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Shake, Rattle, And Read: An Analysis Of An Adaptation Of A Multisensory Phonics Program's Impact On The Reading Achievement Of Kindergarten Students

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SHAKE, RATTLE, AND READ:
AN ANALYSIS OF AN ADAPTATION OF A MULTISENSORY PHONICS PROGRAM'S
IMPACT ON THE READING ACHIEVEMENT OF KINDERGARTEN STUDENTS

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DEDICATION

This dissertation is dedicated to my son, Logan, for being my inspiration to improve education for all students to come.

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To Dr. Todd Lilly, thank you for your guidance and expertise. I have grown immensely as a doctoral student since you became my advisor. I am eternally grateful for the way you helped me shape this action research project into its current state.

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To my sweet son, Logan, thank you for bringing such joy to my life. You inspire me to better myself each day. I treasure every moment I spend with you. You truly are my sunshine.

ABSTRACT

This paper describes a problem of practice stemming from the disparity in reading achievement that exists among kindergarten students due to varying life and academic experiences. This action research study investigated the impact of a multisensory instructional program that attempts to improve students' decoding skills, and therefore, overall reading ability by answering the following question: How does an adaptation of the *Project Read Primary Phonics* program affect the reading level of kindergarten students as measured by the DRA2+? This study employed an action research methodology, specifically Mertler's (2014) action research cycle: *planning, acting, developing, and reflecting*. The *planning* stage was comprised of identifying the problem of practice, research question, related literature, and action research design. The *acting* stage was comprised of implementing the intervention, collecting related data, and analyzing that data. The *developing* stage was comprised of using the findings from the data analysis to create an action plan. The *reflecting* phase was comprised of analyzing the research questions and research design to guide future action research studies, as well as sharing the action research results in an effort to empower other teachers to examine their own instructional practices. Findings indicated that the adaptation of the *Project Read Primary Phonics* program had a positive effect on student achievement. These results served as the basis for the subsequent action plan.

Keywords: action research, phonics instruction, kindergarten, reading achievement

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CHAPTER ONE: INTRODUCTION

The Every Student Succeeds Act (2015) encourages teachers to enable all students to reach the same high levels of achievement regardless of physical, ethnic, socioeconomic, linguistic, or cognitive differences. However, despite teachers' best efforts, a gap in academic achievement continues to exist between low-income elementary students and more affluent elementary students (Spira, Bracken, & Fishel, 2005; Jeynes, 2008; Lo, Chuang, & Haskell, 2009). This disparity in achievement is apparent in all subject areas, but it is particularly evident in reading, possibly because of the push for higher standards (Vadasy & Sanders, 2010; Suggate, 2016). It seems every year young children are expected to read more challenging texts and to understand more abstract concepts in the elementary grades of the United States public school system (Carlsson-Paige, McLaughlin, & Almon, 2015).

The discrepancy in student readiness as demonstrated by the diversity of students' prior knowledge and experiences has challenged elementary public school teachers in the U.S. to enable all children to flourish. However, there is a strong relationship between the skills with which students enter school and future academic success these students achieve (Suggate, 2016). This relationship means students who enter elementary school behind their peers have a tendency to remain that way throughout their academic careers (Spira et al., 2005). In fact, according to Schacter and Jo (2005):

Low-income urban kindergarteners score one half of a standard deviation below the national average in reading achievement, and the gap increases to two standard deviations by the time they graduate from elementary school. (p. 159)

As a result, if these obstacles are not recognized and addressed, a continuous cycle of reading failure can be perpetuated, negatively affecting future generations of learners (Cihon, Gardner, Morrison, & Paul, 2008).

Consequently, recent initiatives have emphasized the significance of systematic phonics programs. The motivation behind these programs is prevention since it seems students who do not learn to read effectively in the elementary grades generally have trouble with reading throughout their academic careers (Denton, Fletcher, Anthony, & Francis, 2006). In addition, children who are poor readers have a higher risk for having behavior problems, a pattern which can lead to further educational issues (Cihon et al., 2008).

Statement of the Problem

According to the National Center for Education Statistics (NCES), only thirty-seven percent of twelfth-grade students in the U.S. scored at or above the proficient level on the National Assessment of Educational Progress reading exam in 2015. In addition, the average score on this test was similar to 2013, yet significantly lower than the average score from 1992, the first year the assessment was administered (NCES, 2016).

Unfortunately, statistics such as these, which show a staggering number of students performing below grade level reading expectations, are a common occurrence.

Therefore, the problem of practice (PoP) for this Dissertation in Practice (DiP) stems from the national need to improve reading instruction and consequently, achievement, for all students. Within the State of South Carolina (SC), the Read to Succeed Act (2014) requires all students to independently read at or above grade level by the end of kindergarten. According to SCDE (2015), “Students who are not proficient readers by third grade are more likely to struggle academically, greatly reducing their chances of graduating from high school, going to college, or successfully participating in a 21st century high-skill economy” (p. 3).

However, as the level of rigor in the curriculum has increased, low-income students appear to be entering elementary school without the necessary foundational knowledge to achieve the minimum level of reading success (Cihon et al., 2013). Historically, studies have shown that urban children from low-income families are at an academic disadvantage before they even begin kindergarten (Lo et al., 2009). Therefore, it appears that seemingly innocent variances in life experience can have significant educational consequences for low-income children.

In response, SC has urged teachers to implement reading intervention programs for students who enter each elementary classroom already performing below their current grade level’s expected reading goal. Schools leave it up to each teacher’s discretion to determine how to effectively meet each student’s literacy needs by choosing from a variety of available educational resources. Therefore, this research will examine the implementation of an adaptation of the *Project Read Primary Phonics* program with a class of kindergarten students at O Elementary School. The goal is to enable these students to read on grade level by the end of the school year.

Study Rationale

Reading is an essential skill on which students will depend to further their education, become employed, and even accomplish daily living tasks. Therefore, providing students who cannot read on grade level with reading intervention is essential (SCDE, 2015). Specifically, students who receive reading instruction involving phonemic awareness, sound-letter correspondence, and sounding out and blending words are thought to be more skilled in decoding words than children who do not receive supplemental instruction focused on these skills (Gunn, Biglan, Smolkowski, & Ary, 2000). Furthermore, children with low reading skills were found to achieve the greatest success with the implementation of teacher modeled word recognition strategies, such as chunking words into units such as syllables or onsets/rimes, finding little words in big ones, sounding and blending individual phonemes, and considering known letter sounds and what makes contextual sense (Rupley, Blair, & Nichols, 2009). However, all literacy instruction is not considered equally effective. According to De Graaff et al. (2009), children show greater progress with both reading and spelling skills from systematic phonics instruction than from nonsystematic or non-phonics reading programs. Also, further research outcomes demonstrated that when students receive explicit instruction in phonology and phonics, their reading performance improves at a faster rate (Podhajski, Mather, Nathan, & Sammons, 2009). Therefore, current research supports the idea of implementing a systematic phonics program in order to enable kindergarten students to read on grade level by the end of the school year.

Purpose Statement

The purpose of this action research study is to examine the extent to which an adaptation of the systematic program, *Project Read Primary Phonics*, will affect the reading achievement of kindergarten students. More specifically, this study will measure the effect of multisensory phonics instruction on students' ability to decode unknown words, which will enable students to read more difficult texts, improving their overall reading ability.

The *Project Read Primary Phonics* program is designed to introduce language concepts and skills in a systematic order and convey them through the use of multisensory strategies and materials. Therefore, the sequence of phonics skills is arranged from the simple to complex and most frequently used to least. In addition, *Project Read Primary Phonics* postpones introducing certain skills due to their dependence on other concepts (FCRR, 2007). The lessons are formatted to include a named skill, a concept and instructional objective, teacher modeling, guided practice with feedback, independent student practice and application, and cumulative review. This program differs from others due to its visual, auditory, kinesthetic, and tactile (VAKT) elements, as well as the inclusion of body language. Students also have opportunities to select how they apply their learning, which can increase students' motivation to learn to read (FCRR, 2007). Therefore, this study seeks to investigate the potential benefits students may reap due to the implementation of an adaptation of this program.

Research Question

In an effort to enable all students to read on or above grade level by the end of kindergarten, the following research question was asked:

1. How does an adaptation of the *Project Read Primary Phonics* program affect the reading level of kindergarten students as measured by the DRA2+?

Related Concepts

Student Interest and Choice. Progressivists like John Dewey (1938), believe that curriculum should be focused on students' interests. According to Drake (2012, pg. 7), "Dewey advocated for balancing the needs of the learner with the demands of the subject content and of living in a democratic society." Furthermore, Progressivists emphasize the importance of shared learning (Waterman, 2007). They believe that teachers should not make all of the instructional decisions. Instead, students should have the freedom to make choices about their education. Therefore, a teacher's role should be to guide students to make responsible choices in an effort to turn them into independent, lifelong learners (Waterman, 2007). These thoughts are paralleled by Tomlinson (2014) when she discusses the importance of allowing students to demonstrate their learning in a way that mirrors their interests. Dewey (1938) also promoted the idea of students actively learning through authentic experiences that built on previous experiences. Similarly, Tomlinson (2014) encourages teachers to identify students' prior knowledge in order to use it as a foundation for future learning.

Although phonics instruction largely falls in line with the social efficiency theory, elements of the *Project Read Primary Phonics* program reflect some progressive notions.

For example, students are able to showcase their phonics knowledge through various outcomes of their choice (Tomlinson, 2014). Students' interests are also taken into consideration when teachers select texts for students to read as another application of their learning (Dewey, 1938; Tomlinson, 2014). In addition, the *Project Read Primary Phonics* program allows teachers to assess students prior to instruction, so they can use that data to drive future instruction (Tomlinson, 2014).

Social Issues. Tomlinson (2014) also discussed several social issues that students face, as well as their effects on education. She argued that students today are more diverse than ever and often come from homes with a single parent or two working parents. Consequently, in many cases, students do not have strong academic support at home, such as someone to read to them, help them study for tests, or assist with homework. This directly relates to one potential cause for widespread reading failure, particularly in urban areas (Lo et al., 2009). Therefore, it becomes the school's responsibility to fill that role and take it a step further, as teachers help students examine these societal issues and problem solve potential solutions (Tomlinson, 2014). She stated:

At a time in human history when the world truly is a village and when we need to learn from one another how to live together and solve problems together, classrooms that enable virtually all members of the world community to work successfully together seem a far better alternative. (p. 27)

This is important because according to Juel (1988), children who struggle to read in kindergarten or first grade often decide that they do not like to read and therefore, avoid the task at all costs. Consequently, involving students in engaging, fun literacy

instruction, like *Project Read Primary Phonics*, is not only encouraged, but necessary. As a result, teachers should reconceptualize their literacy instruction to meet the needs of all learners.

Teacher Quality. In their study of first-grade classrooms, Pressley, Allington, Wharton-McDonald, Block, and Morrow (2001) examined instructional programs, as well as teacher quality. Their findings revealed the power of effective instruction since the lowest achieving students in classrooms with excellent teachers performed comparably to average students in classrooms with average teachers (2001). Taylor, Pressley, and Pearson (2002) analyzed the characteristics of exemplary reading teachers and found that successful teachers spend more instructional time teaching beginning reading skills through explanation and modeling. These educators also demonstrate how to use multiple reading strategies, in addition to implementing more small-group instruction (2002).

Project Read *Project Read Primary Phonics* is designed to introduce language concepts and skills in a systematic order and convey them by using multisensory strategies and materials. Therefore, the sequence of phonics skills is arranged from the simple to complex and most frequently used to least. In addition, *Project Read Primary Phonics* postpones introducing certain skills due to their dependence on other concepts (FCRR, 2007). The lessons are formatted to include a named skill, a concept and instructional objective, teacher modeling, guided practice with feedback, independent student practice and application, and cumulative review. This program differs from others due to its visual, auditory, kinesthetic, and tactile (VAKT) elements, as well as the inclusion of body language. Opportunities for VAKT are infused throughout these

sections of the lesson such as finger blending, glue letters, skywriting, finger scissors, hand signals, puppets, and body language. Students also have opportunities to select how they apply their learning, such as by selecting the body language for each digraph, which can increase students' motivation to learn to read (FCRR, 2007).

Project Read Adaptation The time constraint of this action research project did not allow for the entire *Project Read Primary Phonics* program to be implemented. As a result, I strategically selected lessons based on students' needs and interests. In addition, in order to help the students make connections to both consonant and vowel sounds, certain *Project Read Primary Phonics* lessons have a body language component. For example, for the diphthong /oo/, the body language is put your hands over your eyes and lift them off as you say, "oo says /oo/ as in boo." However, not every lesson includes a scripted body language idea for each sound. Furthermore, the students could not relate to some of the body language ideas that were provided in the *Project Read Primary Phonics* program.

Therefore, I encouraged my students to create their own body language for each new sound that was taught. Students could share their ideas and we would vote as a class to decide the one we would use. Each week, we would start off our phonics lesson by reviewing the previous week's sounds with body language. In addition, on Fridays we would review all of the sounds with body language that we had learned up until that point. After the students were comfortable with the body language, they began to take turns leading the class in the sound/body language review.

DRA2+ The Developmental Reading Assessment, Second Edition, PLUS is “a formative reading assessment system that allows teachers to assess their reading level, then observe, record, and evaluate changes in student reading performance” (Beaver, 2012). Using this assessment system, each student was tested individually in a quiet room, away from the rest of the class. This occurred three times throughout the school year – fall, winter, and spring. In the fall, each student was tested starting on level A, which is the lowest possible level in the DRA2+ program. Books on levels A-3 assess students in two areas - reading engagement and oral reading fluency. Reading engagement refers to a student’s reading behaviors and preferences. For example, can the student select an appropriate book for his/her reading level? Who reads to him/her at home? What’s his/her favorite book? A student’s score in this section cannot be used to prevent him/her from moving on to the next level. Therefore, the oral reading fluency score is used solely to determine a student’s independent reading level for levels A-3 (Beaver, 2012).

