2012

The Effects of Response to Intervention on Third Graders' Reading Achievement

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THE EFFECTS OF RESPONSE TO INTERVENTION ON THIRD GRADERS’ READING ACHIEVEMENT

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A Dissertation
presented in fulfillment of requirements
for the degree of

Doctor of Education
in the School of Education, Department of Curriculum and Instruction

University of Mississippi

May 2012
ABSTRACT

The purpose of this quantitative study was to examine the effects of the Response to Intervention Three Tier Model on third graders’ reading achievement. Two hundred forty-three students participated in this study. Students were from an elementary school in the southeastern region of the United States. The data on the students was collected through V-Port database, a database supported by Cambium Learning Group. Of the three groups engaged in Response to Intervention, data analysis revealed that there was a significant difference between group one, benchmark students and group two, emerging students who received intervention, while no significant difference existed when comparing group one or group two to group three. Also, data revealed that there was no significance in the relationship between the teachers or teacher’s assistants when observing words-per-minute gain categories. The author suggests recommendations and areas for further study of Response to Intervention.
DEDICATION

This dissertation is dedicated to my loving wife and son, Latisha and Hudson King, who have shown me unconditional love and support throughout this entire educational experience; to my parents (Leon and Glodine King), who supported me until my adulthood and continue to help my family through this process; and to my sister and brother-in-law (Bridget and Kendall Dancy), who have been trailblazers and a great support to my family during my absence to complete this project.

I am overwhelmingly excited to have reached this phase in my life. I always dreamed that I would attain my Doctorate – DREAM IT! BELIEVE IT! RECEIVE IT! However, this has not been an easy endeavor. I had to grapple with being a husband, father, son, brother, and a co-worker (superintendent of schools), but I held on to my FAITH. I knew if He brought me to it, He would bring me through it, and I am eternally grateful to my Lord – For He knows…

Family, you all have supported me throughout all my journeys in life in addition to this milestone. Words cannot express my sincere, heartfelt appreciation to all of you. It is to you, I dedicate this dissertation. My love for all of you only increases day-by-day.

In Loving Memory of Derek L. King.
ACKNOWLEDGEMENTS

With all due respect, I would like to acknowledge my Lord and Savior, who has given me the mind, ability, and knowledge to dream colossal dreams and wait on His deliverance. I realize without Him, nothing is possible, but with Him ALL things are possible. Because of Him, I am able to present this dissertation.

I would certainly be remiss if I did not take this opportunity to acknowledge some individuals who have guided me throughout this process. First, I would like to thank my academic advisor and Dissertation Chair, Dr. Bobbie Smothers-Jones for her unwavering leadership and guidance. From the day I met her, she has given me sound advice that afforded me the opportunity to make it to this point. Not only did she give me scholarly advice to complete this program, but she also has given me great leadership advice as I progressed through my leadership career. I attribute many of my successes in K-12 education to her.

I am most appreciative to my committee member, Dr. Lori Wolff, for being a great support. She guided me through the statistical/research process. She answered late night telephone calls and responded promptly to countless e-mails. She offered face-to-face time and many other alternatives to ensure that I was well immersed in the statistical/research component of my dissertation and could articulate the data. I feel privileged that when I called she answered, “Hello Marlon.” I can only assume that I am programmed in her mobile device. I hope that is a good thing!

I would like to thank my committee member, Dr. Nichele Boyd, for being a great support system. I had been privileged to know Dr. Boyd even before attending the University of
Mississippi. I always enjoyed our engaging conversations. She has been a valuable resource in so many ways, and I am very grateful to have established such a relationship.

I would like to thank my committee member, Dr. Jerilou Moore, who was one of my first professors in the program. From her technology class, I have been able to integrate and implement technology efforts throughout my school district. Also, she provided constructive feedback on making the language of my dissertation flow coherently. To this entire committee, I am grateful and appreciative for their willingness to allow me to defend my dissertation. Again, thank you!

I also would like to thank Dr. Fanny Love, who has been supportive in so many ways. It was with her assistance that I was able to receive additional resources to support my efforts in completing this program.

For believing in me and giving me the opportunity to lead the school system, I would like to thank Mr. Harold Garrett, school board chairman, and the other board members of Haywood County Schools. Mr. Garrett’s leadership has been phenomenal, and I am very thankful for his support. Also, I would like to thank my executive administrative assistant, Debbie Benard, and Charles Allen, instructional specialist, for their proofreading and editing efforts. I couldn’t have made it without them.

For their support, encouragement and/or prayers throughout the doctoral program, I would like to thank the following persons/organization: Tommy & Ida Nettles (father/mother-in-law), Rodney & Sheila Gaines (sister and brother-in-law), Levondle & Christal King (brother and sister-in-law), Haywood County Schools Central Administration and District Staff, Dr.
Reginald Green, Myles Wilson, and many other wonderful people who supported me throughout this journey.
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CHAPTER I
INTRODUCTION

Statement of the Problem

Students enter school with different academic ability levels. There is no one-size-fits-all level of instruction to ensure that every child is academically prepared. For various reasons, students learn differently and do not process information the same (Tomlinson, 2005). Because of students’ unique academic needs, schools must prescribe appropriate intervening services to ensure the academic needs of all students are met.

The No Child Left Behind Act (NCLB) presented many demands that raised the level of accountability in public education. The NCLB Act imposed requirements for all students to become proficient in reading/language arts and mathematics by 2014. Therefore, schools can no longer exclude any children from their data, regardless of their ability to learn. Every student is factored into the accountability equation. Under the No Child Left Behind Act, educational policies emphasized that schools must reorganize themselves to meet the needs of children who are vulnerable to reading failure and apply more approaches for identifying reading disabilities to ensure that all students are afforded an opportunity to acquire reading achievement (Justice, 2006).

Because of these requirements for all students, special educators revisited the Individuals with Disabilities Education Act (2004) to aid in the new endeavor. From this collaboration, Response to Intervention (RtI) originated. This multi-tier model assists schools with providing early intervening services to students with learning disabilities through the use of explicit
instruction. The reauthorization of IDEA (2004) was designed to identify and assist students who are struggling academically, most often in reading, by providing a multi-tier instructional intervention plan before evaluating the students’ eligibility for special services for a learning disability (Walker-Dalhouse et al., 2009).

In the early stages of NCLB implementation, many states had not begun to use the multi-tier model for reading intervention. Students were placed in special education through the deficiency model for identification. More recently, RtI has evolved into a national movement, as more states have progressed toward its implementation. Response to Intervention (RtI) has raised immediate attention for educators to improve reading instruction and, more importantly, has provided an alternative for determining students’ eligibility for special education services (Fiefer, 2008).

The use of RtI has allowed schools and districts to determine the needs of students with learning disabilities. RtI is not a law and is not mandated by the U. S. Department of Education; many states have been authorized to explore the merits of RtI as an effective strategy for identifying students with learning disabilities (Berkley et al., 2009). Further, under NCLB and IDEA, states are given legal authority to implement RtI (Cumming et al., 2008).

One goal of RtI is to close achievement gaps among students by identifying students early for intervention. By doing so, referrals for students to receive special education services are minimized. A paradigm shift in the early identification of struggling students was a result of the Reading First initiative of NCLB, as its instructional components reduced the incidence of reading difficulties (Mesmer & Mesmer, 2008). Reading First in Tennessee adopted the Three Tier Model. The Three Tier Reading Model is used as a preventative measure to meet the reading needs of all students. The framework is assessment-driven that supported differentiated
reading instruction and is supported by scientific research-based core, supplemental, and intervention reading curricula (Tennessee Reading Panel, 2005). The Three Tier Model response to intervention provides instruction at three different levels to accommodate the needs of all learners.

RtI is a multi-tier solution that is useful for identifying students who need additional support, offering support through consistent explicit instruction, and providing an alternative for identifying students who are eligible for services based on their learning disability (Brown & Doolittle, 2008). The Three Tier Model offers students intense instruction based on their academic need. The level of intensity in instruction increases from one tier to the next. Tier I instruction is provided to all students at the class level using a whole-group format. Tier II instruction targets a smaller group of students who need additional support, while Tier III is the most intensive level of additional instruction for an even smaller group of students with the most severe needs (Brozo, 2010).

Purpose Statement

The purpose of this quantitative study was to examine the effects of the Response to Intervention Three Tier Model on third graders’ reading achievement.

Hypotheses

This quantitative study hopes to address the following hypotheses.

Hypothesis One: There is no significant difference in mean ORF posttest scores by instructional method when controlling for ORF pretest scores. For hypothesis one, mean oral reading fluency posttest is the dependent variable while the instructional method is the independent variable, and the oral reading fluency pretest is the covariate.
Hypothesis Two: There is no significant relationship between mean WPM gained by instructional method (teacher) for only Tier II students. The independent variable in this study is the instructional method by two methods – new/novice teachers (0 – 7 years) and tenure/veteran teachers (8 +). The dependent variable will be categorical. There will be seven possible categories the dependent variable will fall into: (1) -2 or beyond wpm (2) +2 or beyond wpm.

Hypothesis Three: There is no significant relationship between mean WPM gained by instructional method (teacher’s assistant) for only Tier II students. The independent variable in this study is the instructional method by two methods – high school diploma teachers’ assistants and college degree teachers’ assistants. The dependent variable will be categorical. There will be two possible categories the dependent variable will fall into: (1) -2 or beyond wpm (2) +2 or beyond wpm.

Significance of Study

Black students have often been over identified for special education services (Munday, 2005). The need to correct this over representation of Black and other students is one reason to hope that the Three-Tier Model for Response to Intervention is a viable alternative to aid in the process of accurately identifying all students with specific learning disabilities. This study will show the effects, if any, that RtI has on students who receive Tier II instruction.

