reading groups includes the teacher emphasis to "introduce and encourage the use of various reading strategies, leading children toward independent use of those strategies." As children are assessed at marked points within the frame of the school year, students are placed and reassigned to various groups according to progress and reading ability. While in the group, students "read books on their instructional level" (Hulan, 2010, p. 42), receive scaffolded instruction, and discuss the literature sample. These group discussions are definitely "a powerful way for the student and teachers to develop understanding of texts" (Hulan, 2010, p. 43).

A review of the related literature yielded many results the researcher found to be credible and valuable to define how Guided Reading impacts the Fundamentals of Literacy. Differentiated Instruction, in the form of School-wide Enrichment Model in Reading Framework

(SEM-R), produced "a greater increase in fluency" (Reis et al., 2007). In fact, a report indicates a "significantly higher attitudes toward reading and higher scores in reading comprehension and oral reading fluency" (Frahm, 2006).

One recent Action Research study reviewed the implementation of Guided Reading strategies with 74 Kindergarten and first grade students. The purpose of this project study was to improve the overall reading ability of the aforementioned children. Initially, these students were reported as not having "the reading readiness skills to be reading at their benchmark target" (Abbott, Dornbush, Giddings, & Thomas, 2012, p. iii). In order to document the deficient reading skills, the researchers distributed parent surveys, administered baseline data, and documented teacher observations. From the baseline data, homogeneous weaknesses were identified and targeted interventions were employed with students of similar reading abilities within the framework of Guided Reading groups.

Post-intervention of individualized implementation, the researchers' conclusions were unanimous in that collectively they reported "the reading strategies that were implemented throughout the project were extremely successful through the use of Guided Reading" (Abbott, Dornbush, Giddings, & Thomas, 2012, p. 89). "Small instruction groups, ample support, and time to utilize new strategies" (Abbott, Dornbush, Giddings, & Thomas, 2012, p. 89) were paramount when improving kindergarten and first graders' overall reading ability.

As a means to determine the effect on first grade students' reading fluency with two different reading programs, Bowling's (2011) principle of study was to identify the effects of the Scholastic Guided Reading program and Harcourt Trophies Basal Reading program relative to reading fluency of elementary students at a rural school in north Georgia. Moreover, the researcher's purpose of study "was to identify increases in students' reading fluency related to

the implementation of the two different reading programs, focus on imbedded fluency instructional strategies" (Bowling, 2011, p. 9). This study examined five randomly chosen first grade classrooms where Scholastic Guided Reading and Hardcourt Trophies Basal Reading were being implemented.

Results of the aforementioned study concluded that "Scholastic Guided Reading program's results showed an increase in reading fluency unlike the Hardcourt Trophies" (Bowling, 2011, p. 43). The researcher asserted the importance of allowing students to read at their level "increases their confidence in reading" (Bowling, 2011, p. 43). She further insisted that the "individualized readers allowed students to focus on the understanding of the passage and not the vocabulary" (Bowling, 2011, p. 43). A third point the researcher indicated was that the Scholastic Guided Reading group practiced fluency skills within small reading groups each day as compared to the Hardcourt Trophies group of two days per week of reading fluency practice.

A second Action Researcher chose to examine "the effects that a guided reading program had on first-grade students' reading abilities in a rural southwestern Minnesota primary-level school during the fall of 2010 (DeVos, 2011, p. 2) due to the academic trend of instructing students to become skilled readers to further perpetuate society. The researcher chose administrators, parents, and teachers as the audience of this study due to their overall investment "to see improvements in students' overall reading abilities (DeVos, 2011, p. 12). Guided Reading does support the development of the competent reader as it reinforces students' ability to remember reading strategies taught by the teacher within the "scaffolded one-to-one instruction" (Ferguson & Wilson, 2009) setting.

Conclusions of the action research indicated "that students' scores on the Developmental Reading Assessment (DRA) including fluency and comprehension scores, increase after they have participated in a guided reading program" (DeVos, 2011, p. 2). Further results indicated that "the students' fluency scores increased either two or three levels on the DRA" (DeVos, 2011, p. 78). One final conclusion referred to the use of running records by teachers to record the students' reading accuracy, errors, and strategies to read text over a period of time. DeVos (2011) asserted that "when teachers use running records as ongoing assessment of their first-grade students' reading abilities, they will find that student will be reading texts at their instructional or independent level." Frequent assessment based running records "allow teachers to place students in appropriate guided reading groups" (Fawson, et al., 2006) throughout the course of the school year as their reading abilities continue to improve.

Parsons and Ward (2011) investigated the role of Constructivism as it relates to authentic tasks for literacy. Once teachers relate the assignment to the value and relevance of how the topic influences and impacts their lives, students' understanding of content and reading improve. As students understand how the content is relative to their individuals lives, student motivation, engagement, and vocabulary are strengthened.

Swain (2011) explored the effectiveness of Guided Reading to a whole class to "foster critical dialogue" with six, twelfth grade students in southeast England. Students previewed age-appropriate magazines of high-interest then distributed questionnaire for student completion to discover a representative sample. The next day, the researcher would implement a series of 30-minute Guided Reading lessons to promote student understanding over time. Student interviews were conducted and a theme emerged by which the researcher categorized the information. Upon review of the date, Swain concluded that "guided reading provides quality time for the

teacher to develop response within a small group context" and guided dialogue "around the text did support pupil in viewing the texts from a more critical and reflective stance within a relatively short period of time."

Brown (2010) studied the impact of "The Official Script," a researched-based program implemented in the state of Pennsylvania in response to No Child Left Behind (NCLB) mandates for implementation of researched-based programs. The researcher experienced "literacy learning from the perspective of two successful and two struggling beginning readers" (Brown, 2010, p. 270). As students began to struggle, the more instructional voices the student experienced such as scripted series. Since these struggling readers possessed a limited understanding and use of problem solving strategies when they incurred reading complexities, their ability to determine the value and meaning of the print they read was unclear. Plus, these students compensated for this lack of clarity by focusing their attention to completing the immediate task. Brown concluded that as scripted programs may be an infallible substitute in meeting all students' individual reading needs, the voice of knowledgeable, responsive teachers with a shared perspective on the literacy learning and coordinated efforts to guide each child as he or she finds his or her way to print" (Brown, 2010, p. 271) is paramount when building a literacy foundation in children.

Another researcher studied the impact of Guided Reading instruction on fourth and fifth grade students in a semi-rural community in an Illinois school district. The purpose of the study was to determine if significant achievement could be measured as a result of this type of reading instruction. Embedded within the study's rational, the researcher noted that "a discrepancy existed in reading achievement from third grade to the intermediate grades of fourth and fifth" (Underwood, 2010, p. 10). As an effort to supplement these readers and to meet their reading

needs, Guided Reading instruction at each child's instructional reading level begin at the beginning of the next school year. It is important to note that the teachers received their "professional development in the form of a book study and bi-weekly meetings were held to discuss the strategies presented in the book" (Underwood, 2010, p. 11). The Developmental Reading Assessment (DRA2) was also administered at the beginning of the next school year to place students in like reading ability groups. The purpose of this grouping "was to provide differentiated reading instruction to a group of approximately three to five students at the readers' instructional level (Underwood, 2010, p. 12).

Results of Underwood's study of the effects of Guided Reading include conclusions that may be otherwise familiar to educators. "Lasting change from any new program requires time to implement, with continuous support from administrators. Professional development activities must be on-going and teachers must feel supported throughout the process of change" (Underwood, 2010, p. 101). Significant improvements in the student's reading ability were noted in the second year of Guided Reading implementation due to teachers and students growing "accustomed to the new program" (Underwood, 2010, p. 101).