A student’s oral reading fluency score is determined based on the percentage of text read accurately. A student must read with 95% accuracy to be considered independent at that level. Therefore, if a student reads level A with 95% accuracy, he/she is given a book on the next level, which is level 1. If that same student cannot read the level 1 book with 95% accuracy, that would mean that his/her independent reading level is level A. If he/she did read level 1 with 95% accuracy, he/she would be given a book on level 2. This process would continue until the student could no longer read with 95% accuracy (Beaver, 2012).

However, beginning on level 4, students are also assessed on reading comprehension. As a result, a student reading on level 4 is expected to read with 95% accuracy and answer comprehension questions with 90% accuracy. If he/she fulfills both of these requirements, he/she can move on to the next level, which is level 6. (The DRA2+ does not use odd numbers after level 4 so the levels are numbered as 6, 8, 10, 12, 14, and so on up to 60) (Beaver, 2012).

Action Research Methodology

According to Mertler (2014), when teachers are faced with an educational dilemma, they look for answers from three main sources – tradition, authority, and common sense. Tradition refers to methods that have been used in the past, which does not guarantee effectiveness. Authority relies on expert opinions, which can be conflicting. Common sense utilizes individual problem solving and reasoning abilities, which are only as strong as the information upon which the conclusions are based. Overall, these sources are generally biased and are not considered to be very reliable.

Therefore, an alternative solution is implementing the scientific method to examine and solve problems. This method involves creating a question based on an existing problem; creating a hypothesis as a potential answer to the question; collecting, analyzing, and interpreting information to look for an answer to the question; forming conclusions; and then using the conclusions to verify or reject the hypothesis (Mertler, 2014). Philosopher John Dewey (1938) believed that this systematic approach would allow for more objective thinking. Consequently, educational researchers have taken the

major components of these steps and applied them to ideas, questions, or concerns regarding issues faced in schools through the process of action research.

Therefore, based on this knowledge, action research is best suited for this study. According to Mertler (2014), “action research allows teachers to study their own classrooms – for example, their own instructional methods, their own students, and their own assessments – in order to better understand them and to be able to improve their quality or effectiveness” (p. 4). Consequently, this action research study will allow the researcher to influence the research while concurrently participating in the process.

This study design will follow Mertler’s (2014) cyclical action research model, which is broken into four stages – *planning*, *acting*, *developing*, and *reflecting*. The *planning* stage is comprised of identifying the problem of practice, research question, related literature, and action research design. The *acting* stage is comprised of implementing the intervention, collecting related data, and analyzing that data. The *developing* stage is comprised of using the findings from the data analysis to create an action plan. The *reflecting* phase is comprised of analyzing the research questions and research design to guide future action research studies, as well as sharing the action research results in an effort to empower other teachers to examine their own instructional practices.

Dana and Yendol-Hoppey (2014) point out that “meaningful teacher inquiry should not depart from the work of classroom teachers, but become a part of their daily work” (p. 85). This is what makes action research so appealing. The process allows teachers to investigate topics in which they are passionate, without losing touch with their

students (Mertler, 2014). They can explore the benefits of instructional strategies and programs and use the results to bring about positive change in real time, which is why action research is the most appropriate methodology for this study.

DiP Overview

Chapter One of this Dissertation in Practice (DiP) has introduced the problem of practice, purpose statement, research question, related literature, action research design, and ethical considerations. Chapter Two of this DiP will delve deeper into the pertinent literature on the systematic program, *Project Read Primary Phonics*, as well as the historical and theoretical theories concerning phonics instruction. Chapter Three of this DiP will describe the mixed methods action research design. Chapter Four of this DiP will inform the reader of the data results and their correlation to research question. Chapter Five of this DiP will explain the conclusions reached based on the data from Chapter Four in regard to the adaptation of the *Project Read Primary Phonics* program and its effect on the reading achievement of kindergarten students at O Elementary School.

CHAPTER TWO: LITERATURE REVIEW

Introduction

The purpose of this chapter is to explore the scholarly literature involving the role of phonics instruction and its potential impact on the reading achievement of kindergarten students. Current literacy instruction at O Elementary School does not include the use of a systematic phonics program. Yet, phonics is recognized as a crucial component of an early literacy program, as it fosters the development of strong decoding skills, which has been linked to higher overall reading ability (Cihon et al., 2013; De Graaff et al., 2009; DiLorenzo et al., 2011). Therefore, the *Project Read Primary Phonics* program will be used to provide phonological/phonemic awareness activities for visual, auditory, kinesthetic, and tactile learners in order to engage all students (Florida Center for Reading Research, 2007). The effect of the adaptation of the *Project Read Primary Phonics* program on student reading achievement will be measured and analyzed throughout this action research study.

Research has shown that early reading outcomes predict future success in school and beyond the classroom (Hernandez, 2011; Jacob & Lafgren, 2007; Jimerson, 2001; Roderick, 1994, 1995; Rumberger & Larson, 1998). For example, students who struggle to read in first grade have a .88 probability of struggling to read as fourth graders (Juel,

1988). In addition, students who exit third grade significantly behind their peers in terms of reading ability have a tendency to remain at a disadvantage for the remainder of their educational career (Cihon, Gardner, Morrison, & Paul, 2008; Spira, Bracken, & Fischel, 2005). These findings point to the necessity of early intervention beginning in kindergarten. Otherwise, as the gap widens between grade level expectations and students' independent reading levels, it becomes more difficult for teachers to address concerns effectively (Denton, Fletcher, Anthony, & Francis, 2006). Furthermore, since the ability to read and write is paramount to academic achievement, a large percentage of students with reading difficulties often are not promoted to the next grade. The idea behind this decision is that retaining students gives them an extra year to master required grade level content. However, students who experience retention are two to eleven times more likely to drop out before completing high school. (Hernandez, 2011; Jacob & Lefgren, 2009; Jimerson, 2001). Therefore, the educational community cannot rely solely on retention as an effective means of assisting students with reading difficulties.

As the population of diverse students has grown, classes are now comprised of students with varying "experience, readiness, interest, intelligences, language, culture, gender, and mode of learning" (Tomlinson, 2014, p. 42). As a result, students may struggle with various aspects of reading at different times and for numerous reasons (Arlington, 2013; Scanlon, Velluntino, Small, Fanuele, & Sweeney, 2005; Clay, 2001). Therefore, teachers cannot expect one standard curriculum to meet all of their needs. In response, researchers and educational policymakers have concluded that literacy intervention is key to helping children achieve reading success (Read to Succeed Act, 2014; National Reading Panel, 2000). This is because effective interventions can enable

students to experience accelerated progress, which can break the cycle of reading failure (Dorn & Schubert, 2008; Jimerson, Burns, & VanDerHeyden, 2007; Vellutino, Scanlon, Small, & Fanuele, 2006; Clay, 2001).

Problem of Practice

The identified Problem of Practice (PoP) for this action research study involves the close examination of students' reading achievement within a kindergarten classroom. According to SCDE (2015), "Reading is a complex and purposeful socio-cultural, cognitive, and linguistic process in which readers simultaneously use their knowledge of spoken and written language, their knowledge of the topic and text, and their knowledge of culture to construct meaning with text" (p. 8). As a result, in conjunction with many other literary skills, students must possess phonemic awareness, which is 1) the understanding that words are made up of separate sounds and 2) the ability to manipulate those sounds in words (Carnine, Silbert, & Kameenui, 1997). Consequently, students who have deficits in phonemic awareness find it challenging to process oral sounds, as well as unknown written language, which leads to poor fluency and comprehension (Adams, 1990). In addition, research supports the idea that students who enter first grade with poor phonemic awareness have difficulty with beginning reading tasks, which puts them at a disadvantage in regards to future reading achievement (Adams, 1990; Ball & Blackman, 1991; Juel, 1988; Scanlon & Velluntino, 1996). As a result, the *Project Read Primary Phonics* program will be implemented to explicitly teach phonics and phonemic awareness as a means of addressing the diverse needs of the beginning readers in this action research study.

Research Question

In an effort to enable all students to read on or above grade level by the end of kindergarten, the following research question was asked:

2. How does an adaptation of the *Project Read Primary Phonics* program affect the reading level of kindergarten students as measured by the DRA2+?

Importance of the Literature Review

The subsequent literature review of this DiP will present the historical and theoretical framework for this action research study. This section of the project is critical because according to Mertler (2014), “[it] allows you to use the insights and discoveries of others whose research came before yours in order to make your research more efficient and effective” (p. 61). For example, teachers can learn from the mistakes of others who have conducted similar studies. In addition, by examining different studies related to the problem of practice, a teacher-researcher can gain a better understanding of the subject area and its significance to his/her intended study (Stringer, 2013).

The documents, books, journal articles, and other sources that serve as the foundation of this literature review were selected based on their quality, objectivity, and timeliness. According to Schwalbach (2003), it is important for teachers to evaluate if the sources compiled are well researched or just based on the author’s personal opinions. In this regard, this literature review will examine articles from peer-reviewed journals, books published by reading experts, and legislation signed by government officials to attempt to remove as much personal bias from the research as possible.

Next, according to Mertler (2014), a literature review should also be objective. This means that teacher-researchers should avoid presenting only one side of the issue. Consequently, studies that support both sides of the debate regarding phonics instruction will be utilized. This will provide a comprehensive historical and theoretical context for this action research project.

Finally, teacher-researchers should focus primarily on studies that are still relevant based on current educational trends (Schwalbach, 2003). The only exception to this rule is when older studies are used to explain the progression of thinking that led to the proposed action research study, such as the previously mentioned historical and theoretical frameworks. The reasoning behind using timely research is that only examining studies older than a decade could cause the researcher to use outdated methods or answer a research question that is no longer relevant (Mertler, 2014).

Overall, this literature review is comprised of primary and secondary sources, relating to phonics instruction and its impact on student achievement from the inception of the common school to today. Therefore, this chapter seeks to provide justification for the problem of practice, research questions, and intended methodology of this action research study. Furthermore, at the conclusion of the study, this literature review will serve as a comparison for the research findings of this DiP (Stringer, 2013).

Action Research Methodology

Many researchers have chosen to use the experimental research model to evaluate the effectiveness of a phonics-based instructional program or teaching strategy (Cihon et al., 2013; Fien et al., 2010; De Graaff et al., 2009; Lo et al., 2009; Cihon et al., 2008;

Denton et al., 2006; Spira et al., 2005; Pressley et al., 2001; Ball & Blackman, 1991).

According to Stringer (2013), this model involves an experimental group, which receives the condition (phonics instruction), and a control group, which does not receive the condition. However, teachers are bound by a moral code to provide all students with the same quality education (Mertler, 2014; Mills, 2011). Therefore, exposing some students to a potentially positive variable, yet not exposing other students in the same class or school to the same variable is unethical.

Consequently, the present study will reflect an action research design. According to Mertler (2014), “action research allows teachers to study their own classrooms – for example, their own instructional methods, their own students, and their own assessments – in order to better understand them and to be able to improve their quality or effectiveness” (p. 4). As a result, the teacher-researcher will take field notes, as well as implement a quantitative pretest-posttest model. At the start of the school year, all students will be assessed using the Developmental Reading Assessment (DRA2+). This will serve as a baseline for student achievement. All students will then receive instruction based on an adaptation of the *Project Read Primary Phonics* curriculum before being assessed again using the same measures.

The students’ posttest scores will be compared to their pretest scores using descriptive statistics, such as finding the mean, median, mode, range, and standard deviation. Frequency distribution tables, histograms, bar graphs, and pie charts can also be used to display the data in a way in which emerging patterns can be identified easily (Urdu, 2010). However, descriptive statistics only allows a researcher to make conclusions regarding the current set of data. This is because the student-participants in

this study will not necessarily be a true sample of the larger kindergarten population. Therefore, generalizations about the larger population cannot be made (Mertler, 2014).

Historical Context

Throughout the past fifty years, beginning reading instruction in the United States has been analogous to a large pendulum, swinging back and forth between ideas. This constant change has occurred every decade or so, based on the work of competing theorists, new research conclusions, and an ongoing unrest regarding early reading failure (Jeynes & Littell, 2000; McEwan, 2001). Other stakeholders, such as government officials and publishing companies, have initiated and also benefitted from these cyclical changes in early reading instruction (Morris, 2015).

Early Phonics Instruction. Since the days of the common school, a high percentage of educators preferred to use phonics as their primary means of reading instruction (McGuinness, 2004; Stahl, 2001). Beginning around 1930, basal reader programs, featuring methodical word control, systematic phonics instruction, and small-group guided reading lessons served as the basis for reading instruction (Morris, 2015). However, basal readers were boring and did not spark students' interests, which led to low motivation and reduced retention of literacy skills (Chall, 1983). In addition, early researchers had difficulty obtaining results that led to any firm conclusions about the "best" method of instruction. For example, after analyzing the results of a first grade field experiment, Bond and Dykstra (1967) found, "no one approach is so distinctly better in all situations and respects than the others that it should be considered the one best method..." (p. 75).

Therefore, the initial decision to implement phonics instruction was largely based on the inaccurate idea that English is a phonetic language (McGuinness, 2004; Stahl, 2001). This is because scholars argued that the best way to become a fluent reader was to understand the reasoning behind the construction of the English language (Segui, Dupoux, & Mehler, 1990). Supporters of phonics did concede that periodically instruction needed to be supplemented for the many exceptions to common phonics rules (Jeynes, 2003). However, that did not impede teachers before the 1960s from teaching phonics strategies in their classrooms.