Because of the urgency to improve public education through increased national standards, it is highly critical that schools exhaust all alternatives for providing high quality teaching and learning to all students. RtI is an alternative that includes all students in the educational equation of promoting student achievement.

The No Child Left Behind Act of the Elementary and Secondary Education Act (1965) has placed a mandate on public education that requires all students to be reading proficient. The
NCLB goal is to raise the level of achievement among all subgroups (i.e., Black, White, Hispanic, Students with disabilities, English Language Learners, Native American, Asian) in the United States, while narrowing the gaps for those underperforming groups. Special emphasis was placed on reading and math achievement (Azzam, 2007).

Theoretical Perspective

In formulation of a theoretical perspective for studying the effects of the Response to Intervention Three-Tier Model, the theories of situated learning and cooperative learning provide a useful prototype. Social anthropologist Jean Lave and professor Etienne Wenger propose the theory of situated learning as a process of social engagement in a community of practice where individuals are involved in collective learning through authentic experience (Smith, 2009).

When individuals are engaged in a situated learning experience, they are able to gain knowledge through an authentic context in a setting that would involve knowledge to be learned automatically. When individuals interact socially through collaborative dialogue, which is essential for academic achievement or improvement, they are experiencing situated learning processes. According to Smith (2009), “The interactions involved, and the ability to undertake larger or more complex activities and projects through cooperation, bind people together and help to facilitate relationships and trust” (p. 50). Not only do individuals build relationships through this process, but they also are afforded more opportunities to expand learning.

In addition to the situated learning theory, the theory of cooperative learning is another consideration when studying the effects of the Response to Intervention Three-Tier Model. The cooperative learning theory promotes instruction that involves students working in teams toward the same common goal while each member is individually accountable, uses appropriate collaborative skills, and understands the function of the group for the completion of the
assignment (Johnson et al., 1991). Students learn more by doing; therefore, when exposed to the active engagement of cooperative learning rather than passive watching and listening, students experience greater learning gains (Bonwell & Eison, 1991). Response to Intervention Three-Tier Model provides opportunities for students to engage in small group learning. Cooperative learning provides benefits by allowing students autonomy to solve problems, improve social and communication skills, and gain self-confidence (Felder & Brent, 1994).

Based on a success story in the mid-1970s, a mathematics professor sought to understand through a research study why minority students in his calculus class performed poorly. He discounted reasons based on lack of motivation, family background, or poor academic preparation, and found that Black students, many of whom were failing, studied in isolation and were reluctant to seek help while Asian students, who performed well and worked in groups. After establishing a group-based calculus honors program with over half of the roster reserved for minority students, he found students who completed the three year program had a higher retention rate, while minority students in a control population were mostly gone after three years (Conciatore, 1990). In a recent study conducted in 2002, a chemistry course was taught through traditional direct instruction method and other courses had students to work cooperatively in groups to solve problems. Both sections took the same exam while those who complete the class had similar grades. However, 33% of the direct instruction students dropped the class, as opposed to only 17.3% of the students who worked in cooperative groups to solve problems (Williamson & Rowe, 2002).

**Delimitations**

The findings of this study were delimited to third grade students attending an elementary school with a free and reduced lunch rate of 89%.
Limitations of the Study

The findings in this study are limited to an elementary school in the Western Region of Tennessee. The school is the only one in the district comprised of third and fourth grades; therefore, there is no other school in the region with the same configuration. Because of the district’s configuration, students at third grade will experience a new school culture and climate. There are five Black teachers in third grade and three Black teachers in fourth grade while the student population is comprised of 75% Black, 25% White, and 5% Hispanic. There is one White male teacher on faculty, and many of the students are from single parent homes without a father’s influence.

Definition of Terms

For the purpose of this study, the following definitions are used to describe background information, to relate to the significance of the research, and to identify concepts under investigation:

Benchmark Measures: An assessment that observes the class performance in reading as a whole, so that the teacher can make a decision about organizing students for differentiated instruction (Berkeley, 2006).

Dynamic Indicators of Basic Early Literacy Skills (DIBELS): An assessment composed of varied subtests that examine students’ reading development within one minute (Kaminski & Good, 1998).

Individuals with Disabilities Education Improvement Act (IDEA 2004): A reauthorized law that includes Response to Intervention as a permissible alternative to identifying students with specific learning disabilities (Berkeley, 2009).
No Child Left Behind (NCLB): A law that requires students’ progress to be measured on an annual basis. This Act holds all public schools accountable for improving student achievement in all subgroups within the United States (Munday, 2005).

Progress Monitoring Measures: An assessment conducted periodically (bi-weekly) to provide information on individual students who are receiving additional reading support beyond the initial first tier of instruction on specific targets within the curriculum (Compton, 2000).

Response to Intervention (RtI): An evidence-based reform that reshapes the way students are identified for having reading disabilities and addressed with schools (Justice, 2006).

Three-Tier Instructional Model: An instructional intervention model that provides guidance to monitor students’ progress. The model assists in providing student outcomes early enough so that instruction can be tailored to ensure students’ needs are met (Coleman-Potter et al., 2005).

Tier I instruction: A preventive tier of instruction based on high quality instruction provided in a whole-group setting (Berkeley, 2009).

Tier II instruction: A secondary intervention tier of instruction that targets small groups of students who are at risk and need additional time for reading support (Berkeley, 2009).

Tier III instruction: A tertiary intervention tier of instruction that involves the most intensive level of instruction with longer time (Berkeley, 2009).

Organization of the Study

This study is organized in five chapters. Chapter I introduces the research study, the purpose of the study, hypotheses, significance of the study, limitations, delimitations, and definitions. In Chapter II, a review of relevant literature is provided. Chapter III outlines methodology, study design, participants, instruments/procedures for data collection, and analysis
of the data. Chapter IV will include the results of the study, while Chapter V offers a conclusion, discussion, recommendations, and implications for further research.
CHAPTER II

REVIEW OF LITERATURE

Introduction

The No Child Left Behind Reform of 2001 (NCLB) has challenged educators to adopt research-based practices to educate all children. Student expectations and the demand for student achievement are ever changing and increasing. For schools to change their traditional approach to teaching, they must collectively provide high quality, ongoing professional development in the area of RtI. For RtI to benefit students, high quality professional development is critical (Bergstrom, 2008). Because of the pressure on schools from NCLB, school systems must adopt research-based practices to ensure that every child receives adequate instruction to promote student learning. In order to effectively provide every child with explicit, systematic instruction through research-based efforts, the Three-Tier Model to Response to Intervention is essential. The NCLB Act and the IDEIA outline the importance for early intervention through research-based efforts to stimulate academic achievement (Glover & DiPerna, 2007). The implementation of RtI is more than progress monitoring and teaching research-based instructional practices. The implementation requires consistency, collaboration, and commitment from all stakeholders (i.e., teacher, special educator, administrator, parent) involved in the process, especially the special education teacher. Special education teachers will play a critical role in the implementation of RtI. They are unique contributors to the entire collaborative process (Cummings et al., 2008).

The purpose of this review of literature is to provide information from empirical and primary sources in three areas: 1) the Three-Tier Instructional Model for Response to
Intervention 2) high quality professional development in Response to Intervention (differentiated instruction) and 3) fidelity of implementation for Response to Intervention.

First, an overview of how ongoing professional development plays an integral part in the development of the teacher, which is essential to successfully implement the Three-Tier Response to Intervention Model. Second, the Three-Tier Model will be discussed in more detail. Each Tier (i.e., preventative, secondary, tertiary) and its purpose will be discussed at length. Lastly, the fidelity of implementation will target how critical consistency, collaboration, and planning are in successfully implementing the Response to Intervention Three Tier Model. Finally, empirical studies will shed light on past effects of Response to Intervention on students’ reading achievement.

*The Three-Tier Instructional Model for Response to Intervention*

According to the US Department of Education (2006), IDEA Public Law 108-446, introduced RtI language. Response to Intervention has been a component needed in public education since the initiation of Individuals with Disability Education Improvement Act (IDEIA). RtI is an intervention that assists in the identification or eligibility for special education students. RtI has brought national attention to the way students with special needs are identified for special services. This alternative is a method for determining students’ eligibility for receiving special services (Feifer, 2008). Today schools are challenged with rigorous standards and enormous expectations. Students enter schools with many challenges and other factors that so often impede students’ ability to read. Many children’s emergent literacy background is limited, which presents problems and challenges when they enter school (Gettinger, 2007).

No longer can schools implement programs that are not based on solid research-based efforts. It is critical that research-based instructional strategies are embedded in any curriculum
to aid with improving students’ reading ability. RtI focuses on research-based interventions and data to drive instructional decisions that are aligned with the goals of early intervention (VanDerHeyden & Snyder, 2006). The Three-Tier Model for Response to Intervention is a multifaceted instructional strategy that is used to provide intervention to students who are experiencing learning difficulties in reading. There are three levels of instruction students can receive depending on their reading ability. Each level is intensified as students’ progress. RtI is a three-tier process. The first level involves instruction that involves all students. The second level targets a smaller group that needs additional reading instruction. The third level is the most intensive level that is designed for students who need additional support (Brozo, 2010).

RtI is designed to assist struggling readers. It is used as an intervention at early stages to eliminate reading deficiencies. RtI is an organized reading intervention for at-risk students in the emergent and early literacy stages of reading development (Justice, 2006). This Three-Tier model is used to support all learners. Its functions afford teachers the opportunity to observe student data and determine the Tier that is most appropriate for instruction. RtI intervention features multiple tiers of reading instruction that are structured for students based on their needs (Justice, 2006). Teachers must provide high quality instruction in order for student literacy skills to improve. RtI model is structured in a way that forces teachers to provide high quality instruction. When the three-tier intervention hierarchy is implemented correctly, it ensures that students are provided with high-quality instruction (Gettinger, 2007). As standards are induced with rigor, teachers must adopt an arsenal of strategies to determine their students’ needs. Teachers must use data to aid them in making instructional recommendations for their students. To successfully guide these students, teachers will need to assess and monitor their students’ progress. RtI includes an assessment component that requires ongoing progress monitoring of
students’ emergent and early reading development. Progress monitoring is administered early so that teachers will know which students need additional reading support (Justice, 2006).

