2015

The Effect of Researched-Based Practices on Reading Achievement of Title Î? Students

Oliver Lorenza Phipps
Walden University

Walden University

COLLEGE OF EDUCATION

This is to certify that the doctoral study by

Oliver L. Phipps

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Mansureh Kebritchi, Committee Chairperson, Education Faculty
Dr. Marvin Putnam, Committee Member, Education Faculty
Dr. Michelle Brown, University Reviewer, Education Faculty

Chief Academic Officer

Eric Riedel, Ph.D.

Walden University
2015

Abstract

The Effect of Researched-Based Practices on

Reading Achievement of Title I Students

by

Oliver L. Phipps

MEd, University of South Florida, 1993

MA, University of South Florida, 1991

BS, Florida A&M University, 1985

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

2015

Abstract

Title I schools are supported to improve student reading achievement and to bridge the achievement gap between low-income students and other students. The researched-based practices of professional learning communities, coteaching classrooms, and the RtI 3-tiered model were added to a Title I school to improve students' reading achievement; however, the effects of these research-based practices on students' reading achievement were unclear. The purpose of this quantitative causal comparative study was to examine the impact of these research-based practices on reading scores of students. Florida Comprehensive Assessment Test (FCAT 2.0) reading achievement scores were compared between students (n = 98) in a Title I school receiving researched-based practices for 3 consecutive years against Title I students (n = 127) not receiving researched-based practices for 3 consecutive years. Gardner's theory of multiple intelligences and Webb's depth of knowledge formed the theoretical framework of the study. The independent variable was the type of reading instructional practices. The dependent variables were the FCAT 2.0 reading scores of Title I 5^{th}, 4^{th}, and 3^{rd} grade students. The covariates were the FCAT 2.0 scores or the Florida Assessment for Instruction in Reading test scores taken at the end of previous year for each grade level. Analysis of covariance indicated that students receiving the enhanced instructional practices had significantly higher reading scores than did the comparison group following the intervention. The implications for positive social change include providing data to the study school administration that support the use of these researched-based practices in Title I schools to improve students' reading achievement and close the reading achievement gap.

The Effect of Researched-Based Practices on Reading Achievement of Title I Students

by

Oliver L. Phipps

MEd, University of South Florida, 1993

MA, University of South Florida, 1991

BS, Florida A&M University, 1985

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

June 2015

Dedication

This doctoral study is dedicated to my wife, Tonya, our three beautiful children, Olivia, Oliver, and Orion. Tonya, I am short of words to express my gratitude to you. Your undying patience, love, input, constant encouragement, and words of wisdom have made this journey possible. You continually encouraged me and prayed for me as I hurdled through all the obstacles in the completion of this doctoral program. To my children, thank you for putting up with me. There were times when I could not fulfill my role as a father because of my school work, but you understood and cheered me on. To my mother, Loree S. Phipps, and to the memory of my beloved-father, Ollie H. Phipps, whose invitation from the Lord on September 15, 2005 prevented him from seeing me graduate. Both of you have always supported my many endeavors throughout my life. With your constant love and support, both of you encouraged me to always believe and trust in God the Father, the Son, and the Holy Spirit, and to give my best always.

Acknowledgments

I acknowledge the kindness and love of God our Savior in my life. Jesus saved me, not because of any righteous things I have done, but because of his love and mercy. He saved me through the blood and of the Holy Spirit, so that having been justified by His grace, I will have eternal life. I thank you God the Father for calling me, Jesus Christ the Son for saving me, and the Holy Spirit for sealing me.

I would like to thank my committee chair, Dr. Mansureh Kebritchi, and co-chair, Dr. Marvin Putnam, for your support, guidance, and encouragement. Dr. Kebritchi, you kept me focused and you also took a personal interest in my family life. You provided a foundation and constant reminders to continue with my progress. I acknowledge that strong support from my parents, Ollie and Loree Phipps, my In-laws, John and Shirley Bookhart, my sister in-laws, Wanda Bookhart and Sandy Lakin. To the members of my kindred, Arnold Sherman, Sr., Dollie Manns, Shawn Stafford, Carolyn Beasley-Shortt, Calvernetta Williams, Frank and Elaine Walker, Randy and Calvernetta Brown, Cardell Shortt, My friends, in particular, Dr. Leon Williams, Senior Pastor, Dr. Patrick Latimore, Pastor, Earnest and Shirley Crumbley, Reginald Thomas, John and Bonita Drayton, Edward Hall II, Benny and Octavia Bolden, Dr. Jan Messer, and Dr. Brian Castellani.

Most importantly, I acknowledge that I would not have started, continued, or finished this doctoral program without the unswerving support from my wife, Tonya, a true helpmate. Thank you to my three children as well for being the foundation that I needed to complete this study. Words cannot express how much love and appreciation I have for all of you. I love all of you very much.

Table of Contents

List of Tables

Section 1: Introduction to the Study

Meeting Adequate Yearly Progress

The need to change the school environment to meet adequate yearly progress (AYP) became evident to school districts with the congressional passage goal of the No Child Left Behind Act (NCLB: 2002) that is determined by the percentage of students of low socioeconomic status (SES) who scored at the proficient level in reading. In order for states to receive federal funding under the NCLB, they are required to develop and establish ongoing assessments in elementary reading achievement and skills in mathematics to be directed to every student in Grades 3 through 5. The Title I funded schools' goal is also to show proficiency on the statewide accountability assessment test while meeting AYP.

Under the NCLB, AYP mandated all public school districts to establish increasing annual targets of proficiency in reading and math for all students. AYP is an accountability system that is a statewide mandate by the NCLB (2002), which requires all schools and districts to move each student toward a year's growth academically. Children's early reading proficiency is linked with their home literacy surroundings, quantity of books they have, and parent anguish (Aikens & Barbarin, 2008). However, low SES community parents may be incapable to meet the cost of resources such as books, computers, or tutors to build this positive literacy setting (Orr, 2003). As a result, AYP was instituted to protect the academic requirements of all students and to guarantee that each school district is closing the achievement gap.

On average, students from low SES backgrounds start off a step behind their peers and never catch up, and this achievement gap continues to the end of their schooling (Dixon, 2010). Children who are low in literacy achievement and experience more social and behavior problems are more likely to be retained. As they age, students grow further behind and may even need help as an adult and may not graduate (Voices for Virginia's Children, 2010).

The potential for reading failure has been recognized in the lower grades as early as primary grades, so that students are strengthened in the area of reading to learn by third grade (Martella, Martella, & Przychozin, 2009). When students cannot read, they lack an essential tool for learning and eventually lack job opportunities (Martella et al., 2009). Children from low SES households often enter kindergarten with less readiness than their middle socioeconomic counterparts; this gap in academic readiness throughout schooling pessimistically affects their achievement levels when compared to their more affluent peers and will follow them throughout their schooling (Kafer, 2004). There is an agreement with researchers that there are positive relationships between low SES and academic achievement (Oxley, 2008; Tonn, 2007). The purpose of Title I was to assist states and local school districts in allocating resources to targeted groups and to increase the level and quality of services provided to these students (Odden, Goetz, & Picus, 2008). District administrators have become intensely aware of their students' performance on the mandated testing as Title I funding is directly tied in with the ability of the district to meet AYP (DeVries, 2004). Title I funds are given to districts and states

on a formula basis. The formula takes into consideration the statewide average per pupil expenditures and the number of low SES students.

Even though community leaders, educators, and politicians are generally fixated on minimizing the achievement gap, the school readiness gap between low SES students and their middle socioeconomic counterparts remains large (Zhang & Cowen, 2009). Therefore, remediating the educational shortfalls of teaching strategies that are linked with low SES students should be revised (Caldwell & Ginther, 1996).

To improve the quality of schools in low SES neighborhoods, the subsequent factors have been found: building of a learning community, focusing on refining teaching and learning strategies, designing a classroom environment that is information-rich, providing constant professional staff development, keeping parental involvement, and improving allocations of funding and resources (Muijs, Harris, Chapman, Stoll, & Russ, 2009). With the Individuals with Disabilities Education Act of 2004 (IDEA), the obligation for schools to make use of researched-based practices with more effectiveness and creativity has become more important (Kohler-Evans, 2006). These researched-based practices are not a formal curriculum but a process for a Title I school using designated outcomes, evaluations, data for decision making, and consistency throughout Grades 3 through 5.

If schools do not meet AYP for more than 2 consecutive years, they are required to offer and implement supplementary educational strategies to their students to improve the school's performance (U.S. Department of Education, 2010). Through investigating

the research-based practices, the Title I school in this study could make AYP and close the reading gap.

As Title I schools face difficult challenges in assuring success for all its students, it is imperative to research the effect of researched-based practices such as professional learning communities (PLCs), coteaching classrooms, and the response to intervention (RtI) three-tiered model for 3 consecutive years as compared to a Title I school that did not implement researched-based practices such as PLCs, coteaching classrooms, and the RtI three tiered model for 3 consecutive years to achieve AYP and close the reading gap as evidenced by the reading scores on the state's annual accountability assessment test, known as FCAT 2.0. The FCAT 2.0 is an achievement test that is given to Grades 3 to 11 students throughout the state. The FCAT 2.0 evaluates children's acquisition in reading, writing, math, and science skills on the Next Generation Sunshine State Standards (Florida Department of Education, 2005b).

It is essential that early intervention be introduced in lower grades, which could impact the reading fluency and comprehension skills of at-risk students (Martella et al., 2009). Millions of American children get to fifth grade without learning to read proficiently, which puts them on the dropout track (Martella et al., 2009). To improve reading achievement to low SES, the goal of this research was to study the outcome of research-based practices, such as PLCs, coteaching classrooms, and the RtI three-tiered model between Title I fifth grade students who received the researched-based practices for 3 consecutive years and Title I fifth grade students who did not receive the researched-based practices.

Problem Statement

A number of federal dollars has been disbursed on the efforts of NCLB to close the learning gap among low SES and more advantaged students (Gorey, 2009). The likelihood for reading failure has been documented in the lower grades, and upcoming dropouts can be anticipated by examining third grade reading skills. Balfanz, Bridgeland, and Dilulio (2009) shared that in Grades 4 to 12, more than 8 million students are not reading on their grade level. NCLB is a federal policy that has as two of its primary goals for Title I schools to meet AYP and to decrease the level of performance between disadvantaged students and more advantaged students. Individual districts must be able to show that students are making AYP, which is determined by the individual states and is approved by the federal government.

Title I is the largest single source of federal funds for schools in the United States. It supplements both state and local allocations for low SES schools at all levels, and yet, Title I schools continue to have difficulty closing the achievement gap due to learning disabilities, gender, race, and SES status (Rathbun, West, & Walston, 2005). Many factors could contribute to this problem, such as, grade-level retention, attendance problems, behavioral problems in the classroom, low SES status, or low achievement (Slavin & Madden, 2004). There are clear effects of what poverty does to children when they are at the age to enter school as well as during their later years while attending school (Evans, 2004). The researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model were added to Title I schools to improve students' academic gains in reading achievement (Bryk, Sebring, Allensworth, Luppescu,

& Easton, 2010). There has been little research to show a significant difference between Title I fifth grade students receiving researched-based practices for 3 consecutive years and Title I fifth grade students not receiving researched-based practices for 3 consecutive years with regard to their FCAT 2.0 reading achievement scores that describes the achievement a student has succeeded on the reading test.

In this quantitative study, a causal comparative design and a repeated measure approach was used to examine the effect of research-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model used in Title I schools on students' reading achievements measured by FCAT 2.0 reading scores. Two groups of treatment and control were considered in this study. Treatment used researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years, while the control group did not use researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years.

The independent variable was defined as the use of researched-based practices of the treatment fifth grade students for a period of 3 consecutive years. FCAT 2.0 reading scores was used as the dependent variable. The Florida Assessment for Instruction in Reading (FAIR) reading comprehension test was used as covariate variable.

Results of this quantitative study showed if researched-based practices for 3 consecutive years increased, decreased, or had no impact on Title I students in fifth grade closing the reading achievement gap as evidenced by FCAT 2.0 reading scores. If the study showed a decrease or no impact in improving reading achievement, a conduit of communication could begin communications between all stakeholders, the district,

school-based leadership, school staff, and community, on how to address researched-based practices results for Title I students.

Nature of the Study

A quantitative causal comparative design with a repeated measure approach (Lodico, Spaulding, & Voegtle, 2010) was used in this study to examine to what extent Title I fifth grade students who received researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years differ from Title I fifth grade students who did not receive researched-based practices with regard to their FCAT 2.0 reading scores. The narrowing of the achievement in reading gap were the results of using researched-based practices for 3 consecutive years. Causal comparative was useful to examine the effect of an event after it occurred. Thus, it was appropriate to use a repeated measure approach to the effect of researched-based practices on reading achievement of the same group of students within 3 years from third to fourth and fifth grades to find out the enduring effect of the researched-based practices on their reading scores.

In this study, the groups of students were already formed due to their Title I social economic status (Lodico et al., 2010). A nonrandom purposeful sampling method was used to include 225 participants from Title I schools (treatment and control) with similar demographic status. The sample for the treatment group included the fifth grade students of the Title I school who used the researched-based practices for 3 consecutive years. The sample for the control group included the fifth grade students from a Title I school that did not receive the researched-based practices for 3 consecutive years. Fifth grade

student participants were from low SES households as defined by federal free or reduced lunch guidelines in fifth grade from this school district.

The treatment school was one Title I elementary school serving a student body of 715 students with approximately 100% of children with the free and/or reduced lunch status. The control school was one Title I school that serves a student body of 796 students with approximately 100% of students in possession of the free or reduced lunch status. The treatment and control sample group included fifth grade students.

The total number of the projected sample included Title I students tracked from third grade to fifth grade in the treatment school and the control school (all within district). The reason for tracking these students for 3 years was during their third grade year (2010/2011), the treatment school started using research-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model. In the treatment school, they were mandated by the superintendent to implement PLCs, coteaching classrooms, and the RtI three-tiered model. The quantitative data included data from FAIR reading comprehension test and FCAT 2.0 reading scores.

The qualitative design method was not chosen because of the way data are collected and analyzed from focus groups, surveys, reviews, and in-depth interviews; a qualitative study would not have afforded the opportunity to be more objective, number-based, use random selection or random sampling, and use statistical tests for analysis. The qualitative method design is used primarily to search for patterns and themes and not the numerical data.

This study's outcome will complement the current research concerning closing the achievement gap by using research-based practices for 3 consecutive years for Title I fifth grade students as evidenced by FCAT 2.0 reading scores. Participants were from two different schools: one treatment school and one control school (all within district) as indicated in Table 1.

Table 1

Comparisons of Treatment and Control Title I Schools Implementing Research-Based Practices

Year	2010/2011	2011/2012	2012/2013
Treatment school	3rd grade FCAT 2.0 reading scores with researched-based practices.	4th grade FCAT 2.0 reading scores with researched-based practices.	5th grade FCAT 2.0 reading scores with researched-based practices.
Control school	3rd grade FCAT 2.0 reading scores without researched-based practices.	4th grade FCAT 2.0 reading scores without researched-based practices.	5th grade FCAT 2.0 reading scores without researched-based practices.

Table 1 illustrates the comparisons of treatment and control Title I schools implementing researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model. During the third grade year (2010/2011), the treatment school started using research-based practices such as PLCs, coteaching classrooms, and the RtI, three-tiered model. In the treatment schools, they were mandated by the superintendent to implement PLCs, coteaching classrooms, and the RtI, three-tiered model in Grades 3 through 5 during the entire academic year. The control school was not mandated to

implement the research-based practices for 3 consecutive years. The treatment Title I school was mandated to send their teachers who taught Grades 3 through 5 to receive professional staff development training in coteaching from the district's staff development office during the 2010/2011 school year. Training consisted of (a) coteaching experiences, (b) planning for effective coteaching, (c) collaboration and self-regulation, and (d) coteaching that works.

During the fourth grade year (2011/2012), the treatment school continued research-based practices during the entire academic year. The control school was not mandated to implement the research-based practices. During the fifth grade year (2012/2013), the treatment school continued research-based practices during the entire academic year. The control school was not mandated to implement the research-based practices.

By examining the FCAT 2.0 reading scores, it was explored how implementing researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model at the treatment school might close the reading achievement gap with the control school. Therefore, I sought after answers to the ensuing questions:

Research Question 1*:* What is the difference in FCAT 2.0 reading scores between Title I fifth grade students receiving researched-based practices for 3 consecutive years and Title I fifth grade students not receiving researched-based practices for 3 consecutive years, controlling for preexisting differences in reading achievement?

H_o1: There is no significant difference in FCAT 2.0 reading scores between Title I fifth grade students receiving researched-based practices for 3 consecutive years and Title I fifth grade students not receiving researched-based practices for 3 consecutive years.

H_a1: There is a significant difference in FCAT 2.0 reading scores between Title I fifth grade students receiving researched-based practices for 3 consecutive years and Title I fifth grade students not receiving researched-based practices for 3 consecutive years.

Research Question 2: What is the difference in FCAT 2.0 reading scores between Title I fourth grade students receiving research-based practice for 2 consecutive years and Title I fifth grade students not receiving researched-based practices for 2 consecutive years, controlling for preexisting differences in reading achievement?

H_o2: There is no significant difference in FCAT 2.0 reading scores between Title I fourth grade students receiving research-based practices for 2 consecutive years and Title I fourth grade students not receiving researched-based practices for 2 consecutive years.

H_a2: There is a significant difference in FCAT 2.0 reading scores significant relationship difference between Title I fourth grade students receiving research-based practices for 2 consecutive years and Title I fourth grade students not receiving researched-based practices for 2 consecutive years.

Research Question 3: What is the difference in FCAT 2.0 reading scores between Title I third grade students receiving research-based practice for 1 year and Title I third grade students not receiving researched-based practices for 1 year, controlling for preexisting differences in reading achievement?

H_o3: There is no significant difference in FCAT 2.0 reading scores between Title I third grade students receiving research-based practice for 1 year and Title I third grade students not receiving researched-based practices for 1 year.

H_a3: There is a significant difference in FCAT 2.0 reading scores between Title I third grade students receiving research-based practice for 1 year and Title I third grade students not receiving researched-based practices for 1 year.

A repeated-measure design with the ANCOVA test was used to determine if any variance occurred among the results of the FCAT 2.0 reading scores in fifth, fourth, and third grade. The independent variables were the use of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model of the research participants for a period of 3 consecutive years. To answer Research Question 1, participants' FCAT 2.0 reading scores of fifth grade students in control and treatment groups was compared. FCAT 2.0 reading scores of fifth grade was used as the dependent variable and FCAT 2.0 reading scores at the end of fourth grade was the covariate. To answer Research Question 2, participants' FCAT 2.0 reading scores of fourth grade students in control and treatment groups was compared. FCAT 2.0 reading scores of fourth grade was used as the dependent variable and FCAT 2.0 reading scores at end of third grade was the covariate. To answer Research Question 3, participants' FCAT 2.0 reading scores of third grade students in control and treatment groups was compared. FCAT 2.0 reading scores of third grade was used as the dependent variable and FAIR reading scores at the end of second grade was the covariate.

Two different assessments were used because the state department of education determined which tests were mandatory for assessing student achievement under the NCLB (2002). FCAT 2.0 reports the total reading percentage points of the raw-score, indicating the total number of points earned and points probable of each classification. A detailed test item specification chart was reported in the reading categories as well as a content focus chart performance index for each student for all tested benchmark items. Detailed explanations of the research method are provided in Section 3.

Purpose of the Study

In this quantitative study with a casual comparative design and a repeated measure approach I examined the impact researched-based practices have on Title I fifth grade students that received the researched-based practices for 3 consecutive years and Title I fifth grade students who did not receive the researched-based practices for 3 consecutive years with regard to their FCAT 2.*0* reading scores. The NCLB (2002) required that all children be evaluated with state and district assessments. Through this study, I revealed if the mandated implemented researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model increased, decreased, or had no effect on Title I fifth grade students' gains in reading as evidenced by FCAT 2.0 reading scores.

I tracked and collected data on fifth grade students in two Title I schools (treatment and control) to analyze and compare the results of their 2010/2011, 2011/2012, and 2012/2013 FCAT 2.0 reading scores. Both Title I schools are within the district with similar demographics. When data were collected, scores were analyzed using ANCOVA

to determine if any significant difference occurred on the impact of Title I students in fifth grade receiving researched-based practices such as PLCs, coteaching classrooms, and the RtI, three tiered model during their third through fifth grade years as evidenced by their FCAT 2.0 reading scores.

Reading is important to the lives of our children. It helps them do better in all of their subjects in school. With limited abilities to read, students will have less opportunity with jobs or college (Martella et al., 2009). Schools and educators should employ scientific methods of educating and preparing students to consent social transformation and create social changes that are positive for the good of society (Johnson, Musial, Hall, Gollnick, & Dupuis, 2008). This research may be used to help education stakeholders to narrow the achievement in reading gap among Title I students in fifth grade and their higher counterparts, ultimately leading to positive social change.

Theoretical Framework

The theoretical base of this research was the system theory approach, which related to this study through the acknowledgement that underlies the goals of both NCLB (2002) and the reauthorization of IDEA (2004) that it is important for schools to accomplish their mission of giving equal opportunity and adequate resources for all children to have academic success. Successful learning for Title 1 fifth grade students requires a consistent effort to administer the research-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model to close the reading achievement gap.

Gardner's (1999) multiple intelligences and Webb's (2002) depth of knowledge (DOK) were used as foundations of my theoretical framework because Gardner dealt with cognitive learning and a concept of learning based on addressing multiple levels of the students cognitive learning and Webb's DOK dealt with a concept of learning based on addressing multiple levels of students' cognitive complexity theory of higher-level thinking.

The researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model are supported by these two theories through planning, collaboration, instruction, and assessment. The researched-based practices are also supported by Gardner's (2000) theory of multiple intelligences and Webb's (2002) DOK by varying both the approach and the pace, and offering an assortment of ways to engage the learner. Besides increasing the interest level, using a variety of intelligences and higher-order questioning activates more parts of the brain and facilitates learning.

Gardner's (1999) multiple intelligence theory originally formulated a list of seven intelligences. Gardner stated, "the first two have been normally valued in schools; the next three are usually associated with the arts; and the final two are personal intelligences" (p. 41). Gardner's (2000) theory of multiple intelligence consisted of seven intelligences: "bodily-kinesthetic intelligence, interpersonal intelligence, intrapersonal intelligence, linguistic intelligence, logical-mathematical intelligence, musical intelligence, and spatial intelligence" (p. 42-43).