Whole Language. As Dewey's (1938) student-centered theory became the foundation of U.S. public schools in the 1960s, teachers began to question the validity of phonics instruction (Jeynes, 2008). Educators and social scientists were concerned that phonics was too boring for students to learn and that reading instruction could be enhanced if students enjoyed the process more (McGuinness, 2004; Goodman, 1989). Consequently, alternatives to phonics emerged, such as language experience and eventually, whole language (Jeynes, 2008). Whole language instruction emphasized the construction of meaning from oral language, the writing process, reading comprehension, whole word reading, and spelling strategies (McGuinness, 2004; Goodman, 1989).

Whole language advocates, such as Frank Smith, proposed new reading instructional strategies, which “abandoned word control in first grade books, de-emphasized phonics, and relied on whole-group guided reading lessons” (Morris, 2015). Smith (1971) argued that phonetic decoding actually interfered with the reader's ability to gain meaning from the text. Therefore, the emphasis of the whole language approach was student enjoyment, rather than reading with accuracy (Goodman, 1989; Morrow &

Gambrell, 2001). As a result, educators moved away from the use of basal readers and instead, let students select books independently based on interest (Jeynes & Littell, 2000; Morrow & Gambrell, 2001). However, after 1980, the use of whole language curriculum materials declined when the approach was criticized as being responsible for a decline in reading test scores (Morris, 2015).

Reading Reform. In 1983, the National Commission on Excellence in Education (NCEE) published a report, *A Nation at Risk*, which “blamed public schools for America’s difficulties in competing with Japan and West Germany in world markets” (Spring, 2014, p. 430). The commission claimed SAT scores had declined 40 to 50 points from 1963 to 1980. In addition, business owners and military officials specified that college graduates were not proficient in reading, writing, spelling, or basic mathematical computations (NCEE, 1983). The report called for educational reform in order for America to stay competitive in the global market (Spring, 2014).

Concurrently, Chall (1983) attempted to gather research studies on teaching beginning reading in order to help educational experts come to a definitive conclusion as to the most effective literacy instruction. However, she was only able to find fewer than 100 studies on the topic. Furthermore, the results of those studies were mixed. Other major reviews of reading research (Balmuth, 1992; Adams, 1990; Anderson, Heibert, Scott, & Wilkinson, 1985), all mirrored Chall’s findings. Consequently, phonics instruction continued to be a controversial topic of discussion. The National Reading Panel (2000) explained that, “part of the reason that the debate has continued is that phonics instruction has become entangled with politics and ideology” (p. 2-101).

In 1994, the Goals 2000: Educate America Act was passed to rectify the issues outlined previously by the NCEE. This was another example of legislation that tied educational goals to the needs of big business (Spring, 2014). Consequently, Goals 2000 emphasized requirements for subject area and performance standards, as well as a system of accountability to determine if students were mastering the aforementioned standards (Hurford, Lasater, McMahon, Kiesling, Carter, & Hurford, 2013). Finally, this law focused on the concept of lifelong learning, by expanding access to academic content from preschool to adult education (Spring, 2014).

In 2002, The No Child Left Behind Act (NCLB) was passed in an effort to enable all students to achieve high standards regardless of race, income, or native language (USDE, 2003). Schools were now expected to assess and track students in order to monitor their progress. That progress was then tracked on an annual basis to ensure that disadvantaged students were continuously showing improvement (USDE, 2003). Schools that did not achieve their Annual Yearly Progress (AYP) goals were placed on a corrective action plan that “could include assistance with building a successful academic instructional system, transfer of students to better-performing schools, required tutoring for underperforming students, or a loss of funding” (Hurford et al., 2013).

In addition, NCLB mandated school districts to seek assistance from researchers regarding reading intervention, progress monitoring, and using data to drive future instruction (USDE, 2003). This legislation also required Title I (low-income) schools that received federal funding to implement intensive phonics programs in kindergarten and first grade classrooms to enable beginning readers to develop decoding skills (Morris, 2015). Overall, NCLB and its updated version, the Every Student Succeeds Act (ESSA),

ushered in serious accountability requirements for teachers, administrators, and schools (Hurford et al., 2013). These mandates set the stage for the rise of academic interventions, including phonics instruction, in an effort to enable all children to succeed in the classroom, and therefore, the global economy (Morris, 2015).

Curriculum and Testing. According to Hlebowitsh (2013), “the field of curriculum studies has taken a long journey from its birthplace in social efficiency concerns, through its early development in the laboratory schools to its growing maturity as an agency for the development of school experiences dedicated to normative causes” (p. 230). However, despite innumerable changes since the inception of the common school, the U.S. public school curriculum still “rests most comfortably on historically dominant groups’ perspectives, language, and ways of seeing the world” (Stillman & Sleeter, 2013, p. 266). This notion is mirrored by Spring’s (2014) description of intelligence tests which some hoped would “confirm the racial superiority of the English and Germans... [and the notion] that Native Americans and African Americans were inferior races” (p. 278). Today, standardized test scores are still disaggregated by race, which is appalling based on the original purpose. However, research has shown that systematic phonics instruction has the potential to close the achievement gap if implemented effectively (Lo et al., 2009; Cihon et al., 2008; Denton et al., 2006, Spira et al., 2005). Consequently, Stillman and Sleeter (2013) advocate for a reconfiguration of power in the curriculum as a means of “reasserting who has a right to define what schools are for, whose knowledge has most legitimacy, and how the next generation should think about social order and their place within it” (p. 266).

However, as Doll (2013) explained, “the need to update the curriculum thought... signals a break from the past tradition. On the other hand, breaking from tradition is itself something of a tradition” (p. 210). An example of this “tradition” is the emergence of standards-based accountability as a major twentieth century reform (Siskin, 2013). Literacy instruction is another example of this “tradition,” since the method of choice for effective instruction has shifted from phonics to whole language and back about every ten years (Morris, 2015; Jeynes & Littell, 2000; McEwan, 2001). According to Spring (2014), “the vision of a scientifically managed educational system resulted in extensive use of standardized tests, standardized curricula, teacher’s merit pay based on student test scores, and extensive data collection at state and federal levels of government” (p. 270). Yet, despite their popularity among non-educators, Au (2013) concluded that, “high-stakes tests encourage curricular alignment to the tests themselves. This alignment tends to take the form of a curricular content narrowing to tested subjects, to the detriment or exclusion of nontested subjects” (p. 245). Similarly, Siskin (2013) posed the question, “in transforming subjects into something all students need to be able to demonstrate on a test, do we inadvertently lower performance standards, weaken existing professional accountability systems, or lose knowledge outside of the core altogether” (p. 277)? At the kindergarten level, the high-stakes testing takes the enjoyment out of learning to read and makes it a race to the finish line, as students struggle to meet their reading goals before the end of the school year.

Basal Reading Programs. In order to prepare students for high-stakes testing, a current trend in reading instruction is the use of basal reading programs. This model is supposed to allow teachers to introduce “phonics and word attack skills as embedded

skills inside the shared literature reading or guided reading stories” (Chard & Osborn, 1999, p. 108). However, Stein, Johnson, and Gutlohn (1999) examined the use of these basal reading programs and concluded “that few programs included an explicit phonics approach, and student reading selections often did not correspond to the words children were learning during word-recognition instruction, making most of the selections inaccessible to readers” (p. 276). Therefore, this shift away from teaching explicit phonics concerns many early childhood educators because without foundational phonics and phonemic awareness skills, children are struggling to read fluently (Cassidy, Valadez, and Garrett, 2010). As a result, as children move through elementary school and are exposed to more difficult texts, they begin to also experience issues with reading comprehension (Kamil, 2004).

Orton-Gillingham/Multisensory Programs. In an effort to improve reading instruction for students with dyslexia, neurologist Dr. Samuel T. Orton and psychologist Anna Gillingham developed the Orton-Gillingham approach (IMSE, 2016). This method provides explicit instruction in phonology and phonological awareness, sound-symbol correspondence, syllables, morphology, syntax, and semantics (Ritchey & Goeke, 2006). Even though the initial target group was students with learning disabilities, the program is now marketed as effective for all children in that it “allows the educator to capitalize on an individual student’s dominant learning modality while delivering instruction that will strengthen the remaining learning pathways” (IMSE, 2016, para. 2).

After noticing a lack of scientifically based research in support of the OG approach, Ritchey and Goeke (2006) examined 12 studies that compared OG instruction to a comparison or control group. These studies involved students from elementary

school to college. They found that of the 12, five studies (Guyer, Banks, & Guyer, 1993; Guyer & Sabatino, 1989; Joshi, Dahlgren, & Boulware-Gooden, 2002; Litcher & Roberge, 1979; Simpson, Swanson, & Kunkel, 1992) concluded that the OG instruction was more effective than the control/comparison approach for all outcomes. Four other studies (Dooley, 1994; Hook, Macaruso, & Jones, 2001; Oakland et al., 1998; Stoner, 1991) stated that OG instruction was more effective for at least one outcome examined in the study, but not all. Two studies (Chandler et al., 1993; Westrich-Bond, 1993) found that the comparison/control group showed higher gains than the group receiving OG instruction. Finally, one study (Foorman et al., 1997) compared an OG instructional program to a sight word program and an analytic phonics program. They found no significant differences between the three programs. Overall, despite the popularity of programs rooted in OG theory, there is still a lack of research that supports their efficacy as a means of reading instruction or intervention (Schlesinger & Gray, 2017).

A distinguishing characteristic of the OG approach is the incorporation of multi-sensory techniques – auditory, kinesthetic, and visual - to teach the structure of the English language (IMSE, 2016). Multisensory theories on reading instruction are rooted in dual coding theory (Paivio, 1991; Sadoski & Paivio, 2001, 2013; Schlesinger & Gray, 2017). This suggests there are two separate ways in which information is stored to memory. According to Schlesinger and Gray (2017), “These include a verbal system for coding linguistic information and a nonverbal system for coding nonverbal mental images” (p. 220). Based on this theory, multimodal teaching that engages both the verbal and nonverbal (visual, auditory, or tactile) systems has been shown increase learning (Bell, 1991). As such, several studies have noted the potential benefits of using a

multisensory approach to reading instruction (Block, Parris, & Whiteley, 2008; Clark & Uhry, 1995; Mayer & Anderson, 1991, NRP, 2000).

Project Read. Based on the Orton-Gillingham approach, Mary Lee Enfield and Victoria Greene designed the *Project Read* literacy system. It was originally created for Bloomington Public Schools' students who scored below the 25th percentile in reading (FCRR, 2007). The pilot study was conducted there during the 1969-1970 school year. The sample was comprised of ninety students, who were considered to be reading below grade level. Forty-five students in the control group continued to use the district's basal reading program. The other forty-five students in the treatment group received thirty minutes of demonstration/model teaching using the *Project Read* program for three weeks. Following the three-week time frame, those teachers continued to use the *Project Read* program for the rest of the school year. Students were assessed using the Jastak Wide Range Achievement Test and the Gates-McKillop Paragraph Reading Test before and after the study. The results indicated that *Project Read* students demonstrated more than a year's gain (1.2) compared with control students, who demonstrated only a six-month gain (.6) (FCRR, 2007).

Following the outcome of the pilot study, the Bloomington Public School District decided to implement the *Project Read* program in all first, second, and third grade classrooms (FCRR, 2007). Out of those classes, 665 students who performed below the 25th percentile in reading were chosen at random to participate in a three-year study, which examined student growth in decoding, comprehension, and spelling. Student evaluations took place yearly, followed by a final report at the conclusion of the study. A chi-squared analysis of the data demonstrated significant progress in reading achievement

and spelling skills for all students in the sample. However, there was no control group or comparison group in this study so the results cannot be attributed solely to the *Project Read* program (FCRR, 2007).

Bruce, Snodgrass, and Salzman (2002) published a study involving eleven first grade students, who were identified as “at-risk” by their teachers in regards to reading achievement. Students were assessed in the beginning of the school year using Clay’s Observational Survey of Early Literacy Achievement. Their scores all fell below the fourth stanine on the majority of the seven literacy skill tests. Therefore, the students received intervention reading instruction, which was a combination of *Project Read* and guided reading. At the end of the school year, students were tested again on literacy skills. An analysis of the data showed students’ pre- and posttest scores on word identification, sentence dictation, writing vocabulary, and test level comprehension to be statistically significant. However, like the previous study, it is difficult to determine if the *Project Read* curriculum was the central reason for the improved academic progress. Therefore, it appears that *Project Read* has a positive impact on students’ reading achievement, but additional research is warranted.

Theoretical Base

The theoretical base, which supports this action research, is rooted in the concepts of social efficiency, social development, and differentiation. This section will explain these theories through a review of the relevant, past research, which has been conducted.

Social Efficiency. Learning to read is one of the most significant, yet difficult behaviors for humans (Hurford et al., 2013). Nonetheless, advocates of the social

efficiency theory believe that students should be trained in the appropriate skills and procedures based on the needs of society. Therefore, since reading is a required skill in the workforce, educators must determine the best way to ensure that students leave school with this ability in order to fulfill the larger societal need (Schiro, 2013). Subscribers to this curriculum theory include Ralph Tyler and Franklin Bobbitt, who agreed upon the importance of identifying educational objectives before selecting instructional methods, materials, and assessments. According to Tyler (2013), “all aspects of the educational program are really means to accomplish basic educational purposes. Hence, if we are to study an educational program systematically and intelligently we must first be sure as to the educational objectives aimed at” (p. 60). These thoughts are still present today in legislation, such as the Every Student Succeeds Act (2014), and state standards, such as South Carolina’s Portrait of a College and Career Ready Student, which are the underlying catalysts for this action research study.