RtI requires a systematic monitoring piece to aid in making instructional recommendations for students. This assessment instrument generally provides information about a child’s reading development. There are two instruments used in the RtI model to measure students’ performance. They are called: benchmark measures and progress monitoring measures (Justice, 2006). Benchmark measures are generally administered to the entire class to gain an insight about students’ reading development. Progress monitoring measures are generally done formatively to ensure that adequate instruction is being provided for students. Benchmark measures observe as a whole the class performance in reading so that the teacher can make decisions about organizing students for differentiated instruction (Berkeley, 2006). Progress monitoring measures are conducted periodically (bi-weekly basis) to provide information on individual students who are receiving additional reading support beyond the initial first tier of instruction on specific targets within the curriculum (Compton, 2000).

The Dynamic Indicator of Early Basic Literacy Skills (DIBELS) is a tool that is widely used to support RtI models for data gathering of students. Studies show that the DIBELS has provided the most rigorous results on progress monitoring (Kaminski & Good, 1998). The assessment tool is designed to allow students a one-minute period to complete a specific task related to reading development. DIBELS subtest examines students’ performance by administering an assessment such as how many nonsense words were pronounced correctly, which measures students’ ability to understand the relationship between sounds and letters (Missall & McConnell, 2004).

*Tier I Instruction – Preventive Intervention*
Tier I instruction is a highly critical tier that is designed to provide optimal learning experiences through a level of quality. The quality of Tier I focuses on both the structure and process. Structural variables include the physical make-up of the classroom (e.g., classroom library, print on walls), the core curriculum used (e.g., activities for reading development), and the daily schedule (time designated for groups). The process variables involve how the instruction is executed and reflect the teacher’s experience and/or formal educational training (Justice, 2006).

Tier I instruction focuses on providing solid teaching and learning for students. This Tier of instruction is where students should receive a wealth of rich, explicit reading instruction. The curriculum must be research-based and have opportunities for students to explore a learning environment that alarms students’ awareness about the components of reading – fluency, phonics, phonological awareness, text comprehension, and vocabulary. Tier I instruction is guided through a curriculum that is research-based and an environment that is high print rich with activities to support phonological awareness, oral language, alphabetic principles, and print awareness (Gettinger, 2007).

Tier I instruction is provided to all students with research-based instructions being delivered by the classroom teacher within a 90-minute reading block. Students are benchmark measured three times a year to determine their reading development. Sharon Vaughn describes Tier I instruction as the core reading instruction facilitated by the classroom teacher within a 90-minute time frame (Marston, 2005). During any Tier I instruction, interruptions should be minimal if at all. Teachers should provide whole group as well as differentiated instruction during Tier I instruction. Time allocated for Tier I instruction must be protected to ensure that students receive optimal instruction. Teachers must use this time to engage in a variety of
strategies that target emergent and early literacy development (Justice, 2006). Tier I instruction is where the bulk of reading instruction is delivered to all students. As cited in Marston (2005), Rollanda O’Connor believes that the Tier I instruction is the core of reading instruction for all students while students are measured for improvement three times a year. Tier I instruction is where the crux of reading is presented to students. As cited in Marston (2005), Davis Tilly III research, Tier I instruction is the core instructional curriculum where all students are engaged in the instructional process (Marston, 2005). Tier I is primarily for all students, but the need for research-based instruction is critical.

More importantly, the need for professional development for general education teachers is important for teachers. Based on the study of Vaughn, O’Connor, and Telly, Tier I instruction must be sound in research-based efforts while some attention must be given to teacher training and development in the area of literacy instruction (Marston, 2005).

Tier I instruction is executed through a whole group fashion where all students receive initial reading instruction. This level of instruction is known as the prevention level. Tier I instruction, referred to as the preventive tier, includes the entire class as a part of the core reading program (Berkeley, 2009). Time is very critical and important during Tier I instruction. It must be protected, and instruction must be well planned. Tier I instruction must be provided enough time that is sheltered to ensure that specific attention is given to high-targeted reading skills (Justice & Kaderavek, 2004). During the 90 minutes of designated time, teachers must be addressing the specific needs of reading development for that particular level. Tier I instruction should be an opportunity for teachers to provide direct instruction in an uninterrupted setting with a focus of high-priority targets for literacy development (Justice, 2006).
Tier I instruction is designed so that teachers can provide a rich literacy experience for students to minimize the number of students being referred for further intervention. Teachers must provide an environment that facilitates a well-rounded reading program. When teachers provide systematic reading instruction during the first tier of instruction and students respond to this level of instruction, it eradicates the risk of referring students to Tier II instruction (Vaughn et al., 2003; Velutino et al., 2003). Tier I instruction should be organized so that students have varied opportunities to respond to reading. This level of instruction should be facilitated so that students are exposed to a plethora of reading strategies and materials to support reading development. Students are given multiple activities to respond to Tier I intervention, by doing so the teacher is allowed to observe the students’ attainment of reading skills (Gettinger, 2007).

In order for teachers to maintain an accurate record of their students’ performance in Tier I, progress monitoring should be conducted on a monthly basis. This information allows teachers to monitor and differentiate instruction so that the needs of students are being met. Tier I instruction is conducted by the teachers. Progress monitoring data determines the effectiveness of Tier I instruction in literacy development or it could possibly show a need for teacher development on certain skills (Gettinger, 2007).

When teachers adequately plan and prepare for Tier I instruction, majority of students can become successful in reading. Tier I instruction should be the paramount level of instruction so that students can be successful with becoming proficient readers. If Tier I instruction is presented in a fashion that is responsive to literacy instruction, many students might succeed without receiving Tier II or Tier III instruction (Brozo, 2010). Tier I instruction is the primary tier for executing rich instruction; therefore, teachers must be instructionally sound and understand research-based instruction in order to provide quality, reading instruction. Tier I instruction is
provided to the entire student population. When Tier I instruction is implemented properly, majority of students would benefit from this level of instruction. According the DIBELS, approximately 70% - 80% of students receiving Tier I instruction will meet the benchmark (Kame’ennui & Simmons, 1998). It is important that teachers get the most from their students during Tier I intervention. Otherwise, students who are not successful will have to receive Tier II intervention. The number of students who receive Tier II intervention is determined by the quality of instruction that is presented in Tier I instruction (Kamps & Greenwood, 2005).

Tier I instruction is the most critical Tier, which requires classroom instruction to be research-based and high quality (Allington, 2006). If students are not successful in Tier I instruction, they are recommended for Tier II instruction because the prevention in Tier I was not effective. Tier II is only provided when Tier I is not sufficient which will require additional intervention in targeted areas (Vaughn & Roberts, 2007).

*Tier II Instruction – Secondary Intervention*

Tier II instruction is a supplemental intervention to Tier I. Students will need Tier II instruction if they do not succeed in Tier I instruction. According to Vaughn and Robert (2007), “As many as 20% to 30% of students (depending upon the effectiveness of Tier I instruction) will require supplemental intervention” (p. 40).

Tier II instruction is the additional level of instruction for those students who are identified as needing additional assistance according to the data from an assessment instrument (e.g., DIBELS or AIMSWeb) and would need additional reading support. Tier II provides opportunity for students to make adequate progress in the development of early reading (Gettinger, 2007). The groups are generally small so that teachers can attend to the needs of students while explicitly teaching the skill. Tier II instruction provided by the teachers is
executed in small groups of 4 to 6 children and is designed to provide a stronger focus on skills that students need to become proficient (Gettinger, 2007).

With Tier II instruction in a small group format, teachers are afforded the opportunity to explicitly provide customized instruction that will help students acquire skills that would be difficult to comprehend during Tier I instruction. Research conducted on Tier II instruction indicated that Tier II instruction small-group format could be more effective in aiding students to attain certain skills as compared to Tier I large-group format (Elbaum et al., 1999). Tier II instruction provides additional support to the initial core instruction (Tier I).

Tier II is executed within a 30-minute time frame and is progress monitored on a bi-weekly schedule. According to Vaughn’s research, Tier II is a supplemental intervention for students who did not respond well to Tier I instruction based on data from benchmarks. It is recommended that teachers provide students with 30 additional minutes of explicit Tier II intervention while monitoring their progress twice a month (Marston, 2005).

For Tier II instruction to be effective, it must be provided as an addition to Tier I instruction. Students need small group instruction along with additional time and support. As cited in Martson (2005), Rollanda O’Connor’s studies on Tier II intervention supports 20 – 25 minutes of small group intervention for students struggling in reading. Tier II instruction goes hand in hand with Tier I instruction. These interventions support each other. As cited in Martson (2005), Davis Tilly III’s research on Tier II instruction, Tier II instruction is a combination of core instruction and supplemental instruction. Tier II instruction is structured and includes certain tasks to be completed within the given time. During this time, teachers have specific areas to cover. Tier II instruction focuses on high-priority skills and activities and is delivered in a fashion that demonstrates consistency (Vaughn, 2003). Traditionally, the classroom teacher
delivers Tier II; however, schools can use other qualified staff to provide Tier II intervention. (Catts et al., 2002).

The primary goal of Tier II instruction is to help students improve their reading development because of their failure to acquire reading proficiency during Tier I instruction. Tier II instruction is designed to accelerate the reading development of those students who are not making adequate progress in reading during Tier I instruction (Justice, 2006). As aforementioned, Tier II instruction is an addition to Tier I instruction. Tier II instruction supplements the instruction that was executed in Tier I; therefore, special resources or requirements are not necessary. However, instruction should be more explicit while providing differentiated instruction. Research recommends that Tier II instruction should reinforce the learning goals and materials that were covered in the first tier of instruction where students are grouped more homogeneous than is possible in Tier I whole group instruction (Speece et. al., 2003; Vellutino et. al., 2003).

