Tools for Effective Implementation of Response to Intervention in the Elementary Classroom

Tonia Y. Manning
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TOOLS FOR EFFECTIVE IMPLEMENTATION OF
RESPONSE TO INTERVENTION IN THE ELEMENTARY CLASSROOM

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Dissertation submitted to the Faculty of the
College of Education
in partial fulfillment of the requirements for the degree of
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Teacher Leadership

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Abstract

Response to Intervention is a regular education initiative composed of multiple tiers of service designed to deliver scientifically based instruction and intervention. The Response to Intervention Model monitors student growth over time and enables schools to provide support to students identified as at-risk through curriculum-based measurements. The reauthorization of the No Child Left Behind Act (2004) allowed states to use Response to Intervention to identify and provide intervention to students at risk of developing a reading disability. The purpose of this qualitative collective case study was to examine the tools used by teachers experienced in providing instruction and intervention to students at risk of developing a reading or learning disability. The study was conducted at two research sites and the participants included seven elementary teachers. The methodology applied semi-structured interviews and direct observations for data collection. The data were analyzed using field notes and *in vivo* coding, which uncovered five themes that were used to substantiate the findings. The key finding from this study indicated a need for increased professional development. The finding also revealed the participants used research based intervention programs and strategies while facing myriad of challenges when implementing RTI in the elementary classroom. The significance of this study revolves around the usefulness and applicability of the results to educators and stakeholders in schools across the country on the tools needed for effective implementation of Response to Intervention.
DEDICATION

This dissertation is dedicated to my family, beginning with my husband Tony for his love and encouragement. At any inkling of frustration, you were there with the right words to put things back into perspective. You have been my rock and my comfort. Thank you for stepping in and becoming our modern day Mr. Mom. I love you and could not have done this without your dedication and devotion to our family. To our children, Amari, Mia, and Tristan. You finally get your mother back. No matter what was going on or how overwhelmed I may have been, I am happy I made it a priority to listen each day as you told me about your day at school. Thank you for being such wonderful children. You make me proud. Now go out and do wonderful things.

I would like to thank my mother who passed away in 1982. Although I was only eleven, I have held tight to all the values that she instilled in me through her words and actions. These values have proven instrumental in the paths I have taken in this life journey. I also dedicate this dissertation to my father, whose calm approach to life taught me patience and understanding. On the few occasions when things seemed daunting, I thought of you and reminded myself of the phrase that you seem to breathe life into: “This too shall pass.” Lastly, I thank my sisters, brothers, in-laws, and friends for their support and words of encouragement throughout this dissertation process.
ACKNOWLEDGEMENTS

This has been the most challenging and most rewarding undertaking of my life. There were days I would ask myself, “Why are you doing this?” Then I would remember that quitting is not in my nature. Anything I start, must be completed. I was able to complete this dissertation with the support and encouragement of many people. The greatest source of my strength came from my Lord and Savior Jesus Christ who strengthens me.

He gives strength to the weary and increases the power of the weak. Even youths grow tired and weary, and young men shall stumble and fall; but those who hope in the Lord will renew their strength. They will soar on wings like eagles; they will run and not grow weary, they will walk and not be faint. Isaiah 40:29-31

I was fortunate to have the best dissertation committees one could hope for. I was constantly uplifted and always treated with respect. Dr. Julie McCann provided encouragement along with critical feedback that aided in improving my writing throughout the process. She encouraged me to trust in my abilities and to rely on my own words. Dr. Taylor’s nurturing approach provided calmness and her knowledge of the topic allowed me to see the impact it would have on practice and policy in the educational community. Dr. Davidson’s keen insight and questioning encouraged me to delve deeper as she reminded me to approach the process from the point of view of an expert. Thank you all for your guidance and support.

Thank you to the school district and principals for granting the approval needed to conduct this research study in your schools. A special thank you to the seven participating teachers who gave of their time and expertise during the data collection process of this dissertation. Your input has proven invaluable to the findings is this research study.
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Chapter 1: Introduction

Introduction to the Problem

As an elementary school teacher, I have faced with the dilemma of determining how teachers identify and provide effective intervention to students that I have come to call the “in-betweeners.” These are the students who often fall “between the cracks” or “under the radar” because they do not meet the qualifications necessary to receive special education or remedial services. Based on this realization, I determined that there is a gaping distance between the theory and the practical application of implementing instruction and intervention under the Response to Intervention (RTI) Model.

I was first introduced to RTI in 2006 while working as a fifth grade teacher in Central Texas. During this introductory period to RTI, the school simply focused on identifying students and assigning them to an instructional tier based on lengthy formative assessments. Once students were placed into a tier, students received little to no intervention, and the process seemingly came to a halt with no follow-up on student progress. In 2010, I began working as an Instructional Specialist at an elementary school in the northern-most part of the United States, and the RTI process became more in-depth.

It was during this assignment that I gained a greater sense of excitement for RTI and its promise to offer high quality instruction and intervention to all students through tiered instruction. All students were given brief curriculum-based measurements (CBM) three times during the school year. The results of these measures were used to determine students’ level of proficiency and which students were considered at risk of developing a reading or learning disability. In order serve these students, Title I Specialists and substitute teachers were given the title of Interventionists and asked to lead instruction in small intervention groups.
These intervention groups consisted of students who were below the targeted norm for the district in reading and literacy. While teachers were asked to provide instruction, they were not provided the research-based resources or programs needed to work towards improving student achievement. These teachers and interventionists also lacked the training necessary for implementing the research-based, high quality instruction of RTI. As a result, the same students were cycled through the intervention program year after year, while making minimal to no academic gains. Ultimately, these students failed to make progress because teachers were not properly trained on the methods, techniques, and strategies needed for the effective implementation of Response to Intervention.

**Background, Context, History, and Conceptual Framework of the Problem**

**Background and context.** RTI is a regular education initiative that involves a multi-tiered model of service delivery depending on a student’s outcome on a scientifically based CBM (Buffum, Mattos, & Weber, 2009). The concept behind RTI is to identify students at risk of having or developing a reading or learning disability, and provide intervention to prevent further academic delays. Under the RTI Model, each student’s performance is measured using research-based interventions and progress monitoring. RTI is used to make educational decisions and to determine tier placement based on the students’ response to these interventions. The academic intervention provided to students is differentiated at each tier, becoming more intensive as students move across the tiers (Fuchs & Fuchs, 2006). Since RTI is a regular education initiative, instruction in each tier is intended to be supplemental, as opposed to a replacement to the regular education curriculum.

RTI was developed as a “response to the shortcomings of the discrepancy model, which often waited for student educational failure before diagnosing a specific learning disability
(SLD)” (Buffum et al., 2009, p. 22). The RTI Model monitors student growth over time and gives schools the ability to provide support before students are placed into special education. In order to provide support that meets the needs of struggling students, teachers themselves must be educated in the implementation of RTI. Local education agencies and school districts must enact policies to invest in providing teachers with scientific, research-based programs, training, and strategies needed for effective implementation of instruction and intervention under the RTI Model.