A critical challenge for schools is to be a place that offers all children the chance for a quality education where they should be equipped for all opportunities that our world

has to offer (Reimers, 2008). Azzam (2008) further elaborated that with NCLB (2002), the law makes it difficult for Title I funded schools to recruit and retain good teachers thus making it hard for low SES students to receive a quality education. When there is a school that has dedicated and skilled teachers who care for their students and gives them access to knowledge, they will achieve extraordinary results (Chenoweth, 2007).

Webb's (2002) DOK framework addresses cognitive complexity. Engaging children's higher-level intellectual talents required districts to amend their curriculum and benchmark assessment questions to incorporate Webb's formulated model, the DOK (as cited in Hess, Jones, Carlock, & Walkup, 2009). The four DOK levels of mental difficulty, embodied within assessment items and standards form an essential component of alignment analysis:

- DOK-1: Recall and the response are automatic.
- DOK-2: Activities are more complex and requires the engagement of mental processing.
- DOK-3: Activities requires higher cognitive demands than DOK 1 and DOK 2.
- DOK-4: The demonstration of reasoning, planning, and developing connections within and above the content areas.

The four DOK levels act as a conduit in which to teach cognitively innovative levels as a vital part of the grade level curriculum; they can also effectively examine content standards and assessments at the state level (Hess et al., 2009). Instilling a thorough and cognitively demanding curriculum requires planning, executing lessons, and strategic questioning strategies focused on well-crafted selection of grouping

practices. Finding solutions to multifaceted problems allows low SES students to internalize the process by making connections to others more knowledgeable in navigating through cognitively complex tasks (Walqui, 2008). Not every student performs alike at higher cognitive tasks; however, these students contribute in additional ways when assisting in group projects while learning from their classmates. Teachers should guide students and encourage progress in becoming independent and critical thinkers. Teachers must have a clear understanding of their role at each level of Webb's (2002) DOK and plan the best delivery of strategies. Consequently, teachers' lesson plans must undoubtedly demonstrate learning goals, essential questions, and assessment strategies they intend to employ during their instruction and at each DOK level.

Students from low SES backgrounds are often characterized as having poor self-concepts, poor academic performance, low goals, and inadequate goals for the future (Dunn, Chambers, & Rabren, 2004) and a greater inability to demonstrate sustained attention (Farver, Xu, Eppe, & Lonigan, 2006; Schneider & Eisenberg, 2006). With the new stimulus package and platforms such as Race to the Top, Investing in Innovation, and School Improvement Grants, the new federal policy now focuses on teacher effectiveness rather than quality.

Teacher quality is how well teachers know their content area and teacher effectiveness is based on their students' performance (Stumbo & McWalters, 2011). Additionally, based on researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model, another area that has an impact on low SES students closing the achievement gap is critical when examining teacher performance. Currently,

NCLB (2002) requires educators to improve the student achievement of all types of learners.

When investigating the impact that research-based practices have on student achievement, teachers are expected to assist a greater range of learners reach higher levels of performance (Ball & Forzani, 2011). It is reasonable to conclude that research-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for Title I fifth grade students for 3 consecutive years may have a direct effect on Title I funded schools meeting AYP and closing the achievement gap. However, limited research exists to document this relationship.

As discussed in this subsection, researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model were rooted in multiple intelligences and Webb's (2002) DOK. Researchers have suggested that implementing the principles of these two theories would assist Title I schools to close the achievement gap (Carwile, 2007; Chenoweth, 2007; Stumbo & McWalters, 2011). In this study, I tested such suggestions by examining the effect of research-based practices, PLCs, coteaching classrooms, and the RtI three-tiered model grounded in these two theories on Title I students in fifth grade reading success as evidenced by FCAT 2.0 reading scores.

Definitions of Terms

Adequate Yearly Progress (AYP): A state's measure of individual schools holding accountable the progress of achievement on standardized state-based assessments in reading, math, and science. Additionally, it refers to the least level of proficiency that the

schools, school districts, and state must attain on annual tests each school year (U.S. Department of Education, 2009a).

Coteaching: Coteaching consists of a teacher in general education and a teacher in special education specialized in content and learning strategies who work together to teach a fully inclusive classroom (McDuffie, Mastropieri, & Scruggs, 2009; Scheeler, Congdon, & Stansbery, 2010; Sileo & van Garderen, 2010).

Developmental Scale Score: A score that is a measure of student learning as a student moves from one grade level to the next (Florida Department of Education, 2010).

Differentiation: The requirement of educators modifying the curriculum, learning strategies, and educational practices to meet the differences of each student's learning experiences. Differentiation is a refinement of, not a substitute for, high quality curriculum and instruction (Hall, Strangman, & Meyer, 2011; Tomlinson & Imbeau, 2010).

Florida Assessment for Instruction in Reading (FAIR): A K-12 assessment system that provides essential guided instruction for teachers from screening, diagnostic, and progress monitoring of students (U.S. Department of Education, 2009a).

Florida Comprehensive Achievement Test (FCAT 2.0): The state's annual test of student achievement that is given to Grades 3 to 11 students in Florida. The FCAT 2.0 assesses children's achievement in the content areas of reading, mathematics, science, and writing of the NGSSS (Florida Department of Education, 2005b).

Learning disability: Tested difficulties in reading, writing, math skills, and expressing self (Horowitz, 2011).

Low socioeconomic status: Based on students who have free or reduced lunch as outlined by federal guidelines. Factors that influence families of low socio-economic status are income, educational level, occupation, and social status in the community (Wisconsin Department of Public Instruction, 2009).

Multiple intelligences: The way individuals learn to solve problems or create products based upon their individual intelligence type (Gardner, 1993).

No Child Left Behind (NCLB): Enacted in 2002 to upkeep standards-based education reform to set high standards and establish calculable goals, which can increase student achievement results in education. If states are receiving federal funds for schools, they are mandated to develop assessments in basic skills at identified particular grade levels (NCLB, 2002).

No Child Left Behind (NCLB) school choice: Refers to institutes that accept federal Title I monies that did not make state-defined AYP for 2 sequential school years and are now designated as needing improvement. Students in these identified schools can make the choice to relocate to another public school and the school district is required to provide the transportation (NCLB, 2002).

Response to intervention (RtI) three-tiered model: Academic and behavioral interventions created to deliver on-going monitoring of struggling students to measure student response and progress (National Dissemination Center for Children with Disabilities, 2012). At-risk students are monitored for student progress, identified for poor learning outcomes; and provided interventions that are researched-based. The type

and number of those interventions are adjusted to meet students' responsiveness, which will categorize students with learning disabilities or other disabilities (Wright, 2007).

RTI tiered system: A tiered approach to identify and assist students with knowledge and behavioral essentials (RTI Action Network, 2012).

Theory of multiple intelligences: Students learning in many different ways, and through various modalities based on the premise that all learners have strengths and weaknesses (Gardner, 2004).

Title I: Funding authorized under the Elementary and Secondary Education Act (ESEA) provision that every child has an unbiased, equitable, and substantial chance to acquire a stellar education (U.S. Department of Education, 2009b).

Assumptions

Four assumptions were evident in this study. The first assumption was that Title I students in third grade receive research-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years. I assumed that the researched-based practices have been implemented consistently for 3 consecutive years. The Title I school consulted regularly with the district's specialists in the areas of PLCs, coteaching, and the RtI three-tiered model to provide training for the teachers involved and to improve their program.

The second assumption was that the administration and staff performed their responsibilities according to the implementation of the researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model. The Title I school

administration and staff were trained by the district's specialists in each of the three researched-based practices.

The third assumption was that the FAIR reading comprehension test and FCAT 2.0 reading test scores were consistent and valid indicators of student academic achievement in reading. The district uses the FAIR reading comprehension test to evaluate student progress in reading as well as how well a student will do on the FCAT 2.0 reading test. The FAIR reading comprehension test and FCAT 2.0 reading test is the state's recommended student reading assessment for progress monitoring and academic achievement.

The fourth assumption was that each second grade teacher administered the FAIR reading comprehension test and Grades 3 through 5 administered the FCAT 2.0 reading test in the same manner as trained. Without this assumption, differences in FCAT 2.0 reading scores may be biased by the teachers' methods of administering the state assessment, and FCAT 2.0 reading scores could not be attributed to the researched-based practices.

Limitations

The sample size was derived from a certain demographic population that could have limited the generalization to populations in areas with similar situations. The sample for the treatment group included the entire Title I school population of fifth grade students who used researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years from 2010 to 2013. The sample for the control group was taken from a Title I school population of fifth grade students who did

not receive the researched-based practices for 3 consecutive years. This limits the generalization of the research findings. This study was exclusive to third, fourth, and fifth grade classes of Title I students continuously enrolled at the study sites during the school years of 2010/2011, 2011/2012, and 2012/2013.

A limitation is that as research has shown, productive coteaching takes time to implement (Cramer, Nevin, Thousand, & Liston, 2006). The research was limited to study the impact of the researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model on FCAT 2.0 reading scores of the participated Title I schools.

Scope and Delimitations

The research site was restricted to a southeast school district of the United States involving two Title I schools for this study. The study was confined to analyzing 2010 FAIR reading comprehension test results and 2010/2011, 2011/2012, and 2012/2013 FCAT 2.0 reading scores to determine the impact of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model implemented for 3 consecutive years on Title I fifth grade students' reading achievement.

Considering researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model is still in the early stages of becoming part of the school culture, a threat to validity could exist. Methods may not be within the researched standards of researched-based practices due to limited professional staff development training. Therefore, the study focus would be on how the implementation of the

researched-based practices affected Title I fifth grade students reading achievement from the treatment school as evidenced by FCAT 2.0 reading scores during the study period.

Possible Biases

The role I played as an educator in the same Title I school district as the treatment school could have influenced the actions of the fifth grade teachers. However, students were not informed about the study until after their experiences in the researched-based practices occurred. The role that I played as a researcher in the same school district as the treatment school did not have any impact on the researched-based practices being implemented. The role I played as a researcher and administrator in the same Title I school district did not have any impact on the students at the control school. The data from the FAIR reading comprehension test and FCAT 2.0 reading test already existed for these participants in the treatment and control study school system during the time data was approved for collection.

Significance of the Study

As districts and Title I schools decide whether to implement researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model, they need more than logistical evidence, and this study could provide statistical evidence as to whether researched-based practices can improve student performance in reading as evidence by the FCAT 2.0 reading test. This study affects the educational community by providing evidence about the benefits of implementing researched-based practices for student achievement in reading. Title I schools will be able to see if the implementation of the researched-based practices impacted the Title I students' performances in fifth

grade and if any effects carried through from their third grade and fourth grade experiences.

From these results, Title I schools would be able to change, discard, or maintain their current methods with less worry since the students were compared to a parallel control school not requiring the implementation of researched-based practices for 3 consecutive years. Students at the treatment school may have benefited directly by researched-based practices being examined to close the reading achievement gap as evidenced by FCAT 2.0 reading scores.

This research study supports positive social change by providing improvements in educational systems that could be enacted by this study. This study may help to improve efforts at other schools with similar student demographics and researched-based practices by establishing a ground work of efficacy for Title I schools. Positive study findings may encourage school districts to implement these researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model that have not been either mandated or implemented due to safeguarded idle practices. The study revealed encouraging results, which will have the influence to help Title I schools realize all children can learn so no one is left behind (NCLB, 2002). If the study did not show a difference between the two groups, educators could find an evidence/empirical clue to revise the researched-based practices to make them more effective. Creating a lasting positive social change involves building strong cultures that engage educational professionals with their colleagues and communities.

Finally, researchers will have more evidence that may be generalized to other samples with similar demographics, grade levels, and a similar implementation of researched-based practices. As indicated by Marshall (1996), choosing a study sample is a significant step in any research study since it is not often practical, resourceful, or ethical to study whole populations. Ultimately, staff professional development opportunities may be conducted to help direct implementation processes and transitions to researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model.

Summary

Researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model was mandated and implemented for the first time into a Title I school in the southeast of the United States. Concerns about the effectiveness of the researched-based practices was questioned at the treatment school. A quantitative casual comparative study and a repeated measure ANCOVA test was used to check the effectiveness of the research-based practices implemented three consecutive years to Title I fifth grade students on their FCAT 2.0 reading scores. A substantial difference in the low SES students' test scores in reading was sought by tracking the same unidentified students from third grade, fourth grade, and fifth grade in the treatment and control Title I schools. The outcome results, whether positive or negative, have the potential to lead to social change by providing results that encouraged administration at other Title I elementary schools of similar demographics to use researched-based practices in order to reach each individual students while closing the reading achievement gap.

Positive results may reveal whether the researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model were effective and could motivate Title I schools to continue to implement the practices. Negative or nonsignificant results may allow Title I schools to make adjustments to the current methods for improving students' reading achievement.

In continuing sections, additional research was provided to assist in the study of research-based practices, PLCs, coteaching classrooms, and the RtI three-tiered model as well as, multiple intelligence theories and Webb's (2002) DOK used in Title I schools to close the reading achievement gap as evidenced by FCAT 2.0 reading scores. In Section 2 of the study, I focus on significant literature on researched-based practices such as PLCs, a coteaching model, and the RtI, theories related to the researched-based practices, multiple intelligence theories, Webb's (2002) DOK, research variables, method literature review, and use of differing methodologies. Section 3 addresses outlining key parts of the study method, the research design and approach, setting and sample, data, participants, describing researched-based practices treatment, instrumentation, materials used, data collection, data analysis, participant's rights, and the researcher's roles.

Section 2: Literature Review

Introduction

In this section, the research and literature review are summarized to relate to the implementation of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model and its impact on Title I fifth grade students reading success as evidenced by FCAT 2.0 reading scores. An inclusive literature review is included to accomplish this purpose. The literature search comprised of department of education websites, scholarly journals, articles, books, and dissertations that were available via online libraries at Walden University. Online databases such as Advanced Scholar Research, ProQuest, ERIC, and EBSCO Host were searched for relevant literature. Key terms researched included *professional learning communities, coteaching model, the response to intervention, school readiness, school leadership, multiple intelligences,* and *Webb's depth of knowledge*. Saturation of the articles was achieved through keywords.

Information was accessible from professional journals and peer-reviewed articles to contribute to various viewpoints and to reinforce the method used (quantitative casual comparative) for this study, but not all information was applicable to this particular study. Saturation was reached in the literature review, with less than 50 to 75 current peer-reviewed articles found and cited in this literature review. The number of articles used in this study constitutes saturation on the topic being examined. Information was selected for sources that added to the field of knowledge for educators who are being faced with comparable implementation of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years. In addition, sources

were selected by the relevancy of historical background to educational processes and recent research pertinent to the focus topic. The review provided literature based dialogue related to the introduction, comparable empirical studies, theories related to researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model, systems, school readiness, school leadership, multiple intelligences, Webb's (2002) DOK, research variables, method literature review, use of differing methodologies, and a summary.

Title I schools in the United States supplement state and local allocations for low SES schools at all levels. Title I schools continue to have difficulty closing the achievement gap due to learning disabilities, gender, race, and SES (Wagner, 2005). Moreover, there has been little observed research performed to show if research-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for Title I fifth grade students has significant impacts to attain AYP as evidenced on FCAT 2.0 reading scores.

Review of Related Research and Literature

Through reviewing related research and literature, I established data that are important for gaining insight into low SES fifth grade students' academic performance in order to improve educational experiences for their needs and instructional planning. The literature review presented in this section includes studies and articles that focused on attaining reading achievement gains for the low SES subgroup of students. The review focuses on three research-based practices: (a) PLCs, (b) coteaching classrooms, and (c) the RtI three-tiered model. Each of these three research-based practices were reviewed

with emphasis on the significance of implementation for Title I students in Grades 3 to 5 reading achievement as evidenced by FCAT 2.0 reading scores.

Numerous researchers (Allington, 2009; Barth, 2006; Johnston, 2010; Kohler-Evans, 2006; Mesmer & Mesmer, 2008) have shown learning capacities to be improved by a variety of methods of implementing researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model in the treatment school. However, the results of these comparable empirical studies may not be applicable to the particular researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model implemented in the treatment school due to the demographics of the Title I fifth grade students and the nature of the implemented researched-based practices in the treatment school.

On the other hand, the correlation between research-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model to meet AYP and close the reading achievement gap as evidenced by FCAT 2.0 reading scores for Title I fifth grade students was determined. Title I schools that do not meet or achieve AYP for 2 sequential years were categorized as "schools in need of improvement" and remain under immediate subjection to interventions by the Florida Department of Education (U.S. Department of Education, 2009a).

Professional Learning Communities

PLCs can help increase leadership capacity, increase student academic performance, increase teacher collaboration and effectiveness, implant professional staff development in daily lessons, create a school culture that is positive, and improve

accountability (Eaker & Keating, 2009; Garrett, 2010). PLCs also address how to manage conflict that arises, help problem-solving creativity, challenge present systems with courage, and challenge ways of thinking when necessary (Hord & Sommers, 2008). From the literature, PLCs has much potential in ensuring that all students prosper and that schools become institutions dedicated to student learning and collaboration among faculty (Hord, 2009). Teachers share experiences and improve the school's effectiveness through dialogue and professional collaboration. The term PLC emerged from educational research and theory (Dufour, Dufour, & Eaker, 2008). In a PLC, learning by doing is the focus. DuFour et al., (2008) defined PLCs as "educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve" (p. 4). The PLCs can be used to explain and discuss new techniques or initiatives in the classroom. According to Marzano (2003), to provide teachers participation in decision making, defining norms, and creating a professional culture, schools should take a proactive approach to create governance procedures.

PLCs are a culture in which collaboration between all staff involved is the norm. Collaborative networking of veteran teachers dedicated to the academic achievements of all students and to the professional development of new teachers is provided through PLCs (Slavit, Kennendy, Lean, Nelson, & Deuel, 2011). The value of a community of practice serves to promote purposeful dialogue for collaborative learning, builds enduring relationships with colleagues, serves to decrease teacher isolation, endorses a shared belief system about students, creates a community of respect for parents and teachers, and

affords professional learning for personal growth and student achievement. Dewey (2010) acknowledged, "whether we permit chance environments to do the work, or whether we design environments for the purpose makes a difference" (p. 22). Barth (2006) declared, "a precondition for doing anything to strengthen our practice and improve a school is the existence of a collegial culture in which professionals talk about practice, share their craft knowledge, and observe and root for the success of one another" (p. 13). School-based leadership shapes the organizational culture and provides the critical leadership constructs that sustain PLCs.

Creating lasting change involves building strong cultures that engage educational professionals with their colleagues and communities. Hawley and Rollie (2007) stated a "compelling body of evidence suggests that pupils benefit when teachers in a school form a 'professional learning' sub-community" (p. 107). There is a belief that people are more likely to support school improvement and the importance of building a PLC within a school, as well as joining with others, groups can accomplish more than individuals can do alone (McLaughlin & Talbert, 2006). The National Staff Development Council documented the importance of PLCs in the standards they developed. PLCs are distinctively addressed in one standard to improve learning for every student, which arranges adults into a community of learners whose goals are cohesive with what is expected in that school district (NSDC, 2001). The position of the educational leader has been characterized as leading the PLCs and has called on the educators in its membership to develop, implement, and maintain PLCs as a key approach to improving children's success (The National Association of Secondary Principals, 2004). Success for students

and professional development for teachers are anticipated outcomes for any initiatives, and PLCs provide both when effectively and fully implemented (Linder, Post, & Calabrese, 2012).

Coteaching Classrooms

The directives of the NCLB (2002) establish goals and high standards and accountability for all children. The reauthorization of IDEA (2004) caused schools to focus on teaching children in the general education classroom who have special needs while holding every student accountable for their learning (National Education Association [NEA], 2010). IDEA is significant because it requires that children with infirmities be considered for placement in a regular classroom setting first, and a special education placement second (Conderman & Johnston-Rodriguez, 2009). In a study conducted by Nichols, Dowdy, and Nichols (2010), they advised that in order to meet the requirements of NCLB 2002, schools are implementing the coteaching model to fulfill the requirement of a highly qualified teacher providing instruction.

In the state of this study, Title I schools' low socioeconomic subgroup of students are usually in both categories for the AYP status for Exceptional Student Education (ESE) and English Language Learners (ELL). Allowing ESE teachers to collaborate with highly qualified content teachers (the general educators), is coteaching in an inclusive classroom, which subsequently places a highly qualified teacher in every classroom (Bouck, 2007). Three delivery models used for servicing these subgroups of students are: (a) pull-out programs, (b) consulting services, and (c) coteaching classrooms. Pull-out programs are the most common type of service given to special education students and

ELL students. Good coteaching is not one teacher and an assistant in the classroom; it encompasses two teachers dynamically teaching together and observing all students (Ploessl, Rock, Schoenfeld, & Blanks, 2010). In this process, co-teaching can be referred to as collaborative teaching or team teaching.

A co-teaching classroom entails two teachers, one general education teacher and one ESE teacher. Both are together in a classroom, teaching special needs children within the general population (Gurgur & Uzuner, 2010). Coteaching involves the general educator as the facilitator of the content while the special educator facilitates the learning process by creating proper learning modifications and accommodations to the content for ESE students (Scheeler et al., 2010; Sileo & van Garderen, 2010). Students are not being pulled out from their general education classroom for a minimum time to work on academic and social skills with an ESE teacher. Consulting services are the regular education teacher and the ESE teacher collaborating to design effective interventions or strategies for students receiving minimal ESE and ELL services in the general education class.

Coteaching started back in the 1960s. During the last 15 years the application of this delivery model has significantly grown with trends that specify that this could be the replacement of the ESE Resource room (Villa, Thousand, & Nevin, 2008). In the classrooms where coteaching takes place, teachers share responsibilities to more effectively solve the different emerging problems and work with more thoroughness. In the United States, nearly half of all ESE students are learning in regular classrooms for more than half of their day in school (Sileo & van Garderen, 2010). The basic definition

of coteaching is two qualified teachers sharing instructional responsibilities (Friend & Hurley-Chamberlain, 2007; Jones, Michael, Mandala, & Colachico, 2008; Murawski, 2008; York-Barr, Ghere, & Sommerness, 2007). The collaboration between regular education teachers and ESE teachers is a co-teaching service delivery model that is effective in strategies for meeting the diverse requirements of all children in that classroom. The reasoning behind this form of coteaching is that regular education teachers are content specialists and ESE teachers are learning specialists; together these teachers can serve classrooms of diverse students (Wilson & Michaels, 2006). Both teachers are responsible for facilitating the learning process in that classroom. Students with IEPs receive specialized teaching and related assistants in the regular classroom.

Through expectations of standardized test scores for all students, change is evitable. General education teachers must understand that because of the NCLB (2002), ESE and ELL students are probable to be included in the regular classes. Most general educators are not comfortable with meeting specific academic, behavioral, and emotional goals of the special education students and ELL students. With that in mind, it is important that the teacher in the general class be proactive and establish a rapport with an ESE teacher to deliver the diverse requirements of children receiving ESE services in their regular education classroom. In this coteaching classroom model, the special education teacher can still focus on assisting students with disabilities achieve their Individualized Education Program (IEP) goals (Kloo & Zigmond, 2008).