Tier II instruction requires teachers to be consistent in the delivery of instruction which means that more structure on the teacher’s behalf is necessary. Tier II instruction is organized where teachers ensure systematicity, explicitness, and intensity of instruction is delivered daily (Justice, 2006). Tier II instruction is carried out by teachers, reading specialist, and special educators through short-term explicit instruction (Coleman et. al., Justice, 2006).

It is important that teachers and interventionist (i.e., special educator, teacher’s assistants, other personnel) are trained properly in providing Tier II instruction. Secondary intervention, known as Tier II intervention, is most beneficial to students when the staff is highly trained to implement that level of intervention (Vaughn & Roberts, 2007). Because of the barrier of having all certificated personnel, it is advisable to use other staff members such as teacher’s assistants
and tutors to aid in implementing Tier II instruction. Studies have shown that well trained tutors or teacher’s assistants have an impact on improved students’ outcomes from Tier II intervention (Vaughn & Roberts, 2007). Tier II instruction focuses on providing students with explicit reading research-based material to assist with bringing them to the reading level they should be. Tier II instruction goal is to catch students up after they have gone through several weeks of intervention at that secondary level (Vaughn & Roberts, 2007).

Equally as important, Tier II instruction requires progress monitoring. Students must be monitored in order for teachers to make instructional recommendations. During Tier II instruction, progress monitoring is valuable in providing guidance to teachers as decisions are made for students who need additional support (Fuchs & Fuchs, 2006). Because of the variance in the execution of Tier II, it is necessary that interventionists have dialogue on a regular basis to eliminate communication breakdowns regarding students’ reading development. Tier II instruction can be conducted by either the general educator or the special educator, which means that the level of ongoing collaboration is increased to ensure that students’ needs are met (Marston, 2005).

Progress monitoring is vital during Tier II instruction. It must be executed with brisk intensity with ongoing feedback provided to students regarding their current progress. Progress monitoring measures are timely and provide a quick glance at students’ reading development while tracking their performance over a period of time (Deno et al., 2001). It is highly recommended that teachers and interventionist closely monitor students’ progress during Tier II instruction. By doing so, valuable information is provided so that informed decisions can be made regarding the student’s placement. When progress-monitoring measures are coupled with explicit/direct instruction, it affords educators the opportunity to make decisions on what is best
for students (Vaughn and Robert, 2007). There are not many students who are served as a result of Tier II instruction. This level of intervention serves a small portion of the general population. According to DIBELS, students receiving Tier II instruction is made up of only 20% to 30% of a school’s population (Coyner et al., 2004; The University of Texas, 2005).

The primary goal of Tier II instruction is to provide additional support through explicit instruction to students so that they can improve in reading. Tier II is intended to stifle reading difficulties while promoting literacy acceleration through intensive small group sessions (Davis et al., 2007).

*Tier III – Tertiary Intervention*

When students do not respond to Tier II instruction, they are referred to Tier III instruction. This level of intervention serves an extremely small population of the general population. According to DIBELS, students receiving Tier III instruction is made up of only 5% to 10% of a school population (Coyner et al., 2004, The University of Texas, 2005). Tier III instruction is more intensive than Tier II instruction. Students are generally in smaller groups than they were in Tier II. As cited in Martson (2005), Sharon Vaughn’s study of Tier III instruction revealed that this level of instruction is for non-responders of Tier II. This level of instruction provides more strategic and intensive intervention. Students are grouped in groups of threes with one teacher. Because Tier III instruction is more intensive, students must receive additional time for instruction. Vaughn studies show that Tier III instruction should occur in two 30-minute sessions per day (Marston, 2005). At this Tier III instruction, the need for progress monitoring is as equally as important as additional time. As cited in Martson (2005), Vaughn’s study on Tier III instruction, progress-monitoring measures continue just as Tier II monitor schedule of twice per week.
When students are placed in Tier III instruction, it is highly critical that they receive adequate attention. Because they are struggling readers, they must be handled in such a manner that offers a more intimate instructional learning environment. As cited in Martson (2005), Rollanda O’Connor Tier III instruction is for students who are not at the level of the average reader; therefore, Tier III instruction is most effective when it is one-on-one and implemented by a well-trained professional. As cited in Martson (2005), Davis Tilly III’s research on Tier III instruction, Tier III instruction in his view reflects core instruction and intensive instructional resources.

While Tier I instruction is provided to all students, several students who might need special attention or special services tend to fall in the tertiary level known as Tier III. Tier III instruction is generally comprised of general education and special education students. Students receiving Tier III instruction need a well-trained person who can provide in-depth intervention and understand students with special needs (Martson, 2005). Tier III instruction is a very delicate level of instruction. When students are placed in this level of instruction, they must be guided with tailored instruction. Tier III instruction is designed for students who could not grasp reading in Tier I and Tier II instruction. Tier III provides customized reading instruction for individual literacy needs (Vaughn & Chard, 2003).

Tier III intervention should focus on individuals’ specific needs. When students experience this level of instruction, the level of instruction must be rich and coupled with scientifically based reading research. Special education services could benefit students who are categorized to receive Tier III instruction. Tier III instruction can become overwhelming on general resources which means that special education resources should be explored including: (a) customized instruction, (b) developed annual goals, (c) progress monitoring measures to aid in
decision-making, and (d) special education teachers who are trained to work with students with
disabilities (Stecker, 2007). The third tier of instruction is identified as the most intensive level
of intervention and is directly centered on individual student needs (Stecker, 2007).

Tier III instruction does not automatically warrant special services. Tier III instruction is
a mechanism for individualizing instruction for students who have reading difficulty. At this
level of instruction, students tend to receive more attention than at any other tiered level of
instruction. Students who show significant need for reading development should be placed in
Tier III intervention after going through Tier I instruction and Tier II instruction. By being
placed in Tier III instruction, the intensity of instruction will increase as well as individualization
of instruction, which means that these students do not need to be certified as students with
disabilities prior to receiving appropriate interventions (Kashi, 2008).

After being in Tier III instruction for several weeks and no progress is shown, the process
for referring students to special education should be explored (Kashi, 2008).

*High quality professional development in Response to Intervention*

NCLB has caused many educators to revisit their philosophy of teaching and learning.
Teachers realize that they must be properly trained in order to provide optimal learning
experiences for their students. There is a connection between high quality professional
development and student achievement outlined in NCLB requirements, which supports a shift in
thinking (Kratochwill et al., 2007). With an increase in educational standards, educators must
find solutions to accommodate all learners. In order to accommodate all learners, schools must
develop a systemic approach, which includes establishing relationships with parents, community,
and other schools/districts.
As with other systemic school improvement efforts, implementing RtI requires varied changes with the most significant change relating to professional development (Kratochwill et al., 2007). In addition to this systemic approach, schools must rely heavily on shared-decisions, student data, and professional development for improving academic achievement. Professional development plays a vital role in any systemic change process (Haager & Mahdavi, 2007). However, RtI requires extensive planning and preparation. Therefore, teachers must be provided with ongoing, customized professional development in order to become familiar with the process so they may adequately prepare students. Kratochwill and colleagues (2007) emphasize that professional development must be on-going and systematically integrate educators’ skill development to effectively increase student outcomes. Teachers are exiting Teacher Education programs with little knowledge and training in the area of intervention for students. A majority of the teachers who are receiving a special education certification receive some training.

Through a research study, surveys indicated that 25 respondents received little or no training in behavioral-based instructional practices, with the least amount in academic assessment strategies and instructional programs. However, special education teachers received more training but it was limited. In light of the role the regular education teacher plays in implementing RtI, the findings raised immediate concerns (Kratochwill et al., 2007).

States must embrace RtI notions in an effort to provide high quality professional development for all teachers. State educational leaders cannot shun this pedagogy designed to assist at-risk children. Studies show that 88% of state departments of education have planned or have begun implementing some type of professional development with focus on the Three-Tier Model of Response to Intervention (Berekely, 2009). States and schools can explore the option of partnering with colleges and universities for technical support in providing RtI high quality
professional development. Many states have partnered with universities for professional development (RtI). Vanderbilt University is working closely with the Tennessee Department of Education to create modules through online professional development; while in Florida, the University of South Florida has been awarded monies from the state department of education to provide professional development (RtI) statewide (Berekely, 2009). RtI is not an initiative that can be dumped in educators’ laps without guidance. Gradual steps should be taken to aid in successful implementation of RtI. Hence, it is critical that professional development is provided through varied angles to aid schools and districts in a successful implementation process. Several states have not implemented the full concept. States are gradually assisting their schools and district by providing professional development through RtI manuals, deferment to states who are fully implementing the RtI model (e.g., Tennessee suggest districts model the state’s Reading First Programs) or general guidance and professional development program (Berkeley, 2009).

Teachers are challenged with educating students from varied socio-economic backgrounds and ethnic groups. NCLB requires that every child becomes proficient by 2014; therefore, responding to intervention for these students requires ongoing, customized professional development for teachers. Ongoing professional development in curriculum, instruction, and assessment that is tailored to the diverse needs of students is essential (Drame & Xu 2008).

They enter classrooms as novices and are evaluated based on their ability to increase student achievement within their classroom. Hence, schools must cultivate a climate of collaboration where high quality professional development is acknowledged and is a driving force for student achievement and school improvement. Educators must invest time through collaborative efforts to assess methods of teaching, to develop new ways to approach their
subject matter, and to stay current with research through efforts of high quality professional development opportunities (Mississippi Department of Education, 2002).