Social efficiency theorists believe, “teaching is evaluated in terms of both student achievement and the efficiency with which the teacher produces student achievement rather than in terms of how humane, creative, enlightening, or insightful it is” (Schiro, 2013, p. 94). Therefore, objectives are viewed as a critical component of education. According to Popham (2013), objectives should be predetermined, clearly stated, and measurable, “thus permitting us to determine whether they have been accomplished and, consequently, allowing us to get better at achieving them” (p. 97). However, when public schools focus exclusively on student test scores, this places the responsibility entirely on the teacher, which “excludes the effects social and economic factors outside the classroom have on children’s education” (p. 83). For instance, many of students do not

receive proper nutrition or adequate sleep. Furthermore, parental support plays a critical role in student success, which is not taken into consideration during the analysis of school performance data (Lo, Chuang, & Haskell, 2009). Regardless, teachers are expected to help all students achieve the high standards set for them by the local and federal government. Consequently, educators continue to search for a panacea for the nationwide reading failure epidemic.

Social Development. Wang, Bruce, and Hughes (2011) envisioned “ society providing students with the background of cultural history, social context, and language skills in order to acquire knowledge. [Therefore,] individual development is based on societal influence” (p. 297). Lev Vygotsky is said to have influenced the theory of social development immensely by advocating for “mediated instruction providing guidance to a student in learning a particular skill” (Rupley et al., 2009, p. 128). This relates to phonics instruction since teachers must provide support to students in the areas of phonological/phonemic awareness in order to help them accomplish reading tasks that would otherwise be too difficult. In addition, Vygotsky’s (1978) Zone of Proximal Development encourages teachers to scaffold knowledge for students. Consequently, the teacher starts instructing each student where he/she currently is academically. Over time, the teacher uses modeling and guided support to help each student master more complex literacy concepts as they progress (Martin, 2001).

Rupley et al. (2009) agreed with Vygotsky on the importance of scaffolding students’ learning of complex concepts, such as reading. For example, teachers should begin teaching children to read by teaching the concept of phonemic awareness. This is because phonemic awareness logically develops oral word connections, while

progressing toward phonetic skills (Sonnenschein et al., 2009). Therefore, students can become highly effective readers if teachers guide them through the concepts of phonemic awareness and phonics by using Vygotsky's ideas as the basis for instruction.

Differentiation. Tomlinson (2014) explains that the idea of differentiation is not a new concept. In fact, the underlying theme goes back to the times of Confucius who noted that people had varying strengths and weaknesses. More recently, Tomlinson explains how brain research provides insight into the unique qualities of learners and the importance of effective instruction. In essence, if teachers want students to learn, they “must give them [students] ample opportunity to make sense of or ‘own’ these ideas, information, and skills through involvement in complex learning situations” (Tomlinson, 2014, p. 33). The author also states that learners can make long-lasting connections when teachers bridge new concepts with students' individual prior knowledge. She argues, “A meaningful curriculum is characterized by high interest and high relevance, and it taps into learners' feelings and experiences” (Tomlinson, 2014, p. 37).

Tomlinson (2014) cites psychological research, rooted in the findings of Vygotsky (1980), which states that, “individuals learn best when they are in a context that provides a moderate challenge” (p. 35). She explains that learners who feel that an assignment is too difficult will shut down. In addition, learners who find a task to be too easy will stop progressing. Therefore, a teacher's ultimate goal is to provide students with tasks that are appropriately stimulating. These activities should encourage learners to tackle a new topic, but only after providing them with the necessary baseline skills and level of guidance to get started. Tomlinson (2014) argues that students who consistently fail or succeed with minimal effort eventually lose the drive to continuously learn and

grow. Therefore, it is imperative for teachers to differentiate instruction to keep students engaged in classroom activities and enthusiastic about acquiring new knowledge (Tomlinson, 2014).

As such, the *Project Read Primary Phonics* program enables teachers to differentiate instruction so students can receive whole-group phonics instruction, in addition to small-group phonics instruction tailored to their individual needs. The program also allows students to have voice and choice in the way they demonstrate their learning, which will tap into their interests and provide motivation. Finally, *Project Read* emphasizes, “systematic, direct instruction of concepts and skills supported and enhanced by a teaching approach that includes visual, kinesthetic, auditory and tactile strategies (VAKT), and the use of body language” to appeal to all learners (FCRR, 2007, p. 1).

Related Constructs

The research question for this action research study involves combining phonemic awareness skills and a systematic phonics program. As a result, it is important to understand how these constructs interact in order to provide effective reading instruction for all students. Therefore, primary and secondary sources on these topics have been examined.

Phonemic Awareness. Numerous studies have identified phonemic awareness as essential for beginning reader success (Adams, 1990; Allington, 2013; Ball & Blachman, 1991; Morrow & Gambrell, 2001; Morris, 2015). Phonemic awareness is considered “the ability to notice, think about, and work with individual sounds in spoken words” (Armbruster, 2010, p. 4). Therefore, students with phonemic awareness can hear,

identify, and manipulate the different phonemes in words, which is a critical step in the learning of language (Yopp & Yopp, 2000). For example, a student with strong phonemic awareness would be able to say all the sounds in the word, “dog” (/d/ /o/ /g/). However, other aspects of phonemic awareness include:

1. Phoneme isolation – identifying an individual sound in a word. For example, “What is the beginning sound in the word, turtle?” (/t/).
2. Phoneme identification – Identifying a common sound in different words. For example, “What sound is the same in boy, ball, be, and bring?” (/b/)
3. Phoneme categorization – Identifying a word that does not belong in a group of words because of an explicit difference. For example, “Which word does not belong - ran, rug, baby, red? (baby)
4. Phoneme blending – Listening to a sequence of sounds and blending them to form a word. For example, “What word is /c/ /a/ /t/?” (cat)
5. Phoneme segmentation – Breaking a word into individual sounds. For example, “What sounds do you hear in had?” (/h/ /a/ /d/)
6. Phoneme deletion – Identifying what a word would sound like if it was missing a sound. For example, “What word would I make if I took the /f/ out of the word, farm?” (arm) (National Reading Panel, 2000).

The National Reading Panel (2000) examined ninety-six experimental and quasi-experimental studies, in which the experimental group received phonemic awareness instruction and a control group received a different treatment. In all of the studies, the students were taught phonemic awareness skills that were age appropriate based on their

literacy development. When the findings of these studies were examined, the experimental groups that received phonemic awareness instruction scored significantly higher than the control groups in regards to the ability to transfer phonemic awareness skills to the acquisition of word reading. The National Reading Panel (2000) was also able to conclude that phonemic awareness instruction does not have to be lengthy in order to produce significant results.

However, when students enter kindergarten without phonemic awareness skills, they require explicit instruction in the skills of segmentation, blending, rhyming, and letter sound correspondence (Ball & Blachman, 1991; Carnine, et al., 1997; Morris, 2015). Yet, traditionally, phonemic awareness has been taught using auditory-only approaches, such as listening to sounds in spoken words (Clay, 1979; Lewkowicz, 1980; Liberman, Shankweiler, Fischer, & Carter, 1974; Lundberg, Frost, & Peterson, 1988). As a result, some researchers argue that this practice is not developmentally appropriate for young students because it demands too much of the children's working memory (Bruce, 1964; Goswami & Bryant, 1990). However, the *Project Read* program can potentially alleviate some of those concerns, since it employs a multisensory approach, including visual, kinesthetic, and tactile activities, in addition to auditory ones.

Systematic Phonics Programs. In response to the challenging standards and a push for increased standardized testing, many districts have chosen to implement systematic phonics programs to improve students' basic skills (Cihon, Gardner, Morrison, & Paul, 2013). These programs are created to allow students who have fallen behind to catch up to their peers without causing the teacher to slow down the rest of the class (2013). Districts electing to take such a step assume that providing this extra

instructional time in a small-group setting will allow these at-risk students to better grasp content which, in the past, had proved to be difficult or confusing for them (De Graaff, Bosman, Hasselman & Verhoeven, 2009). Similarly, the South Carolina Department of Education (2015) states:

A review of the research indicates that whole group instruction will not meet the needs of every child. Small group and individualized instruction based on evidence from current classroom data, observations, and school, district, or state assessments are necessary components of the teacher's literacy block to meet the needs of all students. (p. 41)

Current research provides support for the implementation of phonics instruction as a means of helping to improve reading achievement. For example, Cihon et al. (2013) conducted a study using a pretest and posttest to determine if using See the Sound/Visual Phonics, “an intervention that combines auditory, kinesthetic, and visual cues and responses to teach phonemic awareness and phonics skills” (p. 30) was an effective method of teaching letters and letter-sounds to students at-risk for reading failure. Similarly, DiLorenzo et al. (2011) focused their study on the effect of using the multisensory phonics program, Itchy's Alphabet, on students' ability to identify initial letter sounds, segment a word into individual sounds, and decode nonsense words. The results of both studies showed positive gains for all students in the areas of phonics and phonemic awareness.

Vadasy and Sanders (2010) examined the effect of supplemental phonics instruction on both English Language Learners and native English speaking students and

received comparable results. Furthermore, in 2000, the National Reading Panel (NRP) published a report on the efficacy of numerous approaches to reading instruction. The NRP determined that the effects of systematic early phonics instruction were significant and substantial, indicating that programs of this nature should be implemented (NICHD, 2000). This meta-analysis is cited frequently because the NRP was convened by the U.S. Congress to determine research-based methods for improving reading and writing achievement. Most recently, Suggate (2016) reported on the long-term effects of reading interventions from fifty-five studies that took place between 1974-2014. The author concluded that based on the data, phonics interventions had a more enduring effect on achievement than other literacy interventions.

However, in order to be successful, systematic phonics programs must incorporate direct instruction. This is because as Allington (2001) concluded, “children are more likely to learn when they are taught than when they are not” (p. 10). Although this seems like an obvious idea, not all reading instruction programs are created with this thought in mind, such as whole language. Consequently, students who are left to figure out the alphabetic system and common spelling patterns without direct instruction, teacher modeling, and opportunities for guided and independent practice, often struggle needlessly (2001).

As previously mentioned, another vital component of systematic phonics programs is teacher modeling (Hiebert, Pearson, Taylor, Richardson, & Paris, 1998). This means teachers should demonstrate how to segment and blend sounds so beginning readers learn how to decode unknown words. Then students can practice these skills by making words using the letter-sound patterns taught, as well as through writing with

phonetic spelling (Cunningham & Cunningham, 2002). By writing, the students have a chance to slow down the decoding process and focus on each individual letter, sound, or spelling pattern. Similarly, teachers can also use Elkonin Boxes to help beginning writers hear the sounds in a word (Clay, 2001). The teacher draws a square to represent each sound in a word. Then, “the child utters the word aloud, separating each successive sound... while placing a counter for each sound in the corresponding square of the diagram...” (p. 84-85). This allows the children to attend to the individual sounds they hear in a word, as well as their sequence.

A third critical facet of this systematic instruction is giving beginning readers a rationale for the importance of phonics. Cunningham and Cunningham (2002) identify this step as “cognitive clarity... [which is] knowing what you are trying to do and understanding where you are trying to go and why you are going there” (p. 88). Furthermore, according to Wilkinson (1999), students who experience dialogue at home that differs significantly from the dialogue at school require additional direct instruction and explanations in order to become successful readers. Therefore, explicit teaching and modeling is “not only appropriate, but essential if all students are to become successful” (p. 5).

Rupley, Blair, and Nichols (2009) concluded that, “explicit/direct instruction has been shown to be efficacious in learning and teaching the major components of the reading process – phonemic awareness, phonics, fluency, vocabulary, and comprehension” (p. 126). Furthermore, reading is a complex process, which unlike speaking is not innate (Torgeson et al., 1999, Scanlon & Vellutino, 1996; Camine, Silbert & Kameenui, 1997; Ball & Blachman, 1991). Instead, according to Salinger (2003),

“students must have understandings, skills, and strategies in these areas” (p. 76).

Consequently, when students can decode words easily and successfully, they can focus their entire attention on making connections to the text (Hudson, Torgesen, Lane, and Turner, 2010). Therefore, when students possess knowledge of phonics, it allows them to develop word recognition, which increases fluency and can help improve comprehension (Rupley, Blair, & Nichols, 2009).

Finally, Smith, Simmons, and Kameenui (1998) examined the results of 25 intervention studies as a means of identifying the best practices of phonics instruction. Their meta-analysis yielded five conditions:

1. Provide phoneme instruction.
2. Scaffold tasks based on complexity.
3. Explicitly model phonemic awareness skills.
4. Provide systematic instruction on sound-identification, blending, and segmentation.
5. Utilize concrete materials as representations of sounds.

These conditions serve as the foundation for an adaptation of the *Project Read Primary Phonics* program, which the teacher-researcher seeks to implement and evaluate (FCRR, 2007).

However, despite the popularity and expense of systematic phonics programs, it seems many districts do little or nothing to assess their merit, post-implementation (Suggate, 2016). At the program’s conclusion, the data are often left unanalyzed, causing worthwhile information about the program’s successes and failures to be withheld from

the teachers and staff. Therefore, the next time a program is implemented in the school, there is no evidence to support whether the same instructional techniques should be employed or if new strategies are in order (Vadasy & Sanders, 2010). This omission leaves teachers susceptible to either repeat their same mistakes or to haphazardly choose a new teaching method that may be unnecessary or ineffective. Hence, this issue serves as the reason for the current action research study involving an adaptation of the *Project Read Primary Phonics* program.

Reflection on the Gap Between Research and Practice.

Research is only worthwhile if the findings are applied (Arlington, 2001). Unfortunately, “we have learned much about what sort of schools, classrooms, and lessons foster reading proficiency... But with all we have learned, there still exists no blueprint for restructuring schools, classrooms, and lessons” (p. 9). Calfee (2001) explained the gap between research and practice as the result of the tension between researchers and classroom teachers. However, he also attributed this issue to “many sources, including government agencies, the media, institutions of higher education, and professional organizations” (p. 178). Nonetheless, research continues to report conclusions in favor of one method (explicit, systematic phonics), while classroom practice seems to shift back and forth (Chall, 1983).