The Institute of Education Sciences identified the following core components for effective implementation of RTI: (a) universal screening, (b) data-based decision-making, (c) progress monitoring (PM), (d) a multi-level prevention system through increasingly intensive tiers of intervention, and (e) fidelity of implementation (Al Otaiba, Wagner, & Miller, 2014; Spear-Swerling & Cheeseman, 2011). Universal screening is administered to every student, and the information gained from the screening is used to make data based decisions regarding student placement and the need for intervention. Students who are deemed below proficient are placed on a progress-monitoring schedule based on their level of proficiency.

The most familiar component of the RTI Model is the three-tiered intervention system. This tiered system and the components of RTI are designed to work together to reflect a model of prevention as opposed to one of failure (Reeves, Bishop, & Filce, 2010). In Tier 1, every student receives universal screening and high quality instruction that meets the needs of 80-90% of students in the general education classroom (Fuchs & Fuchs, 2006). Tier 2 is designed to meet the needs of students who fall below the proficiency level on universal screening tools. Students in Tier 2 receive strategic small group intervention in conjunction with classroom instruction based on the core curriculum. Students who do not respond to these interventions
move into Tier 3, where they receive more intensive, individualized intervention with a specialist or special education teacher.

Each of these components is critical to establishing fidelity in the implementation of a RTI Model. Miller (2010) believes fidelity of implementation provides educators with clearly defined features that provide a common understanding of RTI that builds consistency in the practices of all educators. Fidelity of implementation plays a crucial role in the purpose of this research study, which is to identify the methods, techniques, and strategies teachers need to effectively implement instruction under RTI.

**History.** In 1977, the United States Department of Education (USDOE) defined a learning disability (LD) as “a severe discrepancy between achievement and intellectual ability” (Mesmer & Mesmer, 2009, p. 280). To determine if students presented with a LD, students are administered IQ tests and achievement tests using the IQ/Achievement Discrepancy Model (Mesmer & Mesmer, 2009). In most cases, a discrepancy could take up to two years to manifest, which leads to delayed responses to the needs of students who are at risk of academic failure. The RTI Model no longer required wait time for students not performing at grade level to receive interventions before qualifying for intervention or special education (Richards, Pavri, Golez, & Canges, 2007).

Response to Intervention evolved from a National Research Council Study conducted in 1982 to outline criteria for special education classification. This study started the push for the use of responsiveness to instruction in eligibility determination (Bender & Shores, 2007). In 2001, the Bush administration created federal legislation—No Child Left Behind (NCLB)—which required state governments set standards for student performance as well as teacher quality and qualifications (NCLB, 2001). Together, NCLB (2001) and Individuals With
Disabilities Education Improvement Act (IDEA, 2004) cleared the path for schools to use RTI as a method for identifying students with specific learning disabilities.

The reauthorized Individuals With Disabilities Education Improvement Act (IDEA, 2004) offers local education agencies (LEA) the choice of using RTI to determine eligibility for special education under the classification of specific learning disabilities (Shinn, 2007). IDEA allowed RTI, a general education initiative, to be written into special education law; therefore, merging general education with special education initiatives. Consequently, RTI became the accepted means by which schools no longer waited for formal identification of a learning disability, but instead started providing targeted interventions early (Kavale, Kauffman, Bachmeoer, & Lefever, 2008).

**Theoretical framework of the problem.** RTI is a general education initiative that relies on open communication in which fidelity checks of classroom methods are deemed a constructive way to collaborate (Mellard, 2010). Under this initiative, educators collaborate, communicate, and reflect on the practices for implementing and improving instruction and intervention. Since RTI is a problem-solving model to student learning that relies on collaboration and reflective communication, the problem was investigated using the theoretical underpinnings of Lev Vygotsky’s (1962) Social Constructivism and Donald Schön’s (1983) Reflective Learning Theory.

Social constructivism emphasizes the collaborative nature of learning. RTI requires a collaborative approach that includes constant communication among general and special education teachers, intervention specialists, speech and language pathologists (SLP), school psychologists, and school administrators (Jonassen, 1991). To maintain fidelity throughout each
tier of the RTI framework, these members of the school staff meet, analyze, plan, discuss, and decide the best line of intervention for all students.

Vygotsky’s (1978) social constructivism theory of learning placed focus on social relations and the importance of readiness for learning. Vygotsky relied on dynamic assessments to establish a students’ level of readiness in order to determine a students’ learning potential (Taff-Barge, 2012). The work of Vygotsky (1978) is significant in the development of RTI because Vygotsky believed that instruction should occur through functional scaffolding (Ellis, 2014). This concept supports a major structural component of RTI, specifically the concept of multi-tiered instruction.

Vygotsky (1978) developed the zone of proximal development (ZPD) to describe the gap between the students’ actual development level and the potential development level as understood through problem solving (Vygotsky, 1978). The ZPD is synonymous to the tiers of RTI (Zone of Proximal Development and Scaffolding [ZPDS], 2015) in that varied tiers of instruction and support are developed in order to promote the highest possible level of achievement (Vygotsky, 1962). Just as knowledgeable skilled teachers are important to the effective implementation of RTI, providing instruction using the ZPD model requires actively involved teachers who use social negotiation to build knowledge as a collaborative group. The ZPD represents a students’ capacity to learn with the support of a skilled teacher.

This research study focused on identifying the tools, such as the methods, techniques, and strategies teachers needed for the effective implementation of RTI. The study also sought to determine what professional development opportunities K-3 teachers believed were necessary to provide effective instruction under the RTI Model. For this reason, the theoretical framework of reflective practice was applied to this research study. A major element of reflective practice
theory was that knowledge comes from continuous practice such as that found in ongoing professional development opportunities.

While John Dewey is recognized as the eminent 20th century influence on reflection in education, this study applied the work of Donald Schön (1983), who reintroduced the use of reflective practice in the field of education. Reflective practice is based on the idea of intentional action, such as participation in professional development for the purpose of attaining the skills and strategies needed for implementing RTI to students (Osterman & Kottkamo, 2004). In his work on reflective practice, Schön (1983) described the gap between professional knowledge and what teachers actually know and practice as a crisis in professional knowledge (York-Barr, Sommers, Ghere, & Montie, 2006). This crisis in professional knowledge was a major contributor to the problem addressed in this study, which was a perceived lack of knowledge for understanding the strategies needed for implementing RTI on the part of the teacher.

**Statement of the Problem**

This study examined the tools used by teachers who had experience in the RTI Model to provide instruction and intervention to students at risk of developing a reading or learning disability. Teachers across the United States are being tasked with following the RTI Model to provide instruction and intervention to students in each tier of the RTI Instructional Model (Perry, 2012). Therefore, the problem addressed in this study stemmed from the perceived lack of knowledge in understanding of the tools needed for implementing instruction and intervention under the RTI Model on the part of the teacher. Many educators were not equipped with the tools needed to provide effective RTI instruction and intervention to at-risk students (Mellard, 2010).
Purpose of the Proposed Study

The purpose of this collective case study was to identify and describe the methods, techniques, and strategies used by K-3 teachers at two urban elementary schools for the effective implementation of RTI in the classroom. Teachers were asked to share their perspective on using RTI as a means for identifying and providing intervention to students at risk of developing a reading or learning disability.