The demand for clear and open communication with all stakeholders is critical to the implementation for RtI. RtI professional development has to be provided in a manner in which it is clearly articulated to all stakeholders. To eliminate communication breakdowns, it is highly important that the RtI “three-tiered” model is communicated effectively to teachers, parents, and stakeholders (Berkely, 2009). For RtI to benefit schools, a shared vision must be a focal point to aid all participants in the process. Cooperation from all stakeholders is essential. Many state departments of education have begun implementing collaborative relationships to involve various stakeholders in the process of understanding the impact of RtI (Berkely, 2009). Teachers are challenged with implementing a Three-Tier Model that includes explicit teaching and learning strategies. Teachers must be properly prepared to execute these models so that students gain the most benefit from RtI. As stated by Mastropieri and Scruggs (2005) teachers are not equipped with the background knowledge or skills to implement RtI model even in beginning reading. RtI professional development cannot only be provided to special education teachers, it must be presented to all faculty members to include administrators, regular education teachers, teachers’ assistants, auxiliary teachers, and other support staff members. It has been recommended that RtI professional development provide general knowledge to support general education teachers (Semrud-Clikeman, 2005). It is imperative that teachers are trained properly in implementing RtI. RtI requires teachers to explore research-based strategies that have impacted learning and when this does not happen, student achievement is affected. A significant challenge in implementing RtI is the lack of professional development in providing teachers with evidence-based practices (Kratochwill et al., 2007).
RtI and differentiated instruction cannot be separated. One cannot function without the other. As a part of the teacher’s ongoing professional development, differentiated instruction must be presented and demonstrated for teachers. By doing so, teachers will be able to differentiate instruction to respond to student intervention adequately. Differentiated instruction is a pedagogical method that embraces the way we treat our students, design our curricula, establish rules, and talk about learning (Benjamin, 2006). To prepare students to meet the daunting challenges of NCLB, schools have to create a community where differentiated instruction is a part of the learning culture. A critical insight to providing a culture where differentiation exists is that school leaders must provide teachers with ongoing, high quality professional development with a concentration of how to differentiate instruction. When teachers are oriented and knowledgeable of the process of RtI in addition to understanding pedagogical method of differentiation, they are able to provide quality instruction to their students. High-quality professional development must move beyond the traditional “one-size-fits-all” and the “sit-and-get” type of professional development. Workshops and trainings where one representative attends are ineffective professional development offerings for improving schools (Bergstrom, 2008).

There must be a shift in the theory of practice for professional development. Teachers must be actively engaged in an authentic situation where they are afforded an opportunity for collaboration with their peers. Professional development related to the content should include active learning, content focus, and coherence (Kratochwill et al., 2007). When providing opportunities for active learning in professional development activities, a shift in change of practice was evident from those professional development opportunities with a strong content area focus (Porter, 2000).
High quality professional development is very necessary for teachers to provide explicit instruction to students. RtI is a demanding process, and teachers need as much preparation as possible in order to provide instruction to all students. Often times, teachers are bombarded with other responsibilities and rarely get an opportunity to engage in professional reading and learning experiences. Professional development is required for teachers who are providing intervention because it is observed as a means of teachers staying current with their disciplines (Campbell & Sawyer, 2009). High quality professional development (RtI) gives teachers opportunities to explore best practices and learn new strategies for improving their classroom instruction. Professional development should be viewed as an opportunity that enables participants an alternative to adopt and use specified best practices (Campbell & Sawyer, 2009). Also, professional development (RtI) has been viewed as a strategy that can impact the implementation practices (Fixen et al., 2007).

High quality professional development training for teachers should be focus-driven. It is essential that teachers understand RtI model. Teachers should focus on three areas as it relates to training them to use RtI model. These areas include scheduling, teacher learning outcomes, and indicators of mastery of the RtI concept (Brown-Chidsey & Steege, 2005).

Professional development should vary according to the climate and culture of the school; however, it must be ongoing and consistent. Teachers should be given opportunities for side-by-side coaching experiences when receiving training to use the RtI model. One-to-one professional development with guidance from a reading coach is highly encouraged to teach teachers more effective practices and strategies for providing intervention (Gravios & Rosenfield, 2006). Professional development for teachers on how to use RtI must be ongoing and extensive. The traditional approach to presenting information is not an effective way to train teachers. In-service
programs that are traditional have been found to be unresponsive in assisting teachers with attaining knowledge and skills necessary to provide explicit instruction for all students (Xu & Drame, 2008).

Teaches must learn how to use the RtI model so that all students are challenged with explicit instruction. Because of the many components necessary for implementing RtI, teachers must be given in-depth training in those areas such as progress monitoring, Tier I, II, III, instruction, and benchmark measuring. By engaging in this type of training, teachers will be able to modify instruction as needed and provide their students with appropriate interventions. Teachers will need professional development in primary and secondary-tier instruction along with the assessment pieces, which are crucial in determining students’ progress and areas that need strengthening (Danielson, 2007). Tier III intensive intervention should be provided with professional development in order to deliver intensive intervention; however, the regular classroom teacher should have some general knowledge about Tier III intervention. Special educators will need extensive training in providing intensive intervention in addition to identifying those students with learning disabilities and using the RtI model as a part of the process (Danielson, 2007).

High quality professional development must be established on the front end. When high quality professional development on how to use the RtI model is established, teachers are positioned to improve student achievement while establishing relationships with other teachers. High quality professional development is critical and must be in place to improve student performance. This development should be structured in a fashion that allows teachers to work in small collaborative groups with opportunities to share ideas and network (Kratochwill et al., 2007). Professional development cannot be avoided. It is one of the driving forces to
implementing RtI successfully. Professional development impacts the way teachers view teaching and learning. It cannot be avoided if schools/systems plan to raise student achievement. A study in the 1990s revealed that professional development influences the practices that teachers demonstrate in the classroom and leads to improved student achievement (American Educational Research Association, 2005). Without sufficient training, teachers cannot embrace nor understand the concept of RtI. RtI model requires extensive training to avoid challenges with implementing all components of the intervention. RtI model includes understanding the process of instructing students through research-based efforts, progress monitoring, frequent assessments, and ways to sustain the intervention. Professional development for educators to conduct assessments and prevention-interventions while using a systemic approach to sustaining services is a critical concern for implementing RtI (Krarochwill, 2007).

With new mandates and addendums to the Individuals with Disability Education Improvement Act (IDEIA), adequate teacher preparation is essential if schools are to improve student achievement.

*Fidelity of Implementation of Three-Tier Instructional Model*

For the Three-Tier Instructional Model to Response to Intervention to be successful, it must be implemented in a manner that is consistent. The implementation of RtI Three-Tier Instructional Model will require ongoing collaboration/planning, execution, and evaluation. Grade level planning and team meetings are essential in the implementation of the three-Tier Model (RtI) (Stuart & Rinaldi, 2009). Collaboration among teachers and staff members who are implementing RtI allows opportunities for sharing knowledge and gaining rich understanding of the implementation. Collaborative teams serve as an instructional support team to solve potential problems with implementing RtI. During collaborative meetings, educators can reach consensus
on what is standard when it comes to implementing RtI within their school (Stuart & Rinaldi, 2009). Through collaboration, teachers are able to gain insight about the best practices to aid instructional decisions for student improvement. By collaborating, teams are able to identify effective practices as well as inefficient practices. It is essential that teachers observe the curriculum closely to ensure that quality instruction opportunities are embedded to provide optimal learning (Haager & Kilnzer, 2005).

In addition to collaboration and planning, execution is another component that ensures that all students are receiving adequate instruction. In order for students to acquire reading skills, teachers must execute quality instruction consistently on a daily basis. Execution requires teachers to have knowledge of students who are receiving intervention reading ability so that goals to ensure students’ needs are being met (Stuart & Rinaldi, 2009). During the execution stage, teachers must consistently progress monitor to determine the progress students are making, if any. Progress monitoring must be administered as scheduled without reservations. Progress monitoring is done often for students receiving Tier II and Tier III instruction to ensure appropriate services are provided to students (Stuart & Rinaldi, 2009).

To ensure that services provided are meeting the needs of students, evaluation is desperately needed. This component of implementation fidelity provides an opportunity for educators to reflect on data presented. During this reflective experience, either recommendations for improvement can be made and acknowledged or commendations about students’ progress can be documented and celebrated. Feedback is critical in implementing RtI. Feedback allows teachers to collaborate and problem solve based on results presented that will lead to more data-driven instructional planning and intervention (Stuart & Rinaldi, 2009).

*Empirical Studies of the Three-Tier Instructional Model*
According to Vaughn et al. (2008), participants in the study were identified as low responders because of their previous experience in intervention. Low responders can be identified as students performing significantly below their peers in reading prior to them receiving intervention. This study conducted examined the effects of RtI multi-tiered instructional framework on students demonstrating minimal response to previous intervention. Participants received 13 to 26 weeks of intervention in first grade. This study was done over a two-year period for each Cohort. Students entering second grade were assessed, and those who met benchmark did not receive further intervention, but those who did not meet benchmark received an additional 26 weeks of intervention.

Vaughn’s (2008) study revealed that classroom teachers provided instruction from 2003 - 2005 that involves Cohort 1, and from 2004 - 2006 that involves Cohort 2. All first grade students were screened (Cohort 1: n = 536; Cohort 2: n = 494 ). Students failing to meet benchmark in Cohort 1 was n=153 (29%) and in Cohort 2 n = 121 (24%). In the beginning of second grade, students who scored above the benchmark no longer received Tier II intervention but continue to receive Tier I instruction. During Tier II instruction, students received an additional 30 minutes of intervention: 15 minutes (Phonics and Word Recognition); 5 minutes (Fluency); 10 minutes (Passage Reading and Comprehension).