Usually, research precedes practice. However, phonics remains a notable exception. For example, Gaffney and Anderson (2000) compared research articles regarding phonics to articles written about phonics classroom practices. They found that in the last thirty years, the number of research articles far exceeded the number classroom

practice articles. This supports the idea that phonics research has yielded consistent results in regards to its benefits to reading achievement. Yet, these findings have failed to significantly impact classroom phonics instruction. In conclusion, “it would seem that the time has come to give more serious attention to why practice has been so little influenced by existing research” (Gaffney & Anderson, 2000, p. 149)

Conclusion

Chapter Two of this DiP explored a body of research related to the research question: How does an adaptation of the *Project Read Primary Phonics* program affect the reading level of kindergarten students as measured by the DRA2+? This chapter described the Problem of Practice (PoP) being addressed throughout this study, as well as justified the chosen methodology to be used to address the research question. The research indicated a national need for effective reading instruction that addresses the diverse needs of all students. It also demonstrated the potential benefits of implementing a systematic phonics program, such as *Project Read Primary Phonics*.

Key Words

Alphabetic principle: This concept refers to the naming of each letter and creating the sound each letter makes. For early readers, this is a beginning concept in the phonological process (Adler, 2001; National Reading Panel, 2000; Snow, Bums, & Griffin, 1998). According to Fien et al. (2010), the alphabetic principle refers to the students' ability to understand "knowledge of letter-sound correspondences, and... blend sounds to make words" (p. 634).

Phonemes: A term used to describe the smallest units of spoken language, which are combined to form syllables and words. The English language is comprised of approximately 41 phonemes (Armbruster, 2010; National Reading Panel, 2000). For example, the word, net, has 3 phonemes - /n/ /e/ /t/ while the word, black, also has 3 phonemes - /bl/ /a/ /ck/.

Phonemic awareness: This concept refers to the ability to target and manipulate phonemes in spoken language. Comprehending onset, the beginning chunk of a word, and rime, the ending part of a word, is a critical component of phonemic awareness. Other phonemic awareness skills included rhyming, alliteration, and syllabication. Students must master phonemic awareness before they can learn phonics skills. (Armbruster, 2010; National Reading Panel, 2000; Harris & Hodges, 1995).

Graphemes: A term used to describe the written representations of phonemes. For example, C, D, P, and T are graphemes. However, so are CH, SH, TH, -CK, AI, and IGH. Each grapheme symbolizes one phoneme (Fien et al., 2010; National Reading Panel, 2000).

Phonics: A term used to describe the study of the relationship between phonemes (spoken language) and graphemes (written language). Phonics enables children to spell words phonetically until they are able to spell accurately. (Adler, 2001; National Reading Panel, 2000). According to Adams (1990), phonics is “intended to help children to understand the fundamentally alphabetic nature of our writing system, and... to internalize the correspondences between frequent spelling patterns and the speech patterns – the words, syllables, and phonemes – that those spellings represent” (p. 29).

Systematic/Explicit phonics: This concept describes an instructional approach that outlines an organized, progressive set of skills, which will be taught explicitly to students. Systematic/Explicit phonics programs introduce a sequential set of consonants, vowels, and vowel combinations (Armbruster, 2010; Adler, 2001).

Whole language: This concept refers to the process of teaching letters, sounds, and reading in the context of real language. As students read and write, they are expected to naturally discover knowledge of the alphabetic principle and phonemic awareness (Goodman, 2005; National Reading Panel, 2000).

CHAPTER THREE: METHODOLOGY

Introduction

This chapter will describe in detail the research methodology being implemented to answer the research question. The purpose of this action research study was to ascertain the effect of an adaptation of the *Project Read Primary Phonics* program on the reading level of kindergarten students as measured by the DRA2+. The goal of this action research study was to determine if an adaptation of the *Project Read Primary Phonics* program positively impacted kindergarten students by improving decoding skills, and therefore, overall reading ability.

Role of the Researcher

Generally, researchers who are detached from the school environment are the ones who perform traditional research in education (Mertler, 2014). They examine people and programs from afar to explain educational occurrences objectively. However, there is often a disparity between their findings and what takes place in the classroom. Mertler (2014) described this gap by saying, “Research occurs in the ivory towers, whereas practice takes place in the trenches” (p. 22). In other words, traditional researchers do not take into account teacher’s daily schedules, their opinions based on their experiences, or the challenges they face, which can prevent what ideally works on paper from becoming

a reality. Furthermore, traditional research can come across as condescending, since the flow of information only goes one way (2014).

An alternative to traditional research is action research, which Mertler (2014) defines as:

Any systematic inquiry conducted by teachers, administrators, counselors, or others with a vested interest in the teaching and learning process or environment for the purpose of gathering information about how their particular schools operate, how they teach, and how their students learn. (p. 4)

Action research allows teachers to examine previous research that relates to a dilemma they are facing. However, the teachers then conduct their own studies at their schools with their students. This is the main difference between action research and traditional research – the educators are active participants instead of passive listeners. This process allows teachers to solve their educational problems in a timely manner while working collaboratively with colleagues (2014).

However, in order for action research to take place, teachers must be reflective practitioners (Mertler, 2014). They must examine their instruction critically in order to bring about positive change. Consequently, teachers should be aware of their students' individual needs in order to create meaningful activities that promote academic and social growth. However, Dewey points out that, "It is not enough that certain materials and methods have proved effective with other individuals at other times. There must be a reason for thinking that they will function in generating an experience that has educative quality with particular individuals at a particular time" (1938, p. 46). Through action

research, teachers can accomplish this goal by reflecting on their instructional techniques, examining their consequences, and determining how to improve teaching and learning for the benefit of their students (Merler, 2014).

In this action research study, I served as the instructor to the sample student population, while simultaneously implementing the research design. My role as an insider allowed me to use my knowledge of students' needs to make informed instructional decisions that benefited their overall academic progress and achievement. My goal was to ensure that this action research plan was implemented fairly, consistently, and without personal bias.

Action Research Validity

While the goal of traditional research is to prove or disprove a hypothesis, action research only seeks to generate information that benefits a particular setting, such as an individual classroom of students. Therefore, action research results are not generalizable to other populations. However, that does not mean that the results are not valid. Mertler (2014) states that the rigor involved with action research determines validity through precise measures and organized data, as well as the accuracy of the results.

Research Context

The research site for this study was O elementary school, which is located in the Lowcountry region of South Carolina. My position at the time of the study was that of a kindergarten general education classroom teacher. Over the last decade, I have also taught other grade levels, including first grade and third grade. The school's master schedule was comprised of nine 45-minute periods. I taught during seven of those periods

each day. One of those periods was considered homeroom, during which attendance and lunch count were taken and morning announcements were given. Another period was for lunch and recess. The other six periods were divided between English Language Arts (ELA), writing, mathematics, social studies, and science. All of the student participants of this study were kindergarten students. South Carolina requires all kindergarten students to read on grade level in order to be promoted to first grade (SCDE, 2015).

The school district in which this study took place is the second largest in the state of South Carolina. It is comprised of eighty-six schools that serve over 49,000 students from Child Development (CD) through twelfth grade. The district spans 1,000 square miles and encompasses urban, suburban, and rural areas. In terms of demographics, the district's student population is comprised of 46.6% White, 40.1% Black, 8.6% Hispanic, 1.5% Asian, and 3.2% Other. The district's poverty index is 57.8%. The high school graduation rate is 83.8%, which is slightly higher than the state average of 80.3% (SCDE, 2016a).

The elementary school in which this study took place is one of forty-eight elementary schools within the school district. It serves 582 students in grades CD-5. The student population is 67% Black, 23% White, 4% Hispanic, and 2% Asian. In term of gender, 54% of the students are male and 46% are female. 8.6% of the students receive special education services. The school's poverty index is 79.5%. The school staff was comprised of thirty-eight teachers, one administrator, one lead teacher, one curriculum coach, one nurse, eight teacher assistants, one media specialist, and one guidance counselor. Students in all grade levels received daily instruction in ELA, writing, mathematics, science, and social studies. They also received 50-minutes of instruction

each week in each of the following special areas - physical education, music, art, computers, and library (SCDE, 2016b).

Action Research Design

Action research can take shape using a myriad of study designs. Mertler (2014) categorizes the action research process into four stages – *planning*, *acting*, *developing*, and *reflecting*. I have chosen to implement this model of action research to attempt to answer the research question of this DiP.

Planning. Mertler (2014) delineates the first step in action research process as the *planning* stage. I began planning this study by identifying a problem of practice and a related research question. I also gathered information from multiple sources on the topic, as well as conducted a review of the current, relevant literature. Based on the research, a research plan was developed.

Evolution of the research focus. I have worked as an elementary school teacher for over a decade. My career has taken me from New Jersey to South Carolina. I have worked in both urban and suburban schools. I have taught students from kindergarten to third grade. However, regardless of the state or the age group, the problem remained that many students were not meeting grade level standards, particularly in the content area of reading. Upon reviewing the literature (Chapter 2), I began to understand that this problem is not uncommon. Research supported the concept of the gap in achievement among students from various socio-economic statuses (Jeynes, 2008; Lo et al., 2009; Schacter & Jo, 2005). It also pointed to several studies, which advocated for the use of phonics instruction as a means to help students improve their decoding skills, and overall

reading ability (Cihon et al., 2008; Cihon et al., 2013; De Graaff et al., 2009; Denton et al., 2006; DiLorenzo et al., 2011; Gunn et al., 2000; NICHD, 2000; Podhajski et al., 2009; Rupley et al., 2009; SCDE, 2015; Spira et al., 2005; Suggate, 2016; Vadasy & Sanders, 2010). These findings led to the development of a research question: How does an adaptation of the *Project Read Primary Phonics* program affect the reading level of kindergarten students as measured by the DRA2+?

Development of the research plan. The second phase of the *planning* stage in the action research process involves the development of a research plan. I specifically had to decide how to design this study and what data should be collected in order to answer the research question. The independent variable for the research question was the implementation of phonics instruction. The dependent variable for the research question was the effect on reading achievement. This study design involved the use of a single group pretest and posttest analysis in an effort to measure changes in the students' ability to independently read grade level texts. In this context, the researcher's role was that of a facilitator. Using an adaptation of the *Project Read Primary Phonics* program, students received whole-group phonics instruction, in addition to small-group phonics instruction tailored to their individual needs. The program was student-centered and therefore, allowed students to have voice and choice in the way they demonstrated their learning.

Ethical Considerations. According to Dana and Yendol-Hoppey (2014), "keeping caring, fairness, openness, and truth at the forefront of your work as a teacher-inquirer is critical to ethical work" (p. 150). In order to accomplish this goal, I abided by the guidelines set by the school district in regard to the approval of action research, such as informing parents about the research, as well as submitting a copy of the final report. I

also obtained informed consent from the parents before involving students under the age of 18 in an action research project. Parents received a letter, detailing the purpose of the study and how it affected the instruction received by their children (see Appendix A). The letter also explained each parent's right to withdraw from the study at any time without repercussions. Students' names were not used in the study and their identities have been protected at all costs. Although these safeguards were in place, participation in the study was completely voluntary and at the discretion of each parent (2014).

Beyond transparency, I was also aware that I had a moral obligation to do what was in the best interest of the students. To this end, Mertler (2014) cites three principles that all teacher-researchers must consider. The principle of beneficence refers to the importance of doing no harm to students, such as intentionally stifling academic growth. The principle of honesty refers to the importance of the teacher-researcher being honest about the purpose of the study, as well as the data collected. Finally, the principle of importance refers to the significance of ensuring that the action research study is worthwhile and will have an impact on the field of education (2014). To this end, I did my best to ensure that the students received the best possible education and that this action research study in no way compromised my judgment, integrity, and commitment to my students.

Acting. Mertler (2014) defines the second step in the action research process as the *acting* stage. This phase involves implementing the phonics program, as well as collecting and analyzing data. During this action research study, quantitative data was collected and statistical analysis of the data was used to measure the effect of an adaptation of the *Project Read Primary Phonics* program on the students' reading ability.

This was done as accurately and impartially as possible.

Sample. The goal of the action research process was to examine the study's impact on the context, with the classroom serving as the context of this study. The kindergarten students in my homeroom class served as the sample for this study. There was no control group. All of the students received phonics instruction based on an adaptation of the *Project Read Primary Phonics* program. Due to the nature of enrollment in elementary schools, it was not possible to randomize the sample. Therefore, convenience sampling was utilized for this study.

Data collection. To determine their baseline reading abilities, students completed a standardized reading assessment prior to receiving an adaptation of *Project Read Primary Phonics* instruction –the running record section of the DRA2+ (Developmental Reading Assessment). The DRA2+ allows teachers to assess elementary students' independent reading levels on a scale that begins with letter A and then switches to a numerical score from 1-60. Following the pretest, all students received whole-group phonics instruction according to an adaptation of the *Project Read Primary Phonics* program. Students who could not independently read text at a level 1, according to the DRA2+ baseline test, were also placed into a small group of no more than four students to receive small-group phonics instruction using the *Project Read Primary Phonics* program.

At the conclusion of the action research study, students were assessed again using the same measure – DRA2+. Students' pretest and posttest scores were compiled and analyzed to look for any impact the phonics instruction may have had on students'

reading achievement. In addition to pretest and posttest scores, field notes were also collected to track students' levels of engagement throughout the phonics lessons, as compared to lessons during other subjects.