As part of The National Reading panel's incentive to encourage "educational professional to seek out teachers who best use solid teaching practices, Ferguson and Wilson (2009) "sought to identify if teachers were implementing Guided Reading into their classrooms and to examine why teachers were or were not using this instructional practice". Surveys were distributed to 40 primary and upper primary teachers in four urban schools in a Southwest Texas district to ascertain the depth of teaching experience and training and the preferred reading method used for implementation.

Survey results indicated that primary teachers practiced the Guided Reading instructional strategy more frequently per week as compared to their upper primary teachers. Further survey essay data "reported that students within a classroom (primary or upper) in which Guided Reading was used experienced improved comprehension skills, higher fluency levels, and an increase in overall reading test scores" (Ferguson & Wilson, 2009, p. 300). Other discussion points defined by the participants in this study as to the effectiveness of Guided Reading implementation include teacher training and time management. Study participants felt as though "teachers need to be supported until they feel comfortable and confident with" (Ferguson & Wilson, 2009, p. 303) Guided Reading instruction and "support in securing time for guided reading" (Ferguson & Wilson, 2009, p. 303).

Fisher (2008) investigated Guided Reading in three primary schools from the perspective of three student teachers in England. The researcher's aim for these novice teachers was to answer three questions regarding the look of Guided Reading with fluent readers, the opportunity to offer critical and analytical reading for students, and the use of Guided Reading by teachers to further critical and analytical reading skills. Results indicated that teachers could observe the look of Guided Reading in the classrooms "as an opportunity to hear children read, and one that was particularly beneficial for the less able children, but still useful for their more successful classmates" (Fisher, 2008, p. 25).

Additionally, the student teachers reported spending "three-quarters of their teaching time listening to the children read" (Fisher, 2008, p. 26) versus maximizing the time to develop critical and analytical skills offered by guided reading time. While the author's conclusions focused on barriers to literacy, she asserted that in lieu of a current shift of practice "perhaps

guided reading will be seen as learning opportunity rather than 20 minutes to listen to student read" (Fisher, 2008).

Researchers of another action research project studied the improvement of reading comprehension and fluency of second and fourth grade students in a northwest suburban area through the use of Guided Reading. The identification of "low reading and fluency scores were documented through the use of district provided comprehension and fluency assessments and teacher surveys" (Gabl, Kaiser, Long, & Roemer, 2007, p. i). Factors the researchers listed as possible contributors to the low fluency and comprehension scores included "school curriculum, classroom environment, teacher training, and family involvement" (Gabl, Kaiser, Long, & Roemer, 2007, p. i). The researchers decided that since the literature suggested possible solutions to improve reading fluency and comprehension with students included the inverse of the aforementioned contributory factors, the "researchers focused on the use of leveled text, graphic organizers, and flexible groups" (Gabl, Kaiser, Long, & Roemer, 2007, p. i) during the reading process.

Conclusions of the research study noted "an increase in students' reading fluency and comprehension throughout the course of the intervention" (Gabl, Kaiser, Long, & Roemer, 2007, p. 55). Through the course of the study, teacher's integrated the use of three graphic organizers in which students would reveal their comprehension of selections they read. Teachers would score these graphic organizers based on a teacher-generated rubric. Results indicated proof "that the students' comprehension of the selections they read was adequate" (Gabl, Kaiser, Long, & Roemer, 2007, p. 55). Further results indicated that "flexible grouping during guided reading was positive for students who have developed the necessary social skills to work in collaborative groups" (Gabl, Kaiser, Long, & Roemer, 2007, p. 56).

Researchers also indicated recommendations for the use of Guided Reading instruction. The use of leveled texts increased students' reading confidence "due to receiving reading materials that were assigned according to their ability" (Gabl, Kaiser, Long, & Roemer, 2007, p. 56) to peak their interest. A second recommendation included the use of graphic organizers when first receiving whole group instruction. The whole group instruction promotes the independent use, interface, and completion of the organizer to illicit student written responses from comprehension questions to include but not limited to story inference, character mapping, cause and effect, and problem solution mapping. Finally, students would benefit from the flexible grouping intervention so they might switch "group participants periodically throughout guided reading" (Gabl, Kaiser, Long, & Roemer, 2007, p. 57) to develop social skills with various classmates.

Bradley-Brown (2006) examined the "impact the Guided Reading Program had on students' independent reading levels and reading development stages. Student results and teachers' perceptions of the effect of Guided Reading instruction led to the understanding of how Guided Reading can improve reading fluency. The "teacher views and concerns about Guided Reading Program as a means to facilitate students' reading achievement within NCLB requirements" (Bradley-Brown, 2006, p. v) were noted. This study was conducted in an urban school-district setting where 150 students' reading achievement was examined and evaluated by the Developmental Reading Assessment (DRA2) and the Dynamic Indicators of Basic Early Literacy (DIBELS). The researcher asserts that the mastery of basic literacy skills to include "phonemic awareness, phonics, vocabulary, fluency, and comprehension" (Bradley-Brown, 2006, p. 9) promotes literacy. This promotion leads to personalized reading and problem solving

confidence associated with graduation rates and employment. Yet, a low reading ability contributes to societal hardships and individualized behavioral and emotional constraints.

Conclusions with respect to students' reading achievement results included mixed results within the many sub-tests areas of both the DRA2 and DIBELS as statistically analyzed with Repeated Measures ANCOVA and Chi Square results. Overall, "the mean scores increased significantly between the beginning and middle of kindergarten" (Bradley-Brown, 2006, p. 135) but were not at the level considered to be at an acceptable level at that particular point in the school year for the Initial Sound Fluency data. The data for Letter Naming Fluency demonstrated "improvement, albeit somewhat limited" (Bradley-Brown, 2006, p. 135). The first grade data with respect to Phonemic Segmentation Fluency "yielded significant results" (Bradley-Brown, 2006, p. 137) with more than half of the students reaching the end of year benchmarks. The school district for this locality "had an overall 4% increase in the reading target levels being met" (Bradley-Brown, 2006, p. 140). `

Kouri, Selle, and Riley (2006) compared feedback strategies for Guided Reading instruction of students with language delays from different theoretical perspectives on literacy development. The results from their study included findings that "miscued words were corrected overall and higher story comprehension scores were yielded" (Kouri, Selle, and Riley, 2006, p. 236) due to the employment of guided practice word cues. Once these instructional strategies are consistently reviewed prior to oral reading, correction facilitation of reading miscues by the teacher remain quite effective.

Fuchs and Fuchs (2005) examined the impact of decoding instruction combined with phonological awareness training versus the effects of phonological awareness alone. Their research concluded that teaching students' phonological awareness coupled with "decoding

instruction and practice strengthens beginning reading performance more than does PA alone" (Fuchs & Fuchs, 2005, p. 38).

Justice, Meier, and Walpole (2005) researched the influence of children's word-learning, and that adult elaboration of words in context can accelerate vocabulary growth. For example, as adults define those words or provide real examples to define the unfamiliar meaning of the term that children are unable to discern their meaning, children are more apt to extend their vocabulary use by the influence of the adult model. The findings indicated suggestions for using storybooks as a clinical tool for fostering vocabulary development. As storybooks are read to children in familiar, learning, and non-threatening environments, the probability of adult to child discussions of complex vocabulary and unfamiliar terms increases. Therefore, word-learning and elaboration by the child also increases.

Truscott and Truscott (2004) studied 12 elementary school teachers over a two-year period on a professional development model of school-based reading instruction. Teachers focused on primarily authentic, situated learning to report their direct instruction training of improving fluency, academic motivation, and selecting appropriate books for instruction provide support for the continued development for consultation and professional development based on the socio-constructivist learning theory.