Successful coteaching classrooms are ones in which the number of students with disabilities is the same as the average in societal settings. Walther-Thomas (1997)

evaluated coteaching classrooms across eight school districts in 23 schools. The positive outcomes of the coteaching classrooms that were observed were increased academic performance and social skills of low-achieving students, improved student attitudes and self-concepts, and more positive relationships with special needs students and their peers. Coteaching encompasses both a regular and ESE teacher who work in partnership, teach a heterogeneous cluster of pupils, and meet the challenges of all learners (Gal, Schreur, & Engel-Yeger, 2010; Murawski, 2008). For coteaching to be effective, there should be three levels of planning issues–district, building, and classroom. Each of these three levels should ensure financial commitment, sufficient planning, and communication through staff development, recruiting willing and qualified teachers, and planning schedules.

Although the impact is still uncertain on student outcomes with co-teaching (Magiera & Zigmond, 2005; Weiss, 2004), coteaching proponents dispute that it successfully operates the precise and distinctive expertise of every teacher (Jitendra, Edwards, Choutka & Treadway, 2002). However, little research exists to support whether co-teaching actually improves student academic performance (McDuffie et al., 2009; Scheeler et al., 2010). Many researchers discuss the benefits of coteaching, though there are some limitations, and research must continue (Volonino & Zigmond, 2007).

Studies have revealed coteaching has a progressive social outcome on students by promoting social competence and social acceptance (Murawski & Hughes, 2009; Sileo & van Garderen, 2010; Tannock, 2009). Coteaching has the potential to be a solution to the

problem of teachers in general education lacking the necessary skills to educate special needs children.

Response to Intervention Three-Tiered Model

The RtI three-tiered model was introduced by the reactivation of IDEA (2004). IDEA also guarantees early intervention with all at-risk students that may fail in school and permits 15% of all special education monies used in all districts, be used in intervention activities (Simmons et al., 2009).

The history of the RTI has its beginnings in multiple research areas that include applied behavior analysis, curriculum-based measurements, and effective teaching (VanDerHeyden, 2012). The goal of the RtI three-tiered model is to decrease the number of ESE referrals by keeping all students moving along successfully in their general education classroom (Hamilton, 2010; Kavale, Kauffman, Bachmeier, & Lefever, 2008; Mellard, Frey, & Woods, 2012). The generally accepted RTI model is a three-tiered model that provides instruction that matches student needs and evidenced based decisions on student's response to intervention (Bryant, 2012). This multi-tiered framework is the foundation of RtI (Buffum, Mattos, & Weber, 2010; Hoover & Patton, 2008).

The RTI is a system of active evaluation, due to its dependent on the change in the level of the pupil's learning progress (Bryant, 2008). The RTI three-tiered model process uses data to make decisions instead of depending on random methods (Wannemuehler, 2010). The RtI three-tiered model is an instrument that can be used to support all students to be proficient on grade level with their peers through evidence-based interventions (Courtade, G., Servilio, K., Ludlow, B., & Anderson, K, 2010).

Researchers have described this three-tiered model as a triage approach (Scott & Kamps, 2007). Triage is defined as using tiers or a series of levels to prioritize interventions (Campbell & Anketell, 2007). RtI three-tiered model requires that teachers collect ongoing student data for improvement. The referral process, as regular education teachers currently comprehend it, makes it obsolete (Brown-Chidsey & Steege, 2005). Four main parts to teacher collaboration are essential for the RtI three-tiered model to be successful; (a) distributed leadership, (b) new roles and tasks, (c) teamwork, and (d) communication (Brown-Chidsey, Bronaugh, & McGraw 2009). For the RtI three-tiered model to be effective for students, it requires that all teachers work together and share common values. There are three RtI models: (a) the intervention based assessment in Ohio (Vaughn & Fuchs, 2003), (b) the instructional support team in Pennsylvania (O'Conner, Harty, & Fulmer 2005), and (c) the Minneapolis three-tiered model (Marston, Muyskens, Lau, & Canter, 2003). Of the three representations, the RtI three-tiered model is the closest replica to the RtI model recommended in IDEA (2004). The RtI three-tiered model is used by the treatment school to use a multi-tier method to focus on excellence in teaching and offer timely interventions that would provide more rigor in instructive resources for students as they progress through the intervention continuum (Bender, 2009). Since a need to continually analyze low SES student achievement was necessary, the RtI three-tiered model plan was mandated to be implemented at the treatment school beginning in the 2010 to 2011 school year.

The RtI three-tiered model involves the application of required steps student interventions through early detection (Hoover & Love, 2011). The RtI three-tiered model

helps teachers recognize how different students can be supported in different ways to improve their performance (Bursuck & Blanks, 2010; O'Donnell & Miller, 2011). As a result, educators are required to observe student growth using statistics and innovative strategies to create wise decisions when delivering instruction (Lingo, Barton-Arwood, & Jolivette, 2011). The RtI three-tiered pyramid model was devised to be separated into three main tiers. Moving students among the three-tiers is a self-motivated progression where pupils enter and exit intervention based on the outcome of their benchmark assessments (Kalberg, Lane, & Menzies, 2010).

Tier 1 deals with the whole classroom core reading instruction with the teacher. All students participate in this tier, which gives students a balanced approach to reading (Gersten & Dimino, 2006). Tier 2 deals with small groups of similar leveled students that receive 30 minutes of extra intervention in the classroom. Tier 3 deals with individual students for an extra 45 minutes of instruction outside of the core reading program, with whom the first two tiers did not work. The students in Tier 3 are often students who did not progress during the interventions in Tier 2 and are at risk of becoming special education students (McKenzie, 2009; Stewart, Benner, Martella, & Marchand-Martella, 2007). Intensive intervention services more frequently are developed to Tier 3 students' level of learning during small groups. These small group services will be received from resource teachers.

New roles and responsibilities require that there is not one RtI leader in charge; everyone in this process has a defined role to play. General education teachers now have increased responsibility and must make changes in instruction and data collection as a

result of RTI (Benjamin, 2011). At every level, the RtI three-tiered model needs all teachers to think differently about their work. Teachers have usually been isolated in their classroom and there was no collaboration within each grade level or school wide (Spring, 2007). The collaboration in RtI three-tiered model requires shared work. Every teacher is unique and should be permitted to teach each unique student with teaching methods that are effective for the individual teacher (Gregory & Chapman, 2002). Teachers are willing to work together to help students succeed in the classroom. Collaboration requires time and time needs to be provided for grade level instructors to work together weekly to look at progress data of their students.

The RtI three-tiered model also requires effective communication among staff members so that the right information is communicated to the people who need it in a timely fashion. Communication ensures that the individual student data collected will follow that individual student across the tiers of services provided (Brown-Chidsey et al., 2009). Determining the process of which learners are exposed to risk requires that school leaders and teachers communicate with each other during PLCs.

Achievement Gap

The achievement gap is referred to the persistent inequality on a number of educational measures involving the performance of groups of students defined by low SES status. NCLB set standards for schools and required states to work toward closing the achievement gap (Braun, Chapman, & Vezzu, 2010). Student's closing the achievement gap or not can be observed on a selection of academic assessments, including standardized test scores. Most would agree that the achievement gap is a

multifaceted problem (Olszewski-Kubilius, 2006; Paige & Witty, 2010). Studies and statistics have confirmed the connection amongst low achievement and low SES.

Low SES students' achievement gap is present at the start of school. Students of poverty have a harder time learning to read due to their starting school with lesser beginning reading skills compared to middle income families (Gettinger & Stoiber, 2007). This was examined by looking at the overall poverty percentage of the school and if the pass rate of the students changed based on low SES status of the institute.

The need for early literacy experiences has also been associated to low SES and reading success (Noble, Farah, & McCandliss, 2006). At the beginning of kindergarten, good predictors of children's reading abilities throughout their school years are initial reading abilities such as letter recognition, understanding letter and sound relationships, and vocabulary. Developing children language and literacy skills requires cognitive skills and knowledge for them to interact effectively with their peers and adults. Although we have concentrated more current research on dealing with the learning gaps between Caucasian, African-American, and Hispanic learners in the last quarter century, we have made little progress in closing the gaps (Flores, 2007; Konstantopoulos, 2008). Families and communities play significant roles in helping low SES students prepare for school.

Achievement gaps are often seen more in schools located in low-income and urban areas (Paige & Witty, 2010). Children from economically secure families are more probable to prosper in school. Communities are assisting with the well-being of children when they make social provision for parents, learning opportunities for children, and services for families in need available for them. Researchers have found that Caucasian

parents and those with higher levels of education were actively engaged with their child's learning and these students' usually had higher academic achievement (Crosnoe et al., 2010). When parents and families surround their children with love, support, and opportunities to learn, students of low SES will begin school ready to learn.

When school's embraces cultural and language backgrounds of families and students, that's when school readiness is effective. We know more today than previous years about how children develop and how to support their learning. The strongest effects of quality researched-based practices are found with children from homes under social and economic stress and with the fewest resources.

School Leadership

The challenges and complexities surrounding school's implementing researched-based practices with fidelity have played a role in influencing school leadership practices. To overcome the challenges of Title 1 schools decreasing the gap of learning requires a broader commitment to leadership throughout the organization. Researchers have also suggested that there is a linking between school leadership behaviors consistent with the five characteristics of PLCs and student achievement (DuFour et al., 2008; Powell & Powell, 2009; Saban & Wolfe, 2009). The five characteristics are (a) shared vision, (b) shared leadership, (c) collaboration, (d) collective inquiry, and (e) results oriented, also known as reflection. It is alleged that when school leadership encourages these behaviors, the conditions exist for a school to develop and sustain a PLC. Connolly (2008) argued that educational leaders make tough decisions; they constantly use sound judgment each day in the schools. Leadership must have a vision for the organization and a strong

support force to achieve the vision. As Leithwood and Jantzi (2007) wrote, "School leadership must acknowledge the importance of situation and context . . . allowing for variation in leadership style and forms of enactment" (p. 148). Leithwood and Jantzi (2007) believed transformational leadership is the best form to use at this time in education. Transformational leadership includes; (a) developing a vision, (b) nurturing approval of group aims, (c) providing academic stimulus, (d) providing support, (e) monitoring expectations, and (f) setting an example.

The phrase leader and leadership have frequently been interchanged. By defining and integrating the terms leadership and leader into one person, it relinquishes a dominant perception to the limitations of the person (Davies, 2005). Through PLCs, leadership teams work together in order to produce a vision and environment for educators to reach their highest potential (Semadeni, 2010; Shaw, 2009). True leader makes sure the community they are leading has everything they need to get the job expected done.

Effective leaders are people-centered and able to combine an ethical purpose to encourage collaboration with a willingness to be collaborative among all stakeholders through PLCs. They must establish relationships inside their team and build their community through developing and involving others. Goleman, Boyatzis, and Mckee (2004) described six styles of leadership; (a) the visionary leader - pushing his employees in the direction of a mutual vision, (b) the coaching leader - delegates assignments, (c) the affiliative leader – creates coherence within the group, (d) the democratic leader – listens to both sides before making a decision, (e) the pace-setting leader – expects excellence, and (f) the commanding leader – gives clear directions to the organization.

No one style of leadership is appropriate for every situation. The most effective style depends on the situation. Sergiovanni (2005) believed that leadership is adding values and ethics to management. Leadership practice is apprehensive with what is effective and what is good; what works as compared to what makes sense; and doing things right as compared to doing right things.

Educational leaders must devise systems that equip and support teachers with proficient skills so they can address the requirements of all students while maintaining rigorous expectations in the classroom (Lambert et al., 2002). The era of accountability in education is intense as leaders move quickly to determine necessary steps to take to improve teaching and learning. Expanding leadership in school organizations has led to increased student achievement, improved teacher growth, morale, and retention (Heck & Hallinger, 2010).

Leaders that strive to affect social change are met with many challenges from access, to demonstrating progress in the wake of standardized testing. Lambert et al., (2002), suggested that among all the other challenges that leaders face, leaders must develop the ability to self-monitor their work and build connections within the school and in the community. When challenges are evident, one individual alone cannot productively affect change without including all of the stakeholders. School leaders must extend leadership and increase the level of leadership capacity throughout the organization (Kets De Vries & Korotov, 2010).

Building a system of accountability is also a leadership challenge leaders face. A leader who can sustain collaborative relationships within the school and community can

establish a proficient school, which is accountable for the learning and success of its students (Lindsey, Roberts & Campbell-Jones, 2005). In the wake of standardized testing, not only are the students held accountable for the learning, staff, teachers, and parents have to hold some accountability for the success of the school and the child.

Theoretical Framework

The theoretical base of this research is the system theory approach, which relates to this study through the acknowledgement that underlies the goals of both NCLB (2002) and the reauthorization of IDEA (2004) that it is important for schools to accomplish their mission that every child can learn if they are given equal opportunity and adequate resources to do so. Successful learning for Title I fifth grade students requires a consistent effort to administer the research-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model to close the reading achievement gap.

Gardner's (1999) multiple intelligences theory and Webb's (2002) DOK were used as foundations of my theoretical framework because Gardner dealt with cognitive learning and a concept of learning based on addressing multiple levels of the students cognitive learning and Webb's DOK deals with a concept of learning based on addressing multiple levels of students' cognitive complexity theory of higher-level thinking.

Multiple Intelligences

Researched-based practices fit into several theoretical frameworks. One of these frameworks was multiple intelligences. The reason for selecting multiple intelligences as one theory related researched-based practices was due to the implementation processes

used by the treatment school. The treatment school district mandated researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for low SES fifth grade students by utilizing Gardner's (1999) multiple intelligences.

Viewing Gardner's (1999) multiple intelligences theory, all students fit into multiple intelligences at some point throughout their school years. Gardner accepted the belief that culture also plays a role in multiple intelligences, realizing that humans are not basically beings of nature or nurture (Brualdi, 1998). Binet's intelligence quotient (IQ) test was the traditional form of measuring intelligences until Gardner formulated the multiple intelligence theory. Binet developed the first IQ test in 1905 (Lemann, 1999). The main purpose for the IQ test that was developed by Binet was to track students and then assessing who needed extra assistance.

To encourage learning across student intelligences profiles, teachers need to recommend activities to students, in which they can engage with materials personally. In today's educational setting with student's multiple intelligences and different learning styles that fabricate active learners, will reflect increased standardized test scores and enhance student's self-efficacy (Moran, Komhaber, & Gardner, 2006). Gardner's (1993) theory of multiple intelligences identified seven distinct intelligences: Logical-mathematical intelligence allowed us the skill to reason, calculate, identify patterns, see and explore patterns and relationships. Linguistic intelligence was a mastery of effective word choice. Have exceedingly developed listening skills and think frequently in words. Visual-Spatial intelligence had to do with manipulating and creating mental images. Musical intelligence allowed us to show sensitivity to rhythm and sound, identify and

compose musical pitches, and tones. Bodily-kinesthetic intelligence was using one's body effectively, keen sense of body awareness, and mental abilities to enhance learning. Interpersonal intelligence interacts and is understanding with others. Intrapersonal intelligence understands one's own interests and goals.

Since Gardner's original seven intelligences, two more have been recorded and added to the original list: Naturalist intelligence defines a person's skill to distinguish among existing things as well as sensitive to other types of the natural world. Existential intelligence is the capacity to research answers to inquiries about the significance of existence, why do we perish, and how as humans did we evolve. Smith (2002) described naturalistic intelligence as one's intelligences being intricate in the natural world and the links to the real environment in which the person was immersed. Gardner's (2000) argument that no one had the same intelligence gave significant strength to the purpose of a school incorporating researched-based practices in the classroom for low SES students. Educators must examine their instructional practices and make adjustments to educate diverse learners (Graham, 2009). In any given classroom, students' intelligences will vary.

Webb's Depth of Knowledge

At the treatment school, the researched-based practices were integrated with multiple intelligences and Webb's (2002) DOK. Webb formulated the DOK model to meet the demands of parents for educators to teach their child higher-level thinking skills. Teachers designed their lessons during the state mandated 90 to 120 minute reading block that supports multiple intelligence theory and Webb's DOK model by aligning their

center stations; technology center, listening center, writing center, and vocabulary center with differentiated instructions and assessment analysis by employing on how the brain learns best and higher-level thinking skills.

Teaching progressive points of reasoning as an essential measure of the endorsed set of courses, the four DOK levels can be used as a strategic vehicle. The four DOK levels support the teacher in planning learning opportunities to aid student development to become independent learners and critical thinkers. Consequently, the plans in each center rotation should demonstrate questioning and assessment strategies for each DOK level. Webb's (2002) four DOK levels: DOK level 1 recalls and the responses are automatic. DOK level 2 activities are more complex and require the engagement of mental processing. DOK level 3 activities require higher cognitive demands than DOK 1 and DOK 2. DOK level 4 demonstrates reasoning, planning, and developing connections within and above the content areas.

Planning and executing lessons during student's center station rotations in the 90-minute reading block that deliver a cognitively demanding curriculum requires well-designed questions based on a strategic selection of teaching practices (Webb, 2002). This allows low SES learners to grasp methods aimed at discovering answers to multifaceted problems by relying on gestures by pupils who really understand applying increased thinking skills (Hess, et al., 2009). Connections of Webb's (2002) DOK levels and researched-based practices were established in this subsection. As noted by Ramsey (2005), every child is unique and educators ought to discover ways to teach each child in their unique way.

Literature Related to the Proposed Method

Research is divided into three types of methods: quantitative, qualitative, and mixed methods. I reviewed the quantitative method of other studies to locate similarities relating to the proposed study of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model and its impact on Title I students in fifth grade closing the reading gap as evidenced by FCAT 2.0 reading scores. Reviewing the quantitative method of previous studies allowed me to determine that the quantitative method would be best suited for the study.

While exploring quantitative methods, three comparable studies are discussed in this subsection. The comparable studies by Toler (2012), Principato (2010) and Wannemuehler (2010), were chosen due to the nature of investigating implementation of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model. These researchers conducted quantitative research in a comparable format on the impact that researched-based practices had on student achievement.

Toler (2012) quantitative study investigated the effectiveness small learning communities on student achievement. Archived data from 438 students was collected, including standardized test scores in the subjects; language arts, mathematics, science, and social studies. From eleven participants, interviews were given, a focus group, and a teacher self-evaluation. This study used a quantitative casual comparative design between Grade 10 students in SLCs and those Grade 10 students not in SLCs in the subject areas of reading, science, and social studies.

An ex post facto between-group design was used to determine whether achievement scores were different for students in SLCs as well as whether race or low SES had any moderating effect on the Ohio Graduation Test (OGT). Three research questions were investigated to determine if SLCs had an effect on the academic achievement on a sample of Grade 10 students as well as any moderating effects of race or SES. Toler (2012) study can be used to fill a gap in practice and add to current literature by providing appropriate information to high school administrators, school districts, and parents on the effect of race, SES, and standardized test scores on the academic achievement of students in small learning communities.

Fourth grade students in a small suburban elementary school district were measured on their learning accomplishment in two general co-teaching models in Principato (2010) quantitative study. The interventions were measured by the Measurement of Academic Progress (MAP) tests, which were state-aligned, on-line, adaptive assessments that reflected the level of achievement of all fourth grade students and measured the progression throughout. Fourth grade students were tested in fall 2008 and in spring 2009. Two research questions were investigated to determine the effect co-teaching has on fourth grade students' literacy gains on their MAP tests and state reading assessment scores. The partakers in the research were nine general and ESE teachers and 126 fourth grade students, dispersed throughout five neighborhood elementary schools. Findings indicated a significant main effect for the type of coteaching, a significant effect for pre/post but a non-significant interaction. The major findings were that students, in

general, made gains among the pretest and posttest, yet, they were not dependent on the type of coteaching they received.

Wannemuehler (2010) quantitative study measured the impact of 5 years of RtI practices have on third grade achievement results in reading from the state assessment. This investigation narrowed the achievement space through calculating the practice and establishing if the RtI model is practicable and actual in countryside schools. A school location was selected that had been implementing the RtI model over the past five years. In the elementary schools, only third grade students took the ISTEP throughout the baseline school year of 2003-2004 (Indiana Department of Education, 2009). Data was collected from third grade ISTEP scores from five years of the RtI implementation to the baseline year due to the fact that the test did not include students in fourth and fifth grade until the 2004 to 2005 academic term.

Research questions were investigated to determine the impact of five years of RtI practices have on third grade achievement in reading scores from the state assessment. Two fidelity instruments were utilized to evaluate the level of integrity that the site school implemented the RtI model. The School-Based Problem Solving Evaluation Instrument (SBPSEI) and the linkert scale and scoring rubric for problem solving components and student outcomes. The findings indicated no difference exist in student outcomes in the area of reading achievement (reading vocabulary vs. reading comprehension) by time (baseline vs. first year vs. second year vs. third year vs. fourth year vs. fifth year).

Literature Related to Differing Methodologies

I reviewed other studies to locate different methodologies relating to the study of researched-based practices such as PLCs, coteaching classroom, and the RtI three-tiered model. I researched to find if significant differences were determined and what methods of analysis were used to determine the results.

While exploring qualitative and mixed methods used to examine the effects of researched-based practices, three comparable studies are discussed in this subsection. The comparable studies by Evans (2012), Cundiff (2011), and Vaughan (2007) were chosen due to the nature of investigating implementation of researched-based practices such as PLCs, a co-teaching model, and RtI. These researchers conducted qualitative research in a comparable format on the impact that researched-based practices such as on PLCs, co-teaching, and RtI had on student academic gains and decreasing the gap in achievement. Vaughan (2007) used a mixed method approach in researching RtI and the impact it has on student academic gains and decreasing the gap in achievement.

Evans (2012) qualitative case study described and investigated teacher interpreted the benefits of PLCs in regards to student success and overall school improvement. Data was collected from eleven participants through interviews, a focus group, and a teacher self-evaluation. This study used a qualitative case study utilizing Rubin and Rubin's data coding and analytic protocol for interpreting interview data to analyze the data at one elementary school (Rubin & Rubin, 2005). The institute is categorized as a Title I school. The elementary school comprised of teachers that teach third grade, fourth grade, and fifth grade, a math instructional coach, using interviews, observations, unobtrusive data,

video, journaling, and focus groups (Hatch, 2002). This subgroup of teachers was chosen because they make up the grade level's that determines the school's AYP as gauged by the Georgia Criterion-Referenced Competency Tests (CRCT). Three research questions were investigated to determine if PLCs had an influence on educator understanding, teacher practices, and learner success.