Research Questions

**Principal research question.** What methods, techniques, and strategies do K-3 teachers use to provide instruction and intervention to at-risk students under the RTI Model?

**Sub-questions:**

1. How do K-3 general education teachers use RTI in the classroom to identify and provide instruction to at-risk students?
2. What professional development opportunities do K-3 teachers believe are necessary to provide effective instruction under the RTI Model?
3. How do K-3 general education teachers perceive their role and responsibilities for providing instruction within the RTI Model?

Rationale, Relevance, and Significance of the Proposed Study

The rationale for conducting this research study was the importance of providing teachers and other educators with various methods, techniques, and strategies that experienced educators have found effective in their implementation of RTI. Shanklin (2008) wrote, “Under RTI, it is the job of the classroom teachers to recommend students for appropriate interventions and to deliver classroom-level interventions themselves” (p. 62). This was further supported through the work of Gersten & Dimino (2006) and Fuchs & Fuchs (2006), who attested that RTI
provided classroom teachers with a clear-cut, reliable framework for assessing students and making data based decisions.

This study sought to provide elementary teachers with an array of tools that were shown to be successful for experienced educators as they implemented instruction and intervention under the RTI Model. This study brought awareness to educators through the experiences and perceptions of teachers tasked with implementing RTI in the classroom, and the information gained from this study may be beneficial to other classroom teachers and their experiences with implementing the RTI Model.

This qualitative collective case study was relevant to the field of education because the data gathered provided teachers and other educators with examples of specific strategies that can be used for the effective implementation of instruction and intervention under the RTI Model. Research on this topic is also relevant to the educational community because teachers are being directed to implement a model designed to offer early identification and intervention to struggling learners; however, teachers are not properly prepared with the knowledge and the tools required to meet the needs of the students or to implement the model with fidelity.

The significance of this research study is the importance of the results, which can be used to help educators make informed decisions concerning the strategies, techniques, and methods used to provide effective intervention to students at risk of developing a reading or learning disability. This study also allows teachers to reflect critically on their current teaching methods and ponder alternative tools for instruction. The knowledge gained from this study will serve as a resource for policy makers concerning the structure and funding required for the implementation of the RTI Model to teachers, administrators, and schools across the school district.
Nature of the Proposed Study

This qualitative collective case study was designed to identify the methods, techniques, and strategies used by K-3 teachers to implement instruction and intervention under the RTI Model to students at risk of developing a reading or learning disability. The collective case study design allowed the participating teachers to share their experiences and perspectives in regards to RTI. In an effort to improve the validity of the data gathered from this research study, multiple cases were applied because a multiple case study allowed the “researcher to explore differences within and between cases” and draws comparisons between cases (Baxter & Jack, 2008, p. 548).

This research study focused on identifying and uncovering the tools used by teachers who have experience using the RTI Model of instruction. The study included seven K-3 teachers from two different elementary schools within the same school district. There were four participating teachers from Breezeway Elementary School and three participating teachers from Comprehensive Elementary School. Interview and observation protocols were used to collect data from the research participants. The data analysis included debriefing session that invited participants to review the interview transcriptions and observation field notes. The debriefing session allowed the participants to conduct member checks, which were used to verify the accuracy of their perspectives and their contributions to the research study.

Definition of Terms

For the purposes of this research study, the following definitions were used to describe background information, to relate to the significance to the research, and to identify the concepts under investigation.
• *At-Risk Student* pertains to children who are identified as being more likely than other
students to experience undesirable educational outcomes such as low achievement,
suspending, or dropping out of high school (Byrnes, 2009).

• *Curriculum Based Measurement (CBM)* is a specific method of monitoring student
progress through direct, continuous assessments based on instruction of academic skills
towards long-term goals (Fuchs & Fuchs, 2006).

• *Fidelity* refers to “teachers consistently and accurately applying a research-based
curriculum, assessing student gains, managing and using data to guide instruction”
(Mellard, 2010, p. 6).

• *Interventions* are specific strategies, techniques, and/or programs used, in addition to
regular classroom instruction, to improve the student’s performance (RTI Network, n.d.).

• *IQ-Achievement Discrepancy* is the difference between scores on a norm-referenced
intelligence test and a norm-referenced achievement test (rtinetwork.org). This model is
used in special education to determine if a student is eligible for services (Mesmer &
Mesmer, 2009).

• *Learning Disability (LD)* “a severe discrepancy between achievement and intellectual
ability” (Mesmer & Mesmer, 2009, p. 280).

• *No Child Left Behind (NCLB)* is the legislation enacted in 2001 by the Bush
Administration, which mandates strict testing policies in American schools to hold them
accountable for student achievement (NCLB, 2001).

• *Professional Development (PD)* is multidimensional. It includes activities that improve
and increase teachers’ knowledge of the academic subjects they teach, and enable
teachers to become highly qualified. PD is also high quality, sustained and continuous,

- **Progress Monitoring** is a scientific based practice that is used to assess students’ academic performance and to evaluate the impact of instruction. It is used to provide regular documentation of student’s response to intervention (Stuart, Rinaldi, & Higgins-Averill, 2011).

- **Reading Disability** is a condition in which a person displays difficulty reading due to structural and/or functional brain problems. It not due to intelligence (Beach & O’Conner, 2013).

- **Response to Intervention (RTI)** is a “process for implementing high-quality, scientifically validated instructional practices based on learner needs, monitoring student progress, and adjusting instruction based on the student’s response” (Bender & Shores, 2007, p. 7).

- **Struggling Student** is a student who scores below proficient on a state curriculum based measurement in a specific content area, and has difficulty keeping up with classmates of the same age in a developmentally appropriate learning environment. The struggling learner does not qualify for special education or remedial services (Robbins, n.d.).

- **Three-tiered Instructional Model** is an instructional intervention model that provides guidance for monitoring student’s 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).

- **Universal Screening** refers to school-wide assessments used to identify students who are at risk of falling below grade level standards, and those not progressing at expected grade level rates (National Research Center on Learning Disabilities, 2006).
Assumptions, Delimitations, and Limitations

For the purposes of this research study, as the researcher, I assumed that participating teachers had some experience and background knowledge about Response to Intervention. It was also assumed that participating teachers were providing the researcher with valid information and were honest in reporting the strategies, methods, and techniques used to implement RTI in the classroom, as well as in their perceptions on using RTI to identify and provide instruction to students at risk of developing a reading or learning disability.

There were boundaries or delimitations associated with this research study. The study was delimited to kindergarten through third grade teachers who had experience providing instruction and intervention under the RTI Model. The study was also delimited by location and sample selection of two urban elementary schools in from the same school district located in the Washington, D.C., Maryland, and Virginia (DMV) area of the United States.

I recognize that there were certain limitations inherent to conducting this research study. These limitations included sample size and selection, time of study, and researcher bias. The study was conducted using seven participants from two urban elementary schools within the same school district. Therefore, the outcomes were not generalizable to the population, and were not a full representation of the elementary teaching population. Another limitation was the time of school year in which the data collection process of the research study occurs. The fieldwork for this research study began in April and ended mid-June of 2016. This coincided with end of year assessments and final preparations, which influenced the selection of voluntary participants.