Seymour and Elder (1986) studied students' sight word development with flash card review and no phonics instruction. Findings indicated these children could not recognize unfamiliar words therefore suggesting that teaching is imperative to learning. Another example study of direct instruction when teaching decoding purported that "explicit instruction and teacher-directed strategy training are more efficacious when the focus is developing the decoding skills" (Stanovich, 1994, p. 270).

Summary

Guided Reading instruction is a framework designed to be implemented in a small group to promote the acquirement of reading strategies in order to comprehend reading independently. As teachers or trained personnel continually assess the reading needs of their students and accumulate this reading profile over time of a student's running record, the instructor can develop, plan, and implement individualized lessons within a small group setting in order to support the reading needs of the students. Students can transition in and out of groups as their reading progresses. When teaching Guided Reading, best practice teaching strategies is to employ Differentiated Instruction or to enlist the Multiple Intelligences of each student, while identifying the most appropriate methods by which to determine comprehension of what the student read.

In summary, literacy is the "connection to the learning community, both locally and globally and provides a bridge between formal, school-based learning and independent, lifelong learning" (Allen, 1996, p. 206). As teachers continually assess students to determine their strengths and deficits in reading in order to organize their learning sequence guide, the students can participate in individualized small group reading lessons that enhance their ability to draw on learned reading strategies in order to comprehend text at their independent reading level. The goal is to observe the students inherently utilize the reading strategies to decipher text at their reading level to develop an independent reader. From this, an independent learner is supplied with those reading skills by which to read and learn unfamiliar concepts due to their solidified reading foundation developed at an early stage.

CHAPTER THREE: METHODS

Overview

Research indicates as “book introductions, strategy checks, independent reading, returning to the text, and responding to the text” (Simpson & Smith, 2002, p. 10), reading fluency develops and students “bring the ability to construct meaning” (Gregory & Cahill, 2010, p. 515). Eventually, students will interact with the text to gain further understanding of the implications and seek “to understand what they have read” (Kelley & Clausen-Grace, 2009, p. 313). Applying “balanced, research-based literacy instruction” (Iaquinta, 2009, p. 413) fosters students’ ability to read with fluency and accuracy. This study aims to evaluate the effects that Guided Reading instructional strategies have on elementary students in a southeastern Public School classroom where Guided Reading instruction is implemented compared to other southeastern Public School classrooms in the same school where Guided Reading instruction is not implemented. Study results could afford educators research based data on best practice

strategies when implementing Guided Reading instruction to elementary students of varying reading levels and abilities.

Design

The research design that is most appropriate for this educational study is a Quasi-experimental Design with nonequivalent control-group. It will be used because "research participants are not randomly assigned to the experimental and control groups, and both groups take a pretest and a posttest" (Gall, Gall, & Borg, 2007, p. 416). Research participants will be assigned to the experimental and control groups though random assignment and both groups will be administered pretests and posttests. Since "pre-existing group differences rather than treatment effect" (Gall, Gall, & Borg, 2007, p. 417) could threaten the internal validity of this experiment, an analysis of covariance will be utilized to "reduce the effects of initial group differences by making compensating adjustments to the posttests means of the two groups" (Gall, Gall, & Borg, 2007, p. 417). A pretest will be administered to the experimental and control groups of this design and serve as the covariate to balance any variability of the posttest results. The implementation phase of Guided Reading will then be applied and administered to the experimental group for a period of five months. Upon completion of the intervention, both groups will then be administered a posttest by which to compare baseline and posttest scores. This researcher will aim to measure elementary students' overall fluency and accuracy rates when Guided Reading instruction is implemented.

The logical rationale for why this design is the most appropriate choice for this educational study is because the researcher aims to minimize the disruption "to regular school routines" (Gall, Gall, & Borg, 2010, p. 303) while yielding "useful knowledge" from groups selected for the study that are "equivalent as possible" (Gall, Gall, & Borg, 2010, p. 303). This

will allow for review of any statistical change of two groups' test scores after administration of the Guided Reading treatment. Moreover, the pretest results will serve as the covariate or "adjusting for possible differences in the pretest means" (Gall, Gall, & Borg, 2010, p. 301) to compare if any statistical change can be recognized after the instructional strategy has been applied and implemented. The independent variable throughout the research design is the implementation of Guided Reading instructional strategies exposed to the experimental and control groups of elementary students. The dependent variables are the statistical changes in reading fluency and accuracy scores as a result of the implementation of Guided Reading instruction.

Research Questions

RQ1: How does Guided Reading instruction impact reading fluency for elementary students?

RQ2: How does Guided Reading instruction impact reading accuracy rate for elementary students?

Null Hypotheses

$H_0$1: The null hypothesis for this Experimental Design is:
Elementary students exposed to Guided Reading instruction will not have significantly different reading fluency scores from student groups which did not have Guided Reading instruction as evidenced by the DRA2 pretest and posttest scores.

$H_0$2: The second null hypothesis for this Experimental Design is:

Elementary students exposed to Guided Reading instruction will not have significantly different reading accuracy scores from students in groups which did not have Guided Reading instruction as evidenced by the DRA2 pretest and posttest scores.

Participants and Setting

The population group of this research design is defined as students in grades 4-5 who receive reading instruction. The sample size of the target population includes two groups of 35-50 students in grades 4-5 in District X in a southeastern Public School System who receive reading instruction as mandated by the State Department of Education. The type of sample is random because "all members of the accessible population" (Gall, Gall, & Borg, 2007, p. 168) have an equal chance of being selected as a participant in the study. The sampling procedures of the research study details include a random sample of 100 elementary female and male students of various socioeconomic classes in grades 4-5 in District X in a southeastern public school system non-randomly placed in experimental and control groups to analyze their pretest and posttest scores when exposed to Guided Reading instruction from January 2015 to approximately May 2015.

The setting for testing for the experimental and control groups will be at one elementary school within District X of a southeastern Public School System where the researcher is employed. The School System in District X is located in the northern section of a southeastern state is where the study will be conducted and is approximately 30 minutes in driving miles or metro-rail distance from Washington D.C. The school system consists of over 80 elementary, middle, and high schools and is "the second-richest county in the nation with median annual household income of $112,021" (Vardi, 2011, p. 1). Upon review of historical data of state reading assessments that are administered annually, Adequate Yearly Progress indicators

decrease as population density and diversity increase. Since a higher English Language Learning population increases by year, more emphasis is placed on the implementation of instructional reading strategies to promote and instill all students the ability to read. One such strategy is Guided Reading instruction.

The location for testing will occur in general education or special education (as dictated by Individual Education Plans) classrooms with grade level peers. To the fullest extent possible teachers will administer the assessments concurrently while students participate in small group instruction within their leveled groups. The teachers have conducted DRA2 assessments in this manner since the inception of this district-wide assessment participation and have planned for simultaneous group instruction relevant to individualized learning. As the groups are engaged in their particular group lesson, the teacher can sit in a position to view the entire class while providing one to one administration of the DRA2 pretest and posttest.

Instrumentation

This study will determine if any association exists between elementary students' reading fluency and reading accuracy rates and the implementation of Guided Reading instruction with elementary students. The one measurement component that will be related to the reading fluency and reading accuracy rate is the evaluative measuring assessment tool called the Developmental Reading Assessment (DRA2). It will be used to calculate the fluency and accuracy rates of students. The DRA2 K-3, "enables primary teachers to systematically observe, record, and evaluate changes in student reading performance" (Beaver, 2005, p. 4).

The instrument that will be used for the pretest and posttest is the Developmental Reading Assessment or DRA2. This assessment "helps teachers help students become proficient, enthusiastic readers who read for a variety of purposes" (Beaver, 2006, p. 4). The

description of the assessment is that it is an individual "method of assessing and documenting primary students' development as readers over time" (Beaver, 2006, p. 4). The content of the reading instrumentation "enables primary teachers to systematically observe, record, and evaluate changes in student reading performance" (Beaver, 2006, p. 4) over time. As teachers listen to students read individualized reading passages aligned with their reading level and ability, the student reading errors are annotated by the teacher for further review and calculation.