Statistical Analysis. Due to the quantitative components of this action research study, both descriptive and inferential statistics were used to analyze the data. Mertler (2014) explains descriptive statistics as “simple mathematical procedures that serve to simplify, summarize, and organize relatively large amounts of numerical data” (p. 169). Some examples include finding the mean, median, mode, range, and standard deviation. The researcher plans to use the mean to calculate the central tendency, but in the event that the data is skewed, she will use the median instead. This data can also be depicted through frequency distribution tables, histograms, bar graphs, and pie charts, which will easily allow me to look for emerging patterns (Urdan, 2010). Consequently, descriptive statistics allowed me to make conclusions about the current set of data. However, those conclusions cannot be used to make generalization about the larger population (Mertler, 2014).

Inferential statistics were also used to determine the effect of an adaptation of the *Project Read Primary Phonics* program on the students' ability to read grade level text independently. A two-sample t-test was used to determine the differences in pretest and posttest means, regarding students' scores on the DRA2+. This analysis was used to gauge if there was a statistical difference in the reading ability of the kindergarten students before and after the implementation of an adaptation of the *Project Read Primary Phonics* program.

Developing. Mertler (2014) defines the third step in the action research process as the *developing* stage. This is a critical component of the process because the data collected through this action research study will serve as the foundation for future instructional decisions. For example, if the data displayed that phonics instruction has a positive effect on the reading achievement of the students, that information could be used to create an action plan, which will incorporate phonics instruction into teachers' daily routines on a full-time basis.

Reflecting. According to Dana and Yendol-Hoppey (2014), teachers reflect on a daily basis regarding student achievement, pedagogy, and curricular content. However, this type of reflection usually occurs haphazardly and in isolation. Conversely, "as a teacher researcher engages in reflection, she intentionally asks questions about teaching and learning, organizes and collects information, focuses on a specific area of inquiry, and benefits from ongoing collaboration and support of critical friends" (2014, p. 23). Therefore, when a teacher reflects on the ramifications of her action research in this manner, it enables her to make more systematic, informed decisions about future instructional goals, programs, and procedures (Stringer, 2013).

Therefore, when I reflected on this action research study, I was attempting to accomplish two goals – to scrutinize both the expected/unexpected results of the study and to examine the design elements of the study itself (Mertler, 2014). I examined the research question and data to determine if they effectively coincided. In addition, the significance of this professional reflection was that it enabled me to create an action plan based on what aspects of the study went well and what aspects required further investigation or modification. According to Mertler (2014):

Action plans may consist of brief statements or simple descriptions about the implementation of a new educational practice; a plan to reflect on alternative approaches to addressing the problem; a plan to share what you have learned with others, such as other teachers, administrators, boards of education, or other schools or districts; or any other ‘next steps’ you might take. (p. 211)

My goal was to share the results of this study with other kindergarten teachers in the elementary school, as well as other staff members that serve students in various grade levels. Although, I was not able to generalize the conclusions to the larger school population, I can still share this study in hopes of empowering other teachers to examine their own instructional practices. Consequently, this ensures that the findings of the action research study can be utilized to improve classroom instruction and overall student learning (Stringer, 2013).

Summary and Conclusion

There is a disparity in reading achievement that exists among kindergarten students due to a myriad of reasons, such as varying life experiences and limited exposure to academic content. Despite these differences, all kindergarten students are expected to read on grade level by the end of the school year. The purpose of this action research study was to investigate the impact of an adaptation of the *Project Read Primary Phonics* program, which attempts to improve students’ decoding skills, and therefore, overall reading ability. The research question that guided the study was: How does an adaptation of the *Project Read Primary Phonics* program affect the reading level of kindergarten students as measured by the DRA2+? The researcher answered the research

question by employing an action research methodology, specifically Mertler's (2014) action research cycle: *planning*, *acting*, *developing*, and *reflecting*. The *planning* stage was comprised of identifying the problem of practice, research question, related literature, and action research design. The *acting* stage will be comprised of implementing the intervention, collecting related data, and analyzing that data. The *developing* stage will be comprised of using the findings from the data analysis to create an action plan. The *reflecting* phase will be comprised of analyzing the research questions and research design to guide future action research studies, as well as sharing the action research results in an effort to empower other teachers to examine their own instructional practices.

CHAPTER FOUR: FINDINGS AND INTERPRETATION OF RESULTS

Introduction

Kindergarten can evoke images of children playing, singing songs, and exploring new concepts. However, as schools have become more accountable for students' test scores, the pressure to "pass the test" has trickled down to kindergarten, causing it to more closely resemble first grade (Carlsson-Paige et. al, 2015). As such, kindergarten students are expected to read and write independently by the end of the school year (SCDE, 2015). This increased emphasis on student achievement can leave teachers scrambling to teach more advanced content in place of letting students learn through play, which can leave these five-year old students feeling overwhelmed and overworked (Carlsson-Paige et. al, 2015).

As a result, I chose to implement an adaptation of the *Project Read Primary Phonics* program with my students to help them learn how to sound out words in a fun, interactive way. I had hoped this would enable my students to decode more complex words, which could correlate to a positive change in their independent reading levels as determined by the DRA2+. I was also interested to track student progress through the use of anecdotal notes. I planned to examine these notes to look for trends.

Statement of the Problem

According to the National Center for Education Statistics (NCES), only thirty-seven percent of twelfth-grade students in the U.S. scored at or above the proficient level on the National Assessment of Educational Progress reading exam in 2015. In addition, the average score on this test was similar to 2013, yet significantly lower than the average score from 1992, the first year the assessment was administered (NCES, 2016). Unfortunately, statistics such as these, which show a staggering number of students performing below grade level reading expectations, are a common occurrence.

Therefore, the problem of practice (PoP) for this Dissertation in Practice (DiP) stems from the national need to improve reading instruction and consequently, achievement, for all students. Within the State of South Carolina (SC), the Read to Succeed Act (2014) requires all students to independently read at or above grade level (level 3 on the DRA2+ scale) by the end of kindergarten. According to SCDE (2015), “students who are not proficient readers by third grade are more likely to struggle academically, greatly reducing their chances of graduating from high school, going to college, or successfully participating in a 21st century high-skill economy” (p. 3).

However, as the level of rigor in the curriculum has increased, low-income students appear to be entering elementary school without the necessary foundational knowledge to achieve the minimum level of reading success (Cihon et al., 2013). Historically, studies have shown that urban children from low-income families are at an academic disadvantage before they even begin kindergarten (Lo et al., 2009). Therefore,

it appears that seemingly innocent variances in life experience can have significant educational consequences for low-income children.

In response, SC has urged teachers to implement reading intervention programs for students who enter each elementary classroom already performing below their current grade level's expected reading goal. Schools leave it up to each teacher's discretion to determine how to effectively meet each student's literacy needs by choosing from a variety of available educational resources. After careful consideration, the teacher-researcher chose to implement an adaptation of the *Project Read Primary Phonics* program with a class of kindergarten students at O Elementary School. The goal was to enable these students to read on grade level by the end of the school year.

Purpose Statement

The purpose of this action research study was to examine the extent to which an adaptation of the *Project Read Primary Phonics* program, affected the reading achievement of kindergarten students. More specifically, this study measured the effect of phonics instruction on students' ability to decode unknown words, which could help enable students to read more difficult texts, improving their overall reading ability.

Project Read Primary Phonics is designed to introduce language concepts and skills in a systematic order and convey them by using multisensory strategies and materials. Therefore, the sequence of phonics skills is arranged from the simple to complex and most frequently used to least. In addition, *Project Read Primary Phonics* postpones introducing certain skills due to their dependence on other concepts (FCRR, 2007). The lessons are formatted to include a named skill, a concept and instructional

objective, teacher modeling, guided practice with feedback, independent student practice and application, and cumulative review. This program differs from others due to its visual, auditory, kinesthetic, and tactile (VAKT) elements, as well as the inclusion of body language. Students also have opportunities to select how they apply their learning, which can increase students' motivation to learn to read (FCRR, 2007). Therefore, this study attempted to investigate the potential benefits students may reap due to the implementation of this program.

Research Question

In an effort to enable all students to read on or above grade level by the end of kindergarten, the following research question was asked:

1. How does an adaptation of the *Project Read Primary Phonics* program affect the reading level of kindergarten students as measured by the DRA2+?

Participants

In this action research study, there were eighteen student participants. These students were in the same full-day kindergarten class at O Elementary School. Eleven of the students were female and the remaining seven were male. Ten students were African American, seven students were Caucasian, and one student was Asian. One student received ESL services and only began speaking English in February. All students qualified for free breakfast and lunch due to the school's high poverty index. All participants received instruction based on an adaptation of the *Project Read Primary Phonics* program so there was no control group.

Overview of Methodology

An action research methodology was used to complete this study. Action research was selected over traditional research due to the researcher's active role throughout the study. The overall goal was to examine instructional decisions pertaining to the teaching of reading in the researcher's classroom to improve teaching and learning.

The design of the study focused on comparing kindergarten students' independent reading levels before and after receiving an adaptation of *Project Read Primary Phonics* instruction. Students' independent reading levels were determined based on the DRA2+. Each student was tested individually in a quiet room, away from the rest of the class. This occurred three times throughout the school year – fall, winter, and spring. In the fall, each student was tested starting on level A, which is the lowest possible level in the DRA2+ program. Books on levels A-3 assess students in two areas - reading engagement and oral reading fluency. Reading engagement refers to a student's reading behaviors and preferences. For example, can the student select an appropriate book for his/her reading level? Who reads to him/her at home? What's his/her favorite book? A student's score in this section cannot be used to prevent him/her from moving on to the next level. Therefore, the oral reading fluency score is used solely to determine a student's independent reading level for levels A-3 (Beaver, 2012).

A student's oral reading fluency score is determined based on the percentage of text read accurately. A student must read with 95% accuracy to be considered independent at that level. Therefore, if a student reads level A with 95% accuracy, he/she is given a book on the next level, which is level 1. If that same student cannot read the

level 1 book with 95% accuracy, that would mean that his/her independent reading level is level A. If he/she did read level 1 with 95% accuracy, he/she would be given a book on level 2. This process would continue until the student could no longer read with 95% accuracy (Beaver, 2012).

However, beginning on level 4, students are also assessed on reading comprehension. As a result, a student reading on level 4 is expected to read with 95% accuracy and answer comprehension questions with 90% accuracy. If he/she fulfills both of these requirements, he/she can move on to the next level, which is level 6. (The DRA2+ does not use odd numbers after level 4 so the levels are numbered as 6, 8, 10, 12, 14, and so on up to 60) (Beaver, 2012).

Findings of the Study

According to the fall DRA2+ scores, 78% of participants were considered non-readers, which means these students were reading on level A. The remaining 22% of participants were able to read on level 1 or above. Figure 4.1 shows the comparison of nonreaders to readers.

Students were assessed again using the DRA2+ in the winter of 2018. At this point in the school year, students were expected to read on level 1 or above. However, 17% of participants were still reading below level 1, which means they had made no progress in terms of their reading level since the fall assessment. The remaining 83% were able to read on level 1 or above. Figure 4.2 shows the breakdown of winter scores.

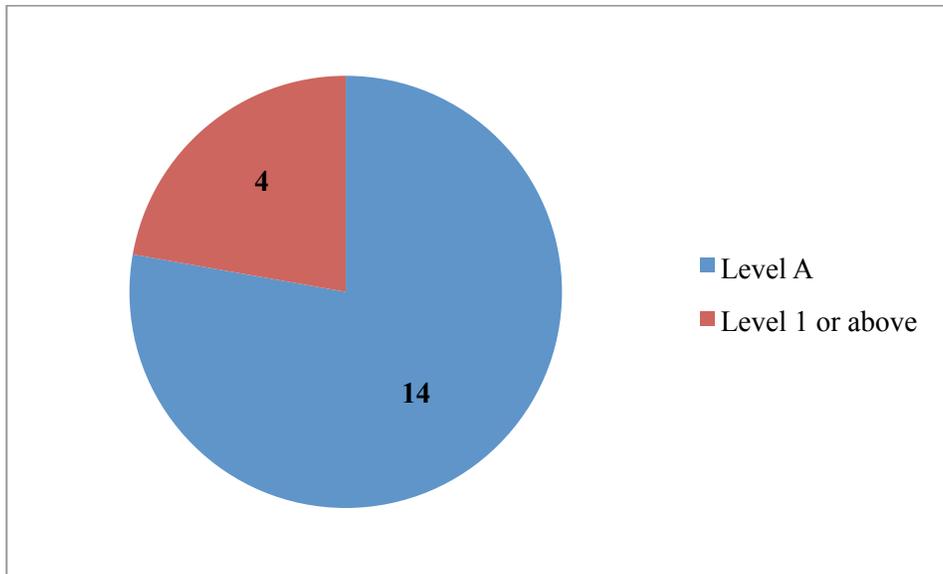


Figure 4.1 Fall 2017 Reading Levels

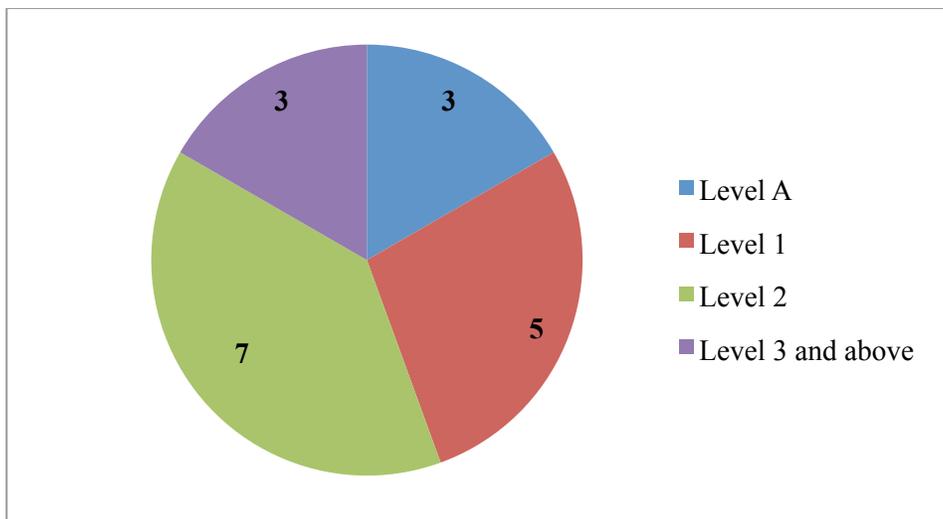


Figure 4.2 Winter 2018 Reading Levels

Following this administration of the winter DRA2+, students received an adaptation of *Project Read Primary Phonics* instruction for six weeks. Each day, students were directly taught a phonics concept using targeted multisensory instruction (visual, auditory, kinesthetic, tactile or body language) followed by student application. At the conclusion of the six weeks, students' reading ability was assessed for the final time. In order to be considered on grade level, students needed to read on level 3 or above. 94% of participants were reading on grade level with 58% of them reading on level 4 or higher. Therefore, only 6% of participants were unable to meet these reading grade level expectations. Figure 4.3 depicts the breakdown of the spring scores.