The phenomenological project study by Cundiff (2011) investigated skills needed for co-teachers to effectively include and serve the needs of an assorted population and to offer professional development for co-teachers. This study looked at 37 available coteachers participating in the professional development program targeting co-teaching practices and five supervisory personnel who had the knowledge and experience in a co-teaching model. Data analysis was conducted after each phase of using triangulated data from open-ended questionnaires for more candid responses, forced-choice surveys using a likert-type scale, which was converted to ordinal data for analysis, and classroom observations conducted in 20-minute intervals in co-teaching settings.

It was concluded that the data collected indicated there is a requisite for providing staff development for coteachers, which would enhance their ability to work collaboratively, focus on relationships for team building/trust, communication and working together, defining expectations and responsibilities, and teaching strategies for standards and curriculum as related to accommodations and modifications.

The third comparable study was conducted by Vaughan (2007), which was a mixed method study of RtI, whereby conditions were examined that may better empower general and special educators to teach. A published survey instrument using a 7-point

summated Likert scale and teacher interviews over two months were the principle sources of data. ANOVA results indicated significant changes in mean responses for two of the 33 survey items and average mean responses increased positively on 31 of the 33 items. The qualitative data were analyzed by assigning codes aligned with 11 educational themes. Qualitative findings supported the survey results.

Under the directives of the NCLB Act, Vaughan's (2007) research was in effect an RtI that was intended to meet the demands that were imposed on individuals and school systems. This study used mixed qualitative and quantitative methods to recognize and evaluate RtI used in the slightest restrictive setting. The basis of the study originates from a grounded theory research method (Creswell, 2009; Rosenblaum, 2002) that begins gathering data from informal interviews and observations within a professional development workshop, culminating with a constructed theoretical model to be confirmed with a quantitative measurement tool. The measurement instrument employed a simple 7-point summated scale. The survey was conducted over several sessions lasting approximately 30 minutes, followed by a short break, then a 10-minute period of informal interviews. The statistics analysis included evidence of degree of range and variance in information, the meaning of such results, and qualitative measures that supplemented the quantitative data gathered.

Summary

This review of the literature provided a theoretical background of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model embedded in multiple intelligence theories and Webb's (2002) DOK. For any change in

the educational setting to take place, change must start in the way instruction is delivered and the ways students learn in the classroom. Stagnated practices are still existent and must be replaced with proven effective practices in order to advance student achievement in classrooms (Marzano, 2003). This review compared relevant research in regards to researched-based practices and studies applicable to closing the reading gap as evidenced by FCAT 2.0 reading scores. Furthermore, a review of the implemented research methods was provided. Although a large amount of published research existed and indicated the effectiveness of PLCs, coteaching classrooms, and the RtI three-tiered model, no empirical studies were found that had been conducted with the sample population in Title I low SES elementary schools. Throughout the research, no studies were found that indicated researched-based practices were not effective. However, what works with one population may not work for all sample populations (Scigliano & Hipsky, 2010). Such comprehensive views and gaps in literature justified conducting the research.

In Section 3, research method and design are discussed alongside where the research takes place, instruments and materials used throughout the study.

Section 3: Research Method

Introduction

In Section 3, I provide detailed methodology information relevant to the study. The information presented includes the research design, setting and sample descriptions, treatment description, instrumentation and materials, validity and reliability, data collection and procedures, analysis, and the role of participants and researcher summary.

Research Design and Approach

I chose a quantitative casual-comparative research design with a repeated measure approach for this study. Often, researchers decide to study particular variables with casual-comparative research when a variable is involved that cannot be manipulated for ethical and practical reasons (Lodico et al., 2010). Creswell (2009) stated a quantitative design "provides a numeric description of trends, attitudes, or opinions of a population by studying a sample of that population" (p. 153). The casual-comparative research design was chosen because I examined the results of past experiences. The repeated measure approach was used to track the enduring effect of the treatment on students' achievement for 3 consecutive years.

In this study, measurements were taken from FAIR reading comprehension test scores and FCAT 2.0 reading scores. The study involved Title I fifth grade students. Casual-comparative was useful to examine effect of an event after it occurred. In addition, the rationale for selecting the quantitative casual-comparative research design was due to not being able to involve a manipulation of the situation. Thus, it was

appropriate to use in this study, which examined the effect of researched-based practices on students' reading achievements after the practices were used.

The status of the Title I students as whether they are in a group with participation in the research-based practices of PLCs, coteaching classrooms, and the RtI three-tiered model was the independent variable. The dependent variables included the FCAT 2.0 reading scores for the 2010/2011, 2011/2012, and 2012/2013 school year. The dependent variable was examined for changes in order to measure the outcome of the treatment. It was measured before and after the administration of the independent variable (Creswell, 2012).

For the first and second question, FCAT 2.0 scores at the end of fourth and third were used as covariates. For the third question, FAIR reading comprehension test scores taking during the third quarter of their second grade as a baseline for the end of their second grade year in 2010 were used as covariate variable to control the effect of Grade 2 students' preexisting reading skills. The FAIR reading comprehension test is calculated in percentile rank, standard score, and a developmental ability score. The percentile score ranges from 1 to 99^{th} percentile. This percentile rank is used to rank student's performance in relation other students. The standard score ranges from 55 to 145, which is used to match one student's outcome of scores to the outcome of scores to other students in the same grade. The developmental ability score ranges from 200 to 800 and is an estimate of the total level of a student's ability on the test.

The FCAT 2.0 reading scores are calculated into developmental score scales. Reading range from 140 to 302 score scales for each individual student resulted in

achievement level data. Students in Grades 3, 4, and 5 must achieve a reading success Level 3 or higher to demonstrate achievement with the challenging content of the New Generation Sunshine State Standards (NGSS) (Florida Department of Education, 2005b). The FAIR reading comprehension tests the FCAT 2.0 success probability percentile score of 85% is considered a good predictor of a student passing the FCAT 2.0 reading test with an achievement Level of 3 or higher (Florida Department of Education, 2010). Treatment and control fifth grade students' FCAT 2.0 reading achievement scores was compared to examine effects of the researched-based practices.

A repeated-measure ANCOVA test (SPSS Inc., 2009) was used to examine data from participants at the treatment and control schools in fifth grade. After extensive research, it was determined that the quantitative casual-comparative research design with repeated measure approach would best analyze the data collected and make a reasonable conclusion with respect to the outcomes of the study.

Setting and Sampling

In this study, I studied a group of Title I students in fifth grade. A nonrandom purposeful sampling method was used to include participants from Title I schools (treatment and control) with similar demographic status. Both groups were low SES, but the researched-based practices were delivered to one cluster only (Creswell, 2009). The sample for the treatment group included the entire fifth grade population of the Title I school who used the researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years. The sample for the control group included the entire fifth grade population of students from a Title I school that did not

receive the researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years.

Student participants were from low SES households as defined by federal free or reduced lunch guidelines (U.S. Department of Agriculture, 2013) in the fifth grade in a United States southeast school district. The treatment school was one Title I elementary school that served a student body of 715 students with a sample size of 98 fifth grade pupils with the free or reduced lunch status. The control school was one Title I elementary school that served a student body of 796 students with a sample size of 127 fifth grade students with the free or reduced lunch status. The total sample size was 225 fifth grade students. By sampling 225 fifth grade students, this was an adequate number for ANCOVA. For a medium effect size, and *at Power* = .80 for α = .05, at least a 60 is needed (Cohen, 1992). Given this condition, the sample of 225 was adequate. Due to the number of variables, the larger the sample size, the less error for ANCOVA.

By controlling the effect of previous reading scores, the effect of the independent variables on the dependent variables was examined. The control sample group was taken from Title I fifth grade students who were matched with the treatment group. The estimated sample included Title I students tracked from third grade to fifth grade in the treatment and control school (all within district). Title I fifth grade students at the control school did not receive researched-based practices for 3 consecutive years.

Treatment and control groupings were demographically alike in relations of age, gender, ethnicity, and achievement levels. Title I fifth grade students at the treatment

school received researched-based practices for 3 consecutive years. All treatment teachers in Grades 3 to 5 were highly experienced by the criteria set by the state.

All control teachers in Grades 3 to 5 were highly experienced by the criteria set by the state. Students were assessed and placed in one of six performance levels based on their FCAT 2.0 reading scores. These levels include performance level one--unsatisfactory, level two--partially proficient, level three--proficient, and levels four through six--advanced. FCAT 2.0 reading scores were used in conjunction with other data to assist educators in placing students in the appropriate level groups. The demographic breakdown for the study is listed on Table 2.

Table 2

Ethnicity and Gender of grade 5 students – Title 1 Treatment and Control School

	Treatment school			Control school		
Race	Male	Female	Total	Male	Female	Total
White	1	3	4	5	6	11
Black	16	10	26	15	7	22
Hispanic	31	33	64	45	44	89
Am. Indian	3	0	3	3	1	4
Asian	1	0	1	1	0	1
Total	52	46	98	69	58	127

Table 2 shows the ethnicity and gender breakdown of the treatment and control school. I used a purposeful sampling to select the Title I fifth grade students who

participated in the study. A purposeful sample was used to select a naturally formed group as participants in the study. The student sample was eligible based on the criteria of having taken the end of year FAIR reading comprehension test in 2010, and the FCAT 2.0 reading test in 2010/2011, 2011/2012, and 2012/2013.

In addition, subjects were enrolled continuously in third, fourth, and fifth grade classrooms at the study school sites during the 2010/2013 school terms. This particular sample was instructed in second grade without researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model, and instructed with researched-based practices from third grade to fifth grade to make an ideal sample to study the effects of researched-based practices.

Treatment

Researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model initiated at the treatment school addressed IDEA (2004) and NCLB (2002) mandates. These mandates required that all students be evaluated with annual state and district assessments based on state standards to increase the percentage of students of low SES to score at the proficient level in reading. The researched-based practices began as a way to employ the best practices that were proven to be most effective. Teachers at the treatment site followed general standards as discussed in Section 2 while implementing the researched-based practices such as PLCs, coteaching classrooms and the RtI three-tiered model.

Treatment for this study was the mandated implementation of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3

consecutive years. During the third grade year (2010/2011), the treatment school started using research-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model. In the treatment schools, the administration was mandated by the superintendent to implement PLCs, coteaching classrooms, and the RtI three-tiered model school-wide during the entire academic year. The Title I school was mandated to send their teachers who taught Grades 3 through 5 to receive professional staff development training in the coteaching model and the RtI three-tiered model. The control Title I school was not mandated to implement the research-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for consecutive years.

During the fourth grade year (2011/2012), the treatment school continued research-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model school-wide during the entire academic year. The Title I control school was not mandated to implement the research-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model. During the fifth grade year (2012/2013), the treatment school continued research-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model school-wide during the entire academic year. By utilizing the reading scores on the FCAT 2.0 test, I hope to be able to compare the treatment school fifth grade students' reading achievement with the control school.

The RtI three-tiered model made the task of assigning students to tiers easier and provided for a constant mixing of group abilities. Students are assigned to different tiers based on the level of intervention needed for success in the classroom. Most models of RtI involved several different levels known as tiers. Teachers at the treatment school had

students involved in all different leveled tiers of intervention. Tier 1 students were classified as primary prevention strategies when instructional methods needed met the individuals learning needs. Again, these students were considered the regular education students in the classroom. Tier 2 students were secondary prevention students who received additional supplemental support when primary strategies did not work. Tier 3 students received classroom core instruction and were pulled from the classroom for intensive support from the special education or resource teacher for an additional 30-minutes daily.

The nature of PLCs, coteaching classrooms, and the RtI three-tiered model school wide provides an environment in which educators participate in collaboration. They are an effective means for linking staff development to the day-to-day actualities confronted in the classroom by teachers (Bullough, 2007). Scholars have found that participation in PLCs leads to amplified participation, ownership, origination, and governance among staff and has an impression on school professional culture (Berry, Johnson, & Montgomery, 2005; Hindin, Morocco, Mott, & Aguilar, 2007; Vescio, Ross, & Adams, 2008; Webster-Wright, 2009). A coteaching model is a manner of instruction in which two or more educators share accountability for their students in one classroom. Coteaching is not shared as PLCs ineludibly, it is not equal with customary group instruction, nor does it blend multiple approaches to teaching (Cook, 2012). The RtI three-tiered model lies in the use of tiered instructional processes. The RtI three-tiered model encompasses regular evaluations of students' development, data-driven decisions, and assignment of pupils surrounded by an assortment of instructional supports.

Instrumentation and Materials

Two instruments were used in the collection of data for this study. To test reading comprehension from the end of the 2010 academic year, the first instrument included individual student FAIR test. The purpose of the FAIR reading comprehension test is designed to make screening, progress monitoring, and diagnostic information available to teachers for them to guide their instruction. The reading comprehension screen forecasts success for the student on the reading FCAT 2.0 test and also offers a Lexile score for each learner. The second instrument was the individual student FCAT 2.0 reading test scores from the 2010-2013 academic school year. The primary purpose of FCAT 2.0 is to assess student achievement of the higher-order cognitive skills outlined in the NGSSS in the content areas of reading, math, and science. The FCAT 2.0 measures student performance contrary to a fixed set of predetermined criteria.

Although the FCAT 2.0 assess three categories (reading, mathematics, and science), reading was chosen for this study. These assessments were designed to measure student achievement in association to the NGSSS. These standards were developed as expectations specifying what students should identify at a certain point of time in their education. The FCAT 2.0 assessment is also designed to measure student reading achievement. Students were assessed and placed in one of six performance levels based on their scores in each subject area. These levels include performance level one--unsatisfactory, level two--partially proficient, level three--proficient, and levels four through six--advanced. FCAT 2.0 scores were used in conjunction with other data to assist educators in placing students in the appropriate level groups. It also aids educators

in the retention discussion as it provides a snapshot of student ability based on the NGSSS. If a student in Grade 3 performs at Level 1 or Level 2 in reading on the FCAT 2.0, they are automatically retained in Grade 3 for the following school year.

For this study, FCAT 2.0 reading test results were used to conclude any variances in the achievement of students. According to the state Department of Education (2005),

> criterion-referenced items measure a student's achievement of the NGSSS in reading, mathematics, science, and writing. The FCAT 2.0 tests assess students in grades three through grade 10 in reading, grades three through eight in mathematics and science, and grades four through eight, and grade 10 in writing that directly aligned with the state's NGSSS. (p.1)

New achievement levels for FCAT 2.0 reading and mathematics were approved in 2011 and for FCAT 2.0 science test amidst a standard-setting method. Performance information is grouped by developmental score scales, ranging from 140 to 302 reading across Grades 3 through Grade 10 and from 140 to 298 for FCAT 2.0 mathematics across Grades 3 through Grade 8. Developmental scales can only be used for content areas that are measured in sequential grades. These instruments were used to provide information on student achievement. The accomplishment a student has achieved with the FCAT 2.0 is termed by success stages that scale from 1 (lowest) to 5 (highest). Achievement Level 3 specifies adequate progress. Grade 3 students need to attain an FCAT 2.0 reading scale score in Achievement Level 2 or higher, or show good cause, to be authorized for advancement to Grade 4.

The standardized tests for this study were based on NGSSS in an unbiased, non-redundant multiple-choice format. During testing all students in the system had to adhere to the same testing protocols during the two-weeks allowed for testing. Students with an IEP were allowed special testing accommodations, which ensured fair and equitable testing without discrepancies or biases. By using a parallel form of reliability during construction of the standardized tests, FAIR reading comprehension test and FCAT 2.0 reading test, multiple items on the tests measured the same performance indicator of learning. The district's test coordinator reviewed the entire study and offered an assessment of the project all through the course of the research.

Data Collection

Authorization to conduct research was received from the researched school's Research and Data Committee and from the principals of the two Title I schools. Request was made to the school district for permission to conduct research within its domain. Approval to conduct research from Walden's University's Instructional Review Board #10-17-14-0073147 (IRB) accompanied the request for data application to School Board (see Appendix B) for required data. Public access law in the State of Florida protects the privacy of students' permanent records and access to such records is regulated. The district's approval to conduct research included approval from the two Title I schools site principals and the authorization provided access to test score results for the two Title I schools.

The principals were contacted electronically with the request for access to data at their respective schools. Subsequently, all the required data was in the custody of the

researched school's county data warehouse and a request was made to the researched school's county Research and Data Committee for those archival data.

The Title I schools selected for this study was chosen because they did not show reading achievement gains as evidenced by FCAT 2.0 reading test during the 2010/2011, 2011/2012, and 2012/2013 school year. Information assembled for this study was from one source: primary data from Collier County Public School District's Data Warehouse archives. Data sets were archived data from reading test results from the FAIR reading comprehension test that was administered to students while in Grade 2 for the end of school year 2010, reading test scores from the FCAT 2.0 for the same students while in Grades 3, 4, and 5 from each of the two Title I schools for 3 consecutive school years, 2010 to 2013.

The archived data from the district's Data Warehouse for the FAIR reading comprehensive test scores for the end of one school year, 2010, and FCAT 2.0 reading test scores for 3 consecutive school years, 2010/2011, 2011/2012, and 2012/2013 provided baseline data for the core data for this study. The treatment Title I school students received research-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years while the control Title I school did not receive the received research-based practices. During the month of April for 3 consecutive years, a state assessment test, FCAT 2.0, was given to assess reading achievements. Students FCAT 2.0 reading achievement level was collected for school years 2010/2011, 2011/2012, and 2012/2013 for Grades 3 through 5. These scores assisted in providing a basis for determining the differences in the reading achievement

of Title I students who received the researched-based practices verses the low SES students who did not receive the researched-based practices.

The second grade FAIR comprehension reading scores from March 2010 and the FCAT 2.0 reading scores for the third through fifth grade students from both Title I schools for the school years 2010/2011, 2011/2012, and 2012/2013 were accessible from the district's Data Warehouse. Districts and schools receive electronic access to students' scores as soon as they are available. Individual student FCAT 2.0 reading test results are electronic by the test scoring contractor to school districts for distribution (www.fldoe.org/fact/results12). The dependent variable provided data based on an interval scale. The independent variable was the instruction status of students receiving researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years or not receiving researched-based practices for 3 consecutive years. The independent variable was used on an ordinal scale which indicated if students used researched-based practices or not. A covariate variable is a variable that can be controlled for by statistically subtracting the effects of the variable while utilizing the ANCOVA statistical test (Field, 2009). The covariate variable was the FAIR reading comprehension test scores.

To clarify, at the treatment school beginning the school 2010/2011 school year, third grade students received full implementation of the researched-based practices such as PLCs, coteaching model, and the RtI three-tiered model. They continued the implementation of the researched-based practices for their fourth and fifth grade school years as required by the 3 year implementation plan. At the control school, no researched-

based practices were implemented for those 3 consecutive years. Therefore, the sequence of 3 consecutive years with researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model and 3 consecutive years without researched-based practices provided the ordinal scale data within the study time that was mandated by the district.

Data Analysis

The result for the students' FAIR and FCAT 2.0 data were organized by school year, student grade levels, and student reading scores, to establish their performance level for the 3 consecutive years. The data for both Title I schools were analyzed and compared to determine if the researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years had an impact on Title I fifth grade students reading achievement gains as compared to the Title I fifth grade students that did not receive the researched-based practices for 3 consecutive years.

The data collected was organized by schools, grade levels, and school years. Descriptive statistics organized and categorized this information for interpretations and comparisons using the SPSS Version 16 (SPSS Inc., 2009), a comprehensive system for analyzing data using a casual comparative design with a repeated-measure ANCOVA test. ANCOVA was used to determine if statistical significance can be applied to the descriptive statistics.

FAIR and FCAT 2.0 statistics were coded and grouped; using content analysis to identify and interpret themes and patterns based perspective on reading performance levels. This data was managed, using Microsoft Excel spreadsheet. ANOVA probability

tests was conducted to determine if the positive results achieved statistical significance by comparing the effects of the researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for three consecutive years on the FAIR reading comprehension test that was administered to Title I students while in Grade 3 for the 2010/2011 school year, reading test scores from the FCAT 2.0 reading test for the same Title I students while in Grades 3, 4, and 5 from each of the two Title I schools for the 2010/2011, 2011/2012, and 2012/2013 school years.

The statistical analysis was done using the SPSS Version 16, a comprehensive system for analyzing data using a casual comparative design with a repeated-measure ANCOVA test. The analysis was based on inferential nature which allowed me to study the sample and make predictions or inferences about the similar population in the study districts.

By analyzing the data, I pursued to discover the answer to the ensuing questions:

Research Question 1*:* What is the difference in FCAT 2.0 reading scores between Title I fifth grade students receiving researched-based practices for 3 consecutive years and Title I fifth grade students not receiving researched-based practices for 3 consecutive years, controlling for preexisting differences in reading achievement?

H_o1: There is no significant difference in FCAT 2.0 reading scores between Title I fifth grade students receiving researched-based practices for 3 consecutive years and Title I fifth grade students not receiving researched-based practices for 3 consecutive years.

H_a1: There is a significant difference in FCAT 2.0 reading scores between Title I fifth grade students receiving researched-based practices for 3 consecutive years and Title I fifth grade students not receiving researched-based practices for 3 consecutive years.

Research Question 2: What is the difference in FCAT 2.0 reading scores between Title I fourth grade students receiving research-based practice for 2 consecutive years and Title I fifth grade students not receiving researched-based practices for 2 consecutive years, controlling for preexisting differences in reading achievement?

H_o2: There is no significant difference in FCAT 2.0 reading scores between Title I fourth grade students receiving research-based practices for 2 consecutive years and Title I fourth grade students not receiving researched-based practices for 2 consecutive years.

H_a2: There is a significant difference in FCAT 2.0 reading scores significant relationship difference between Title I fourth grade students receiving research-based practices for 2 consecutive years and Title I fourth grade students not receiving researched-based practices for 2 consecutive years.

Research Question 3: What is the difference in FCAT 2.0 reading scores between Title I third grade students receiving research-based practice for 1 year and Title I third grade students not receiving researched-based practices for 1 year, controlling for preexisting differences in reading achievement?

H_o3: There is no significant difference in FCAT 2.0 reading scores between Title I third grade students receiving research-based practice for 1 year and Title I third grade students not receiving researched-based practices for 1 year.

H_a3: There is a significant difference in FCAT 2.0 reading scores between Title I third grade students receiving research-based practice for 1 year and Title I third grade students not receiving researched-based practices for 1 year.

Measures Taken for Participants' Rights

Consent was formally requested and granted from Walden University's Instructional Review Board #10-17-14-0073147 (IRB) to conduct this study. Walden University requires all researchers to obtain IRB approval before any research is conducted. Walden University's approval signifies as assessment, which indicates that the potential risk of the study outweighs the potential benefits. This requirement satisfies Walden University and the federal guidelines of ethical standards in research relating to protection of the rights of human subjects. I had no direct contact with the student population of the two Title I school student populations for the intent of this research. The historical data gathered from the school district's Data Warehouse are from Title I student assessments results during 2010/2011, 2011/2012, and 2012/2013 school years was accessed. It provided the reading achievement scores for FAIR reading comprehension test scores and FCAT 2.0 reading test scores.