For the higher responders, only 13 or 26 weeks of secondary intervention was provided to these students for 30 minutes daily. Instruction was conducted in small groups of 4 to 6 students. The intervention was an addition to the core (Tier I) instruction. At the beginning of second grade, students identified as high responders no longer received intervention because they scored at or above the benchmark. Although students who did not score at or above benchmark received at the beginning of second grade were identified as low responders. Since these students
did not meet benchmark at the end of first grade, they were placed in Tier III instruction receive intensive intervention. From the studies, 14 students were identified as low responders who fail to meet benchmark; therefore, these students received Tier III intervention. Tier III instruction was 50 minutes daily and groups of 2 to 4 students were configured. However, Tier III instruction students received 1-2 minutes (Sound Review); 17-25 minutes (Phonics and Word Recognition and Vocabulary); 5 minutes (Fluency); 12-20 minutes (Passage Reading and Comprehension).

Several assessments were used to measure students’ gains. The Woodcock Reading Mastery Test (WRMT-R) was used to measure students’ ability to decode nonsense words. The Dynamic Indicator of Basic Early Literacy Skills (DIBELS) was used to measure students’ oral reading fluency. The Peabody Picture Vocabulary Test (PPVT III) screen for students’ verbal ability as well as their receptive vocabulary (Vaughn, 2008). Students were assessed by the teacher who provided intervention. A regression-discontinuity model was used to compare low responders (second year students who did not meet benchmark) and high responders (second year students who met benchmark).

Results indicated that significant findings in reading comprehension and word reading increased among the low responders. Reading fluency gains were minimal (Vaughn, 2008).

According to Koutsoftas et al. (2009), a study was conducted to assess the effectiveness of Tier II instruction that was designed to impact phonemic awareness on pre-school age children from a low-income background. Thirty-four pre-schoolers were in the study. Tier II intervention was provided to these students only two days a week in small groups over a six-week period. The interventionists (i.e., teachers and speech pathologists) were trained adequately. The Tier II intervention specifically focused on beginning sound awareness. From the study, 71% of the
students as indicated by medium to large effect sizes were successful from the intervention. A comparison between students who qualified for Tier II instruction and students who did not qualify for Tier II instruction indicated that Tier II instruction narrowed the gap in beginning sound awareness. The researchers who conducted this study noted that from a short period of time of providing Tier II instruction, Tier II instruction provided by fully trained teachers in phonemic awareness increased. Results show that Tier II instruction has a potential to impact on reading skills for students who experience reading difficulties (Koutsoftas et al., 2009).

Conclusion

The No Child Left Behind Act of 2001 has brought immediate attention to the way all students are educated. Because of this law, all students must receive quality instruction that supports student achievement. No Child Left Behind Act demands improved outcomes for all students by implementing scientifically research based-efforts (Cumming et al., 2008). With the Response to Intervention (Three-Tier Model) implementation, teachers can ensure that all students are equally educated with evidence-based instruction prior to being identified as learning disable. RtI specifically requires documentation of scientifically research-based instructional strategies before students are transitioned from the general education population to special education (Cumming et al., 2008).

In order to provide guidance in implementing Response to Intervention (The Three-Tier Model), ongoing professional development is necessary for teachers, but more importantly, RtI must be implemented with consistency and fidelity to raise reading achievement. According to the National Educational Placement results, the US reading scores of fourth grade students remain flat while eighth grade student increase a small percentage (Nagel, 2010).
Hence, will US students’ historical reading achievement trends remain constant or will RtI support the quest for improving national reading trends. After all, RtI is a federal mandate as sited in IDEIA (2004)?
CHAPTER III
METHODOLOGY

Introduction

The purpose of this study was to examine the effects of Response to Intervention (RtI) Three-Tiered model on students in second grade. Response to Intervention Three-tiered model supports the IDEA by providing instructional support for educators to use in identifying students for special education services particularly Tier II and Tier III. This model alters the misrepresentation of students being referred to special education. The following chapter specifies the design of the quantitative study, including information about the population and sample, instruments, and the statistical tests that will be used to analyze the resulting data.

This quantitative study provides insight as to the effects of RtI Three Tier Model and its impact on students’ ability to read.

Population, Sample, and Subjects

According to U.S. Department of Education (2004), Reading First grants were given to all states, which, in turn, award subgrants to eligible school districts that submit approved proposals to include a plan of action as to how they would use scientific read research to facilitate reading instruction. Schools throughout the United States who received funds were mandated to implement the RtI Three Tier Model to support struggling readers in an effort to teach students how to read.

The sample for this study consists of third grade students in an elementary school located in the southwestern region of Tennessee. According to the system’s student management report
for 2010, there are approximately 3,500 students in the school district. The third grade class size was anticipated to be approximately 250, including 70% African American, 25% White, 4% Hispanic, and 1% other nationalities. All third grade students receiving intervention will participate in this study. There were approximately (n=243) third grade students in the study selected to receive intervention.

**Instrumentation**

The Dynamic Indicators of Basic Early Literacy Skills (DIBELS) was used to determine students’ oral reading fluency. It will serve as the primary measure for the study. DIBELS is a formative assessment instrument created by Dr. Roland Good and Dr. Ruth Kaminski. It is designed for students in kindergarten through grade 6. DIBELS serves as a two-fold process: to identify students who are not attaining pre-reading skills (i.e., letter naming, nonsense words, initial sounds) and to monitor the progress of students who are receiving intervention (Kamps & Greenwood, 2008). It measures students’ reading ability and determines whether students are at risk for reading difficulty. The classroom teacher and/or assistant/interventionist can administer the DIBELS assessments. In addition to the pre and post-tests, a progress-monitoring instrument will be implemented for those students receiving intervention. This instrument is a bi-weekly tool that the interventionist (teacher or teacher’s assistant) administers to determine the progress of students receiving intervention and to aid teachers in planning instruction for the students. According to Good et al., (2002) and Kaminski and Good (1996), studies have shown that DIBELS have adequate reliability and predictive validity for diagnosing a student’s ability to read and comprehend.

**Research Design**

The study incorporated a single method design using quantitative measures to examine the
effects of RtI (Tier II instruction) on students’ reading achievement. A benchmark (DIBELS) assessment was administered with a pre test and post test format. Students were tested prior to receiving intervention (pre test) and again after the implementation of the intervention (post test). This design provided the researcher an opportunity to compare results from the study. DIBELS results indicated the students’ ability to read fluently based on the words per minute gained.

Procedure

Prior to conducting the research study, the researcher obtained permission from the Dissertation committee. After the Dissertation committee granted permission to proceed with the study, the researcher sought approval from the university’s Institutional Research Board (IRB). The researcher asked the school/principal for permission to conduct research. An IRB approval will be submitted to the Board of Education. A meeting was conducted with the school principal to discuss the study and solicit support from his/her instructional team for the process.

At the beginning of third grade, participants were administered a benchmark assessment (DIBELS). The assessment categorized students as on track, emerging, or struggling. Participants who were identified as needing Tier II will fall into the emerging and struggling categories. Participants who were identified as on track will receive Tier I intervention. Participants who were identified as emerging will receive Tier II intervention from the teacher, while participants who were identified as struggling will receive Tier II intervention from the teacher’s assistant. At the end of the six weeks period, a district level assessment team administered DIBELS. All results were collected and calculated by the assessment team leader.

Hypotheses

Hypothesis One: There is no significant difference in mean ORF posttest scores by instructional method when controlling for ORF pretest scores.
Hypothesis Two: There is no significant relationship between mean WPM gained by instructional method (teacher) for only Tier II students.

Hypothesis Three: There is no significant relationship between gained WPM categories by instructional method (teacher’s assistant) for only Tier II students.

*Statistical Test and Data Analysis*

For hypothesis one, mean oral reading fluency posttest is the dependent variable while the instructional method is the independent variable, and the oral reading fluency pretest is the covariate. The intended data analysis for this hypothesis is an Analysis of Covariance (ANCOVA). One of the assumptions is that the covariate and the dependent are linearly related. If that assumption cannot be met, the mean difference from the DIBELS ORF pretest to the DIBELS post test will be compared by the delivery of instruction using a 1 – Way ANOVA.

According to Hinkle et al. (2003), two assumptions determine the use of ANCOVA that concerns with the relationship between the dependent variable and the covariate. One concern would be if the relationship is linear and the next concern deals with the regression line in each group. Where there are differences between the groups on the covariate, researchers must investigate the nature of the relationship among both dependent and covariate variable, which would support the use of an ANOVA on the covariate.

For hypothesis two, data will be sorted into a contingency table and analyzed using a two-way chi-square test for frequencies contingency. The Two-way Chi Square test will include an independent variable with two conditions (instructional methods) but measures will be taken to determine the relationship between the independent and dependent variables by comparing observed frequencies of events with expected frequencies of events. As aforementioned, the independent variable in this study is the instructional method by two methods – teacher with one
group (emergers) and teacher’s assistant with one group (strugglers). The dependent variable will be categorical. There will be two possible categories the dependent variable will fall into: (1) -2 or beyond wpm (2) +2 or beyond wpm.

The significance of conducting a two-way chi square statistic is to observe how the instructional method could have an impact on students’ ability to read fluently through words per minute gained. By looking at the instructional method, one would be able to observe if a novice or veteran teacher in addition to teacher’s assistant with college experience or a teacher’s assistant with a high school diploma. This will give those who are making instructional recommendations for student intervention, valuable insight in reference to assigning students to interventionists (i.e. teacher or teacher’s assistant). If an interventionist has more students who are identified as falling into the lower tier of the categories, instruction has to be modified in regard to delivery method.