Because the reading is conducted in timed sessions, the teacher can calculate the numbers of words per minute the student reads accurately based on the amount of time it takes for the student to read the passage in its entirety. The information gleaned provides an individual accuracy rate, words read per minute rate, reading level, and student reading deficits and needs. The origin of the DRA was "developed, field-tested, and revised in collaboration with classroom teachers and Joetta Beaver in the Upper Arlington City School District of Ohio between 1988 and 1996" (Beaver, 2006, p. 5). The appropriateness of the DRA2 is "specially designed for kindergarten through third grade classrooms" (Beaver, 2006, p. 4) with a high validity and reliability rate as evidenced on the Cronbach's Alpha scale. The reliability measures include ".95 at the 1st grade level, .96 at the 2nd grade level, and .95 at the 3rd grade level" (Kerbow & Bryk, 2004, p. 66).

Procedures

The procedures of this study are straightforward to include the initial step to confirm student assessment participation in the research study through a random sampling of the current student population. The researcher will confer and authenticate the logistical organization of data review and collection with school administration to afford the researcher the most efficient and unobtrusive method to fluidly gather figures. During the weeks prior to the implementation

of the pretest assessment, the researcher will confirm attendance of student enrollment of the selected school in the research study. Pretest administration of the Developmental Reading Assessment will be conducted during the month of January 2016 and score reports will be collected. Once the pretest information is used to group students according to their reading ability, Guided Reading instruction will be on-going to the experimental groups from January 2016 thru May 2016. During the month of May 2016, students in both the experimental and control groups will be administered the posttest and scores will be collected. Exact dates of the DRA2 pretest and posttest administration window will be announced by District X supervisory personnel and forwarded to subordinate staff to readily execute. Beginning the week following the posttest until approximately June 2016, the researcher will collect, analyze, and compare data to formulate a written conclusion.

Data Analysis

The study will consist of an ANCOVA with Pretest – Posttest analysis with randomized subjects. A pretest will be administered to both groups of this study to lessen the variance in the posttest scores and to further the robustness of the study. The independent variable throughout the research study is the enactment of Guided Reading instructional strategies exposed to elementary students. The dependent variable is the statistical change in reading fluency and reading accuracy rate scores as a result of the implementation of Guided Reading instruction. Assumptions for correlation of outliers, linearity, and normality were minimized. Further, generality of participant groups included students with Individualized Education Plans, English-Language Learners, students of high, moderate, and lower-income socio-economic status, and recipients of free and reduced lunch.

The Shapiro-Wilks test and the Kolmogorov-Smirnov test were employed to check the assumption of normality. Both tests were carried out for all Pretest and Posttest variables. Table 1 shows the results of the Kolmogorov-Smirnov test, while Table 2 shows the results of the Shapiro-Wilks test.

As viewed in Table 1 in the appendix, all variables violate the assumption of normality except the Words Per Minute Experimental Group at Pretest and Posttest and Words per Minute Control Group Posttest. While the sample sizes are either 53 or 54 respectively, all Probability Index score results indicate a general ability of zero with the exception of three categories. Those three exceeding .05 indicate an inconsistent generalization.

CHAPTER FOUR: RESULTS

This chapter reports the results of the statistical analyses performed by Macintosh version of SPSS version 23 on the data collected. As stated earlier in this dissertation, the purpose of this study was to examine the impact of Guided Reading instruction on elementary students' reading fluency and accuracy. The independent variables were the experimental and control groups. The covariates were the pretest scores and the dependent variables were the posttest scores for reading fluency and accuracy. The research questions and null hypotheses for this study are as follows:

Research question 1: How does Guided Reading instruction impact reading fluency for elementary students?

Null hypothesis 1, H0: Elementary students exposed to Guided Reading instruction will not have significantly different reading fluency scores from students in groups which did not have Guided Reading instruction as evidenced by the DRA2 pretest and posttest scores.

Research question 2: How does Guided Reading instruction impact reading accuracy rate for elementary students?

Null hypothesis 2, H0: Elementary students exposed to Guided Reading instruction will not have significantly different reading accuracy scores from students in groups which did not have Guided Reading instruction as evidenced by the DRA2 pretest and posttest scores.

Approval to execute this research was received in November 2015 from both Liberty University IRB and the school district in which the study was employed (see Appendices C and D). The researcher informed the teachers directly implementing the DRA that final approval had

been granted and they could begin to administer the pretest test. The completed DRA test protocols were returned to the researcher in May 2016.

The data were analyzed using Macintosh version of SPSS version 23. ANCOVA was used to determine the posttest scores for reading fluency and accuracy for the experimental and control groups were different from the pretest scores. The assumption of equal slopes indicated that the relationship between the covariate words per minute pretest and the dependent variable words per minute posttest did differ significantly for each of the groups; experimental and control ($F(1, 104) = 5.837$, $p = .018$,). The Levene test of equality of variances indicates that homogeneity of variance was not statistically significant ($F(1, 105) = 2.430$, $p = .122$). For reading accuracy, the assumption of equal slopes indicated that the relationship between the covariate accuracy pretest percentage and the dependent variable accuracy posttest percentage did not differ significantly between the experimental and the control group ($F(1, 107) = .050$, $p = .824$). The Levene test of equality of variances indicates that homogeneity of variance was statistically significant ($F(1, 105) = 6.803$, $p = .010$).

Descriptive statistics and two ANCOVAs were used to examine whether there was a significant difference in pretest and posttest reading fluency and accuracy between experimental and control groups. Differences in performance based on words read per minute and reading accuracy rates were examined. Descriptive statistics were used to compare the outcomes for the control and treatment groups are provided in this chapter.

Descriptive Statistics

This study included a total of 108 fourth and fifth grade participants who received Guided Reading instruction as a school-wide reading program for instruction. All students are enrolled in one elementary public school in a southeastern state. Fifty-seven fourth grade students or

relatively 53% of the total of fourth grade students served as the experimental group while 51 fourth and fifth grade students, or relatively 47% of the total of fourth and fifth grade students served at the control group. Students were pretested and posttested based on their individualized reading levels at mid-year and end of year. One student who was pretested exited the school district prior to the end of year posttest and therefore was excluded from the study.

Of the 108 total participants, eight students possess current Individualized Education Plans (IEP) to afford them individualized access the general education curriculum. Each individual education accommodation was employed with integrity and efficiency. The experimental group contained 28 males and 28 females. The control group contained 27 males and 25 females. The complete sample (N = 108) percentage by gender included 50.9% male and 49.0% female.

Descriptive statistics for the experimental and control groups result by dependent variable are listed in Table 1. For the experimental group the average pretest words per minute was 119.39 and the posttest words per minute was 134.03. Accuracy pretest was 2.32 and posttest was 2.61. For the control group, the average pretest words per minute was 132.22 and the average posttest words were 153.51. Accuracy pretest was 2.76 and posttest was 2.89.

Table 1

Descriptive Statistics: Experimental and Control Group

	Experimental			Control		
Variable	N	M	SD	N	M	SD
Pretest Words per Minute	53	119.39	28.19	54	132.22	31.00
Posttest Words per Minute	53	134.03	25.12	54	153.61	27.58

Pretest Accuracy	53	2.32	0.89	54	2.76	0.78
Posttest Accuracy	53	2.61	1.01	54	2.89	0.82

Table 2

ANCOVA: Test of Between Subject Effects with Dependent Variable: Posttest Words Per Minute

Source	Sum of Squares	*df*	Mean Square	F	*P*	Power
Corrected Model	13340.11	2	6670.06	9.902	0.000	0.16
Intercept	610891.53	1	610891.53	906.91	0.000	0.891
Pretest	3090.82	1	3090.82	4.59	0.035	0.042
Group	826.18	1	8262.18	12.27	0.001	0.105
Error	70054.11	104	673.6			
Total	2299477.26	107				
Corrected Total	83394.22	106				

Note: R Squared= .160 (Adjusted R Squared= .144).