The list of the Title I fifth grade students that participated in the researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years and the Title I fifth grade students who did not participate in the researched-based practices for 3 consecutive years was kept confidential as students' records after they were analyzed and coded to protect the identity of the students. All efforts were made to keep participants' rights protected throughout the collection and

analysis of the data. The researched school's county data warehouse is not a public domain, and, therefore, cannot be accessed by the public.

To ensure confidentiality throughout the records collection and analysis procedures, all data was kept in a locked safe box in my office at work, and stored on my hard drive of my personal password protected laptop computer. All participants administering FCAT 2.0 reading test were trained to adequately administer the test. Participants signed a state code of ethics and procedures form to follow during testing. The state code of ethics have protocol steps that apply respectively to the administration of schools, district testing director, building testing coordinator, and the testing administrator. The participants created a secure environment for testing. All necessary precautions to safeguard tests and tests materials were taken. The administrators tested all eligible students and followed all testing directions, accommodations, testing limits and schedules. Student demographic accountability information was kept confidential at all times.

A resource for an extensive description of the FCAT/FCAT 2.0 Test Administration and Security Agreement is provided (see Appendix E) and the FCAT/FCAT 2.0 Test Administrator Prohibited Activities Agreement is provided (see Appendix F). Testing materials were set aside in a safe and secured area in the school, in which sign in and out procedures were in place during the allotted testing scheduled times.

Role of the Researcher

The researcher's role during the collection of data and analysis processes was to remain as an unbiased researcher with no participation in third through fifth grade classrooms as a teacher. I compiled, de-identified, and coded data after my IRB approval. I analyzed student standardized testing data from the limited data set released by the treatment and control school principals via the data use agreement. I did not collect or analyze any student data before my IRB permission was granted to conduct the study. My role as a principal in the same district did not affect the data analysis or collection process due to the fact that researched-based practices such as PLCs, a coteaching model, and the RtI three-tiered model had already been implemented into the treatment school, and data already existed in the researched school district's data warehouse by the time I received IRB approval for the study. I had no direct relationship with student participants during the time period of the study 2010 to 2013.

Summary

The study design and methodology were presented in Section 3. The study used a quantitative casual-comparative research design with a repeated measure approach to evaluate the impact of Title I fifth grade students reading achievement that had researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years. The sources of the data collection were from archival FAIR reading comprehension data for one year (2010) and FCAT 2.0 reading test for three consecutive school years (2010 to 2013). The data were collected, investigated and evaluated, and the results presented in Section 4.

Section 4: Results

Introduction

The purpose of this research was to study the effect of researched-based practices have on Title I fifth grade students who received the researched-based practices for 3 consecutive years in a treatment school compared to a Title I fifth grade students that did not receive the researched-based practices for 3 consecutive years in a control school with regard to their FCAT 2.0 reading scores. In Section 4, I share the outcome of data collected from two Title I schools in a Public School District for 3 consecutive school years through ANCOVA results related to testing research hypotheses. In addition, explanations of tables are provided. In Section 4, I present the study's analytical procedures that are organized around the research questions presented.

Research Question and Hypotheses

Three research questions were examined. In the first question, I examined if there was any significant difference in FCAT 2.0 reading scores between Title I fifth grade students receiving researched-based practices for 3 consecutive years and Title I fifth grade students not receiving researched-based practices for 3 consecutive years, controlling for preexisting differences in reading achievement. The null hypothesis stated that there was no significant difference in FCAT 2.0 reading scores between Title I fifth grade students receiving researched-based practices for 3 consecutive years and Title I fifth grade students not receiving researched-based practices for 3 consecutive years. The alternative hypothesis stated that there was a significant difference in FCAT 2.0 reading scores between Title I fifth grade students receiving researched-based practices for 3

consecutive years and Title I fifth grade students not receiving researched-based practices for 3 consecutive years. In the second research question, I examined if there was any significant difference in FCAT 2.0 reading scores between Title I fourth grade students receiving research-based practice for 2 consecutive years and Title I fourth grade students not receiving research-based practice for 2 consecutive years, controlling for preexisting differences in reading achievement. The null hypothesis stated that there was no significant difference in FCAT 2.0 reading scores between Title I fourth grade students receiving research-based practices for 2 consecutive years and Title I fourth grade students not receiving researched-based practices for 2 consecutive years. The alternative hypothesis stated that there was a significant difference in FCAT 2.0 reading scores between Title I fourth grade students receiving research-based practices for 2 consecutive years and Title I fourth grade students not receiving researched-based practices for 2 consecutive years. In the third research question, I examined if there was any significant difference in FCAT 2.0 reading scores between Title I third grade students receiving research-based practice for 1 year and Title I third grade students not receiving researched-based practices for 1 year, controlling for preexisting differences in reading achievement. The null hypothesis stated that there was no significant difference in FCAT 2.0 reading scores between Title I third grade students receiving research-based practice for 1 year and Title I third grade students not receiving researched-based practices for 1 year. The alternative hypothesis stated that there was a significant difference in FCAT 2.0 reading scores between Title I third grade students receiving research-based practice for 1 year and Title I third grade students not receiving researched-based practices for 1 year.

Research Tools

For the purpose of this study, state mandated standardized tests, the end of school year 2010 FAIR reading comprehension test and the 2010/2011, 2011/2012, and 2012/2013 FCAT 2.0 reading test were the instrumentation tools. The Pearson Educational group as part of the Educational Testing Services that service institutes throughout the United States created the standardized tests used for this study. The FAIR reading comprehension test, which make information available for teachers through screening, problem-solving, and progress monitoring evidence that is critical to guiding instruction as well as giving students an FCAT 2.0 reading probability score (Just Read Florida!, 2014). The FCAT 2.0 is a student achievement test that is given to Grades 3 to 11. The FCAT 2.0 evaluates acquisitions of reading, writing, math, and science skills on the NGSS (Florida Department of Education, 2005b). Given this information, students in the treatment group did receive researched-based practices for 3 consecutive years from Grades 3 to 5 and students in control group did not receive researched-based practices for 3 consecutive years from Grades 3 to 5 and were mandated to be assessed through the FAIR reading comprehension test for second grade during the end of 2010 school year and the FCAT 2.0 reading test for 3 consecutive years starting in third grade in the 2010/2011 school year, then fourth grade in the 2011/2012 school year, and lastly fifth grade in the 2012/2013 school year.

The FAIR reading comprehension test is calculated in percentile rank, standard score, and a developmental ability score. The percentile score ranges from 1 to 99th percentile. This percentile rank is used to rank student's performance in relation other

students. The standard score ranges from 55 to 145, which is used to match one student's outcome of scores to the outcome of scores to other students in the same grade. The developmental ability score ranges from 200 to 800 and is an estimate of the total level of a student's ability on the test. When a student's percentile score is 85%, his or her probability of achieving at or above Level 3 on the FCAT 2.0 is 85% chance or better. When a student's percentile score is 15%, his or her probability of attaining at or above Level 3 on the FCAT 2.0 is 15% chance or less.

The FCAT 2.0 reading scores are calculated into developmental scale scores. Developmental scale scores range from 140 to 277 for each individual student resulting in achievement level data for Grades 3 to 5. Students in Grades 3, 4, and 5 must achieve a reading achievement Level 3 or higher, which means they have to have a reading developmental scale score of 198 to 260 for Grade 3, a reading developmental scale score of 208 to 269 for Grade 4, and a reading developmental scale score of 216 to 277 in Grade 5 to demonstrate achievement with the challenging content of the NGSS (Florida Department of Education, 2005b). When a student receives a Level 3, he or she has limited accomplishment with content of the standards being challenging, but is in general unsuccessful with problems that are most thought-provoking. A Level 4 means that he or she has triumphed over the hard content of the standards, but may only have some success with questions that echo the most challenging content. A Level 5 means that he or she has triumphed with the content of the standards that are most challenging. Once the scores were categorized, an ANCOVA repeated-measure test was used to test for any

significant difference among student reading achievement and to test both hypotheses (Gravetter & Wallnau, 2008).

The research was centered on a quantitative pretest posttest designs and between subjects casual comparative design examining whether mandated implemented researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years affected students' reading achievement. PLCs, coteaching classrooms, and the RtI three-tiered model was implemented with a defining basis in Gardner's (1999) multiple intelligences and Webb's (2002) DOK as the theoretical frameworks. A between subjects casual comparative design was incorporated because I wished to examine the results of a past experience. The dependent variable for the study had already occurred, and I had no control over the independent variable (Lodico et al., 2010). Variables for the study included dependent, independent, and covariates. The dependent variable were Title I students' FCAT 2.0 reading scores during 2010/2011, 2011/2012, and 2012/2013 school term. The independent variable was the use of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model of the research participants for 3 consecutive years. The dependent variables for this study were the FCAT 2.0 reading scores of Title I fifth, fourth, and third grade students. The covariate variables were the FCAT 2.0 scores at the end of fourth and third grade and FAIR reading comprehension test score taken at the end of their second grade year in 2010. The covariate variables were used to control the effect of students' preexisting reading skills on their reading scores. A purposeful sample of 225 Title I fifth grade students was used in the study. The sample for the treatment group included the

entire student population of fifth graders who used researched-based practices for 3 consecutive years during 2010 to 2013 in the treatment school. The sample for the control group was taken from the Title I fifth grade student population in the control group to be demographically matched with the treatment group. The total sample size was determined by 98 Title I fifth grade students at the treatment school and 127 Title I fifth grade students at the control school. Treatment and control students' archival data were used to evaluate the implementation and completion of researched-based practices and were accessed from the researched school's county data warehouse for Title I students in Grade 2 in 2010, Grade 3 during 2010/2011, Grade 4 during the 2011/2012 school year, and Grade 5 during the 2012/2013 school year. The results on the ANCOVA test provided me with information necessary to test research hypotheses and answer research questions.

Data Analyses

Standardized treatment and control schools' second grade FAIR reading comprehension test during end of school year 2010 and FCAT 2.0 reading test data taken three consecutive years starting in 2010/2011 (Grade 3), 2011/2012/ (Grade 4) and 2012/2013 (Grade 5) were analyzed by performing repeated-measures ANCOVA with the SPSS software. In the first research question, I examined the difference in FCAT 2.0 reading scores between Title I fifth grade students receiving researched-based practices for 3 consecutive years and Title I fifth grade students not receiving researched-based practices for 3 consecutive years, controlling for preexisting differences in reading achievement. To answer this question, I coded and entered standardized students' data

from the treatment and control school into the SPSS statistical software. Data were coded based on the status of the independent variable of either receiving researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model of the research participants for a period of 3 consecutive years or not receiving researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model of the research participants for a period of 3 consecutive years.

Students receiving researched-based practices were coded as MES. Students not receiving researched-based practices were coded as LTE. The dependent variable of student reading achievement was entered as the reading level reported on the FCAT 2.0 reading test scores for that grade and school year. The covariate variables were the student FAIR reading comprehension score at the end of second grade, which was the first covariate variable. The second covariate variable was the FCAT 2.0 reading test scores during third grade, 2010/2011 and fourth grade, 2011/2012. The socioeconomic statuses of the students did not change from year to year as I tracked the students from third to fourth to fifth by following their student test data located in the school district's data warehouse.

Third grade, fourth grade, and fifth grade data were analyzed by using SPSS. As displayed throughout the text, the following tables have helped to determine the effects researched-based practices had on third grade, fourth grade, and fifth grade reading achievement. Table 3 shows the descriptive statistics of the fifth grade FCAT 2.0 reading achievement scores, which was the dependent variable for the treatment and control school. The sample for the treatment school was 98 and control school was 127 for a total

of 225 participants. The means *(M)* and standard deviation *(SD)* of fifth grade FCAT 2.0 reading scores revealed in Table 3 indicate the total of the treatment and control school combined.

Table 3

Grade 5 Descriptive Statistics of Grade 5 FCAT 2.0 Dependent Variable

Type of school	*M*	*SD*	*N*
Control	2.17	0.96	127
Treatment	2.64	0.95	98
Control and treatment total	2.41	0.96	225

In order to further examine the data, I had to enter more data to adjust the means of the dependent variable. Table 4 shows the output of the fifth grade adjusted means dependent variable data. The descriptive statistics in Table 3 and the adjusted means in Table 4 have been statistically adjusted or controlled for by the usage of covariate variable. The covariate variable was fourth grade FCAT 2.0 reading scores of each student. The covariate variable is a variable that can be controlled for by statistically subtracting the effects of the variable while using the ANCOVA statistical test (Field, 2008). By using the covariate variable, I statistically controlled for any individual differences that could have existed between participants. The covariate allowed for all participants to be analyzed from the same mean standpoint.

Table 4

Adjusted Means for Grade 5 Dependent Variable

			95% Confidence interval	
Status independent variable	*M*	*SD*	Lower bound	Upper bound
Control	2.27033019	0.9602785	2.103317	2.437344
Treatment	2.51702108	0.9551812	2.327905	2.706137

Note. Covariate appearing in the model is evaluated at the following value: Covariate Fourth Grade FCAT 2.0 Reading Score = 2.467.

Table 5 shows the test of homogeneity of regression revealed F (1, 221) = 0.93, p (.3346) > α (.05). Therefore, the test of homogeneity of regression results suggested the interaction was not significant and I could proceed with the ANCOVA that does not have the interaction term.

Table 5

The Test of Homogeneity Regression for Grade 5

Source	*df*	*SS*	*MS*	*F*	Sig.
FY12	1	106.90	106.90	261.39	.0001
School	1	1.61	1.61	3.94	.0483
FY 12* School	1	0.38	0.38	0.93	.3346
Error	221	90.38	0.41		

Note. R Squared = 0.58

Findings for Research Question 1

The ANCOVA was used to compare a fifth grade treatment group with a fifth grade control group to determine if any significant difference existed on FCAT 2.0 reading test scores after 3 consecutive years of implemented researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model. The treatment group received 3 consecutive years of implemented researched-based practices. The covariate variable was fourth grade FCAT 2.0 reading test scores. The descriptive statistics in Table 3 and the means in Table 4 have been statistically adjusted or controlled for by the usage of a covariate variable. The fourth grade FCAT 2.0 reading test scores are used as covariate with means *(M)* and standard deviations *(SD)*. The covariate variable is a variable that can be controlled for by statistically subtracting the effects of the variable while utilizing the ANCOVA statistical test (Field, 2008).

Information displayed in Table 6 was utilized to determine if the null hypothesis was rejected. As Table 6 indicated, the school group mean difference in fifth grade FCAT 2.0 reading scores after controlling for fourth grade *FCAT 2.0* reading scores was significant with F was 8.04 and $p = .0050$ which was smaller than the criterion value of .05. Therefore, I rejected the null hypothesis, which stated there was no significant difference in FCAT 2.0 reading scores between Title I fifth grade students receiving researched-based practices for 3 consecutive years and Title I fifth grade students not receiving researched-based practices for 3 consecutive years, controlling for preexisting differences in reading achievement.

Table 6

ANCOVA on Grade 5: A Comparison of Control and Treatment Status

Source	*df*	Type III *SS*	*MS*	*F*	Sig.
Corrected Model	2	126.127	63.064	154.25	.0001
FY13	1	113.93	113.93	278.66	.0001
School	1	3.29	3.29	8.04	.0050
Error	222	90.77	0.41		
Corrected Total	224	216.888			

Note. R Squared = 0.58 (Adjusted *R* Squared = .5777187)

Findings for Research Question 2

The second research question asked if there was any significant difference in FCAT 2.0 reading scores between Title I fourth grade students receiving research-based practice for 2 consecutive years, controlling for preexisting differences in reading achievement. To answer this question, I coded and entered standardized student data from the treatment and control school into SPSS statistical software. Data were from fourth grade students that did receive research-based practice for 2 consecutive years and fourth grade students that did not receive researched-based practices for 2 consecutive years. As I coded the previous data for fifth grade, the data were coded on the same basis for the fourth grade analysis. Data were coded on the status of the independent variable of either receiving researched-based practices for 2 consecutive years or not receiving researched-

based practices for 2 consecutive years. Students receiving researched-based practices were coded as MES. Students not receiving researched-based practices were coded as LTE. The dependent variable of student reading achievement was entered as the reading level reported on FCAT 2.0 reading test results during fourth grade. The covariate variable were student reading achievement levels on FCAT 2.0 reading test during their third grade school year. Fourth grade data were entered in SPSS. Results from Tables 7, 8, and 10 helped me determine the enduring effects of researched-based practices on fourth grade student reading achievement scores, which was the dependent variable for the control and treatment school. The sample for the control school was 127 and the treatment school was 98 equaling a total of 225 participants. The means *(M)* and standard deviation *(SD)* of fourth grade FCAT 2.0 reading scores revealed in Table 7 indicate the total of the control and treatment school combined. The control school *M* was 2.32 and the *SD* was 1.09. The treatment school *M* was 2.65 and the *SD* was 1.02. The overall total for the control and treatment school *M's* were 2.49 and the *SD's* were 1.05. In order to further discuss the data, I had to enter more data to adjust the means of the dependent variable. Table 8 reveals the output of the fourth grade adjusted means dependent variable data.

Table 7

Grade 4 Descriptive Statistics of Grade 4 FCAT 2.0 Dependent Variable

Type of school	*M*	*SD*	*N*
Control	2.32	1.09	127
Treatment	2.65	1.02	98
Control and treatment total	2.49	1.05	225

The descriptive statistics in Table 7 and the adjusted means in Table 8 have been statistically adjusted or controlled for by the usage of covariate variable. The covariate variable was third grade FCAT 2.0 reading scores of each student. By utilizing the covariate variable, I statistically controlled for any individual differences that could have existed between participants. The covariate allowed for all participants to be analyzed from the same mean standpoint.

Table 8

Adjusted Means for Grade 4 Dependent Variable

			95% Confidence interval	
Status independent variable	*M*	*SD*	Lower bound	Upper bound
Control	2.31556776	1.0902300	2.125953	2.505183
Treatment	2.66247852	1.0163817	2.461245	2.863712

Note. Covariate appearing in the model is evaluated at the following value: Covariate Third Grade FCAT 2.0 Reading Score = 2.636.

Table 9 shows the test of homogeneity of regression revealed $F(1, 221) = 0.76$, p (.3829) > α (.05). Therefore, the test of homogeneity of regression results suggested the interaction was not significant and I could proceed with the ANCOVA that does not have the interaction term.

Table 9

The Test of Homogeneity Regression for Grade 4

Source	*df*	*SS*	*MS*	*F*	Sig.
FY11	1	120.56	120.56	221.21	.0001
School	1	2.40	2.40	4.40	.0371
FY 11* School	1	0.42	0.42	0.76	.3829
Error	221	120.44	0.54		

Note. R Squared = 0.53

Information displayed in Table 10 was utilized to determine if the null hypothesis was rejected. As Table 10 indicated, the school group mean difference in fourth grade FCAT 2.0 reading scores after controlling for third grade FCAT 2.0 reading scores was significant with F was 12.23 and p = .0006 which was smaller than the criterion value of .05. Therefore, I rejected the null hypothesis, which stated there was no significant difference in FCAT 2.0 reading scores between Title I fourth grade students receiving researched-based practices for 2 consecutive years and Title I fourth grade students not receiving researched-based practices for 2 consecutive years, controlling for preexisting differences in reading achievement.

Table 10

ANCOVA on Grade 4: A Comparison of Control and Treatment Status

Source	*df*	Type III *SS*	*MS*	*F*	Sig.
Corrected Model	2	135.143	67.571	124.12	.0001
FY11	1	129.11	129.11	237.16	.0001
School	1	6.66	6.66	12.23	.0006
Error	222	120.86	0.54		
Corrected Total	224	256.000			

Note. R Squared = 0.53 (Adjusted R Squared = .5236374)

Findings for Research Question 3

The third research question asked if there was any significant difference in FCAT 2.0 reading scores between Title I third grade students receiving research-based practice for 1 year, controlling for preexisting differences in reading achievement. To answer this question, I coded and entered standardized student data from the treatment and control school into SPSS statistical software. Data were from third grade students that did receive research-based practice for 1 year and third grade students that did not receive researched-based practices for 1 year. As I coded the previous data for fourth grade, the data were coded on the same basis for the third grade analysis. Data were coded on the status of the independent variable of either receiving researched-based practices for 1 year or not receiving researched-based practices for 1 year. Students receiving researched-based practices were coded as MES. Students not receiving researched-based practices were coded as LTE. The dependent variable of student reading achievement was entered as the reading level reported on FCAT 2.0 reading test results during third grade. The covariate variable was student reading achievement levels on the FAIR reading test during the end of their second grade school year. Third grade data were entered in SPSS. Results from Tables 11, 12, and 14 helped me determine the enduring effects of researched-based practices on third grade student reading achievement scores, which was the dependent variable for the control and treatment school. The sample for the control school was 127 and the treatment school was 98 equaling a total of 225 participants. The means *(M)* and standard deviation *(SD)* of third grade *FCAT 2.0* reading scores revealed in Table 11 indicate the total of the control and treatment school

combined. The control school *M* was 2.64 and the *SD* was 1.09. The treatment school *M* was 2.62 and the *SD* was 1.01. The overall total for the control and treatment school *M's* were 2.63 and the *SD's* were 1.05.

Table 11

Grade 3 Descriptive Statistics of Grade 3 FCAT 2.0 Dependent Variable

Type of school	*M*	*SD*	*N*
Control	2.64	1.09	127
Treatment	2.62	1.01	98
Control and treatment total	2.63	1.052	225

In order to further examine the data, I had to enter more data to adjust the means of the dependent variable. Table 12 reveals the output of the third grade adjusted means dependent variable data. The descriptive statistics in Table 11 and the adjusted means in Table 12 have been statistical adjusted or controlled for by the usage of covariate variable. The covariate variable was second grade end of year FAIR reading scores of each student. By utilizing the covariate variable, I statistically controlled for any individual differences that could have existed between participants. The covariate allowed for all participants to be analyzed from the same mean standpoint.

Table 12

Adjusted Means for Grade 3 Dependent Variable

			95% Confidence interval	
Status independent variable	*M*	*SD*	Lower bound	Upper bound
Control	2.53726409	1.0949202	2.346834	2.727695
Treatment	2.76293327	1.0104129	2.562882	2.962985

Note. Covariate appearing in the model is evaluated at the following value: Covariate Second Grade FAIR Reading Score = 94.298.