Conclusion

In conclusion, The No Child Left Behind Act of 2002 has brought immediate attention to the way all students are educated. Because of this law, all students must receive quality instruction that supports student achievement. The No Child Left Behind Act demands improved outcomes for all students by implementing scientifically research based-efforts (Cumming et al., 2008). With the RtI Three-Tier Model implementation, teachers can ensure that all students are equally educated with evidence-based instruction prior to being identified as learning disabled. RtI specifically requires documentation of scientifically research-based instructional strategies before students are transitioned from the general education population to special education (Cumming et al., 2008). As equally as important, ongoing professional development is necessary for teachers to implement RtI Multi-Tiered Model.
In the next chapter, results are revealed and analyses are made regarding the hypotheses as stated in this chapter.
CHAPTER IV
RESULTS

Introduction

The purpose of this quantitative study was to examine the effects of the Response to Intervention Three Tier Model on third graders’ reading achievement. Chapter four presents research results for the analysis of the data received from the DIBELS assessment. The data was analyzed using an Analysis of Covariance (ANCOVA) and a Two-Way Chi Square. Furthermore, descriptive statistics were used to report the results.

Data Management

A total of 243 third grade students’ data entries were placed in the system. Voyager’s V-Port database system, a system where students’ data are entered for observation of progression or regression with words per minute gained/oral reading fluency progress, was used to store all the students’ data. All the data were placed in an EXCEL spreadsheet for organization purposes as well as placed in the prescribed data management spreadsheet as identified by V-Port. One statistical software format that is a vendor of The Statistical Package of Social Sciences (SPSS) called Predictive Analytic SoftWare (PASW) was used to aid in the analysis of the data.

Descriptive statistics, including means, frequencies, and correlations were used for the sample. An ANCOVA was used to compare data across each intervention group with pretest scores as the covariate and the posttest scores as the dependent variable. In addition, the Two-Way Chi Square was used to observe the words per minute gained by students who were receiving only Tier II intervention from novice teachers or veteran teachers, as well as those
receiving intervention from teacher’s assistants with high school diplomas or teacher’s assistants with two or more years of college.

**Demographic Information**

Demographic information included students’ gender and ethnicity, in addition to teachers’ years of experience and teacher’s assistants’ educational levels. The student participants represented only grade level three with a total of 243. Forty-nine percent (n=119) of the participants were males and fifty percent (n=124) of the participants were females. Sixty percent (n=155) of the participants were Black, thirty-four percent (n=80) of the participants were White, and six percent (n=8) of the participants were others. The special education population consisted of a total of 12 students. Fifty-eight percent (n=7) of these participants were males, and forty-two percent (n=5) were females. Eighty-three percent (n=10) of these participants were Black, eight percent (n=1) were White and eight percent (n=1) were others. The teacher participants represented only third grade teachers with a total of 15. Fifty-three percent (n=8) of the participants had seven or fewer years of experience in teaching and forty-six percent (n=7) had eight or more years of experience in teaching. The majority of the teachers, eighty-seven percent (n=13), were regular education teachers, six percent (n=1) were Special Education (SPED) teachers, and six percent (n=1) were school counselors.

**Results**

The scores of the participants in the three groups of instructional methods were analyzed using ANCOVO. The analysis was conducted using the first research hypothesis stated for the study. The results of the analysis and discussions are as stated below.

**Hypothesis One:** There is no significant difference in mean ORF post test scores by instructional method when controlling for ORF prêt test scores.
To determine the relative effectiveness of the three instructional methods (Benchmark, Emerging, Struggling), the participants’ scores were analyzed using ANCOVA and result is as shown in Table 1.

Table 1: Analysis of Covariance Test Between-Subjects

<table>
<thead>
<tr>
<th>Source</th>
<th>Type II Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>2.048E5</td>
<td>3</td>
<td>68280.206</td>
<td>356.503</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>2439.795</td>
<td>1</td>
<td>2439.795</td>
<td>12.739</td>
<td>.000</td>
</tr>
<tr>
<td>CovariatePre</td>
<td>54130.304</td>
<td>1</td>
<td>54130.304</td>
<td>282.624</td>
<td>.000</td>
</tr>
<tr>
<td>InstrMethod</td>
<td>1538.938</td>
<td>2</td>
<td>769.469</td>
<td>4.018</td>
<td>.019</td>
</tr>
<tr>
<td>Error</td>
<td>39646.206</td>
<td>207</td>
<td>191.528</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1.622E6</td>
<td>211</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>244486.825</td>
<td>210</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An examination of Table 1 reveals that an F = 4.018, α = .019 for the main effect (instructional method) was significant. This is because the significance of F = .019 is less than the 0.05 alpha level; therefore, reject the null because there is sufficient evidence of a significant difference in mean ORF posttest scores by instructional method when controlling for ORF pretest. An examination of Table 1 reveals that F (1, 282) = p .000 < .001, which means that the covariate is linearly related to the dependent variable. This is essential to the validity of the ANCOVA results.

After observing the Levene’s Test of Equality, the assumption can be made that there were no interactions between the covariate and the instructional method (treatment). This assumption was checked with the F test on the interaction of the independent variable with the covariate. The F test revealed that there was no significant difference; therefore, the assumption has not been violated. Table 2 shows the Levene’s Test of Equality.
Table 2: Levene’s Test of Equality of Error Variances

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levene’s Test</td>
<td>2.808</td>
<td>2</td>
<td>208</td>
<td>.063</td>
</tr>
</tbody>
</table>

An examination of Table 2 reveals that an $F = 2.808$, $\alpha = .063$, that homogeneity of variance was met because $\alpha = .063$ is greater than that 0.05 alpha level.

Table 3: Pairwise Comparison

<table>
<thead>
<tr>
<th>(I) InstrMethod</th>
<th>(J) InstrMethod</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval for Difference $^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>2.00</td>
<td>-9.332$^c$</td>
<td>3.292</td>
<td>.015</td>
<td>[-17.257, -1.406]</td>
</tr>
<tr>
<td>3.00</td>
<td>1.00</td>
<td>9.332$^c$</td>
<td>3.292</td>
<td>.015</td>
<td>[1.406, 17.257]</td>
</tr>
<tr>
<td>3.00</td>
<td>2.00</td>
<td>10.586</td>
<td>4.985</td>
<td>.101</td>
<td>[-1.415, 22.586]</td>
</tr>
</tbody>
</table>

In Table 3, results from the Pairwise Comparisons show the comparison of each instructional method (independent variable). Participants receiving intervention from method one were identified as emerging. Participants receiving intervention from method two were identified as struggling. Participants receiving intervention from method three were identified as benchmark. An examination of Table 3 revealed a comparison between instructional method one and instructional method two had an $\alpha = .015$, which is less than 0.05 alpha level; therefore, there is a significant difference between instructional method one and instructional method two. However, results indicated a comparison between instructional method one and instructional method three had an $\alpha = .974$, which is greater than 0.05 alpha level; therefore, there is no
significant difference between instructional method one and instructional method three. Finally, results indicated a comparison between instructional method two and instructional method three had an $\alpha = .101$, which is greater than 0.05 alpha level; therefore, there is no significant difference between instructional method two and instructional method three.

Before proceeding with the results for the next two hypotheses, it is essential to discuss a statistical complication. Because of the limited frequencies that appeared in the four planned categories, the Cochran’s Rule was violated. Therefore, categories were collapsed into two categories to determine the words per minute gained or loss by instructional delivery (teacher or teacher’s assistant). Even after collapsing the column, zero appeared in row two, column one, which violates the Cochran’s Rule; however, results revealed no significance relationship.

For Hypothesis Two, participants were categorized as to receiving instruction from a veteran teacher (8 or more years of experience) or a novice teacher (0-7 years of experience). The gain scores fell into two categories: (1) -2 or beyond wpm (2) +2 or beyond wpm. These scores were analyzed using Two-Way Chi Square. The analysis was done using the second research hypothesis stated for the study. The results of the analysis and discussions are as stated below. Table 4 reveals the number of frequencies that appeared in each category.

**Hypothesis Two:** There is no significant relationship between gained WPM categories by instructional method (teachers) for only Tier 2 students.

The results of the analysis and discussions are as stated below.

**Table 4: Novice and Veteran Teachers Contingency Table**

<table>
<thead>
<tr>
<th></th>
<th>Category 1 (-2 wpm or beyond)</th>
<th>Category 2 (+2 wpm or beyond)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers (8 + years)</td>
<td>15</td>
<td>24</td>
<td>39</td>
</tr>
</tbody>
</table>
To determine the relative effectiveness of the two instructional deliveries (novice teacher and veteran teachers) based on the numbers in the wpm gained categories, the scores were analyzed using Two-Way Chi Square and result is as shown in Table 5.

**Table 5: Two-Way Chi Square Tests for Teachers**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>1.654^a</td>
<td>1</td>
<td>.198</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>1.108</td>
<td>1</td>
<td>.292</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>1.652</td>
<td>1</td>
<td>.199</td>
<td></td>
<td>.246</td>
</tr>
<tr>
<td>Fisher’s Exact Test</td>
<td></td>
<td></td>
<td></td>
<td>.146</td>
<td></td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>1.635</td>
<td>1</td>
<td>.201</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>86</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An examination of Table 5 reveals that a Pearson Chi Square Asymp. Significance = .198 is greater than 0.05 alpha level; therefore, fail to reject the null because there is no significant relationship in gained wpm when delivered by novice teachers or veteran teachers.

For Hypothesis Three, participants were categorized as to receiving instruction from a teacher’s assistant with a college degree (two or more years) or a teacher’s assistant with a high school diploma. The gain scores fell into two categories: (1) -2 or beyond wpm (2) +2 or beyond wpm. Table 6 reveals the number of frequencies that appeared in each category. The analysis was done using the third research hypothesis stated for the study.