Null hypothesis and research question one. This study was conducted to determine whether to the impact of Guided Reading instruction on elementary students' reading fluency would differ based on the experiment or control group. Research question one asked, how does Guided Reading instruction impact reading fluency for elementary students? Results for hypothesis one indicate that the ANCOVA was statistically significant, $F(1,104) = 12.266$, $MSE = 8262.18$, $p = .001$, indicating that the gains for the experimental group were greater than for the control group.

Table 3

ANCOVA: Test of Between Subject Effects with Dependent Variable: Posttest Accuracy Percentage

Source	Sum of Squares	*Df*	Mean Square	F	*p*	Power
Corrected Model	2.322	2	1.161	1.374	0.258	0.26
Intercept	71.278	1	71.278	84.367	0.00	0.448
Pretest	0.148	1	0.148	0.175	0.677	0.002
Group	1.761	1	1.761	2.085	0.152	0.02
Error	87.865	104	0.845			
Total	890.00	107				
Corrected Total	90.187	106				

Note: R Squared= .026 (Adjusted R Squared= .007)

Null hypothesis and research question two. This study was conducted to determine whether to the impact of Guided Reading instruction on elementary students' reading accuracy would differ based on the experiment or control group. Research question two asked, how does Guided Reading instruction impact reading accuracy rate for elementary students?

Results of hypothesis two indicated that the ANCOVA was not statistically significant ($F(1, 107) = 2.085$, $p = 0.152$. The means for the experimental group and control group were adjusted for initial differences.

Summary

Chapter four has presented a detailed report of the results for this study. Data were analyzed using SPSS version 23 to perform ANCOVA. Descriptive statistics were reported. The use of Guided Reading instruction to impact elementary students' reading fluency and accuracy was supported and null hypothesis one and two were rejected. Students of subgroups to include English Language Learners, students with disabilities, and students of various race and ethnicity benefitted from Guided Reading instruction as did students of both genders.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this study was to determine the impact of Guided Reading instruction on elementary students' reading fluency and accuracy in a southeastern public school district as measured by the Developmental Reading Assessment. The results of the analysis will be discussed as well as the implications, limitations, and recommendations for future research. Results of this study are similar to those of Reis, et. all (2007) who imported instructional strategies with "direct instruction to improve reading fluency" in elementary students. Post-intervention scores of direct instruction favored the students who received the treatment. As students were provided opportunities to practice their reading abilities in a variety of settings to include independent reading, peer and partner sharing, and small group read-alouds with discussion, student attitudes toward reading positively improved. Therefore, as the attitude positively increased, so did the reading engagement time. The results revealed increased words per minute the elementary students read.

Additionally, a second study with similar results was conducted by Fuchs and Fuchs (2005). Results of the study included increased fluency scores and measures of elementary students' as a result of repeated readings of students over a period of time. While the score increases were headlined as modest, the results improved nonetheless as an individualized approach was implemented. Further, comparable effects were demonstrated across separate studies conducted in consecutive years. Additionally, repeated readings appear to import a positive impact on reading fluency.

Discussion

The purpose of this study was to determine if a connection exists between reading fluency and reading accuracy rates when Guided Reading instruction is employed. The importance of understanding the reading fluency and reading accuracy rates in elementary students when Guided Reading instruction is implemented in invaluable information for educational practitioners, theorists, and lawmakers. As the instruction is paired with each student's individualized way of learning, children are more apt to understand and receive the instruction from the teacher and apply the practices they have learned. Once students practice their newly formed skills, their confidence with implementing it consistently becomes their common practice. When children read and interact with text, their ability to read with fluency and accuracy typically increases thereby positively impacting their reading experiences within instructional environments. The summary of the results of this study will elicit information to those practitioners, theorists, and lawmakers who contribute to the reading process of all elementary students.

Research Question one sought to examine the impact of Guided Reading instruction of the reading fluency of elementary students to include the number of words individual students read per minute with expression and intonation. Guided Reading instruction ultimately incorporates a multi-sensory approach to teach students how to read and develop "the ability to understand and respond to ideas" (Nichols, Rupley, & Blair, 2005). As varied instructional strategies are repeatedly implemented to reinforce the reading process, a fuller foundation of reading is built. One such strategy is paired reading where "two readers who have different reading strengths and weaknesses can learn to compensate for them in an interactive process" (Topping, 2014). Partners listen to their peer buddy read selections appropriate for their reading

level and offer suggestions and compliments as a way to overall improve their reading fluency. Further, research indicates “that pupils thought learning from a wide range of their peers in guided reading was important” (Hanke, 2014). Thus, the exploration of the impact and significance of Guided Reading remains paramount to the student reading process. Once students understand that print makes sense and they are exposed to various fiction and non-fiction texts, one instructional strategy method to positively impact their ability to read words per minute includes Guided Reading instruction.

The test used to examine the relationship between words read per minute and Guided Reading instruction was an ANCOVA. The results revealed a significant difference between words read per minute while Guided Reading was consistently implemented to elementary school students and thus solidifying the willingness to reject the null hypothesis one. Positively, Guided Reading instruction promotes the increase of words students read per minute.

Research Question two sought to examine the impact of Guided Reading instruction on the accuracy of words read per minute by elementary students. While Guided Reading instruction utilizes and implements instructional strategies based on students’ individualized reading strengths and needs, a varied and multi-step approach is impactful when applied. When teachers “reconceptualize regular classroom instruction in ways that allow them to work with individual students” (Ivey & Broaddus, 2000), the opportunity for a teacher to confer with all students about their reading selections can occur frequently and consistently. As the teacher circulates throughout the class to individually consult to students about their reading strengths and needs, students increase in confidence when reading due to the feedback given by their teacher as outlined in the implementation of the Guided Reading protocol. The students’ ability to take risks when reading unfamiliar words and concepts also increases as well as their internal

reading motivation and engagement. Research suggests "when people are intrinsically motivated, they will become courageous" (Marinak, 2013). So, as students become more confident with their reading fluency and interpretative skills, they are more willing to take risks when reading challenging text. Most times, readers are successful within the reading process because of the ability to synthesize what the read due to their skill foundation. Therefore, their reading development, fluency, and comprehension of text is impacted.

The test used to examine the relationship between Guided Reading instruction and the accuracy of words elementary students read per minute was an ANCOVA. This measure revealed no significant difference in the relationship of accuracy of words read per minute by elementary students as a result of the implementation of Guided Reading instruction. As noted in Chapter Four, student error rates in both the control and experimental groups scored under five. This defines a group of readers with an accuracy rate of 95% or higher when reading independent text as outlined by their Developmental Reading Assessment scores. Thus, the null hypothesis is rejected.