Researcher bias was the other limitation to consider. I was aware that my previous experience with RTI could impact my opinion about the intervention strategies used by participants; therefore, measures were taken to separate my own experiences from this research
study. I remained open-minded and recorded participant responses verbatim to avoid misrepresentation of the data collected during this research study.

Summary

This collective case study sought to identify the tools used by teachers to effectively implement RTI to students at risk of developing a reading or learning disability, and to explore teachers’ perceptions of using Response to Intervention. The study was grounded in the theoretical frameworks of social constructivism and reflective practice. One of the major implications of this study offered recommendations aimed at improving the implementation of instruction and intervention under the RTI Model. This improvement was accomplished by adding research-based data to the existing field of literature and knowledge, thereby allowing all stakeholders to make more informed decisions on the selection of tools and strategies for providing instruction to students at all stages of the RTI Model.

The remainder of this study includes Chapter 2, which features a review of literature surrounding Response to Intervention. This chapter includes the history of RTI, the conceptual framework used to guide the research study, a review of research and methodological literature, a review of methodological issues, and a synthesis of research findings. Chapter 3 provides the methodology used to conduct research using the K-3 participating teachers from two elementary schools. This study followed the collective case research design and data is collected using semi-structured interviews and direct observations. Chapter 4 shares the findings by offering a non-evaluative reporting of the data, and Chapter 5 wraps up the study with discussions and conclusions on how the dissertation answered the research questions and addressed the problem in this study.
Chapter 2: Literature Review

Introduction

This literature review provides a critical examination of the existing literature on RTI, along with teachers’ perceptions of RTI as a method for identifying and meeting the academic needs of elementary students who experience reading or academic difficulties. RTI is a “process for implementing high-quality, scientifically validated instructional practices based on learner needs, monitoring student progress, and adjusting instruction based on the student’s response” (Bender & Shores, 2007, p. 7). This study sought to uncover the methods, techniques, and strategies used by teachers of RTI, and to glean teachers’ perception of using RTI as a means for identifying and providing intervention to students at risk of developing a reading or learning disability. Current research regarding teachers’ knowledge and preparation, tools for providing instruction under RTI, and professional development for implementing RTI were the guiding factors of this study.

The search strategies used for collecting sources included key word searches that were refined as the focus of the study narrowed. The study began with the following phrases: Response to Intervention, Tier 2 intervention, struggling readers, pull out programs, at-risk students, special education, and closing the achievement gap. While searching and reviewing literature on my topic, I added the following search terms: teacher knowledge of RTI, professional development, program effectiveness, and teacher perception/perspective. Searches were conducted using databases such as ProQuest Education Journals, ProQuest Dissertations & Theses, ERIC ProQuest, Sage Premiere, Wiley Online Library, and JSTOR. Key terms and phrases were also entered into the Google Scholar search option, which located articles and
books and used the terms to send automatic alerts when new articles relevant to the study were available.

This source selection was chosen because of the expansive offering of scholarly, educational journals and articles, which offered a wealth of credible, peer-reviewed resources. This research study provides insight into the practices and tools used by teachers of RTI and shares teachers’ perception of and experience using RTI as a means for identifying and providing intervention to students at risk of developing a reading or learning disability. This study is significant to the field of education because it offers the teachers’ perception of what is known and what is needed for the successful implementation of RTI on all levels.

**Conceptual Framework**

The focus of the research was to uncover the strategies or methods used by teachers of RTI and to glean teachers’ perception of using RTI as a means for identifying and providing instruction and intervention to students at risk of developing a reading or learning disability. The study also sought to gain a deeper understanding of teachers’ knowledge and preparation for implementing RTI, and the professional development opportunities teachers are afforded for effective implementation of RTI.

This literature review contained the history of RTI, including the components of and approaches to RTI, the reauthorization of Individuals with Disabilities Education Act (IDEA, 2004), RTI versus an IQ/Achievement Model for identifying at-risk students, and the teachers’ role in RTI. A separate section addressed the conceptual framework used to guide the research study. Included in this section were the theoretical framework and related literature. The literature review also included a review of research and methodological literature; a review of
methodological issues, a synthesis of research findings, and concludes with a literature review summary.

**Response to Intervention (RTI).**

RTI evolved from a National Research Council Study conducted in 1982 to outline criteria for special education classification—this study “began the momentum for the use of responsiveness to instruction in eligibility determination” (Bender & Shores, 2007, p. 4). Amendments to IDEA (2004) allowed states to use RTI for both prevention and identification of reading disabilities (Al Otaiba, Wagner, & Miller, 2014; Beach & O’Connor (2015); Compton, Fuchs, Fuchs, Elleman, & Gilbert, 2007; and Spear-Swerling & Cheesman, 2011). RTI was designed for the dual purposes of providing early intervention to students at risk of failing, and for developing a more valid, proactive procedure for identifying students with a reading disability or a specific learning disability (SLD) Gersten & Dimino, 2006; Fuchs & Fuchs, 2006; Fuchs & Deshler, 2007; and Al Otaiba, Wanzek, & Yavanoff, 2015). Reeves et al. (2010) contended, “RTI models make monitoring all students and intervening instructionally early—before a child experiences failure—part of everyday classroom practice” (p. 32).

There is no single definition for RTI. RTI’s goal is to identify children at risk for academic difficulties during the formative years and provide them with a tiered system of interventions aimed at preventing learning or reading disabilities. This tiered system and the components of RTI were designed to work together to provide a model of prevention (Reeves et al., 2010). The new IDEA (2004) offered local education agencies (LEA) the choice of using RTI to determine eligibility for special education under the category of SLDs (Shinn, 2007). This decision was designed to give states and districts an option for identifying and providing early intervention to students who demonstrate a need for supplemental support.
The Components of and Approaches to RTI

Components of RTI. The Institute of Education Sciences published a practice guide that identified the following core components for effective implementation of RTI: (a) universal screening, (b) data-based decision making, (c) progress monitoring (PM), (d) a multi-level prevention system through increasingly intensive tiers of intervention, and (e) fidelity of implementation (Al Otaiba et al., 2014; Al Otaiba et al., 2015; Spear-Swerling & Cheeseman, 2011). These components were critical in establishing fidelity in the implementation of Response to Intervention. According to Miller (2010), fidelity of implementation featured a set of clearly defined essential features that provided a common understanding of RTI, and consistency in practices across all stakeholders. Fidelity was measurable at multiple levels within a school.

The literature described RTI as a multi-tiered structure featuring three tiers of intervention (Reeves et al., 2010; Compton et al., 2007; Richards et al., 2007; Waznek & Vaughn, 2011). The focus of strategic intervention changed at each tier and became more intensive as students moved from Tier 1 to Tier 3 (Fuchs & Fuchs, 2006). Universal screening, differentiated instruction, and high-quality core reading programs were integral to Tier 1 of the RTI framework, and made available to all students in the general education classroom.