**Hypothesis Three:** There is no significant relationship between gained WPM categories by instructional method (teacher’s assistants) for only Tier 2 students.
Table 6: College and High School Diploma Teacher’s Assistants Contingency Table

<table>
<thead>
<tr>
<th>Category 1 (-2 wpm or beyond)</th>
<th>Category 2 (+2 wpm or beyond)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant (2 or more years)</td>
<td>8</td>
<td>31</td>
</tr>
<tr>
<td>Assistant (high school diploma)</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>44</td>
</tr>
</tbody>
</table>

To determine the relative effectiveness of the two instructional deliveries (college experienced teacher’s assistants versus a high school diploma teacher’s assistant) based on the numbers in the wpm gained categories, the scores were analyzed using Two-Way Chi Square and result is as shown in Table 7.

Table 7: Two-Way Chi Square for Assistants (College) and Assistants (Diploma)

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>3.152a</td>
<td>1</td>
<td>.076</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correctionb</td>
<td>1.773</td>
<td>1</td>
<td>.183</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>5.070</td>
<td>1</td>
<td>.024</td>
<td></td>
<td>.177</td>
</tr>
<tr>
<td>Fisher’s Exact Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.082</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>3.091</td>
<td>1</td>
<td>.079</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>52</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An examination of Table 7 reveals that Pearson Chi Square Asymp. Significance level $\alpha = .076$ is greater than 0.05 alpha level; therefore, fail to reject the null because there is no significant relationship in gained wpm when delivered by teacher’s assistants with college degrees or teacher’s assistants with high school diplomas.

Summary
In Chapter 4, the results were revealed. The hypotheses were tested using An Analysis of Covariance (ANCOVO) and a Two-Way Chi Square. A significance difference existed among students receiving intervention from the teacher and students receiving intervention from the teacher’s assistants; however, significant differences were not evident in novice teachers versus veteran teachers; teacher’s assistants with college experience versus teacher’s assistants with a high school diploma.

Based on the statistical results from the instructional delivery for Tier II (emerging) and Tier II (struggling) in addition to the word per minute gained, the Response to Intervention Three Tier Model only needs minimal modifications. In the next chapter recommendations will be discussed.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents conclusions related to the study. A discussion of the results and recommendations for further research are also presented.

Purpose of the Study

The purpose of this quantitative study was to examine the effects of the Response to Intervention Three Tier Model on third graders’ reading achievement. This study proposed three hypotheses concerning the effects of Response to Intervention with regard to the Three Tier Model.

Summary of Results

The first hypothesis showed that there was a significant difference in mean ORF posttest scores by instructional method when controlling for ORF pre test. The Levene’s Test of Equality did reveal that the dependent variable and covariate were linear. The test did not show any significant difference. The second hypothesis revealed that there was no significant relationship between gained wpm categories regardless to the delivery of instruction from either a novice teacher or a veteran teacher. The third hypothesis revealed that there was no significant relationship between gained wpm categories regardless to the delivery of instruction from either a teacher’s assistant with college experience or a teacher’s assistant with a high school diploma.

Discussion of Results

Three hypotheses were examined in this study. The purpose of this study was to examine the effects of the Response to Intervention Three Tier Model on third graders’ reading
Two of the three null hypotheses indicated a fail to reject and one hypothesis was rejected. The following paragraphs provide a discussion of the findings based on each hypothesis.

The first hypothesis examined the effects of intervention for students in third grade. Intervention was categorized in three groups – benchmark, emerging, struggling. The ANCOVA between-subjects test was used to calculate differences across the groups. The ANCOVA results indicated that group one (emerging) and group two (struggling) differed significantly; however, there was no significant difference among group one (emerging) and group three (benchmark) or group two (struggling) and group three (benchmark). In a similar study, results revealed that RtI groups helped students become better readers (Griffin, 2008).

The second hypothesis examined the relationship between gained wpm categories by the delivery of instruction from either a novice teacher or a veteran teacher. The Two-Way Chi Square revealed that there was no significant difference between the two groups based on gained wpm categories.

The third hypothesis examined the relationship between gained wpm categories by the delivery of instruction from teacher’s assistants with college experience or teacher’s assistants with a high school diploma. The Two-Way Chi Square revealed that there was no significant difference between the two groups based on gained wpm categories. According to the results from hypothesis two and hypothesis three, several studies validated the importance of fidelity of implementation to maximize the effectiveness of intervention (e.g., Foorman & Moats, 2004, Foorman & Schatschneider, 2003; Gresham et al., 2000; Kovaleiski et al., 1999; Telzrow, McNamara & Hollinger, 2000; Vaughn, Hughes, Schamm, & Klingner, 1998). Even though several studies observed varied interventions, the results suggested that positive student results
can be attributed to 1. Fidelity of implementation; 2. Degree to which the selected interventions are supported; and 3. Fidelity of intervention implementation (Johnson et al., 2006).

**Recommendations**

1. Provide on-going professional development for teachers and teacher’s assistants to ensure that common knowledge exists among all.

2. Develop an evaluative instrument that can assist with observing the fidelity of implementation.

3. Re-evaluate the assignment of Tier II students who are considered emerging (teacher’s group) and struggling (teacher’s assistant group).

**Conclusion**

There was a significant difference in mean ORF posttest scores by instructional method when controlling for ORF pre test. There was no significant relationship between gained wpm categories regardless to the delivery of instruction from either a novice teacher or a veteran teacher. There was no significant relationship between gained wpm categories regardless to the delivery of instruction from either a teacher’s assistant with college experience or a teacher’s assistant with a high school diploma.

According to the results, more data is needed for evaluation and analysis to determine the total impact Response to Intervention will have on reading achievement of third graders. At Winter Break, another DIBELS assessment will be given. Results from this assessment will allow the school the opportunity to re-establish groups, if necessary. According to the TCAP Achievement results for 2011, third grade reading achievement was substantially low. Response to Intervention was implemented this year to assist with preparing students to become proficient readers. By implementing RtI, the administration is anticipating an increase in achievement.
Having said that, at the end of the year, the final DIBELS assessment will be administered in addition to the TCAP Achievement Test. These data sources will be valuable in observing the total impact of Response to Intervention on third graders’ reading achievement.
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APPENDICES
APPENDIX A

Letters of Instruction
August 8, 2011

Dear Principal:

I am Marlon King, a doctoral student in the Department of Curriculum and Accountability in the School of Education at the University of Mississippi. I am currently working on my dissertation, which will examine the effects of Response to Intervention Three Tier Model on third graders’ reading achievement. Specifically, this student will examine the effects of the intervention in addition to the impact teachers and teacher’s assistants have on students’ word per minute gains.

Data for the study will be collected using VPORT database, which holds DIBELS results for students. I would like your help in collecting data for my study. I will need access to VPORT to collect students’ entered scores.

The Institutional Review Board at the University of Mississippi has approved this study. I will not be collecting any personal information on students or teachers. All data will be analyzed at an aggregate level and no individuals’ scores will be associated with any names.

There are no associated risks in this study. The ending goal is to reveal the outcomes and suggest benefits to the school district and individual school.

I greatly appreciate your help. If you have any questions or need clarification, please contact me (mdking2@olemiss.edu) or if you would like to speak with my advisor, Dr. Bobbie Smothers-Jones, she may also be contacted (smothers@olemiss.edu).

Educationally yours,

Marlon D. King
August 15, 2011

Dear Mr. King,

We would be honored to have you examine our intervention implementation and the effects RTI has had on our third grade students. Our RTI team can assist you with data collection and reports from DIBELS as well.

We are looking forward to working with you.

Sincerely,

Sandra Humphreys
APPENDIX B

Institutional Review Board Approval
Office of Research and Sponsored Programs  
The University of Mississippi  
100 Barr Hall  
Post Office Box 907  
University, MS 38677  
(662) 915-7482  
Fax: (662) 915-7577  

May 9, 2011

Mr. Marlon King  
4884 Indian Walk Lane  
Arlington, TN 38002  

Dear Mr. King and Dr. Smothers-Jones:

This is to inform you that your application to conduct research with human participants, *The Effects of Response to Intervention on Second Graders' Reading Achievement (Protocol 11-226)*, has been approved as Exempt under 45 CFR 46.101(b)(1).

Please remember that all of The University of Mississippi's human participant research activities, regardless of whether the research is subject to federal regulations, must be guided by the ethical principles in *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research*.

It is especially important for you to keep these points in mind:

- You must protect the rights and welfare of human research participants.
- Any changes to your approved protocol must be reviewed and approved before initiating those changes.
- You must report promptly to the IRB any injuries or other unanticipated problems involving risks to participants or others.

If you have any questions, please feel free to call me at (662) 915-7482.

Sincerely,

Diane W. Lindley  
Coordinator, Institutional Review Board  

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VITA

Marlon D. King is an educator with commitment to serving others and helping children. A graduate of the Haywood County Public School System, he began his education career as a substitute teacher and an educational assistant while completing a Bachelor of Science Degree in Elementary Education. He spent three years at Union University but later transferred to Lemoyne Owen College where his degree was conferred. He became a successful classroom teacher in Shelby County Schools, where he was recognized for his outstanding performance and was selected to serve on local and state committees during his tenure there. He completed a Master’s Degree in Educational Leadership from Trevecca Nazarene University. At the age of 27, he was recruited by Fayette County Schools to serve as principal of Lt. Governor John Wilder’s alma mater, Northwest Elementary School. During his tenure, Northwest was nationally recognized for academic achievement and was named a National Blue Ribbon School by the United States Department of Education. He then went on to transform another low-performing school, leading Central Elementary School to make AYP (high percentages) without using the federal safe harbor provisions after just one year as principal there. At the age of 32, he became Superintendent of Haywood County Schools in Brownsville, Tennessee. Additionally, in December of 2011, he completed the doctoral program at the University of Mississippi with an emphasis in Curriculum and Instruction. Marlon is married to Latisha Nettles King, a teacher at Haywood Junior High School, and they have a son, Hudson.