Table 13 shows the test of homogeneity of regression revealed $F(1, 221) = 0.20$, p (.6545) > α (.05). Therefore, the test of homogeneity of regression results suggested the interaction was not significant and I could proceed with the ANCOVA that does not have the interaction term.

Table 13

The Test of Homogeneity Regression for Grade 3

Source	*df*	*SS*	*MS*	*F*	Sig.
FY10	1	101.35	101.35	153.88	.0001
School	1	0.03	0.03	0.04	.8369
FY 10* School	1	0.13	0.13	0.20	.6545
Error	221	145.56	0.66		

Note. R Squared = 0.42

Information displayed in Table 14 was utilized to determine if the null hypothesis was rejected. As Table 14 indicated, the school group mean difference in third grade FCAT 2.0 reading scores after controlling for second grade FAIR reading scores was significant with *F* was 4.16 and *p* = .0427 which was smaller than the criterion value of .05. Therefore, I rejected the null hypothesis, which stated there was no significant difference in FCAT 2.0 reading scores between Title I third grade students receiving researched-based practices for 1 year and Title I third grade students not receiving researched-based practices for 1 year, controlling for preexisting differences in reading achievement.

Table 14

ANCOVA on Grade 3: A Comparison of Control and Treatment Status

Source	*df*	Type III *SS*	*MS*	*F*	Sig.
Corrected Model	2	104.419	52.209	79.55	.0001
FAIR	1	104.39	104.39	159.06	.0001
School	1	2.73	2.73	4.16	.0427
Error	222	145.70	0.66		
Corrected Total	224	250.1155			

Note. *R* Squared = 0.42 (Adjusted *R* Squared = .4122211)

Summary

This quantitative casual-comparative research design with a repeated measure approach was designed to determine if 3 years of consecutive implementation of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model had any significant effect on students' reading achievement scores. A comparison of a treatment Title 1 fifth grade group receiving researched-based practices for 3 consecutive years to a control Title 1 fifth grade group not receiving researched-based practices for 3 consecutive years was conducted. The ANCOVA revealed significant differences in the adjusted mean scores between treatment and control group indicating enduring effects were found from the implementation of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years.

Section 5: Discussion, Conclusions, and Recommendations

I examined the direct and long-term effects of implementing researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years on Title I students' reading achievement in a treatment school compared to a control school that did not implement the researched-based practices for 3 consecutive years. Section 5 provides an overview, interpretation of the findings, implications for social change, recommendations, and conclusion.

Overview

The need to change the school environment to meet AYP became evident to school districts with congressional passage goal of the NCLB (2002), which is determined by the percentage of students of low SES who scored at the proficient level in reading. Under the NCLB, AYP mandated all public school districts establish increasing annual targets of proficiency in reading and math for all students. AYP is a statewide accountability system that is mandated by the NCLB (2002), which requires all schools and districts to move each student toward a year's growth academically. In order to improve the reading achievement in low SES students, the researched-based practices such as PLCs, co-teaching classroom, and RtI three-tiered model was mandated in a Title I school in Florida.

The obligation of IDEA (2004) has made it become increasingly more important for schools to make use of researched-based practices with more effectiveness and creativity (Kohler-Evans, 2006). These researched-based practices are not a formal curriculum but a process for a Title I school using designated outcomes, evaluations, data

for decision making, and consistency throughout Grades 3 through 5. The purpose of the study was to examine the impact of researched-based practices on Title I fifth grade students who received the researched-based practices for 3 consecutive years and Title I fifth grade students who did not receive the researched-based practices for 3 consecutive years with regard to their FCAT 2.0 reading scores. The goal was to explore if mandated implementation of the researched-based practices increased, decreased, or had no significant effect of third grade, fourth grade, and fifth grade students' FCAT 2.0 reading achievement scores.

The theoretical base of this study was system theory approach, which relates through the acknowledgement that underlies the goals of both NCLB (2002) and the reauthorization of IDEA (2004). Gardner's (1999) multiple intelligences and Webb's (2002) DOK were used as foundations of my theoretical framework because Gardner dealt with cognitive learning and a concept of learning based on addressing multiple levels of the students cognitive learning and Webb's DOK dealt with a concept of learning based on addressing multiple levels of students' cognitive complexity theory of higher-level thinking.

I tracked third, fourth, and fifth grade students in two Title I schools (treatment and control) to analyze and compare 2010/2011, 2011/2012, and 2012/2013 standardized reading results from the FCAT 2.0. In this study, teachers at the treatment school implemented the researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years as discussed in Section 2. Treatment was the mandated implementation of the researched-based practices in third grade during

2010/2011, fourth grade during 2011/2012, and fifth grade during 2012/2013. The control school did not receive treatment of the researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years, but were instructed by traditional instruction the study period.

Research Questions

Three research questions were examined by the study. First, was there any significant difference in FCAT 2.0 reading scores between Title I fifth grade students receiving researched-based practices for 3 consecutive years and Title I fifth grade students not receiving researched-based practices for 3 consecutive years, controlling for preexisting differences in reading achievement? Second, was there any significant difference in FCAT 2.0 reading scores between Title I fourth grade students receiving research-based practice for 2 consecutive years and Title I fourth grade students not receiving research-based practice for 2 consecutive years, controlling for preexisting differences in reading achievement? Third, was there any significant difference in FCAT 2.0 reading scores between Title I third grade students receiving research-based practice for 1 year and Title I third grade students not receiving researched-based practices for 1 year, controlling for preexisting differences in reading achievement?

Review of Methods

This quantitative study with a casual comparative design and a repeated measure approach was designed to examine the impact that researched-based practices such as, PLCs, coteaching classrooms, and the RtI three-tiered model have on Title I fifth grade students who received the researched-based practices for 3 consecutive years and Title I

fifth grade students who did not receive the researched-based practices for 3 consecutive years with regard to their FCAT 2.0 reading scores. A nonrandom purposeful sample was used in this quantitative study. The sample consisted of demographically similar groups in terms of age, gender, ethnicity, achievement levels, and socioeconomic statuses. A casual-comparative research design was chosen because I wished to examine the results of past experiences. A repeated measure approach was used to track the enduring effect of the treatment on students' achievement over an extended period of time. The ANCOVA test was used to analyze data from participants at the treatment and control school in third, fourth, and fifth grade.

In this study, measurements were taken from FAIR reading comprehension test scores and FCAT 2.0 reading scores. The FCAT 2.0 scores at the end of fourth grade and third grade were used as covariates as well as the FAIR reading comprehension test scores taking during the third quarter of their second grade as a baseline for the beginning of their third grade year in 2010 to control the effect of Grade 3 students' preexisting reading skills. The independent variable in this study was the status of the Title I students as whether they were grouped with participation in the research-based practices of PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years. The dependent variables included the FCAT 2.0 reading scores for the 2010/2011, 2011/2012, and 2012/2013 school year. An assumption was made that treatment students received the mandated researched-based practices for 3 consecutive years in their classrooms by their teachers.

Summary of Findings

The data resulting from this study indicated that the researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model implemented for 3 consecutive years had significant effect on the third grade, fourth grade, and fifth grade students' FCAT 2.0 reading scores. In Section 4, I explained that the ANCOVA was used to compare a fifth grade treatment group with a fifth grade control group to determine if any significant difference existed on FCAT 2.0 reading test scores after 3 consecutive years of implemented researched-based practices. In Section 4, the ANCOVA test revealed the value of F was 8.04 and $p = .0050$ which was smaller than the criterion value of .05. Therefore, I rejected the null hypothesis, which stated there was no significant difference in FCAT 2.0 reading scores between Title I fifth grade students receiving researched-based practices for 3 consecutive years and Title I fifth grade students not receiving researched-based practices for 3 consecutive years. I concluded that there was a significant difference in reading achievement scores of fifth grade students who received researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years as compared to fifth grade students who did not receive researched-based practices for 3 consecutive years.

The ANCOVA was used to compare a fourth grade treatment group with a fourth grade control group to determine if any significant difference existed on FCAT 2.0 reading test scores after 2 consecutive years of implemented researched-based practices. The value of with F was 12.23 and $p = .0006$ which was smaller than the criterion value of .05, and was smaller than the criterion value of .05. Therefore, I rejected the null

hypothesis, which stated there was no significant difference in FCAT 2.0 reading scores between Title I fourth grade students receiving research-based practice for 2 consecutive years, controlling for preexisting differences in reading achievement. I concluded that there was a significant difference in reading achievement scores of fourth grade students who received researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 2 consecutive years as compared to low SES fourth grade students who did not receive researched-based practices for 2 consecutive years.

The ANCOVA was used to compare a third grade treatment group with a third grade control group to determine if any significant difference existed on FCAT 2.0 reading test scores after 1 year of implemented researched-based practices. The value of F was 4.16 and $p = .0427$ which was smaller than the criterion value of .05, and was smaller than the criterion value of .05. Therefore, I rejected the null hypothesis, which stated if there was any difference in FCAT 2.0 reading scores between Title I third grade students receiving research-based practice for 1 year and Title I third grade students not receiving researched-based practices for 1 year, controlling for preexisting differences in reading achievement.

I concluded that there was a significant difference in reading achievement scores of third grade students who received researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 1 year and Title I third grade students not receiving researched-based practices for 1 year, controlling for preexisting differences in reading achievement.

Interpretation of Findings

The findings from this quantitative study based upon the Section 4 data analysis indicated significant differences in students' FCAT 2.0 reading scores in Grades 3, 4, and 5. Throughout the literature, (Dufour et al., 2008; Conderman & Johnston-Rodriguez, 2009; Eaker & Keating, 2009; Garrett, 2010; Hoover & Patton, 2008; Marzano, 2003; Simmons et al., 2009; Vanderwood & Nam, 2008; Villa et al., 2008;), researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model, implemented for 3 consecutive years was expected to increase reading achievement for the Title I students. The researched-based practices were implemented into the treatment school based on the theoretical frameworks of Gardner's (1999) multiple intelligences and Webb's (2002) DOK. Research involving both theoretical theories has shown reading achievement can close the gap if the implemented researched-based practices are within suggested guidelines of implementation (Azzam, 2008; Hess et al., 2009; Reimers, 2008; Stumbo & McWalters, 2011; Walqui, 2008). Based on the findings of this quantitative causal comparative design with a repeated measure approach, the implemented researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years at the treatment school had a significant effect on student reading achievement (see Tables 6, 10, and 14). In order to better serve all Title 1 students in the school district, it is recommended that implementing the researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model be implemented for significant reading gains for Title 1 students.

Previous studies in the literature review had the same results as this quantitative causal comparative design with a repeated measure approach. For example, the comparable studies by Toler (2012), Principato (2010) and Wannemuehler (2010), were chosen due to the nature of investigating the implementation of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model. These researchers conducted quantitative research in a comparable format on the impact that researched-based practices had on student achievement. Toler (2012) investigated the effectiveness of small learning communities on student achievement. Toler's study can be used to fill a gap in practice and add to current literature by providing appropriate information to high school administrators, school districts, and parents on the effect of race, SES, and standardized test scores on the academic achievement of students in small learning communities. Principato's (2010) quantitative study of all fourth grade students in a small suburban elementary school district measured the impact of two general coteaching models on their learning accomplishment. Findings indicated a significant main effect for the type of coteaching, and a significant effect for pre/post but a non-significant interaction. Wannemuehler's (2010) quantitative study measured the impact that 5 years of RtI practices have had on third grade achievement results in reading from the state assessment. The findings indicated no difference exist in student outcomes in the area of reading achievement (reading vocabulary vs. reading comprehension) by time (baseline vs. year 1 vs. year 2 vs. year 3 vs. year 4 vs. year 5).

Implications for Social Change

The study has revealed a significant difference in reading achievement scores of fifth grade students who received researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model for 3 consecutive years as compared to fifth grade students who did not receive researched-based practices for 3 consecutive years. From these results, the treatment school will be able to continue to use the researched-based practices and the control school will be able to start using the researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model. Upon distribution of the test results, treatment students have profited directly by implementing the researched-based practices.

I will meet individually with the principal of the treatment and control school to discuss the implications of the data. A positive social change will be able to take place by the achievement in reading gains from the Title I students of this study. Title I schools that need to improve their reading achievement scores on standardized tests will benefit from these results. The results reveal that school districts do need to implement researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model to close the achievement gap in reading in Title I schools due to their low SES populations. Learning capacities can be improved by a variety of methods of implementing researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model (Allington, 2009; Barth, 2006; Johnston, 2010; Kohler-Evans, 2006; Mesmer & Mesmer, 2008). Finally, researchers have another piece of evidence that can be comprehensive to other samples outside the district with similar demographics,

grade levels, and a similar implementation of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model.

Recommendations for Actions

Findings of this study revealed that the mandated implementation of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model had a significant effect on third, fourth, and fifth grade students' reading achievement under the current plan of implementation. This conclusion is supported by the findings of data analysis as evidenced by the reading scores on the state's annual accountability assessment test, known as the FCAT 2.0. It is recommended that principals, district administration, and the curriculum supervisor use the results of this study to continue or begin the implementation of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model.

Dissemination of deidentified results will be accomplished by an executive summary after all Walden University processes for the final doctoral study approval have been completed. The school principals will be informed of the deidentified results individually, and stakeholders will be informed of the results at faculty meetings. Since I work in this school district and personally know each principal, I am able to have them schedule a meeting for me to share the findings with the treatment and control school staff. It is my recommendation that the treatment school continue to implement the researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model. Research has shown that schools will benefit from the researched-based practices (Allington, 2009; Barth, 2006; Johnston, 2010; Kohler-Evans, 2006; Mesmer & Mesmer,

2008). In addition, I will meet individually with the principal of the treatment and control school to share and discuss the implications of the data. My recommendation for action to the principal of the treatment school is to continue implementing the researched-based practices, and my recommendation to the control school principal is to begin the implementation of the researched-based practices.

As a last recommendation, I will recommend that principals allow deidentified sharing of the study results with the district administration and the curriculum supervisor develop a plan of implementation for other Title 1 schools in the district.

Recommendation for Further Study

I recommend further research that would involve all the education stakeholders: parents, teachers, administrators, and other education policy-makers in the implementation of mandated implementation of researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model to curb the problem of on NCLB's efforts to close the learning gap between low SES and more advantage students (Gorey, 2009). The likelihood for reading failure has been documented in the lower grades and upcoming dropouts can be anticipated by examining third grade reading skills.

Finally, this research study has helped me to answer some of the biases and preconceived ideas and values such as Title I schools have difficulty closing the achievement gap due to socioeconomic status (Rathbun, West, & Walston, 2005). The research study has helped me understand that if schools implement researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model, schools will improve low SES students' academic gains in reading achievement (Bryk, Sebring,

Allensworth, Luppescu, & Easton, 2010). I recommend further research that would involve all the education stakeholders: parents, teachers, administrators, and other education policymakers in the implementation of the researched-based practices such as PLCs, coteaching classrooms, and the RtI three-tiered model to restrain the problem of Title I students not scoring at the proficient level in reading in Grades 3, 4, and 5 evidenced by the reading scores on the state's annual accountability assessment test, known as the FCAT 2.0.

Conclusion

The need to change the school environment, which is critical to educators and school districts, became evident with congressional passage goal of the NCLB (2002), which is determined by the percentage of students of low SES who score at the proficient level in reading. Student's early reading proficiency is linked with their home literacy surroundings, quantity of books they have, and parent anguish (Aikens & Barbarin, 2008). Students from low SES families often enter school with less readiness than their middle socioeconomic counterparts, this gap in academic readiness throughout schooling pessimistically affects their achievement levels when compared to their more affluent peers and will follow them throughout their schooling (Kafer, 2004). It is time for a change. It was imperative to conduct this study. As Title I schools face difficult challenges in assuring success for all its students, this study allowed for mandated researched-based practices such as PLCs, coteaching classrooms, and the RtI three tiered model to be examined for their effectiveness. In return, results provided a pathway for closing the reading gap as evidenced by the reading scores on the state's annual

accountability assessment test within the treatment school. In sum, there is a real need to provide low SES students alternative ways to learn through researched-based practices to be successful in the classroom as well as close the achievement gap that exits amongst low SES students and their counterparts, which will in turn, provide our future generation of students a means to a more positive social change for all involved.

References

Aikens, N. L., & Barbarin, O. (2008). Socioeconomic differences in reading trajectories: The contribution of family, neighborhood, and school contexts. *Journal of Educational Psychology, 100,* 235-251. doi:10.1037/0022-0663.100.2.235

Allington, R. (2009). *What really matters in response to intervention: Researched based designs*. Boston, MA: Allyn & Bacon.

Andrews, D., & Lewis, M. (2002). The experience of a professional community: Teachers developing a new image of themselves and their workplace. *Educational Research, 44*(3), 237-254. doi:10.1080/00131880210135340

Azzam, A. M. (2008). Left behind – by design. *Informative Assessment, (65)*4, 91-92. Retrieved from http://www.ascd.org/publications/educational-leadership/dec07/vol65/num04

Balfanz, R., Bridgeland, J.M., & Dilulio, J.J. (2009). The high school dropout problem: Perspectives of teachers and principals. *Education Digest, 75*(3), 20-26.

Ball, D. L., & Forzani, F. M. (2010). Teaching skillful teaching. *Educational Leadership, 68*(4), 40-45. Retrieved from http://www.ascd.org/.../dec10/vol68/num04/Teaching-Skillful-Teaching.aspx

Barth, R. (2006). Improving relationships within the schoolhouse. *Educational Leadership, 63*(6), 8-13. Retrieved from http://www.ascd.org/.../Improving Relationships-Within-the-Schoolhouse.aspx

Benjamin, E. M. (2011). *Response-to-intervention: Understanding general education teacher knowledge and implementation.* (Georgia State University). *ProQuest*

Dissertations and Theses, Retrieved from http://search.proquest.com/docview/899269033?accountid=14872

Berry, B., Johnson, D., & Montgomery, D. (2005). The power of teacher leadership. *Educational Leadership, 62* (5), 56.

Bouck, E. C. (2007). Co-teaching…Not just a textbook term: Implications for practice. *Preventing School Failure, 51*(2), 46-51. doi.10.3200/psfl.51.2.46-51

Braun, H., Chapman, L., & Vezzu, S. (2010). The African American-white achievement gap revisited. *Education Policy Analysis Archives, 18*(21). http://epaa.asu/ojs/article/view/772

Brown-Chidsey, R., & Steege, M. (2005). *Response to intervention: Principles and strategies for effective practice*. New York, NY: Guilford Press.

Brown-Chidsey, R., Bronaugh, L., & McGraw, K. (2009). *RTI in the classroom: Guidelines and recipes for success.* New York, NY: The Guilford Press.

Brualdi, A. (1998). Multiple intelligences: Gardner's theory. *Teacher Librarian, 26*(2), 26-28.

Bryant, D. (2008). *Response to intervention (RTI): The three tier model applied to early mathematics.* Austin, TX: University of Texas.

Bryant, D. P. (2012). Response to intervention (RTI): The 3-tier model applied to early mathematics. Retrieved from http://buildingrti.utexas.org/PDF/3_Tier_Math.pdf

Bryk, A. S., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). *Organizing schools for improvement: Lessons from Chicago.* Chicago: University of Chicago Press.

Buffum, A., Mattos, M., & Weber, C. (2010). The WHY behind rti. *Educational Leadership, 68*(2), 10-16. Retrieved from http://www.ascd.org/.../oct10/vol68/num02/The-Why-Behind-RTI.aspx

Bullough, R. V. (2007). Professional learning communities and the eight-year study. *Educational Horizons, 85*(3), 168-180. Retrieved from http://files.eric.ed.gov/fulltext/EJ762729.pdf

Bursuck, B., & Blanks, B. (2010). Evidence-based early reading practices within a response to intervention system. *Psychology in the Schools, 47*(5), 421-431. doi:10.1002/pits.20480

Caldwell, G. P., & Ginther, D.W. (1996). Differences in learning styles of low socioeconomic status for low and high achievers [Electronic version]. *Education, 117*, 141-148. Retrieved from http://connection.ebscohost.com/c/articles/9611212691/differences-learning-styles-low-socioeconomic-status-low-high-achievers

Campbell, P. H., & Anketell, M. (2007). Suggestions for statewide measurement systems: Pennsylvania's experience. *Topics in Early Childhood Special Education, 27*(1), 34-48. Retrieved from http://search.proquest.com.leo.lib.unomaha.edu/docview/62043451?accountid=14692.

Carwile, J. (2007). A constructivist approach to online teaching and learning. *Inquiry*, *12*(1), 68-73. Retrieved from http://www.vccaedu.org/inquiry/inquiry-spring-2007/i-12-Carwile.html

Chenoweth, K. (2007). *It's Being Done; Academic Success in Unexpected Schools*. Cambridge, MA: Harvard Education Press.

Cohen, J. (1992). Quantitative methods in psychology: A power primer. *Psychological Bulletin, 112*(1), 155-159. doi:10.1037/0033-2909.112.1.155

Conderman, G., & Johnston-Rodriguez, S. (2009). Beginning teachers' views of their collaborative roles. *Preventing School Failure, 53*(4), 235-244. doi:10.3200/PSFL.53.4.235-244

Cook, L. (2012). Co-teaching: Principles, practices, and pragmatics. New Mexico Public Education Department Quarterly Special Education Meeting, 29 April 2004, p.2. Retrieved from: http//www.hanoverresearch.com/wp-content/uploads/2012/05/effectiveness-of-co-teaching-membership.pdf.

Courtade, G., Servilio, K., Ludlow, B., & Anderson, K. (2010). Highly qualified teacher requirements for special educators: Perceptions of West Virginia stakeholders. *Rural Special Education Quarterly, 29*(3), 37-49. Retrieved from https://www.questia.com/library/journal/1P3-2202943541/highly-qualified-teacher-requirements-for-special

Cramer, E., Nevin, A., Thousand, J., & Liston, A. (2006, January). *Co-teaching in urban school districts to meet the needs of all teachers and learners: Implications for teacher education reform*. Paper presented at American Association for Colleges

of Teacher Education, San Diego, CA. Retrieved from ERIC Database (ED491651).

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods* (3rd ed.). Los Angeles, CA: Sage Publications.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Los Angeles, CA: Sage Publications.

Crosnoe, R., Morrison, F., Burchinal, M., Pianta, R., Keating, D., Friedman, S. L., & Clarke-Stewart, K. (2010). Instruction, teacher-student relations, and math achievement trajectories in elementary school. *Journal of Educational Psychology, 102*(2), 407-417. doi:10.1037/a0017762

Cundiff, D. C. (2011). *Development of teaching skills for teachers in a coteaching setting with general and special student populations*. Retrieved from Walden University Library Research website: http://search.proquest.com.ezp.waldenulibrary.org/pqdtlocal1005747?accountid=14872

Davies, B. (2005). *The essentials of school leadership*. Thousand Oaks, CA: Sage Publications.