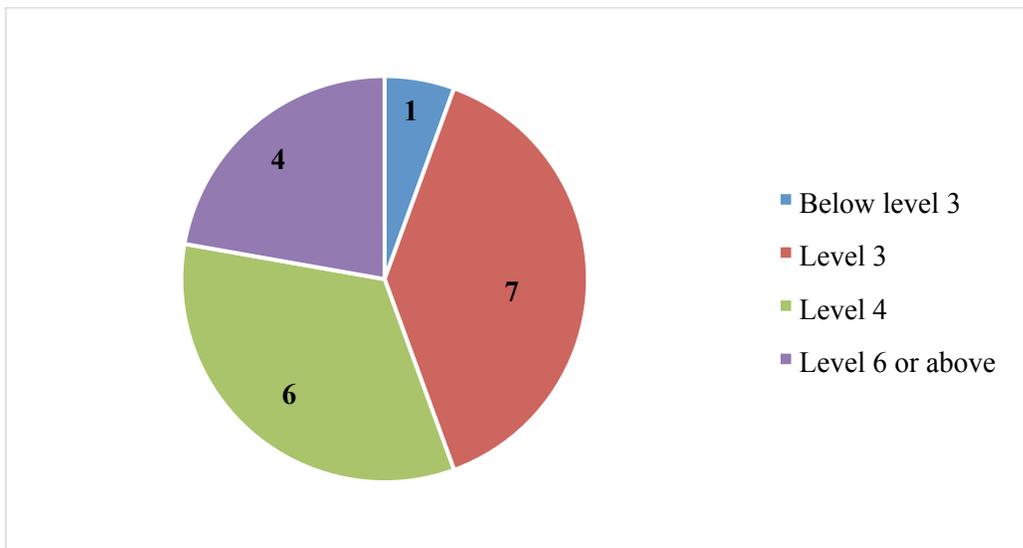


Figure 4.3 Spring 2018 Reading Levels

Table 4.1 depicts the independent reading levels of each participant during the three testing windows according to the DRA2+.

Table 4.1 Independent Reading Levels During the Three Testing Windows

Student	Fall Reading Level	Winter Reading Level	Spring Reading Level
Z	2	6	14
Y	1	3	8
X	A	1	4
W	A	1	4
V	A	1	3
U	A	A	A
T	A	A	3
S	A	A	3
R	A	2	3
Q	A	2	6
P	1	2	4
O	A	2	3
N	A	2	4
M	1	3	6
L	A	2	4
K	A	2	4
J	A	1	3
I	A	1	3

Table 4.2 Comparison of Reading Level Growth

Student	Fall to Winter Growth	Winter to Spring Growth	Difference
Z	4	4	0
Y	2	3	1
X	1	3	2
W	1	3	2
V	1	2	1
U	0	0	0
T	0	3	3
S	0	3	3
R	2	1	-1
Q	2	3	1
P	1	2	1
O	2	1	-1
N	2	2	0
M	2	2	0
L	2	2	0
K	2	2	0
J	1	2	1
I	1	2	1

Table 4.2 displays the reading level growth demonstrated by each participant from fall to winter and then winter to spring. The DRA2+ text level gradient begins with A for non-readers and then switches to numerical values from 1-60. From 1 to 4, the levels are numbered in sequential order. However, after level 4, the levels increase by two. Therefore, the next level would be 6, followed by 8, then 10, and so on. This means Student Z's reading level growth from fall to winter was 4 (6-2). However, that same student's reading level growth from winter to spring was also 4 (from 6-14, counting by twos – 8, 10, 12, 14).

In order to compare the reading level growth (or lack thereof) demonstrated by the students from fall to winter (prior to an adaptation of the *Project Read Primary Phonics* program) and winter to spring (after the implementation of an adaptation of the *Project Read Primary Phonics* program), a two-tailed t-test was used. The number zero was used to represent level A since it was the lowest possible score and signified that a student was a non-reader.

The paired t-test with an alpha level set at .05 was used to compare the means of the two samples – fall to winter reading level growth (pre-*Project Read Primary Phonics*) and winter to spring reading level growth (post-*Project Read Primary Phonics*). This analysis revealed a significant difference between pretest and posttest scores, $t(n-1)=2.83$; $p=0.011549$. Table 4.3 shows the paired sample statistics.

From fall to winter, students' reading levels increased by an average of 1.44, which rounds down to about one level. From winter to fall, their reading levels increased by 2.22, which rounds down to about two levels. This would suggest that the adaptation

of the *Project Read Primary Phonics* program had a positive impact on the reading level of the participants since their reading level growth appears to have doubled following its implementation.

Table 4.3 Pretest and Posttest Statistics

	Mean	N	Standard Deviation
Pretest	1.44	18	0.9835
Posttest	2.22	18	0.9428

In addition, only one student failed to read at a level 3 or above during the spring testing window. This particular student was a native Chinese speaker and struggled with English vocabulary words, which was what prevented him from demonstrating any reading level growth, even following the adaptation of the *Project Read Primary Phonics* program.

Field Notes

Beyond the pretest and posttest scores, I was interested in identifying how the interactive phonics instruction affected my students' level of engagement and consequently, their learning. In kindergarten, it is difficult, if not impossible to keep the students' attention without incorporating visuals, songs or chants, and opportunities for movement. However, sometimes during a lesson there may be a few minutes of just listening, which students can find boring. If this goes on for too long, it causes them to

lose interest in the topic and play with their shoes, the carpet, their hair, a piece of fuzz they found on their pants, etc. They may also try to avoid the lesson altogether by asking to use the bathroom. Unfortunately, these are common occurrences in today's kindergarten classroom, which now must conform to increased accountability and high stakes testing. As a result, I chose to take field notes on several students to track their progress through the lessons. Were they more engaged during phonics? Were they less engaged? Was the level of engagement the same?

There are five components of student engagement in my classroom – eyes watching, ears listening, body still, mouth quiet (when it is someone else's turn to speak), and mind focused. The phrase, eyes watching, means your eyes are on the speaker. They are not looking around the room or out the window. The phrase, ears listening, means you are hearing the speaker's words. You are paying attention to what he/she is saying. The phrase, body still, means your body is not moving in a manner that distracts yourself and/or others. "Body still" also can refer to situations when we are doing movements as a class. It means you are doing the same movements that we are all doing. You are not making up your own movements or dancing independently to be silly. The phrase, mouth quiet, means you are not talking out of turn. It also means you are not singing, humming, or whispering to yourself. The phrase, mind focused, means you are thinking about what is being said so you can share your thoughts on the topic with the class. You are not thinking about recess or what is for lunch.

In order to track student engagement, I created a checklist with each of these five behaviors. I observed three students throughout each week during the adapted *Project*

Read Primary Phonics lessons and also during lessons on other subjects. Table 4.4 displays the student engagement checklist.

Table 4.4 Student Engagement Checklist

Date	Child	Type of Lesson	Eyes watching	Ears listening	Body still	Mouth quiet	Mind focused

I knew that it would be almost impossible to take detailed field notes on every student participant, even with the use of the checklist so I chose to observe all students, but to focus more intently on three in particular. The first student I was chose was Jamie because of her bubbly personality and eagerness to learn. Jamie has a lot of energy so if she is forced to sit still on the carpet or at her seat for too long, she usually finds herself getting into trouble. She often “accidentally” tips her chair backwards so she can fall on the floor, giving her a reason to be out of her seat.

The second student I chose was Kameron. He is shy, and quiet. Kameron is intelligent and makes connections easily between ideas. However, he is hesitant to raise his hand and often cries because he has anxiety about expressing himself in front of others. For the first half of the school year, he would whisper to me if he had a question

or needed assistance with his work. When we did whole class activities to get the wiggles out, he usually just watched instead of participating.

The third student I chose was George. He is happy and excited about learning. George is fluent in Chinese, but entered the school year unable to speak any English. He received ESL services twice daily to help him acclimate to school and learn enough English to communicate with us on a basic level. However, George struggled to pay attention since he could not fully understand what we were saying most of the time. Overall, based on their individual personalities and background information, I was interested to see how the interactive nature of the *Project Read Primary Phonics* program affected them, if at all.

Each *Project Read Primary Phonics* lesson has several parts – a named skill, a concept and instructional objective, teacher modeling, guided practice with feedback, independent student practice and application, and cumulative review. Opportunities for VAKT (visual, auditory, kinesthetic, tactile) are infused throughout these sections of the lesson. Examples of VAKT activities include finger blending, glue letters, skywriting, finger scissors, hand signals, puppets, and body language. My students enjoyed the multisensory aspects of the lessons, although to be honest I already used many of these strategies prior to being trained in the *Project Read Primary Phonics* program. However, one new aspect of my teaching while implementing this program was the use of body language. Therefore, that is the aspect I chose to focus on during my student observations.

Body Language

In order to help the students make connections to both consonant and vowel sounds, certain *Project Read Primary Phonics* lessons have a body language component. For example, for the diphthong /oo/, the body language is put your hands over your eyes and lift them off as you say, “oo says /oo/ as in boo.” However, not every lesson includes a scripted body language idea for each sound. Therefore, my student, Jamie asked me if we could make up our own body language for some of the sounds. I thought this was a wonderful idea, as it would give the students more ownership of their learning. I told Jamie and the rest of the class that when we learned a new sound, we would spend a few minutes coming up with body language to match it. Students could share their ideas and we would vote on the one we would use as a class. For the vowel team –ie, the students came up with a few good suggestions for body language, such as “-ie says /i/ as in lie while lying down or “-ie says /i/ as in pie” while pretending to eat pie. However, the class favorite was, “-ie says /i/ as in tie” while pretending to tie their shoes. They also created, “ch says /ch/ like chill” while crossing their arms in front of their chest and leaning back slightly and “sh says /sh/ like shake” while shaking both hands with their fingers spread open. Each week, we would start off our phonics lesson by reviewing the previous week’s sounds with body language. In addition, on Fridays we would review all of the sounds with body language that we had learned up until that point.

As I mentioned, Jamie was eager to move around so she really enjoyed the body language aspect of the phonics lessons. She took pride in trying to come up with the best body language idea for each new sound that was introduced. As a result, I was excited to

use the student engagement checklist when observing Jamie to see if her level of engagement varied between the phonics lessons and other lessons.

Before phonics each morning, we first did our calendar routine. A student would put the date up on the calendar. We also discussed what day it is today, was yesterday, and will be tomorrow. We sang a few songs about the months of the year and days of the week. We also counted to the number of the day and checked the weather. I noticed that Jamie had a tendency to ask to use the bathroom during calendar. I think part of her reason for using the bathroom at this particular time was to avoid the calendar lesson. Her average level of engagement during a non-phonics lesson over the six-week time frame was a 2 out of 5.

However, as soon as the phonics lesson started, there was an immediate change in her demeanor. One day, she was still in the bathroom when I started the lesson and she yelled, "Wait, don't start without me. I'll be right out!" The entire class started laughing and we waited for her so we could review the previous lesson's body language together. Jamie's average level of engagement during phonics over the six-week time frame was a 4 out of 5. In addition, I saw Jamie's behavior at her seat change. She went from rocking in her chair while writing to now using the body language to help her sound out words. Jamie had found a constructive way to move her body and it was beneficial for her because she got her energy out in a positive way. It was also beneficial to me because I could spend more time helping other students with their work instead of trying to correct her behavior.

Initially, Kameron was less eager than Jamie about the phonics lessons. His anxiety about dancing/moving/talking in front of his classmates prevented him from being excited about this new opportunity to move around more. He did not have any trouble with paying attention on the carpet so his average level of engagement was a 4.5 out of 5 during a non-phonics lesson. I told Kameron that if he wanted to participate, he could stand on the back row of the carpet, behind everyone else so no one would see him.

After week 1 of an adaptation of the *Project Read Primary Phonics* program, Kameron moved to the back of the carpet, but just stood there. I considered that to be making progress, but I was really hoping that he would let go and have fun with the lessons. During week 2, I heard Kameron on the playground telling another student, “No, ch says /ch/ like chill” as he demonstrated the body language. My mouth dropped open in surprise, but I did not want to make a big deal of it and embarrass him. During week 4, Kameron started doing the body language movements with the class on a regular basis. No one stared at him and no one talked about it. We just let it happen. Since Kameron took half of the program’s time frame before he felt comfortable enough to participate, his average level of engagement score was actually lower during phonics, 3.5 out of 5, than during a non-phonics lesson.