Useful discussion from this study were derived and can prove fruitful for schools when guiding students to read with fluency and accuracy. Data from this study are indicative that Guided Reading instruction is a practical instructional teaching strategy when implemented to elementary students. As the results indicate, Guided Reading instruction does make a statistical difference in elementary students' reading fluency and reading accuracy percentage. Also of note, "it was additionally reported that students within a classroom in which guided reading was used experienced improved comprehension scores, higher fluency levels, and an increase in overall reading test scores" (Ferguson & Wilson, 2009). The effectiveness and consistency with implementation promote further fidelity to student achievement and growth. Therefore, as

reading sessions with individualized groups remain intact and as students are promoted to the next level based on their increase of words per minute and percentage of reading accuracy scores, educational reading gains can be measured. Further, as individualized accommodations are afforded to each student, regardless of a current Individualized Education Plan, as a means of remediation and/or promotion of student ability, student investment and confidence elevate. A similar study for students with disabilities reports that as Guided Reading instruction was implemented for one full school year, a teacher "documented between 6 to 24 months of growth in the students' reading levels while compared against their own previous abilities" (Simpson, Spencer, Button, & Rendon, 2007). Overall, the reading levels and attitudes toward reading improved. Presently, students who participated in the experimental group for approximately a period of five months to include at least two to three Guided Reading instruction group per week, posted statistically significant correlations between their pretest and posttest scores. Hence, it is deduced that a direct correlation in the positive direction of the application of Guided Reading instruction.

Of additional comparison was a study conducted by Bryant (2012) who integrated music instruction to ascertain the effect of music instruction on reading fluency in first grade students. The research indicated that there was a significant effect of music instruction on DIBELS score results. As the multiple intelligences were enacted to stimulate the learning abilities of auditory learners, their ability to read more words per minute increased. Purposeful instructional strategies tailored to those auditory learners increased their ability to succeed. Thereby increasing their overall score.

In contrast, Scheriff (2012), utilized repeated readings to increase students' ability to read with achievement. In the quasi-experimental study, the intervention did not show improvements.

While repeating instruction day after day tends to lend a student to house this information and recall it quickly and with accuracy, Guided Reading incorporates a multi-modality approach to support the use of a repeated strategy to afford confidence and inclusiveness.

Implications

Overall, the implications of this study support the implementation of Guided Reading instruction when considering how to impact students' reading fluency and accuracy. As data driven practices, instruments, and trends dictate the pace for educational policy, Guided Reading instruction is an instructional design proven to improve students' reading abilities regardless of reading level or reading ability. Frequent monitoring of students' progress in reading has been identified as an essential part of effective reading instruction to track learning" (Romain, Millner, Moss, & Held, 2007). In Guided Reading, teachers meet with their leveled reading groups 2-3 times per week contingent on individualized severity of strength and need and update student progress within student monitoring logs. Tracking progress over time affords the teacher and extended view of student progress and teacher practice in order to maintain group homogeneity based on level. As students are grouped based on individualized needs, teachers ascertain their strengths and deficits based on assessments and organize reading plans and instructional practices based on these scores. Once the teacher instructs the students based on their variance of learning abilities to include accommodations, interests, abilities, and reading levels, students mostly remain motivated, challenged, and invested within the Guided Reading framework.

As the results of the study indicate and prove, the implementation of Guided Reading instruction benefit students of various learning abilities as it relates to their overall improvement and progress with reading fluency and accuracy. Clearly, the daily practice and repetition of learned reading skills to include fluidity and the overall lessening of reading omissions,

insertions, and substitutions afford students the opportunity to apply what they have learned. As students apply what they learn and it produces a positive outcome, their likelihood to replicate that particular skill is enhanced. Further, teachers can monitor student progress and reading behavior and interject various modalities and strategies to encompass the learning intelligences within the child's Zone of Proximal development of the individual child to promote the reading success of the students.

Additionally, the results of the study indicate positive effects for reading fluency as a result of Guided Reading instruction implementation. As educators and administrators review researched-based reading programs by which to teach elementary students reading, this study supports the positive impact that Guided Reading promotes on student growth.

This current study is unique from other studies in that a pretest and posttest were administered to both the experimental and control groups to lessen the variance in the posttest scores. Therefore, the robustness of the study was enhanced. The field of current literature has now been expanded in that this particular study provided additional substantiated research as to the impact of Guided Reading instruction as it is implemented to elementary students are they are solidifying their ability to read.

Limitations

Based on this particular study, it should be noted of both the experimental and control groups' data could potentially be compromised. The researcher took into consideration the motivation, wellness, testing stamina, and effort by each student when administering pretests and posttests. All of the aforementioned factors could contribute to the outcomes of the overall scores. Since the pretest and posttests were administered within a two-week time period, varying factors could contribute to the overall legitimacy of scores of each individual student. For

example, a student could be impacted by unrelated incident to impact his or her mood just prior to the test. In no way could the test administrator be aware of this irregularity thereby positively or negatively impacting the results of the test scores. Further, illness, sleep deprivation, and hunger could all impact testing scores.

Another potential limitation to this study is the teacher's ability to implement Guided Reading instruction with fidelity and consistency. Unpredictable situations and changes to instructional schedules occur frequently. Some of these include field trips, fire and tornado drills, guest speakers, earned teacher leave, school-wide presentations, and unforeseen student behavioral incidents. All of these examples could require a teacher to change the implementation of Guided Reading. As educators and administrators realize, "for educational practices to be successful, they must be implemented consistently as defined over time," (Auld, Belfiore, & Scheeler, 2010). Over time, teachers and student teachers alike develop their classroom management practices to quickly maintain the consistent instructional class time. Meaningful redirection to student behavior can readily engage the reading group should any of these examples occur during the scheduled Guided Reading instructional period. As changes to schedules occur, other changes to the schedule occur in order to offset lost instruction time. Often times, these losses of instructional time may fail to be gained within the schedule thereby impacting the effectiveness and consistency of Guided Reading instruction.

Another certain limitation to this study is student attendance maturation. Certain cognitive areas of growth are likely to occur in the student as they are exposed to Guided Reading instruction. This also happens naturally as the student physiologically develops. Therefore, the control group must receive no exposure to any Guided Reading instruction strategy of reading. This is imperative so that reading growth conclusions, if identified by

statistical measures, can be based on Guided Reading instruction alone. Should students be exposed to various Guided Reading instructional strategies, the findings of the study could be invalidated.

One final limitation to this study could include experimental mortality. This is defined as some participants are "absent during some sessions" (Gall, Gall, & Borg, 2007, p. 386). These absences could be attributed to individual or family illness, environmental conditions, change of schools, family occurrences, etc., Inconsistent attendance impacts the overall school experience and "students who are frequently absent often fall behind in academics and miss important socialization that enhances their ability to understand and follow directions" (Weismuller, Grasska, Alexander, White, & Krammer, 2007). Consistent attendance affords consistent opportunities for students to be exposed to programs and instruction, such as Guided Reading, to further their school promotion. Plus, students acclimate to the structures of routines established within the classroom and testing environments. One way to curtail the issue and variance of attendance would be to randomly disperse students to treatment groups and track attendance. Attendance could be easily tracked prior to the beginning of the lessons in a verbal roll call with an associated computer data entry or even through the participation of a guided practice written sample, given the student consistently writes his name and date on his assignment and the teacher readily acknowledges attendance. Once a consistent method of tracking attendance is employed, validity of results is further confirmed. As students are tracked at a higher rate than others because of absences, the researcher may want to consider if the participant could invalidate the study findings.

Recommendations for Future Research

It is recommended that further research be conducted on the impact of Guided Reading instruction on elementary students' reading comprehension. Now that this study has affirmed the statistical significances of which Guided Reading impact students' reading fluency and accuracy, data could be collected to ascertain the same instructional strategies benefits on student comprehension. As Guided Reading encourages and solidifies student ability to critically think, it would prove beneficial to study this application to discern its use for teaching reading comprehension to elementary students. Further, as making inferences are one of the most challenging tasks of reading, it would be of use to determine how Guided Reading supports student growth when reading for inference in fiction and nonfiction text.