DeVries, B. A. (2004). *Literacy assessment and intervention for the elementary classroom*. Scottsdale, AZ: Holcomb Hathaway.

Dixon, A. (2010). Focus on the school calendar. *Southern Regional Education Board,* 1–9.

DuFour, R., DuFour, R., & Eaker, R. (2008). *Revisiting professional learning communities at work: New insights for improving schools*. Bloomington, IN: Solution Tree.

Dunn, C., Chambers, D., & Rabren, K. (2004). Variables affecting students' decisions to drop out of school: Remedial and special education. *Sage Journals, 25*(5), 314-323. doi:10.1177/07419325040250050501

Eaker, R., & Keating, J. (2008). A shift in school culture: Collective commitments focus on change that benefits student learning. *Journal of Staff Development*, *29*(3), 14-17. Retrieved from http://learningforward.org/default.aspx?issueID=238

Evans, G. W. (2004, February/March). The environment of childhood poverty. *American Psychologist. 59*(2), 77-92. doi: 10.1037/0003-066X.59.2.77

Evans, P. L. (2012). *A qualitative study on the impact of professional learning communities in an elementary school*. Retrieved from Walden University Library Research website: http://search.proquest.com.ezp.waldenulibrary.org/pqdtlocal1005747?accountid=14872

Farver, J. M., Xu, Y., Eppe, S., & Lonigan, C. J. (2006). Home environments and young Latino children's School readiness. *Early Childhood Research Quarterly, 21*, 196-212. Retrieved from http://dx.doi.org/10.1016/j.ecresq.2006.04.008

FDOE. (2005b). *Bureau of K-12 assessment*. Retrieved August 10, 2011, from http://fcat.fldoe.org/

FDOE. (2010). *Florida Comprehensive Assessment Test*. Retrieved September 27, 2012, from http://fcat.fldoe.org/

Field, A. (2009). *Discovering Statistics Using SPSS* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Field, A. (2008). Research methods in psychology: *Analysis of Covariance (ANCOVA)*. Available from http://www.statistic.shell.com/ancova.pdf

Flores, A. (2007). Examining disparities in mathematics education: Achievement or opportunity gap? *High School Journal, 91*(1), 29-42. doi:10.1353/hsj.2007.0022

Friend, M., & Hurley-Chamberlain, D. (2007). Is co-teaching effective. Retrieved from http://www.cec.sped.org/AM/Template.cfm?Section=home&TEMPLATE=/CM/contentdisplay.cfm&CONTENTID=7504

Fuchs, L. (2003). Assessing intervention responsiveness: Conceptual and technical issues. *Learning Disabilities Research and Practice, 18* (3), 172-186. doi:10.1177/07419325040250050501

Gal, E., Schreur, N., & Engel-Yener, B. (2010). Inclusion of children with disabilities: Teachers' attitudes and requirements for environmental accommodations. *International Journal of Special Education, 25*(2), 89-99.

Gardner, H. (1999). *Using multiple intelligences: The theory in practice*. New York, NY: Basic Books.

Gardner, H. (2000). *Intelligence reframed. Multiple intelligences for the 21st century*. New York, NY: Basic Books.

Gardner, H. (2004). *Frames of mind: The theory of multiple intelligences* (2nd ed.). New York, NY: Basic Books.

Garrett, K. (2010). Professional learning communities allow a transformational culture to take root. *Education Digest: Essential Readings Condensed for Quick Review, 76*(2), 4-9. Retrieved from http://eric.ed.gov/?id=EJ903507

Gettinger, M., & Stoiber, K. (2008). Applying a response-to-intervention model for early literacy development in low-income children. *Topics in Early Childhood Special Education, 27,* 198-213. doi:10.1177/0271121407311238

Goleman, D., Boyatzis, R., & McKee, A. (2004). *Primal leadership: Learning to lead with emotional intelligence*. Boston: Harvard Business School Press.

Gorey, K. M. (2009). Comprehensive School Reform: Meta-Analytic Evidence of Black-White Achievement Gap Narrowing. *Education Policy Analysis Archives, 17*(25). doi:10.14507/epaa.v17n25.2009

Graham, K. J. (2009). *Mandated implementation of differentiated instruction and effectiveness examined.* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3366972)

Gravetter, F. J., & Wallnau, J. E. (2008). *Essentials of statistics for the behavioral sciences* (5th ed.) Belmont, CA: Wadsworth Thomson Learning.

Gregory, G. H., & Chapman, C. (2002). *Differentiated instructional strategies one size doesn't fit all*. Thousand Oaks, CA: Corwin Press.

Gurgur, H., & Uzuner, Y. (2010). A phenomenological analysis of the views on coteaching applications in the inclusion classroom. *Educational Sciences: Theory & Practice, 10*(1), 311-331. Retrieved from http://www.edam.com.tr/kuyeb/pdf/en/124c2d2ab5e624625d6cb16f3405fa49ENTAM.pdf

Hall, T., Strangman, N., & Meyer, A. (2011). Differentiated instruction and implications for UDL implementation. Retrieved May 6, 2015 from http://aim.cast.org/learn

Hamilton, L.W. (2010). *Project Study: An action plan for implementing response to intervention.* Walden University. *Proquest Dissertations and Theses,* 207. Retrieved from http://search.proquest.com/docview/818725950?accountid=14872. doi:8187252950.

Hatch, J. A. (2002). *Doing qualitative research in education settings*. Albany, NY: State University of New York Press.

Hawley, W. D., & Rollie, D. L. (2007). *The keys to effective schools: Education reform as continuous improvement* (2nd ed.). Thousand Oaks, CA: Corwin Press.

Heck, R.H., & Hallinger, P. (2010). Testing a longitudinal model of distributed leadership effects on school improvement. *The Leadership Quarterly, 21*, 867-885. doi:10.1016/j.leaqua.2010.07.013

Hess, K., Jones, B., Carlock, D., and Walkup, J.R. (2009). Cognitive rigor: Blending the strengths of Bloom's taxonomy and Webb's depth of knowledge to enhance classroom-level processes, Education Resources Information Center ED517804.

Hindin, A., Morocco, C. C., Mott, E. A., & Aguilar, C. M. (2007). *More than just a group: teacher collaboration and learning in the workplace*. Teachers and Teaching: Theory and Practice, *13*(4), 349-376.

Hoover, J. J., & Love, E. (2011). Supporting school-based response to intervention: A practitioner's model. *Council for Exceptional Children, 43*(3), 40-48.

Hoover, J. J., & Patton, J. R. (2008). The role of special educators in a multitiered instructional system. *Intervention in School & Clinic, 43*(4), 195. Retrieved from Questia database: http://www.questia.com/PM.qst?a=o&d=5026235207

Hord, S. M. (2009). Professional learning communities. *Journal of Staff Development, 30*(1), 40-43. Retrieved from http://www.learningforward.org/publications/jsd?gclid=CNJzfS1xrkCFYtQOgodFFYA-Q

Hord, S. M. & Sommers, W.A. (2008). *Leading professional learning communities.* Thousand Oaks, CA: Corwin Press.

Horowitz, J. L. (2011). Applied Nonparametric Instrumental Variables Estimation. *Econometrica, 79*(2), 347–394. doi:10.3982/ECTA8662

Huck, A. W. (2012). Reading statistics and research (6th ed.). Boston, MA: Pearson Educational.

Individuals with Disabilities Education Act Public Law 108-446. (2004). Retrieved from http://www.copyright.gov/legislation/p108-446.pdf

Individuals with Disabilities Education Act (IDEA) of 2004, 20 USC § 1400 et seq. Retrieved from http://idea.ed.gov/explore/view/p/%2Croot%2Cstatute%2CI%2C

Jitendra, A. K., Edwards, L. L., Choutka, C. M., & Treadway, P. S. (2002). A collaborative approach to planning in the content areas for students with learning disabilities: Accessing the general curriculum. *Learning Disabilities Research & Practice, 17* (4), 252-267.

Johnson, J. A., Musial, D., Hall, G. E., Gollnick, D. M., & Dupuis, V. L. (2008). Foundations of American education: Perspectives on education in a changing world (14th ed.). Boston, MA: Pearson Educational.

Johnston, P. (2010). An instructional framework for RTI. *The Reading Teacher, 63*(7), 602-604. doi:10.1598/rt.63.7.8

Jones, M., Michael, C., Mandala, J., & Colachico, D. (2008). Collaborative teaching: creating a partnership between general education and special education. *The International Journal of Learning, 15*(7). 203-207. Retrieved from http://ijl.cgpublisher.com/product/pub.30/prod.1830

Just Read Florida! data revisited. (n.d.). Retrieved December 17, 2014, from Florida Department of Education website, http://www.justreadflorida.com/pdf/FLAiRBrochureVer3.pdf.

Kafer, K. (2004). A head start for poor children? *Backgrounder* (1755). Published by the Heritage Foundation.

Kalberg, J. R., Lane, K. L., & Menzies, H. M. (2010). Using systematic screening procedures to identify students who are nonresponsive to primary prevention efforts: Integrating academic and behavioral measures. *Education and Treatment of Children, 33*(4), 561-584.

Kavale, K. A., Kauffman, J. M., Bachmeier, R. J., & Lefever, G. B. (2008). Response-to-Intervention: Separating the rhetoric of self-congratulation from the reality of specific learning disability identification. *Learning Disability Quarterly, 31*(3), 135. Retrieved from Questia database: http://www.questia.com/PM.qst?a=o&d=5029045858

Kets de Vries, M., & Korotov, K. (2010). Developing leaders and leadership development. *INSEAD Working Papers Collection.* Retrieved from http://search.ebscohost.com

Kloo, A., & Zigmond, N. (2008). Co-teaching revisited: Redrawing the blueprint. *Preventing School Failure, 52*(2), 12-20. doi: 10.3200/PSFL.52.2.12-20

Kohler-Evans, P. A. (2006). Co-teaching: how to make this marriage work in front of the kids. *Education*, *127*(2), 260-264. Retrieved from http://www.eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=EJ765824&ERICExtSearch_SearchType_0=no&accno=EJ765824

Konstantopoulos, S. (2008). Do small classes reduce the achievement gap between low and high achievers? Evidence from project STAR. *Elementary School Journal, 108*(4), 275-291. doi:10.1086/528972

Lambert, L., Walker, D., Zimmerman, D. P., Cooper, J. E., Lambert, M. D., Gardner, M. E., & Szabo, M. (2002). *The constructivist leader* (2nd ed.). New York, NY: Teachers College Press.

Leithwood, K., & Jantzi, D. (2007). Transformational leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School Effectiveness and School Improvement, 17*(2), 201-227. doi:10.1080/09243450600565829

Lemann, N., (1999). The IQ meritocracy. *Time, 153*(12), 115-116.

Linder, R. A., Post, G., & Calabrese, K. (2012). Professional learning communities: Practices for successful implementation. *Delta Kappa Gamma Bulletin, 78*(3), 13-22. Retrieved from http://connection.ebscohost.com/c/articles/74029559/professional-learningcommunities-practices-successful-implementation

Lindsey, R., Roberts, L., & Campbell-Jones, F. (2005). *The culturally proficient school. An implementation guide for school leaders*. Thousand Oaks, CA: Sage Publications.

Lingo, A. S., Barton-Arwood, S., & Jolivette, K. (2011). Teachers working together. *Teaching Exceptional Children, 43*(3), 6-13.

Lodico, M., Spaulding, D., & Voegtle, K. (2010). *Methods in educational research: From theory to practice*. San Francisco, CA: Jossey-Bass.

Magiera, K., & Zigmond, N. (2005). Co-teaching in middle school classroom under routine conditions: Does the instructional experience differ for students with disabilities in co-taught and solo-taught classes? *Learning Disabilities Research & Practice, 20*(2), 79-85. doi: 10.1111/j.1540-5826.2005.00123.x

Marshall, M. N. (1996). Sampling for qualitative research. *Family Practice; 13*(6): 522-525. doi:10.1093/fampra/13.6.522

Marston, D., Muyskens, P., Lau, M., & Canter, A. (2003). Problem-solving model for decision making with high-incidence disabilities: The Minneapolis experience. *Learning Disabilities Research & Practice, 18,* 187-200. doi:10.1111/1540-5826.00074

Martella, N., Martella, R., & Przychozin, A. (2009). Analysis of corrective reading research. *Journal of Direct Instruction, 5*(1), 37-65. Retrieved from http://www.biomedsearch.com/article/overview-research-summary-peer-delivered/170020706.html

Marzano, R. (2003). *What works in schools: Translating research into action*. Alexandria, VA: Association for Supervision and Curriculum Development.

McDuffie, K., Mastropieri, M., & Scruggs, T. (2009). Differential effects of peer tutoring in co-taught and non-co-taught classes: results for content learning and student-teacher interactions. *Council for Exceptional Children, 75*(4), 493-510. Retrieved from http://www.cec.sped.org/AM/Template.cfm?Section=CEC_Today1&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=12918

McHatton, P., & Daniel, P. (2008). Co-teaching at the pre-service level: special education majors collaborate with english education majors. *Teacher Education and Special Education, 31*(2), 118-131. doi:10.1177/088840640803100205

Mckenzie, R. G. (2009). Obscuring vital distinctions: The oversimplification of learning disabilities within RTI. *Learning Disability Quarterly, 32*(4), 203. Retrieved from Questia database: http://www.questia.com/PM.qst?a=o&d=5041167719

Mellard, D., Frey, B., & Woods, K. (2012). School-wide student outcomes of response to intervention frameworks. *Learning Disabilities – A Contemporary Journal. 10*(2), 17-32.

Mesmer, E., & Mesmer, H. (2008). Response to intervention (RTI): What teachers of reading need to know. *The Reading Teacher, 62*(4), 280-290. doi:10.1598/rt.62.4.1

Moran, S., Kornhaber, M., & Gardner, H. (2006). Orchestrating multiple intelligences. *Educational Leadership, 64*(1), 22-27. Retrieved from http://www.ascd.org/publications/educational-leadership/sept06/vol64/num01/Orchestrating-Multiple-Intelligences.aspx

Muijs, D., Harris, A. Chapman, C., Stoll, L., & Russ, J. (2009). Improving schools in socioeconomically disadvantaged areas—A review of research evidence. *School Effectiveness and School Improvement, 15*, 149-175. doi:10.1076/sesi.15.2.149.30433

Murawski, W. W. (2008). Five keys to co-teaching in inclusive classrooms. *School Administrator, 65*(8), 29. Retrieved from http://www.indstate.edu/blumberg/iep/docs/Admin-and-Coteaching.pdf

Murawski, W. W., & Hughes, C. E. (2009). Response to intervention, collaboration, and co-teaching: a logical combination for successful systemic change. *Preventing School Failure, 53*(4), 267-277. doi: 10.3200/PSFL.53.4.267-277

National Association of Secondary School Principals. (2004). *Breaking ranks II: Strategies for leading high performing teams*. Reston, VA: Author.

National Dissemination Center for Children with Disabilities. (2012). *Response to Intervention (RTI)*. Retrieved from http://nichcy.org/schools-administrators/rti

National Education Association. (2010). *Special education and the individuals with disabilities education act*. Retrieved from http://www.nea.org/specialed

National Staff Development Council. (2001). *National Staff Development Council's standards for staff development, revised*. Oxford, OH: Author.

Nichols, J., Dowdy, A., & Nichols, C. (2010). Co-teaching: An educational promise for Children with disabilities or a quick fix to meet the mandates of no child left behind? *Education, 130*(4), 647-651.

No Child Left Behind Act of 2001, Pub. L. No. 107-110, § 115, Stat. 1425 (2002).

Noble, K. G., Farah, M. J., & McCandiss, B. D. (2006). Brain–behavior relationships in reading acquisition are modulated by socioeconomic factors, *Developmental Science, 9(6),* 642-654. doi:10.1111/j.1467-7687.2006.00542.x

O'Connor, R. E., Harty, K. R., & Fulmer, D. (2005). Tiers of intervention in kindergarten through third grade. *Journal of Learning Disabilities, 38,* 532-538. doi:10.1177/00222194050380060901

O'Donnell, P. S., & Miller, D. N. (2011). Identifying students with specific learning disabilities: School psychologists' acceptability of the discrepancy model versus response to intervention. *Journal of Disability Policy Studies, 22*(2), 83-94. doi:10.1177/1044207310395724

Odden, A. R., Goetz, M. E., & Picus, L. O. (2008). Using available evidence to estimate the cost of educational adequacy. *Education Finance and Policy, 3*(3), 374-397. doi:10.1162/edfp.2008.3.3.374

Olszewski-Kubilius, P. (2006). Addressing the achievement gap between minority and non-minority children: Increasing access and achievement through project excite. *Gifted Child Today, 29*(2), 28-37. doi:10.4219/gct-2006-198

Orr, A. J. (2003). Black-White differences in achievement: The importance of wealth. *Sociology of Education, 76,* 281-304. doi:10.2307/1519867

Oxley, D. (2008). From high school to learning communities: Five domains of practice. Portland, OR: Northwest Regional Educational Laboratory.

Paige, R., & Witty, E. (2010). *The African American-white achievement gap: Why closing it is the greatest civil rights issue of our time.* New York, NY: American Management Association.

Phillips, J. (2003). Powerful learning: Creating learning communities in urban school reform. *Journal of Curriculum and Supervision, 18* (3), 240-258. Retrieved from http://www.ascd.org/ASCD/pdf/journals/jcs/jcs2003spring_phillips.pdf

Ploessl, D. M., Rock, M. L., Schoenfeld, N., & Blanks, B. (2010). On the same page: Practical techniques to enhance co-teaching interactions. *Intervention in School & Clinic, 45*(3), 158-168. doi:10.1177/1053451209349529

Powell, W., & Kusuma-Powell, O. (2009). Leadership for learning: Conversations that matter. *International Schools Journal, 28*(2), 45-56. Retrieved from http://search.ebscohost.com

Principato, K. (2010). *A quantitative study of the added-value of co-teaching models implemented in the fourth grade classes of a suburban New Jersey school district*. Retrieved from Walden University Library Research website: http://search.proquest.com.ezp.waldenulibrary.org/pqdtlocal1005747?accountid=14872

Ramsey, R. D. (2005). *What matters most for school leaders: 25 reminders of what is really important.* Thousand Oaks, CA: Corwin Press.

Rathbun, A., West, J., & Walston, J. (2005). *Relationships between family risks and children's reading and mathematics growth from kindergarten through third grade*. Paper presented at the 2005 Annual Meeting of the American Educational Research Association, Montreal, Canada. Retrieved from: http://drum.lib.umd.edu/bitstream/1903/7657/1/umi-umd-4931.pdf

Reimers, F. M. (2008). Preparing students for the flat world. *Education Week, 28*(7), 24-25. Retrieved from http://www.edweek.org/ew/articles/2008/10/08/07reimers.h28.html

Rosenbaum, P. R. (2002). Attributing effects to treatment in matched observational studies. *Journal of the American Statistical Association, 97*(457), 183-192. doi:10.1198/016214502753479329

RTI Action Network. (2012). *What is RTI?* Retrieved from http://www.rtinetwork.org/learn/what/whatisrti

Rubin, J., & Rubin, S. (2005). *Qualitative interviewing. The art of hearing data.* Thousand Oaks, CA: Sage Publications.

Saban, J., & Wolfe, S. (2009). Mentoring principals around leadership practices. *Catalyst for Change, 36*(1), 2-6. Retrieved from http://search.ebscohost.com

Scheeler, M. C., Congdon, M., & Stansbery, S. (2010). Providing immediate feedback to co-teachers through bug-in-ear technology: an effective method of peer coaching in inclusion classrooms. *Teacher Education and Special Education, 33*(1), 83-96.

Schneider, H., & Eisenberg, D. (2006). Who receives a diagnosis of attentiondeficit/ hyperactivity disorder in the United States elementary school population? *Pediatrics, 117,* 601-609. Retrieved from http://pediatrics.aappublications.org/content/117/4/e601.full

Scigliano, D., & Hipsky, S. (2010). 3 ring circus of differentiated instruction. *Kappa Delta Pi Record,46(2),* 82. doi:10.1080/00228958.2010.10516699

Scott, T. M., & Kamps, D. M. (2007). The future of functional behavioral assessment in school settings. *Behavioral Disorders, 32*(3), 146. Retrieved from Questia database: http://www.questia.com/PM.qst?a=o&d=5035162899

Semadeni, J. (2010). When teachers drive their learning. *Educational Leadership, 67*(8), 66-69.

Sergiovanni, T. J. (2005). *The principalship: A reflective practice perspective 5th ed*. Needham Heights, Maryland: Allyn and Bacon.

Shaw, B. (2009). Impact of leadership styles on school climate. (Ph. D. dissertation). Capella University, Unites States – Minnesota. Retrieved from Dissertation & Thesis: Full Text. (Publication No. AAT3344915).

Sileo, J. M., & van Garderen, D. (2010). Creating optimal opportunities to learn mathematics: blending co-teaching structures with research-based practices. *Teaching Exceptional Children, 42*(3), 14-21. Retrieved from http://cec.metapress.com/content/01681604530gw7tp/?p=39e6f877074a4ac49687ea216a4ab4ba&pi=1

Simmons, D. R., Robertson, A. E., McKay, L. S., Toal, E., McAleer, P., & Pollick, F. E. (2009). Vision in autism spectrum disorders. *Vision Research, 49*(22), 2705–2739. doi:10.1016/j.visres.2009.08.005

Slavin, R, & Madden, N. (2004). *Students at-risk of school failure: The problem of its dimensions.* Johns Hopkins University, Center for Research on Elementary and Middle Schools. Boston: Allyn and Bacon.

Slavit, D., Kennedy, A., Lean, Z., Nelson, T., & Deuel, A. (2011). Support for professional collaboration in middle school mathematics: A complex web. *Teacher Education Quarterly, 38*(3), 113-131. Retrieved from http://eric.ed.gov/?id=EJ940637

Smith, M. K. (2002). Gardner and multiple intelligences and education. [Electronic Version]. *The Encyclopedia of Informal Education*, Retrieved from: http//www.infed.org/thinkers/gardner.htm

Spring, J. (2007). *American education* (13th ed.). Belmont, CA: McGraw-Hill.

SPSS Inc. (2009). Statistical Package for the Social Sciences, (Version 16.0), Chicago, IL SPSS Inc. Headquarters.

Stewart, R. M., Benner, G. J., Martella, R. C., & Marchand-Martella, N. E. (2007). Three tier models of reading and behavior: A research review. *Journal of Positive Behavior Interventions, 9*(4), 239. Retrieved from Questia database: http://www.questia.com/PM.qst?a=o&d=5023164940

Stumbo, C. & McWalters, P. (2011). Measuring effectiveness: What will it take? *Educational Leadership, 68, (4), December 2010-January 2011*, 10-15.