As soon as George could tell that the other students were excited about phonics, he became excited too. At that point in the school year, he was able to call me by name, ask to use the bathroom, and count to 20. However, he could only recognize two letters and he could not identify any letter sounds. During a regular lesson, George’s average student engagement score was a 1 out of 5. He frequently tried to play with other students around him by making faces at them. I could only imagine how he must have felt to listen

to me teach without fully understanding what I was saying. As a result, my assistant and I worked with him individually since his academic needs varied so much from the rest of the class. However, during phonics, George seemed to come alive. At first, he was just mimicking what I did in terms of the sounds and body language. However, it was wonderful to see him feel like he could participate too!

For the first three weeks, George started out by doing the body language on the carpet with the class, but did not use it when he was attempting to write during independent work time. Therefore, he was still unable to make the connection between the letters and their sounds. However, during week four, George was able to complete a /ch/ and /sh/ cut and paste activity with minimal support. At first, I was worried that he copied someone else's work. However, I sat down with George and asked about his work. I pointed to a picture and he would say the name, if he could. For example, the first picture was a block of cheese. I said, "What is this?" George said, "Cheese!" I said, "What does cheese start with? Ch or Sh?" George said, "/Ch/ like chill" as he crossed his arms and leaned back. I said, "Where should it go on your paper?" George pointed to the box titled, Ch. Although George demonstrated that he knew the sounds for ch and sh, that was not the case for most of the other lessons. However, George did participate in the lessons and he did show improvement with being able to complete phonics work with a higher level of independence. George's average level of engagement during phonics over the six-week time frame was a 4 out of 5.

Overall, the program appeared to have a positive impact on all three students in different ways. For Jamie, the program gave her a productive outlet for her energetic personality. For Kameron, the program gave him the motivation to overcome his anxiety

of speaking or dancing in front of his peers. Finally, for George, the program gave him a means to fit in with his peers and to complete some of his independent work with less teacher support. Overall, I was happy with all of the students' academic, social, or behavioral growth, even if all participants did not achieve the reading success I was hoping for initially.

Interpretation of Results of the Study

The research question that guided this action research study was: How does an adaptation of the *Project Read Primary Phonics* program affect the reading level of kindergarten students as measured by the DRA2+? The findings described above demonstrate a strong positive connection between adapted *Project Read Primary Phonics* instruction and students' independent reading levels. While this action research study cannot prove causation between the two variables, the findings do have implications for the researcher's teaching. In addition, As such, the results display the importance of implementing a systematic, interactive phonics curriculum as one component of the researcher's reading instruction.

Summary and Conclusion

There is a disparity in reading achievement that exists among kindergarten students due to a myriad of reasons, such as varying life experiences and limited exposure to academic content. Despite these differences, all kindergarten students are expected to read on grade level by the end of the school year. The purpose of this action research study was to investigate the impact of an adaptation of the *Project Read Primary Phonics* program, which attempts to improve students' decoding skills, and therefore,

overall reading ability. The research question that guided the study was: How does an adaptation of the *Project Read Primary Phonics* program affect the reading level of kindergarten students as measured by the DRA2+? The researcher answered the research question by employing an action research methodology, specifically Mertler's (2014) action research cycle: *planning, acting, developing, and reflecting*. The *planning* stage was comprised of identifying the problem of practice, research question, related literature, and action research design. The *acting* stage was comprised of implementing the intervention, collecting related data, and analyzing that data. The *developing* stage was comprised of analyzing and interpreting the findings. The *reflecting* phase will be comprised of analyzing the research questions and research design to guide future action research studies, as well as sharing the action research results in an effort to empower other teachers to examine their own instructional practices.

CHAPTER FIVE: SUMMARY AND DISCUSSION

Introduction

The purpose of this action research study was to investigate the effect of an adaptation of the *Project Read Primary Phonics* program on the reading achievement of kindergarten students at O Elementary School in the Lowcountry area of South Carolina. The primary focus of the program was to help the participants improve their decoding skills, and therefore, overall reading ability. To gauge the programs' impact, students were assessed prior to the start of the program and following its completion using the DRA2+. Field notes were also gathered to analyze individual student's level of engagement throughout the phonics lessons.

Focus of Study

As an educator, my primary goal is to help my students succeed in all subject areas. I want to prepare them for first grade, but also give them a strong overall educational foundation for the future. However, despite the best efforts of me and other well-meaning teachers like me, a staggering number of students are performing below grade level expectations in reading (NCES, 2016). This is disheartening since reading is an essential skill on which students will depend to further their education, become employed, and even accomplish daily living tasks. Therefore, the catalyst for this action

research study stems from a national and local need to improve reading instruction and consequently, achievement, for all students. This is essential because according to SCDE (2015):

Research is clear that students who are not proficient readers by third grade are more likely to struggle academically, greatly reducing their chances of graduating from high school, going to college, or successfully participating in a 21st century high-skill economy. (p. 3)

In response, SC has urged teachers to implement reading intervention programs for students who enter each elementary classroom already performing below their current grade level's expected reading goal (SCDE, 2015). Schools leave it up to each teacher's discretion to determine how to effectively meet each student's literacy needs by choosing from a variety of available educational resources. After careful consideration, I chose to implement an adaptation of the *Project Read Primary Phonics* program. My goal was to enable my kindergarten students to read on grade level by the end of the school year.

Overview of Study

The purpose of this action research study was to examine the extent to which an adaptation of the *Project Read Primary Phonics* program affected the reading achievement of kindergarten students. More specifically, this study attempted to measure the effect of phonics instruction on students' ability to decode unknown words, which will enable students to read more difficult texts, improving their overall reading ability.

Project Read Primary Phonics is designed to introduce language concepts and skills in a systematic order and convey them by using multisensory strategies and

materials. Therefore, the sequence of phonics skills is arranged from the simple to complex and most frequently used to least. In addition, *Project Read Primary Phonics* postpones introducing certain skills due to their dependence on other concepts (FCRR, 2007). The lessons are formatted to include a named skill, a concept and instructional objective, teacher modeling, guided practice with feedback, independent student practice and application, and cumulative review. This program differs from others due to its visual, auditory, kinesthetic, and tactile (VAKT) elements, as well as the inclusion of body language. Students also have opportunities to select how they apply their learning, which can increase students' motivation to learn to read (FCRR, 2007). Therefore, this study attempted to investigate the potential benefits students may reap due to the implementation of this program.

In order to examine the potential impact of an adaptation of the *Project Read Primary Phonics* program on student achievement, the participants' independent reading levels were determined using the DRA2+. Each student was tested individually in a quiet room, away from the rest of the class. This occurred three times throughout the school year – fall, winter, and spring. After the winter assessment, the adapted *Project Read Primary Phonics* program was implemented for six weeks. In order to remember the sounds presented in each lesson, the class came up with body language to represent each one. For example, “ch says /ch/ like chill. After six weeks, the students were assessed again using the DRA2+. Students' reading level growth from fall to winter (pre-*Project Read Primary Phonics*) was compared to the reading level growth from winter to spring (post-*Project Read Primary Phonics*) to examine the impact of the program on student achievement.

Research Question

In an effort to enable all students to read on or above grade level by the end of kindergarten, the following research question was asked:

1. How does an adaptation of the *Project Read Primary Phonics* program affect the reading level of kindergarten students as measured by the DRA2+?

Discussion of Major Points

This action research study aimed to examine an adaptation of the *Project Read Primary Phonics* program's impact on student achievement. Findings indicate that the program had a positive impact on students' reading level growth, since it doubled post-implementation. This is in line with other research that supports the idea that students who receive reading instruction involving phonemic awareness, sound-letter correspondence, and sounding out and blending words are thought to be more skilled in decoding words than children who do not receive supplemental instruction focused on these skills (Gunn, Biglan, Smolkowski, & Ary, 2000). Furthermore, children with low reading skills were found to achieve the greatest success with the implementation of teacher modeled word recognition strategies such as chunking words into units such as syllables or onsets/rimes, finding little words in big ones, sounding and blending individual phonemes, and considering known letter sounds and what makes contextual sense (Rupley, Blair, & Nichols, 2009). The *Project Read Primary Phonics* program incorporates all of these activities so my findings also coincide in that respect. According to De Graaff et al. (2009), children show greater progress from systematic-phonics instruction than from nonsystematic or non-phonics reading programs on reading and

spelling skills. Also, further research outcomes demonstrated that when students receive explicit instruction in phonemic awareness and phonics, their reading performance improves at a faster rate (Podhajski, Mather, Nathan, & Sammons, 2009). Finally, since the *Project Read Primary Phonics* program is systematic and explicit, my findings are similar to the ones mentioned above.

Action Plan: Implications of the Findings

According to Yendol-Hoppey (2014), “As a teacher researcher engages in reflection, she intentionally asks questions about teaching and learning, organizes and collects information, focuses on a specific area of inquiry, and benefits from ongoing collaboration and support of critical friends” (p. 23). Therefore, when a teacher reflects on the ramifications of her action research in this manner, it enables her to make more systematic, informed decisions about future instructional goals, programs, and procedures (Stringer, 2013).

As such, when I reflected on this action research study, I was attempting to accomplish two goals – to scrutinize both the expected/unexpected results of the study and to examine the design elements of the study itself (Mertler, 2014). I examined the research question and data to determine if they effectively coincided. In addition, the significance of this professional reflection was that it enabled me to create an action plan based on what aspects of the study went well and what aspects required further investigation or modification. According to Mertler (2014):

Action plans may consist of brief statements or simple descriptions about the implementation of a new educational practice; a plan to reflect on alternative

approaches to addressing the problem; a plan to share what you have learned with others, such as other teachers, administrators, boards of education, or other schools or districts; or any other ‘next steps’ you might take. (p. 211)

My goal was to share the results of this study with other kindergarten teachers in the elementary school, as well as other staff members that serve students in various grade levels. Although, I was not able to generalize the conclusions to the larger school population, I still shared this study in the hopes of empowering other teachers to examine their own instructional practices. Consequently, this ensures that the findings of the action research study can be utilized to improve classroom instruction and overall student learning (Stringer, 2013).

Although this action research study could not prove that multisensory phonics instruction solely increased kindergarten student’s reading levels, the results did support the idea that phonics could positively impact students’ reading ability. As a result, the kindergarten teachers have decided to increase phonics instruction. This decision is a direct result of the data analysis of this action research. Yet, it is important to note that teachers at O Elementary School are not being mandated to teach phonics or use an adaptation of the *Project Read Primary Phonics* program.

However, due to recent budgetary constraints, money for additional professional development for teachers is non-existent. Therefore, the kindergarten team has decided to use in-house experts to provide the training. These “experts” are teachers in the school that are currently implementing phonics instruction on a daily basis. Consequently, these teachers have already witnessed growth in their students’ ability to spell accurately,

decode text, read fluently, and comprehend what they read due to their higher level of phonemic awareness. These “expert” teachers were previously trained years ago when phonics instruction was a high priority in the district so they are qualified to turnkey this valuable knowledge to their colleagues.

Beginning in September 2018, the “expert” teachers will facilitate phonics instruction over the course of six months. These workshops will occur during the weekly kindergarten teacher meetings, which take place on Wednesdays while the students are with the special area teachers. The experts will share examples of how to incorporate phonics instruction into the English Language Arts (ELA) literacy block without taking time away from the current district reading program. Then, the other teachers will take these ideas back to their classrooms and implement them. At consequent meetings, teachers will share their experiences and brainstorm how to make phonics instruction better, with the goal of using phonics as one potential way to improve reading instruction. Eventually, the goal of the plan would be to expand this opportunity to teachers in first and second grade, as the research also applies to those grade levels.

Suggestions for Future Research

Although the findings in this study are in line with current research, there were some limitations of this action research. For example, a relatively small sample of participants was used in the study, which makes it impossible to make generalizations about all early elementary school students and the effect phonics instruction has on their reading performance. Additionally, the adaptation of the *Project Read Primary Phonics* program was run concurrently with other reading instruction during the regular school

day. Therefore, it is difficult to separate what student gains are a product of the phonics program and which ones are direct results of the daily reading instruction going on in the kindergarten classroom. Finally, the short time span over which the program took place was extremely limiting. Since the program only lasted six weeks, it was impossible to teach the entire *Project Read Primary Phonics* program. Therefore, the teacher had to pick and choose lessons based on student's academic needs. As a result, it would be interesting to start with the program at the beginning of the school year and follow the lesson plans in sequence.

In addition, since my kindergarten class is one of four kindergarten classes in the school, an idea for future research would be to analyze my class data with the data from the other three classes, who did not implement an adaptation of the *Project Read Primary Phonics* program. We could examine the average reading level growth of students in the other three kindergarten classes with the average reading level growth in my class. It would be fascinating to see if the students in the other classes made just as much growth as my class, even without the phonics lessons. Finally, once more of the teachers are trained in the *Project Read Primary Phonics* program, our school could examine the reading level growth of those classes with other classes that are not participating in the program. I believe that having a larger sample would give us a better idea of an adaptation of the *Project Read Primary Phonics* program's impact on our students' reading achievement.

Conclusion

This action research study describes a problem of practice stemming from the disparity in reading achievement that exists among kindergarten students due to varying life and academic experiences. As such, the purpose was to investigate the impact of a multisensory instructional program that attempts to improve students' decoding skills, and therefore, overall reading ability by answering the following question: How does an adaptation of the *Project Read Primary Phonics* program affect the reading level of kindergarten students as measured by the DRA2+? This study employed an action research methodology, specifically Mertler's (2014) action research cycle: *planning, acting, developing, and reflecting*. The *planning* stage was comprised of identifying the problem of practice, research question, related literature, and action research design. The *acting* stage was comprised of implementing the intervention, collecting related data, and analyzing that data. The *developing* stage was comprised of using the findings from the data analysis to create an action plan. The *reflecting* phase was comprised of analyzing the research questions and research design to guide future action research studies, as well as sharing the action research results in an effort to empower other teachers to examine their own instructional practices. Findings indicated that the *Project Read Primary Phonics* program had a positive effect on student achievement. These results served as the basis for the subsequent action plan.

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