A second recommendation encompasses extended length of study over time to maintain consistency with student attendance and fidelity of implementation. Instead of tracking data for an approximate five consecutive months of reading engagement, a researcher could extend the data tracking process to one entire school year. As the opportunity of extension of time increases, less student absences over time could occur, plus more days of implementation of Guided Reading would occur. Both variance could/would impact the outcome of elementary students' reading fluency and accuracy and thereby increase the robustness of the study based on a lengthier implementation time of the strategy to the experimental group.

Finally, other recommendations to this study include changes to the research design and methods. Extension of data collection over time coupled with increased population size could increase the validity of this study. As the population size incorporates the variances of socio-economic classes, students with learning disabilities, English-Language Learners, students of Free and Reduced Lunch, and Title-One Schools, further finite results may be assured from such

a change in population. Additionally, while the treatment impacted reading accuracy slightly, the employment of a large sample size could attract a variance in error rate when more students participate in the treatment. As an increase of participants is tracked by the pretest and posttest data, perhaps a larger degree of error rate percentage change could be measured as a result of the Guided Reading instruction.

REFERENCES

Abbott, L., Dornbush, A., Giddings, A., & Thomas, J. (2012). Implementing guided reading strategies with kindergarten and first grade students. Action Research Project; Saint Xavier University.

Agresti, A. & Finlay, B. (2007). *Statistical methods for the social sciences.* Essex, England: Pearson.

Allen, C. (1996). *Skills for life.* Worthington, OH: Linworth.

Ankrum, J. & Bean, R. (2009). Differentiated reading instruction: what and how. *Reading Horizons,* 48(2), 133-146.

Auld, R., Belfiore, P., & Scheeler, M. (2010). Increasing pre-service teachers' use of differential reinforcement: effects of performance feedback on consequences for student behavior. *Journal of Behavioral Education, 19*(2), 169-183.

Barton, D. (1994). *Literacy: An introduction to the ecology of written language.* Cambridge, MA: Blackwell.

Beaver, J. (2006). *Developmental Reading Assessment.* Parsippany, NJ: Pearson.

Beaver, J. (2005). *Developmental Reading Assessment 2*. Boston: Pearson Education Inc.

Blasingame, J. (2007). *Books that don't bore 'em.* New York, NY: Boyd's Mill Press.

Bowling, C. (2011). *The effect of two reading programs on first grade students' reading fluency* (Doctoral dissertation). Retrieved from ProQuest. (3434868).

Bradley-Brown. (2006). *The impact of a guided reading program: student results and teachers' perceptions* (Doctoral dissertation).. Retrieved from ProQuest. Temple University, OH. (3255107).

Brown, T. (2010). Learning to read: The unofficial scripts of succeeders and strugglers. *Reading Teacher, 64*(4), 261-271.

Bryant, K. (2012). Effect of music-integrated instruction on first graders' reading fluency. Liberty University, Lynchburg, Virgnia.

Bukowiecki, E. (2007). Teaching children how to read. *Kappa Delta Pi Record, 43*(2), 58-65.

Clay, M. (1993). *An observation survey of early literacy achievement.* Portsmouth, MA: Heinemann.

Clay, M. (1993). *Reading recovery.* Portsmouth, MA: Heinemann.

DeMaris, A. (2004). *Regression with Social Data: Modeling Continuous and Limited Response Variables*. Hoboken, NJ: John Wiley & Sons Inc.

DeVos, S. (2011). *Effects of guided reading on first-grade students' reading abilities* (Action Research). Retrieved from ProQuest. (1499389).

Diaz-Lefebvre, R. (2006). Learning for understanding: A faculty-driven paradigm shift in learning, imaginative teaching, and creative assessment. *Community College Journal of Research & Practice*,30(2), 135-137.

Dillon, S. (2010). Stagnant national reading scores lag behind math. *New York Times.* Retrieved December 6, 2010 from http://www.nytimes.com/2010/03/25/education/25reading.html.

Fawson, P. & Reutzel, D. (2000). But I only have a basal: Implementing guided reading in the early grades. *Reading Teacher, 54*(1), 84-97.

Ferguson, J., & Wilson, J. (2009). Guided reading: but it's only for primary teachers. *College Reading Association Yearbook, 30*, 293-306.

Fisher, A. (2008). Teaching comprehension and critical literacy: Investigating guided reading in three primary classrooms. *Literacy, 42*(1), 19-28.

Ford, M., & Opitz, M. (2011). Looking back to move forward with guided reading.

Reading Horizons, 225-240.

Fountas, I., & Pinnell, G. (2009). *Prompting guide: A tool for Literacy teachers.* Portsmouth, MA:Heinemann.

Fountas, I., & Pinnell, G. (1996). *Guided Reading.* Portsmouth, MA: Heinemann.

Fry, E. & Rasinski, T. (2011). *Increasing fluency with high frequency words.* Huntington Beach, CA: Shell Education.

Fuchs, D. & Fuchs. L. (2005). Peer-assisted learning strategies: Promoting word recognition, fluency, and reading comprehension in young children. *Journal of Special Education, 39*(1), 34-44.

Frahm, R. (2006). Approach teaches joyful reading. *Hartford Courant.*

Gabl, K., Kaiser, K., Long, J., & Roemer, J. (2007). Improving reading comprehension and fluency through the use of guided reading. Action Research Project; Saint Xavier University.

Gall, M, Gall, J, & Borg, W. (2010). *Applying educational research.* New York, NY: Pearson.

Gall, M., Gall, J., & Borg, W. (2007). *Educational Research.* Boston, MA: Pearson.

Gardner, H. (1999). Retrieved February 1, 2012 from http://www.infed.org/thinkers/gardner.htm

Garner, H. (1983). Multiple intelligences. Retrieved December 6, 2010 from http://tip.psychology.org/gardner.html.

Glasswell. K., & Ford, M. (2010). Teaching flexibility with leveled texts: more power for your reading block. *Reading Teacher, 64*(1), 57-60.

Gray, L., & Reece, D. (1957). *Teaching children to read, 2nd ed.* New York: Ronald Press

Company.

Green, S. B., & Salkind, N. J. (2014). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (7th ed.). Upper Saddle River, NJ: Prentice Hall.

Gregory, A. & Cahill, M. (2010). Kindergarteners can do it, too! Comprehension strategies for early readers. *Reading Teacher*, 63(6), 515-520.

Hall, K. (1998). Critical literacy and the case for it in the early years of schooling. *Language, Culture, and Curriculum,* 11(2), 183-194.

Hanke, V. (2014). Guided reading: young pupils' perspectives on classroom practice. *Literacy, 48*(3), 136-143.

Harp, B. (1993). *Bringing children to literacy: Classrooms at work.* Publishers: Norwood, MA: Christopher-Gordon

Hart, B. & Risley, T. (1995. *Meaningful differences in the everyday experiences of young American children*. Baltimore, MD: Brookes.

Hatch, T., & Gardner, H. (1993). *Finding cognition in the classroom: An expanded view of human intelligence.* Cambridge, MA: Cambridge University Press.

Hulan, N. (2010) What the students will say while the teacher is away: an investigation into student-led and teacher-led discussion within guided reading groups. *Literacy Teaching and Learning 14*(1 & 2), 41-64.

Iaqunita, A. (2006). Guided reading: A research-based response to the challenges of early reading instruction. *Early Childhood Education Journal, 33*(6), 413-418.

Ivey, G. & Broaddus, K. (2000). Tailoring the fit: reading instruction and middle school Readers. *The Reading Teacher,* 54(1), 68-78.

Justice, L., Meier, J., & Walole, S. (2005). Learning new words from storybooks: An efficacy study with at-risk kindergarteners. *Language, Speech, and Hearing Services*

in Schools, 36(1), 17-32.

Kelley, M. & Clause-Grace, N. (2009). Facilitating engagement by differentiating independent reading. *Reading Teacher,* 63(4), 313-318.