Supovitz, J.A., & Christman, J.B. (2003, November). Developing communities of instructional practice: Lessons for Cincinnati and Philadelphia. *CPRE Policy Briefs.* University of Pennsylvania, 1-9.

Tannock, M. T. (2009). Tangible and intangible elements of collaborative teaching. *Intervention in School and Clinic, 44*(3). 173-178. doi: 10.1177/1053451208318682

Toler, D. E., Jr. (2012). The impact of small learning communities on academic achievement. Retrieved from Walden University Library Research website: http://search.proquest.com.ezp.waldenulibrary.org/pqdtlocal1005747?accountid=14872

Tomlinson, C. A., & Imbeau, M. B. (2010). *Leading and managing a differentiated classroom.* Alexandria. VA: ASCD.

Tonn, J. L. (2007). States seeking greater flexibility under the NCLB. *Education Week, 26,* 1-3. Retrieved from Advanced Scholar Database.

U.S. Department of Agriculture. (2013). *Department of agriculture food and nutrition service.* Retrieved from http://www.fns.usda.gov/schoolmeals/income-eligibility-guidelines.pdf

U.S. Department of Education. (2009a). *State and local implementation of the No Child Left Behind Act: Volume VII-Title 1 school choice and supplemental educational services: Final report.* Retrieved from http://www2.ed.gov/rschstat/eval/choice/nclb-choice-ses-final/choice-ses-final.pdf

U.S. Department of Education. (2009b). *Elementary & secondary education: Title 1-improving the academic achievement of the disadvantage.* Retrieved from http://www2.ed.gov/policy/elsec/leg/esea02/pg1.html

U.S. Department of Education. (2010). *Elementary and Secondary Education Act.* Retrieved from http://www2.ed.gov/

VanDerHeyden, A. (2012). Approaches to RTI. Retrieved from http://www.rtinetwork.org /learn.what/approaches-to-rti

Vaughn, S., & Fuchs, D. (2003). Redefining learning disabilities as inadequate response to instruction: The promise and potential problems. *Learning Disabilities Research & Practice, 18*, 137–146. doi:10.1111/1540-5826.00070

Vaughan, N. (2007). Perspectives on Blended Learning in Higher Education. *International Journal on E-Learning, 6*(1), 81-94. Retrieved from http://www.editlib.org/p/6310.

Vescio, V., Ross, D. & Adams. A. (2008). *A review of research on the impact of professional learning communities on teaching practice and student learning.* Teaching and Teacher Education, *24*, 80-91. doi:10.1016/j.tate.2007.01.004

Villa, R. A., Thousand, J. S., & Nevin, A. I. (2008). A guide to co-teaching: Practical tips for facilitating student learning (2nd ed.). Thousand Oaks, CA: Corwin Press.

Voices for Virginia's Children (2010). Early Warning! Why Reading by the End of Third Grade Matters. Retrieved from http://vakids.org/pubs/Education/SpecialReportfinal%20EMBARGO%20Until%205.18.10.pdf

Volonino, V. & Zigmond, N. (2007). Promoting research-based practices through inclusion? *Theory into Practice, 46(*4), 291-300. doi:10.1080/00405840701593873

Wagner, R. K. (2005). Understanding genetic and environmental influences on the development of reading: Reaching for higher fruit. *Scientific Studies of Reading, 9*(3), 317-326. doi:10.1207/s1532799xssr0903_7

Walqui, A. (2008). Quality teaching for English Learners: The development of adolescent English Language Learners' potential through a pedagogy of high challenge and high support. WestEd. Retrieved from http://www.wested.org/qtel.

Walther-Thomas, C. S. (1997). Co-teaching experiences: The benefits and problems that teachers and principals report over time. *Journal of Learning Disabilities, 30*(4), 395-407. doi: 10.1177/002221949703000406

Wannemuehler, A. (2010). *The efficacy of response to intervention on improving reading achievement and special education referral rates*. Retrieved from Walden University Library Research website: http://search.proquest.com.ezp.waldenulibrary.org/pqdtlocal1005747?accountid=14872

Webb, N. L. (2002). Alignment study in language arts, mathematics, science, and social studies of state standards and assessments for four states, Retrieved from Council of Chief State School Officers: http://www.ccsso.org/Publications/Download.cfm?Filename=AlignmentStudy.pdf

Webster-Wright, A. (2009). *Reframing professional development through understanding authentic professional learning*. Review of Educational Research, *79*(2), 702-739.

Weiss, M. P. (2004). Co-teaching as science in the schoolhouse: More questions than answers. *Journal of Learning Disabilities, 37*(3), 218-223. doi:10.1177/00222194040370030601

Wilson, G. L., & Michaels, C. A. (2006). General and special education students' perceptions of co-teaching: implications for secondary-level literacy instruction. *Reading and Writing Quarterly, 22*, 205-225. doi:10.1080/10573560500455695

Wisconsin Department of Public Instruction. (2009). *Economically disadvantaged status data collection and reporting*. Retrieved September 27, 2009, Retrieved from http://www.ed.gov/about/offices/list/oii/resources/info/guidance.html

Wright, J. (2007). RTI toolkit: A practical guide for schools. Port Chester, NY: Dude Publishing.

York-Barr, J., Ghere, G., & Sommerness, J. (2007). Collaborative teaching to increase ELL student learning: a three-year urban elementary case study. *Journal of Education for Students Placed at Risk, 12*(3), 301-335. doi:10.1080/10824660701601290

Zhang, H. & Cowen, D. J. (2009). Mapping academic achievement and public school choice under the No Child Left Behind legislation. *Southeastern Geographer, 49*(1), 24–40. doi:10.1353/sgo.0.0036

Appendix A: Walden's University IRB Approval Letter

Gmail

Oliver Phipps <oliver.phipps@waldenu.edu>

IRB Materials Approved - Oliver Phipps
1 message

IRB <IRB@waldenu.edu> Fri, Oct 17, 2014 at 6:31 PM
To: Oliver Phipps <oliver.phipps@waldenu.edu>
Cc: Mansureh Kebritchi <mansureh.kebritchi@waldenu.edu>, Doctoral Study <DoctoralStudy@waldenu.edu>, IRB <IRB@waldenu.edu>

Dear Mr. Phipps,

This email is to notify you that the Institutional Review Board (IRB) confirms that your study entitled, "The Effect of Researched-Based Practices on Reading Achievement of Title I Students," meets Walden University's ethical standards. Our records indicate that you will be analyzing data provided to you by Manatee Elementary School and Lake Trafford Elementary School as collected under their oversight. Since this study will serve as a Walden doctoral capstone, the Walden IRB will oversee your capstone data analysis and results reporting. The IRB approval number for this study is 10-17-14-0073147.

This confirmation is contingent upon your adherence to the exact procedures described in the final version of the documents that have been submitted to IRB@waldenu.edu as of this date. This includes maintaining your current status with the university and the oversight relationship is only valid while you are an actively enrolled student at Walden University. If you need to take a leave of absence or are otherwise unable to remain actively enrolled, this is suspended.

If you need to make any changes to your research staff or procedures, you must obtain IRB approval by submitting the IRB Request for Change in Procedures Form. You will receive confirmation with a status update of the request within 1 week of submitting the change request form and are not permitted to implement changes prior to receiving approval. Please note that Walden University does not accept responsibility or liability for research activities conducted without the IRB's approval, and the University will not accept or grant credit for student work that fails to comply with the policies and procedures related to ethical standards in research.

When you submitted your IRB materials, you made a commitment to communicate both discrete adverse events and general problems to the IRB within 1 week of their occurrence/realization. Failure to do so may result in invalidation of data, loss of academic credit, and/or loss of legal protections otherwise available to the researcher.

Both the Adverse Event Reporting form and Request for Change in Procedures form can be obtained at the IRB section of the Walden website: http://academicguides.waldenu.edu/researchcenter/orec

Researchers are expected to keep detailed records of their research activities (i.e., participant log sheets, completed consent forms, etc.) for the same period of time they retain the original data. If, in the future,

Appendix B: Request for Data Application to School Board

OFFICE OF
ASSESSMENT AND DATA MANAGEMENT
[illegible] Naples, Florida [illegible]
(239) [illegible] • (239) 377-0001 FAX

October 8, 2014

Re: Research Request **1CB701**

Dear Mr. Phipps:

The above referenced request has been approved by the Collier County Public Schools Research and Data Committee. It is now your obligation to conduct the study as outlined in the proposal and the *Collier County School District Guidelines for Conducting Research*.

Your approval is also subject to the following guidelines as designated by the committee:

(a) Information is collected anonymously, and no personally identifiable information is obtained from or reported on any individual student, person, group, or organization. If your research involves the collection of data from students, you must provide details of your study, (survey questions to be asked, etc.) and get signed permission from their parents/guardians.
(b) If the district is to be identified in any manner in the final report of an approved study, prior permission must be secured.
(c) The cooperating organization or individual will furnish a copy of the final results to the district.
(d) All personnel involved (staff, teachers, administrators, etc.) know it is voluntary to participate and identity information is kept confidential.
(e) Research conducted on accepted proposals must be actively underway within one (1) year of the date of acceptance. Researchers must request an extension for approved research proposals that are not initiated and actively underway by this time.
(f) Approval means the researcher may collect data as specified in the original proposal. This notification is not approval to provide data, promise of services, nor is it permission to use district data. Should the researcher pursue data beyond the parameters of the research proposal, all access to district resources will be denied to the researcher and any organization he/she presently represents.
(g) Approval does not include any services from the district including access to district databases (unless it is public information available through the district's public information office.)
(h) Personnel from the Department of Assessments and Data Management will not provide research services.
(i) The researcher must notify the committee about any changes made to the original proposal. The committee reserves the right to rescind its approval if the modifications do not satisfy any of the conditions detailed above.

Please contact the Office of Assessments and Data Management should you have any questions or concerns.
Respectfully,

James Briggs
Coordinator
Research Committee

Appendix C: Data Use Agreement – Treatment School

DATA USE AGREEMENT

This Data Use Agreement ("Agreement"), effective as of October 7, 2014, is entered into by and between Oliver L. Phipps, Data Recipient, and Manatee Elementary, Data Provider. The purpose of this Agreement is to provide Data Recipient with access to a Limited Data Set for use in research **in accord with laws and regulations of the governing bodies associated with the Data Provider, Data Recipient, and Data Recipient's educational program.** In the case of a discrepancy among laws, the agreement shall follow whichever law is more strict.

1. Definitions. Due to the study's affiliation with Laureate, a USA-based company, unless otherwise specified in this Agreement, all capitalized terms used in this Agreement not otherwise defined have the meaning established for purposes of the USA "HIPAA Regulations" and/or "FERPA Regulations" codified in the United States Code of Federal Regulations, as amended from time to time.

2. Preparation of the LDS. Data Provider shall prepare and furnish to Data Recipient a LDS in accord with any applicable laws and regulations of the governing bodies associated with the Data Provider, Data Recipient, and Data Recipient's educational program.

3. Data Fields in the LDS. **No direct identifiers such as names may be included in the Limited Data Set (LDS).** In preparing the LDS, Data Provider shall include the **data fields specified as follows**, which are the minimum necessary to accomplish the research:

    - Data from school records in connection to the 2010/2011 FAIR results for grade 3
    - 2010/2011, 2011/2012, and 2012/2013 Florida Comprehensive Assessment Test 2.0 result data for grade 3, 4, and 5.

4. Responsibilities of Data Recipient. Data Recipient agrees to:

    a. Use or disclose the LDS only as permitted by this Agreement or as required by law;

    b. Use appropriate safeguards to prevent use or disclosure of the LDS other than as permitted by this Agreement or required by law;

    c. Report to Data Provider any use or disclosure of the LDS of which it becomes aware that is not permitted by this Agreement or required by law;

    d. Require any of its subcontractors or agents that receive or have access to the LDS to agree to the same restrictions and conditions on the use and/or disclosure of the LDS that apply to Data Recipient under this Agreement; and

e. Not use the information in the LDS to identify or contact the individuals who are data subjects.

5. Permitted Uses and Disclosures of the LDS. Data Recipient may use and/or disclose the LDS **for its Research activities only.**

6. Term and Termination.

a. Term. The term of this Agreement shall commence as of the Effective Date and shall continue for so long as Data Recipient retains the LDS, unless sooner terminated as set forth in this Agreement.

b. Termination by Data Recipient. Data Recipient may terminate this agreement at any time by notifying the Data Provider and returning or destroying the LDS.

c. Termination by Data Provider. Data Provider may terminate this agreement at any time by providing thirty (30) days prior written notice to Data Recipient.

d. For Breach. Data Provider shall provide written notice to Data Recipient within ten (10) days of any determination that Data Recipient has breached a material term of this Agreement. Data Provider shall afford Data Recipient an opportunity to cure said alleged material breach upon mutually agreeable terms. Failure to agree on mutually agreeable terms for cure within thirty (30) days shall be grounds for the immediate termination of this Agreement by Data Provider.

e. Effect of Termination. Sections 1, 4, 5, 6(e) and 7 of this Agreement shall survive any termination of this Agreement under subsections c or d.

7. Miscellaneous.

a. Change in Law. The parties agree to negotiate in good faith to amend this Agreement to comport with changes in federal law that materially alter either or both parties' obligations under this Agreement. Provided however, that if the parties are unable to agree to mutually acceptable amendment(s) by the compliance date of the change in applicable law or regulations, either Party may terminate this Agreement as provided in section 6.

b. Construction of Terms. The terms of this Agreement shall be construed to give effect to applicable federal interpretative guidance regarding the HIPAA Regulations.

c. No Third Party Beneficiaries. Nothing in this Agreement shall confer upon any person other than the parties and their respective successors or assigns, any rights, remedies, obligations, or liabilities whatsoever.

d. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

e. Headings. The headings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement.

IN WITNESS WHEREOF, each of the undersigned has caused this Agreement to be duly executed in its name and on its behalf.

DATA PROVIDER

Signed: Wendy Borowski

Print Name: Wendy Borowski

Print Title: Principal

DATA RECIPIENT

Signed:

Print Name: Oliver C. Parks

Print Title: Researcher

Appendix D: Data Use Agreement – Control School

DATA USE AGREEMENT

This Data Use Agreement ("Agreement"), effective as of October 7, 2014, is entered into by and between Oliver L. Phipps, Data Recipient, and Lake Trafford Elementary, Data Provider. The purpose of this Agreement is to provide Data Recipient with access to a Limited Data Set for use in research **in accord with laws and regulations of the governing bodies associated with the Data Provider, Data Recipient, and Data Recipient's educational program.** In the case of a discrepancy among laws, the agreement shall follow whichever law is more strict.

1. Definitions. Due to the study's affiliation with Laureate, a USA-based company, unless otherwise specified in this Agreement, all capitalized terms used in this Agreement not otherwise defined have the meaning established for purposes of the USA "HIPAA Regulations" and/or "FERPA Regulations" codified in the United States Code of Federal Regulations, as amended from time to time.

2. Preparation of the LDS. Data Provider shall prepare and furnish to Data Recipient a LDS in accord with any applicable laws and regulations of the governing bodies associated with the Data Provider, Data Recipient, and Data Recipient's educational program.

3. Data Fields in the LDS. **No direct identifiers such as names may be included in the Limited Data Set (LDS).** In preparing the LDS, Data Provider shall include the **data fields specified as follows**, which are the minimum necessary to accomplish the research:

    - Data from school records in connection to the 2010/2011 FAIR results for grade 3
    - 2010/2011, 2011/2012, and 2012/2013 Florida Comprehensive Assessment Test 2.0 result data for grade 3, 4, and 5.

4. Responsibilities of Data Recipient. Data Recipient agrees to:

    a. Use or disclose the LDS only as permitted by this Agreement or as required by law;

    b. Use appropriate safeguards to prevent use or disclosure of the LDS other than as permitted by this Agreement or required by law;

    c. Report to Data Provider any use or disclosure of the LDS of which it becomes aware that is not permitted by this Agreement or required by law;

    d. Require any of its subcontractors or agents that receive or have access to the LDS to agree to the same restrictions and conditions on the use and/or disclosure of the LDS that apply to Data Recipient under this Agreement; and

e. Not use the information in the LDS to identify or contact the individuals who are data subjects.

5. Permitted Uses and Disclosures of the LDS. Data Recipient may use and/or disclose the LDS **for its Research activities only.**

6. Term and Termination.

a. Term. The term of this Agreement shall commence as of the Effective Date and shall continue for so long as Data Recipient retains the LDS, unless sooner terminated as set forth in this Agreement.

b. Termination by Data Recipient. Data Recipient may terminate this agreement at any time by notifying the Data Provider and returning or destroying the LDS.

c. Termination by Data Provider. Data Provider may terminate this agreement at any time by providing thirty (30) days prior written notice to Data Recipient.

d. For Breach. Data Provider shall provide written notice to Data Recipient within ten (10) days of any determination that Data Recipient has breached a material term of this Agreement. Data Provider shall afford Data Recipient an opportunity to cure said alleged material breach upon mutually agreeable terms. Failure to agree on mutually agreeable terms for cure within thirty (30) days shall be grounds for the immediate termination of this Agreement by Data Provider.

e. Effect of Termination. Sections 1, 4, 5, 6(e) and 7 of this Agreement shall survive any termination of this Agreement under subsections c or d.

7. Miscellaneous.

a. Change in Law. The parties agree to negotiate in good faith to amend this Agreement to comport with changes in federal law that materially alter either or both parties' obligations under this Agreement. Provided however, that if the parties are unable to agree to mutually acceptable amendment(s) by the compliance date of the change in applicable law or regulations, either Party may terminate this Agreement as provided in section 6.

b. Construction of Terms. The terms of this Agreement shall be construed to give effect to applicable federal interpretative guidance regarding the HIPAA Regulations.

c. No Third Party Beneficiaries. Nothing in this Agreement shall confer upon any person other than the parties and their respective successors or assigns, any rights, remedies, obligations, or liabilities whatsoever.

d. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

e. Headings. The headings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement.

IN WITNESS WHEREOF, each of the undersigned has caused this Agreement to be duly executed in its name and on its behalf.

DATA PROVIDER

Signed: _____

Print Name: Brian Castellani

Print Title: Principal

DATA RECIPIENT

Signed: _____

Print Name: Oliver L. Phipps

Print Title: Researcher

Appendix E: FCAT/FCAT 2.0 Test Administration and Security Agreement

FCAT 2.0
Florida Comprehensive Assessment Test®

Florida EOC Assessments

Florida Standards Assessments

Test Administration and Security Agreement

Florida Department of Education
Bureau of K–12 Student Assessment

Florida State Board of Education Rule 6A-10.042, FAC, was developed to meet the requirements of the Test Security Statute, s. 1008.24, F.S., and applies to anyone involved in the administration of a statewide assessment. The Rule prohibits activities that may threaten the integrity of the test. The Florida Test Security Statute and State Board of Education Rule are located in the appendices of each test administration manual. Examples of prohibited activities are listed below:

- Reading or viewing the passages or test items
- Revealing the passages or test items
- Copying the passages or test items
- Explaining or reading passages or test items for students
- Changing or otherwise interfering with student responses to test items
- Copying or reading student responses
- Causing achievement of schools to be inaccurately measured or reported

If any of the above examples are allowable accommodations for students with current IEPs, Section 504 plans, or ELL plans, test administrators are permitted to provide the accommodation(s) as described in each test administration manual.

All personnel are prohibited from examining or copying the test items and/or the contents of the test. The security of all test materials must be maintained before, during, and after the test administration. Please remember that after ANY administration, initial OR make-up, materials must be returned immediately to the school assessment coordinator and placed in locked storage. Secure materials should not remain in classrooms or be taken out of the building overnight.

The use of untrained test administrators increases the risk of test invalidation due to test irregularities or breaches in test security. Inappropriate actions by district or school personnel will result in further investigation, possible loss of teaching certification, and possible involvement of law enforcement agencies.

I, _____, understand that I must receive adequate training regarding the administration of statewide assessments and read the information and instructions provided in all applicable sections of the relevant test administration manual(s), including the Florida Test Security Statute and State Board of Education Rule. I agree to follow all test administration and security procedures outlined in the manual(s), Statute, and Rule.

Further, I will not reveal or disclose any information about the test items or engage in any acts that would violate the security of statewide assessments or cause student achievement to be inaccurately represented.

_____ _____

School Name and Number *Print Name*

_____ _____

Date *Signature*

Appendix F: FCAT/FCAT 2.0 Test Administration Prohibited Activities Agreement

FCAT Florida Comprehensive Assessment Test®

FCAT 2.0 Florida Comprehensive Assessment Test®

Florida EOC Assessments

Florida Standards Assessments

Test Administrator Prohibited Activities Agreement

It is important for you, as a test administrator of a statewide assessment, to know that the following activities are prohibited. Engaging in such activities may result in an investigation, loss of teaching certification, and/or prosecution for violation of the law. Please read the following list of prohibited activities and sign your name on the signature line at the bottom of this page indicating that you understand these actions and their consequences.

I understand that before testing I may not:

- Leave test materials unattended
- Remove test materials from the school's campus
- Open and check through test books
- Read test items
- Copy, photocopy, or photograph test content

I understand that during testing (including during breaks) I may not:

- Read test items or student responses as I monitor the room
- Assist students in answering test items
- Give students verbal cues ("you may want to re-check number 7") or non-verbal cues (pointing at a specific item)
- Give students more time than is allotted for the session (unless a student has an extended time accommodation)
- Encourage students to finish early
- Display or fail to cover visual aids (e.g., word lists, multiplication tables) that may help students
- Use my cell phone, check email, grade papers, or engage in other activities that will result in my attention not being on students at all times
- Leave the room unattended for any period of time
- Allow students to talk or cause disturbances
- Allow students to use cell phones or other electronic devices, even if they have already submitted their tests
- Instruct students to test in a session other than the one designated for that day/allotted testing time (going on to Session 2 during Session 1, reviewing work in Session 1 during Session 2)
- Coach students during testing regarding test-taking strategies
- Administer the assessment to my family members

I understand that after testing I may not:

- Leave test materials unattended
- Remove test materials from the school's campus
- Read through student test documents
- Change student answers
- Discuss the content of the test with anyone, including students or other school personnel
- Reveal the content of the test via electronic communication, including but not limited to email, text, or post to social media sites (Facebook, Twitter, Instagram, etc.)

If you are administering a test to students with flexible responding or flexible presentation accommodations that require you to read test items, you may not reveal, copy, or share the items, or use the test content during instruction after testing.

I acknowledge the information above and will not engage in any of the prohibited activities on this page.

Signature: _____ Date:_____ Certification Number:_____

Return this agreement to your school assessment coordinator.