Every student was serviced through the primary tier (Tier 1) and received universal screening at least three times during the school year. These screenings were typically conducted using a curriculum-based measurement (CBM) and were used to identify students who were and were not meeting grade level standards with the core curriculum. The results of these screenings were used to determine if students were at risk of a reading disability, and thus in need of further academic support found in a Tier 2 intervention. Tier 1 of the RTI Model consisted of classroom
instruction derived from evidence-based methods considered effective for providing instruction to all students (Kerins, Trotter, & Schoenbrodt, 2010). High-quality Tier 1 instruction typically met the needs of approximately 80 to 90% of students in the general education classroom (Fuchs & Fuchs, 2006). Researchers believed if students received instruction using high-quality core reading programs, they were less likely to require supplemental intervention found in Tiers 2 and 3 (Wanzek & Vaughn, 2011; Spear-Swerling & Cheesman, 2011).

According Kerins et al. (2010), the secondary tier (Tier 2) provided strategic support to students who were not responsive to the instructional practices used in Tier 1 instruction. Assessments were important to this tier in that they were used to determine a students’ baseline abilities, and if students were responding to supplementary instruction (Kerins, 2010). In addition to the Tier 1 core instruction received in the general education classroom, instruction in Tier 2 included targeted intervention. Tier 2 supplemental instruction was provided by classroom teachers and specialty educators, such as reading specialists, special educators, and interventionists, with specialized training (Kerins et al., 2010).

To determine if progress was being made, identified students received progress monitoring weekly or two times per week, which allowed teachers and other educators to consistently monitor student progress and make informed instructional decisions (Stuart, Rinaldi, & Higgins-Averill, 2011). Teachers used the data obtained from progress monitoring to determine if there was a need for changes to curriculum materials or instructional practices (Fuchs & Fuchs, 2006). Students who did not respond to the strategic intervention provided in Tier 2 moved on to receive intensive intervention in Tier 3.

Tier 3 of RTI was designated for students who required more individualized daily instruction, and it temporarily replaced a portion of the core curriculum received in the general
education classroom under Tiers 1 and 2 (Richards et al., 2007). This tertiary tier was reserved for students who continued to struggle to make academic gains in Tier 2, therefore falling further behind their peers. Students who received Tier 3 intervention met with a specialist or special education teacher in one-to-one sessions or in small groups of no more than three students. According to Kerins et al. (2010), formal referrals for special education evaluations were often necessary once students advanced to Tier 3 of the RTI Model. Based on the three-tiered pyramid of interventions, approximately five percent of the student population required intensive intervention in Tier 3.

**Research-based approaches to RTI.** The problem-solving approach and standard protocol approach are the two approaches to service delivery within the RTI Model (Fuchs & Fuchs, 2006; Reeves et al., 2010). Research on both approaches to RTI began in 1977 (Bender & Shores, 2007). Bergan (1995) developed the problem-solving approach to address behavior issues; however, it evolved to include academic difficulties (Bender & Shores, 2007). The problem-solving approach led to what is now known as the standard protocol approach, which used curriculum-based measurements to assess students’ academic progress over time; resulting in the development of interventions to remediate reading difficulties (Bender & Shores, 2007). Fitzpatrick (2012) advised, The United States Department of Education ([US DOE], 2008) did not promote or require the use of a particular approach to RTI. Therefore, it was left to the discretion of each state or school district to determine the approach that worked best for the needs of its student population. Fuchs and Fuchs (2006) attested that while practitioners of RTI used a problem-solving approach to intervention, researchers favored the use of standard treatment protocols.
**Problem-solving approach to RTI.** The problem-solving approach attempted to pair interventions to the needs of each individual student. Bender and Shores (2007) and Fuchs and Fuchs (2006) viewed the problem-solving approach as the preferred model of practitioners because it was used to pinpoint areas of need, which led to the selection of specific interventions, goal setting, and progress monitoring over a designated period of time. This period of time generally spanned 6 to 8 weeks after which educators reconvened to evaluate the effectiveness of the intervention and planned next steps (Fuchs and Fuchs, 2006). Therefore, interventions were specifically tailored to meet individual student needs. The problem-solving approach relied on decision-making discussions held by a team of teachers, and specialists such as the school psychologist, school administrator, speech and language pathologist, and special education teacher. These brainstorming sessions led to the selection of interventions that were closely aligned to the specific needs of each individual student.

**Standard protocol approach to RTI.** In contrast to the problem-solving approach, the standard protocol approach to RTI did not differ from student to student. This approach, which was commonly practiced in schools, featured interventions intended for small groups of students who presented with the same academic problem (Bender & Shores). It used one research-validated intervention for all students and was often referred to as a “one-size fits all, prescriptive type of intervention” (Lose, 2007, p. 277). This approach involved a fixed duration of services that were delivered in small groups or individually. Determinations about student progress were made at the end of the fixed duration or trial period. Fuchs and Fuchs (2006) reported students who responded positively to intervention during the trial were viewed as “remediated and disability-free and are returned to the classroom for instruction” (p. 95), and students who were unresponsive received more intensive intervention.
**RTI versus the IQ/achievement discrepancy model.** In 1977, the United States Department of Education (USDOE) defined a learning disability as “a severe discrepancy between achievement and intellectual ability” (Mesmer & Mesmer, 2009, p. 280). Under the IQ/Achievement Discrepancy Model, students were administered IQ tests and achievement tests (Mesmer & Mesmer, 2009). The scores from these tests were examined for discrepancies between a student’s intellect ability and level of proficiency in order to identify a learning disability. In most cases, a discrepancy took up to two years to manifest, which led to delayed response to the needs of students who were at risk of academic failure.

Buffum et al. (2009) suggested that the problem with the discrepancy system was that no action was taken until the child has already failed. Therefore, the discrepancy model infamously became known as the “wait to fail” model (Al Otaiba et al., 2014; Al Otaiba et al., 2015; Fuchs & Fuchs, 2006; Gersten & Dimino, 2006; Richards et al., 2007). A major criticism of the discrepancy model was the apparent overrepresentation of minority students, low-income students, and English language learners (Bender & Shores, 2007). Studies showed dissatisfaction with the IQ/Achievement Discrepancy Model also stemmed from potential biases in educational and intelligence testing of the identified sub-groups (Fletcher et al., 1994). These identified criticisms required urgent action to establish measures that addressed the problems associated with delayed identification, and alleviated the practice of requiring students wait to receive interventions specific to their needs.

In response to the difficulties and challenges linked to the Discrepancy Model, educational leaders proposed RTI as a valid alternative method for identifying students with learning disabilities (Richards et al., 2007). In 2001, President Bush established the Commission on Excellence in Special Education to investigate ways to improve special education services.
This investigation resulted in a recommended change in determining the criteria for LD eligibility from a Discrepancy Model to an RTI Model” (Bender & Shores, 2007). Unlike the discrepancy model, under the RTI Model students, performing below grade level received interventions without the need for special education determination (Richards et al., 2007). Al Otaiba et al. (2014) and Fuchs and Deshler (2007) agreed that RTI addressed the critical need to provide students with early, preventative intervention rather than waiting for students to fall within the threshold to qualify for assistance.