Kornhaber, M. (2001). Howard Gardner in J.A. Palmer (ed.) *Fifty Modern Thinkers on Education.* London: Routledge.

Kosanovich, M., Ladinsky, K., Nelson, L., & Torgesen, J. (2006). Differentiated reading instruction: small group alternative lesson structures for *all* students. *Florida Center for Reading Research* p. 1-9.

Kouri, T., Selle, C., & Riley, S. (2006). Comparison of meaning and graphophonemic feedback strategies for Guided Reading instruction of children with language delays. *American Journal of Speech-Language Pathology, 15*(3), 236-246.

Lorenzi, N. (2011). A passion for learning. *Scholastic Parent & Child, 19*(1), 82-93.

Marinak, B. (2013). Courageous reading instruction: The effects of an elementary motivation intervention. *The Journal of Educational Research, 106,* 39-48.

McKenna, M. & Stahl, S. (2003). *Assessment for reading instruction.* New York, NY: The Gilford Press.

Narvaez, L., & Brimijoin, K. (2010). *Differentiation at work, K-5.* Thousand Oaks, CA: Corwin.

Nichols, W.D., Rupley, W.H., & Blair, T. (2005). *Reconceptualizing phonics instruction from a constructivist view.* Pre-convention institute #16 paper presented at the International Reading Associations annual conference in San Antonio, TX.

Parsons, S., & Ward, A. (2011). The case for authentic tasks in content literacy. *Reading Teacher, 64*(6), 462-465.

Pinnell, G., & Fountas, I. (2009) *The continuum of literacy learning*. Portsmouth, MA: Heinmann.

Pinnell, G., & Fountas, I. (2009). *When readers struggle.* Portsmouth, MA: Heinemann.

Powell, K. & Kalina, K. (2009). Cognitive and social constructivism: Developing tools for an effective classroom. *Education, 130*(2), 241-250.

Pressley, M. (2006). *Reading instruction that works.* New York, NY: Gilford Press.

Rasinski, T. (2003). *The fluent reader.* New York, NY: Scholastic.

Reis, S., McCoach, D., Coyne, M., Schreiber, F., Eckert, R., & Gubbins, E. (2007). Using planned enrichment strategies with direct instruction to improve reading fluency, comprehension, and attitude toward reading: an evidenced based study. *The Elementary School Journal, 108*(1), 3-23.

Richardson, J. (2009). *The next step in guided reading.* New York, NY: Scholastic.

Robb, L (2008). *Differentiating reading instruction.* New York, NY: Scholastic.

Robb, L. (1996). *Reading strategies that work.* New York, NY: Scholastic.

Romain, M., Millner, K., Moss, V., & Held M. (2007). The effectiveness of classroom-based instructional assessments for progress monitoring purposes in Texas Reading First schools. *Reading and Writing 20*(6), 619-641.

Routman, R. (1996). *Literacy at the crossroads.* Portsmouth, MA: Heinemann.

Scheriff, T. (2012). The effects of repeated readings on third grade students' reading achievement and attitudes. Liberty UNive4rsity, Lynchburg, Virgnia.

Schwartz, R. (2005). Decisions, decisions: responding to primary students during guided Reading. *Reading Teacher, 58*(5), 436-443.

Schulman, M., (2006). *Guided reading in grades 3 – 6.* New York, NY: Scholastic.

Schulman, M., & Payne, C. (2000). *Guided reading: Making it work.* New York, NY: Scholastic.

Seymour, P., & Elder, K. (1986). Beginning reading without phonology. *Cognitive Neuropsychology, 3,* 1-36.

Sigmon, C. (2001). *Modifying the four blocks for upper grades.* Greensboro, NC: Carson-Dellosa Inc.

Simpson, J., & Smith, J. (2002). Guided reading develops fluency. *Literacy Today, 31*(1), 10-11.

Southall, M. (2006). *The first 100 sight words.* Niagra Falls, NY: On the Mark Press.

Simpson, C., Spencer, V., Button, R., & Rendon, S. (2007). Using guided reading with students with autism spectrum disorder. *Teaching Exceptional Children Plus, 4*(1), 2-9.

Stanovich, K. (1994). Constructivism in reading education. *The Journal of Special Education. 28*(3), 259-274.

Street, J.C., & Street, B.V. (1991). The schooling of literacy. In D. Barton & R. Ivanic (Eds.), *Writing in the community.* Newbury Park, CA: Sage.

Swain, C. (2010). It looked like one thing but when we went more into depth, it turned out to be completely different: Reflections on the discourse of Guided Reading and its role in fostering critical responses to magazines. *Literacy, 44*(3), 131-136.

Topping, K. (2014). Paired reading and related methods for improving fluency. *International Electronic Journal of Elementary Education, 7*(1), 57-70.

Underwood, V.L. (2010). *The effects of Guided Reading instruction on reading achievement.* (Doctoral dissertation). Retrieved from ProQuest. (3408060).

U.S. Department of Education. (2010). *Improving reading comprehension in Kindergarten Through 3rd grade.* Retrieved December 6, 2010 from http://ies.ed.gov/ncee/wwc/pdf/practiceguides/readingcomp_pg_092810.pdf

Vardi, R. (2011). America's richest counties. *Forbes.* Retrieved April 12, 2012 from http://www.forbes.com/2011/04/11/americas-richest-counties-business-

Vygotsky, L. (1962). *Thought and language.* Cambridge, MA: MIT Press.

Weaver, B. (2000). *Leveling books k-6.* Newark, DE: International Reading.

Weismuller, P., Grasska, M., Alexander, M., White, C., & Kramer, P. (2007). Elementary school nurse interventions: attendance and health outcomes. *Journal of School Nursing, 23* (2), 111-118.

White, B. (2010). Kids learn in different ways. *Minnesota Fire Chief,* 46(4), 35.

Witherell, N. & McMain, M. (2005). *Teaching reading through differentiated instruction with leveled graphic organizers.* New York, NY: Scholastic Inc.

Appendix A

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

November 24, 2014

Agnes J. Teets
IRB **Conditional Approval** 1788.112414: The Impact of Guided Reading Instruction on Elementary Students' Reading Fluency and Accuracy

Dear Agnes,

We are pleased to inform you that your above study has been **conditionally** approved by the Liberty IRB. Conditional approval means that your full approval is pending on our receipt of certain items, which are listed below:

-Documented approval on letterhead from each research site you are enrolling in your study

Please keep in mind that you are not permitted to begin data collection until you have submitted the above item(s) and have been granted full approval by the Liberty University Institutional Review Board. Thank you for your cooperation with the IRB and we wish you well as you continue working toward full approval.

Sincerely,

[redacted]

Fernando Garzon, Psy.D.
Professor, IRB Chair
Counseling

(434) 592-4054

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Appendix B

Loudoun County Public Schools
Department of Instruction
Research Office
21000 Education Court
Ashburn, Virginia 20148
Telephone: 571-252-1310
FAX: 571-252-1633

TO: Agnes J. Teets

FROM: Ryan L. Tyler, Ph.D., Supervisor of Research [redacted]
Cynthia Ambrose, Assistant Superintendent for Instruction

RE: Research Request

Date: November 2, 2015

Your request to conduct the study, The Impact of Guided Reading Instruction on Elementary Students' Reading Fluency and Accuracy, has been approved on the condition that you receive final approval from your university. Please forward the final IRB approval documentation to us.

Contact Evelyn Hickman, Elementary Reading Supervisor, to coordinate your research project.

As a courtesy to Loudoun County Public Schools and the participants in your research, please provide a copy of your study and subsequent findings to the Research Office.

Contact Dr. Ryan Tyler, Supervisor of Research, if you have any questions about the approval.

Good luck with your project.

Cc: Evelyn Hickman
Dr. Mike Martin