**Teachers’ role in RTI.** The implementation of RTI required schools to reevaluate the role of teachers who served students at risk of developing a reading disability. Shanklin (2008) explained a requirement of RTI was that classroom teachers identify appropriate interventions and personally deliver those interventions themselves. Gersten and Dimino (2006), added RTI placed teachers’ in a position to determine which students needed intervention and special education consideration in reading. The teachers’ judgment was based on the students’ ability to respond to classroom instruction or to the supplemental intervention students received in or out of the classroom.

Since RTI required a collaborative approach, it was important to avoid overlooking the role of the special education teacher in RTI. Special educators were finding their roles shifting to a more consultative role in which they supported students within the general education setting as opposed to providing these students with pullout services (Reeves et al., 2010). This changing role of special education shifted the focus of the teacher from serving students who were unable to keep up in the general education classroom, to the intervention of last resort (Richards et al., 2007). With this newfound responsibility, teachers became knowledgeable at analyzing progress monitoring data in order to make data based decisions for at-risk students (Fuchs & Fuchs,
Continuous professional development is needed in order for teachers to attain proficiency in the implementation of RTI.

As with any new initiative, there was expected push back and resistance from general and special education teachers, as well as support staff such as reading specialist interventionists, school psychologists, speech and language teachers and librarians who were asked to support the movement. Implementing RTI required a shifting of responsibility to the classroom teacher that was met with mixed emotions. Hargreaves (2007) posited resistance to change was generally based on the teachers’ past experiences of unsuccessful reform initiatives. Harlacher and Siler (2011) determined that, next to professional development, teacher buy-in was the most important factor in the success of the RTI Model. Creating teacher buy-in was key to the successful implementation of RTI.

**District and administrators’ role.** The success of RTI was contingent upon the support provided by the school district and school-building administrators. It was important that school administration champion the importance of the RTI process for increased student achievement (Bender & Shores, 2007). Administrators needed to provide teachers with the professional training and time necessary for collaboration and staff development. When implementing RTI, “Administrators are encouraged to shift from a role of manager to that of instructional leader promoting collaborative school systems that result in effective educational outcomes” (Kratochwill, Volpiansky, Clements, & Ball, 2007, p. 626).

**Theoretical Perspectives**

This study on the tools used by teachers experienced in providing intervention under the RTI Model, shared teachers’ knowledge and understanding of implementing RTI in the elementary classroom. This study also provided insight into teachers’ perception of using RTI as
a means for identifying and providing intervention to students at risk of developing a reading or learning disability. Lastly, this study communicated the teacher’s perspective on how professional development contributes to the implementation of RTI. Mackenzie and Knipe (2006) attested constructivism relies on the participants’ views of the phenomenon under study. The purpose of the research was to uncover the practices and methods used by teachers and to gain insight on teachers’ perspective of using RTI in the classroom; therefore, a qualitative approach amalgamating the epistemological position of constructivism and the theoretical perspectives of social constructivism and reflective learning theory was applied to the study.

The definition and characteristics of qualitative research evolved over time. Creswell (2013) noted that qualitative researchers study phenomena in their natural environment to get a better sense of how to interpret the meaning the group under study brings to the phenomena. The characteristic of natural setting was essential to qualitative research. Stake (2010) and McMillan (2012) referred to qualitative research as experiential because it was field oriented. The natural setting involved the collection of data from the field. This permitted the researcher to investigate the problem under study and the behavior of the participants as it occurred naturally (Creswell, 2013; McMillan, 2012). The idea behind qualitative research was to allow events to unfold organically and to meticulously record information gained from observations and conversations.

**Social constructivism.** Social constructivism emphasizes the collaborative nature of learning, and the goal is to rely the participants’ view of the topic (Creswell, 2013). RTI is not a model that can be conducted in isolation. RTI requires the collaboration of general and special education teachers, intervention specialists, speech and language pathologists (SLP), school psychologists, and most importantly, school administrators. School administrators are the leaders of the school and they set the tone for the entire organization. To maintain fidelity throughout
each tier of the RTI framework, these members of the school staff meet, analyze, plan, discuss, and decide the best line of intervention for all students.

Popular seminal thinker Lev Vygotsky (1962) was one of the foremost contributors to the theory of social constructivism. Vygotsky (1978) emphasized the collaborative nature of learning. The work of Vygotsky (1978) was significant in the development of RTI methods, instructional strategies, and applications, because he believed that instruction should occur through functional scaffolding (Ellis, 2014). Vygotsky (1978) developed the idea of the zone of proximal development (ZPD) to describe the gap between the students’ actual development level and the potential development level as understood through problem solving (Vygotsky, 1978). The ZPD is synonymous with the tiers of RTI (ZPD, 2015) in that varied tiers of instruction and support are developed in order to promote the highest possible level of achievement (Vygotsky, 1962). Like Vygotsky (1978), proponents of RTI stressed that scaffolding or tiered instruction be considered when providing instruction to students.

From the perspective of social constructionism, participants build knowledge, not as individuals, but as a group. Therefore, learning and development is a social, collaborative activity and information is gained through the field of practice (Maddux, Johnson, & Willis, 1997). The practice of social constructivism is grounded in context and involves tasks and activities that are authentic. This practice dictates actively involved teachers who use social negotiation to build knowledge as a collaborative group (Jonassen, 1991). One of the key elements of social constructionism is the encouragement of thoughtful reflection on the experience, such as the experiences involved in professional development and the implementation of Response to Intervention.
**Reflective practice theory.** In conjunction with social constructionism, the theoretical perspective of reflective practice theory was also used to conduct this research study. Osterman and Kottkamo (2004) shared the perspective that reflective practice is grounded in the practice of intentional action like that involved in the practice of implementing RTI with students. A major element of reflective practice theory was that knowledge comes from continuous practice such as that found in ongoing professional development opportunities. Therefore, in addition to studying teachers’ perceptions of RTI, this research proposal seeks to gauge how professional development on RTI affects teachers’ perceptions of RTI.

Schön (1983) emphasized context and experiential knowledge, and his work supports the acquisition of knowledge through professional practice. In his work with reflective practice, Schön (1983) sought to professionalize teaching. He described the disparity between professional knowledge and the actual competencies necessary for teachers as a crisis in the teaching profession (York-Barr et al., 2006). The problem addressed in this study stemmed from the perceived lack of knowledge for understanding the tools needed for implementing RTI on the part of the teacher.

Schön (1983) used the terms *swamp* to indicate the uncertainty that defines the daily teaching environment. *Swamp knowledge* was used to describe the “tacit knowledge teachers develop from construction and reconstruction of their own swamp experiences” (York-Barr et al., 2006, p. 6). The *swamp* and *swamp knowledge* described by Schön (1983) represented the knowledge base of teachers who were not and those who were afforded the opportunity to experience the ongoing practice found in professional development. This supported the notion that the construction and reconstruction of knowledge is gained through participation in professional development.
Professional development was key to this study as the research sought to unveil the perspective teachers held in regards to impact professional development had on the implementation of RTI. Stuart and Rinaldi (2009) reported specific professional development such as instructional coaching and the use of teacher leadership teams provided the instructional supports needed for RTI Models. Osterman and Kottkamo (2004) posited “reflective practice builds on and draws from experiential learning, constructivism, and the critical literature on professional development …” (p. xii). It is common knowledge that schools are hard pressed to provide educators with the time needed to engage in careful reflection with colleagues. However, York-Barr et al. (2006) suggested the time and effort invested in reflection would yield tremendous return in student learning, teacher commitment, and a collaborative professional community.

**Review of Related Literature**

The research literature on RTI featured reviews of early identification, prevention, and intervention; teachers’ knowledge base for implementing RTI; professional development for implementing RTI, and the need for continued research on RTI. The related literature established evidence for the significance of the study and examined literature on relevant theory and essays by knowledgeable experts (Marshall & Rossman, 1999). Related literature on RTI and an in-depth understanding on the importance of the teachers’ knowledge base and professional development for implementing the RTI Model allowed readers to ascertain the essence of the research study.

**Early identification, prevention, and intervention.** RTI is a research-based, multi-tiered educational model that emerged from the reauthorization of the Individuals with Disabilities Education Improvement Act (IDEA) of 2004. The reauthorization of IDEA allowed
The overriding promise of RTI was to avoid the pitfall of waiting for children to fail before intervening with supplementary services designed to meet their individual academic needs. Under the RTI Model, teachers were tasked with the responsibility of identifying students at risk, developing an intervention plan, implementing the intervention, and monitoring student progress to determine the effectiveness of the intervention (Monaco, 2012). To ensure fidelity in the collection and analysis of student data, Reeves et al. (2010) stipulated teachers needed assistance in meeting the academic needs of each student in their classrooms.

Early and accurate identification and intervention were the hallmarks of RTI. Catts et al. (2013) implied early and accurate identification enabled the teacher to act proactively through early intervention, which prevented RD or significantly reduced its impact. Denton (2012); Moore-Brown, Montgomery, Bielinski, and Shilon (2005) and Wanzek and Vaughn (2011) stressed the importance of early intervention and identification of children at risk of a reading disability. Failure to identify and provide early intervention to children led to continued academic delays as these students fell further behind their counterparts.

**Teacher’s knowledge base for implementing RTI.** The purpose of the research study was to describe the tools used by teachers to effectively implement RTI, and to explore teachers’ perceptions of using RTI to identify and provide intervention to at-risk students. During the course of this research study, the methods used to collect data aimed uncover teachers’ knowledge for implementing Response to Intervention. The data collected during the research study allowed teachers to reflect on their understanding and share their perspectives of RTI. Current literature suggested teachers were concerned over the logistics of assessments, effectiveness of intervention curricula, and their own professional preparation to implement RTI.
(Perry, 2012). Fuchs and Bergeron (2013) stressed the importance that educators understood and possessed knowledge about effective practices related to RTI.

In a study by Fuchs and Bergeron (2013), a first-year teacher lamented about the difficulty of implementing RTI without written district or state guidelines or the time and resources needed to be successful. On a brighter note, teachers who participated in a study by Stuart, Rinaldi, and Higgins-Averill (2011), indicated after a year of practice and an improved knowledge base on RTI, their perceptions of RTI shifted from viewing RTI as an administrative directive to use RTI, to viewing themselves as agents of change and problem solvers for their school (Rinaldi et al., 2010). The perceptions of teachers were important to both state and local education agencies, as each continued to determine the course of action for implementing RTI in the classroom and designating funding to improve teacher knowledge and learning outcomes for all students.

The teachers’ knowledge base was critical to the quality of implementation within the RTI framework. In addition to the content and subject matter knowledge teachers were expected to possess, teachers also needed an understanding of the types of assessments used for universal screening, tiered intervention models, research based interventions, and the two approaches to RTI (Spear-Swerling & Cheeseman, 2011). Quality, sustained professional development on the use RTI will provided teachers with the knowledge and skills needed for successful implementation of RTI, and in turn shaped teachers’ perspectives of Response to Intervention.

**Professional development for implementing RTI.** Richards et al. (2007) made the keen observation that RTI required specific training for teachers in progress monitoring; data based decision-making skills, and the ability to implement evidence-based interventions. In order for professional development to prepare teachers to effectively meet the needs of students
under the RTI Model, it was be purposeful and strategic. Lose (2007) supported this belief by adding that sustained professional development was necessary to develop highly expert teachers. Along the same lines, Gersten and Dimino (2006) emphasized the importance of consistent and ongoing support as it related to the preparation and success of teachers who implemented RTI.

To strengthen the assertion of specific professional development, Bergstrom (2008) suggested professional development extend beyond increasing the knowledge and skills of teachers, and placed an emphasis on building the aptitude of educational leaders to support an endeavor such as RTI. School system reform referred to the provision of multiyear professional development, with financial allocations for substitute teacher payment. School reform allowed teachers to participate in school-based professional development, and provided free access to a data management system such as AIMSweb or Dynamic Indicators of Basic Early Literacy Skills (Bergstrom, 2008). The school-wide system of providing professional development increased the likelihood that teachers receive quality, sustained training on RTI.

**Challenges to RTI.** The literature revealed challenges associated with the implementation of RTI. The major challenge to RTI was the lack of a universal definition or model for implementation. Kratochwill et al. (2007) reported the lack of training made available in evidence-based practices as another significant challenge to the implementation of RTI. Other challenges to RTI included claims of inadequate research, poor implementation, and false identification of students in need of intervention. The notion that RTI Models were being put into practice without sufficient research and proper organization led to concerns that states were moving too quickly to implement RTI into their schools (Reynolds & Shaywitz, 2009). According to Al Otaiba et al. (2014), schools had to practice restraint when embracing promise
of RTI, because of ongoing concern about the limits of the current research on RTI implementation.

In regards to the challenges concerning the implementation of RTI, Noll (2013) feared poor implementation and lack of time and attention dedicated to understanding RTI would lead to the death of RTI. Noll (2013) extended her claim by adding, “RTI requires a great deal of information gathering, critical thinking, networking, training, uncomfortable conversations, time, and reflection” (p. 56). When these practices were in place, the result was enhanced instruction for all students (Bender & Shores, 2007). In order for this proclamation to have occurred, the implementation process included professional development on the core components of RTI. As previously stated, these components included universal screening, data based decision-making, progress monitoring (PM), multiple tiers of intervention, and fidelity of implementation.

Another major challenge to using the RTI Model as a method for identifying student with a reading or learning disability was the high incidence of false positives, which resulted in providing interventions to students incorrectly identified as at-risk (Gersten & Dimino, 2006). Fuchs and Fuchs (2006) identified false positives as students who had been identified as unresponsive to Tier 1 instruction but, when provided with more intensive instruction, proved to be neither struggling nor at-risk. Wanzek and Vaugh (2011) reported false positives also occurred as a result of students being labeled with a disability without having received effective Tier 1 instruction.

**Review of Research Literature and Methodological Literature**

Current research on RTI varied in scope and area of interest. The majority of the research on RTI focused on early identification, and evaluated the effects of Tier 2 reading and literacy intervention intended for at-risk students. The research literature selected for this
research study on RTI focused on the use of RTI as a measure for early identification and intervention; the impact of professional development on teachers’ perception of RTI; and teachers’ knowledge base and preparation for implementing the RTI Model. The methodology used to conduct the reviewed studies included qualitative and quantitative research approaches, as well as mixed-methods experimental design. Research also included longitudinal studies and a variety of screening measures.

**Research on early identification and intervention.** Catts et al. (2013) investigated the usefulness the RTI Method for early identification of reading disability (RD) in kindergarten children. Catts et al. (2013) proposed that early and accurate identification of children at risk for RD or academic disabilities was pertinent to the prevention of RD within an RTI framework, because early identification allowed teacher to act proactively to prevent or significantly reduce the possibility of RD. The researchers surmised that an analysis of where a child began in kindergarten and where he or she was at midyear gave educators a good indication of risk susceptibility in first grade.

The study participants consisted of 366 students who were administered a battery of screening measures at the beginning of kindergarten. Participants were randomly assigned to either Tier 2 intervention or an at-risk control condition based on initial assessment that used DIBELS (Catts et al., 2012). The study was conducted over a 26-week period in which students received three 30-minute sessions of intervention each week. Students also received progress monitoring throughout the school year.

The primary findings showed that universal screening at the beginning of kindergarten identified children at risk for academic or reading disability with an acceptable level of accuracy (Catts et al., 2013). Therefore, RTI administered in kindergarten added to the prediction of first
grade reading achievement. As a result of the study, Catts et al. (2007) concluded the battery of screening measures accurately identified reading proficiency at the end of first grade. The research conducted in this study supports the notion that RTI should be used as a method for early identification in students who are susceptible to learning and/or reading disabilities.

Kerins, Trotter, and Schoenbrodt (2010) sought to determine if children identified as at risk for reading or academic difficulties would benefit from supplementary instruction from a speech and language pathologist (SLP) and a special educator in addition to their regular classroom instruction. The study examined students who received Tier 2 supplemental instruction in segmenting, blending, and phonics using multisensory techniques compared to students who received Tier 1 classroom instruction only (Kerins et al., 2010). As previously noted, RTI did not dictate how supplemental instruction was offered at each site; therefore, it was left to the discretion of each LEA to determine its approach to supplemental instruction.

Prior to beginning the study, Kerins et al. (2010) hypothesized that direct, explicit instruction using evidence-based practices would demonstrate improvement in phonological awareness and reading skills. Participants were administered a pretest and randomly assigned to one of two groups: one group received daily classroom instruction in reading using the Houghton-Mifflin reading program, and the other group received the same treatment with an additional 60-90 minutes of weekly intervention. Kerins et al. (2010) found the research-based reading program used in the study proved to be an effective model for the struggling readers identified in the study.

At the conclusion of the experiment, all students were administered a post-test on which both groups demonstrated overall improvement in reading efficiency. The study revealed no significant differences between the participating groups (Kerins et al., 2010). The study showed
the control group performed better than the experimental group in the area of improved sight word identification. Kerins et al. (2010) concluded a need for further examination on training required for explicit phonemic awareness was needed in order to assess its impact on sight word acquisition. These findings added to the skepticism surrounding the promise of RTI.

**Research on professional development.** Kratochwill et al. (2007) provided an overview of the role professional development played in implementing multi-tiered intervention, specifically within the context of Response to Intervention. The authors asserted RTI required change on many levels—especially change associated with the professional practice of educators. Kratochwill et al. (2007) hypothesized professional development was a centerpiece of concern for implementing RTI, and effective professional development increased the potential for effective RTI implementation. To investigate the link between student achievement and teacher professional development, the authors cited various research studies conducted on the topic.

There was a pressing need for professional development regarding the integrity and implementation of RTI. Professional development that extended beyond the acquisition of content knowledge and skills resulted in changes in student outcomes (Kratochwill et al., 2007). Kratochwill et al. (2007) rested on the notion that teachers who received training and professional development were more likely to implement RTI with confidence and integrity. Their findings led to the conclusion that when professional development was provided to teachers, programs such as the RTI Model were implemented with fidelity and led to improved teacher knowledge and student performance.

Scanlon, Gelzheiser, Vellutino, Schatschneider, and Sweeney (2008) analyzed the effects of professional development for classroom teachers who received training on various literacy skills aimed at providing intervention to at-risk students. The population included four
elementary schools that served low-income students. The participating schools were randomly assigned to one of three treatment conditions. The sample consisted of 28 teachers and began with 156 kindergarten students. Scanlon et al. (2008) used a longitudinal study that compared three approaches to reducing the incidence of early reading difficulties: (a) professional development only; (b) intervention only; and (3) both professional development for teachers and intervention for the students.

Scanlon et al. (2007) found that teachers who participated in professional development to improve instruction in early literacy were able to raise the level of student achievement in reading. The results demonstrated that when provided with professional development to improve instruction in early reading literacy, classroom teachers were able to raise the level of student achievement in reading by the end of the year (Scanlon et al., 2007).

The literature reiterated the importance that schools commit to providing classroom teachers and support staff (special education teachers, school psychologists, speech and language teachers) with the continuous, targeted professional development opportunities needed to implement viable RTI models in schools. Noll (2013) acknowledged that there were no quick or easy models to successful implementation of RTI. Schools need to invest in teacher professional development, high quality Tier I instruction by highly trained, knowledgeable educators, and assessments that guide intervention. Ongoing professional development on RTI is pertinent in improving teachers’ knowledge based and their capacity to implement RTI in the classroom setting. The following studies provided insight into this particular area.

**Research on teacher’s knowledge base and preparation.** Professional development was a key factor in increasing the knowledge base and preparation of teachers responsible for implementing instruction and intervention using the RTI Model. According to Spear-Swerling
and Cheesman (2011), few studies focused specifically on teachers’ knowledge base for implementing RTI. Therefore, Spear-Swerling and Cheesman conducted a study that examined the knowledge base of elementary teachers for implementing RTI Models in reading at the elementary level. Using a questionnaire on background knowledge for teaching reading, and a multiple choice knowledge survey that was patterned after a teacher licensure exam, the study also examined teachers’ familiarity with the components of the RTI Model (Spear-Swerling & Cheesman, 2011).

The study consisted of 142 elementary educators from two different states, and was guided by four questions to assess content knowledge and application. Teachers were administered two different measures—a content knowledge survey containing 66 multiple choice questions, and a two-part questionnaire used to gather information about the participants’ knowledge with specific assessments, instructional models, and interventions. The content knowledge items primarily assessed participants’ understanding of an important construct in reading, and the application items described the participants, context, setting, and problem (Spear-Swerling & Cheesman, 2011).

Spear-Swerling and Cheesman (2011) found most participants were familiar with basic features of RTI such as the three tiers, but were not as familiar with specific research-based approaches and interventions. While the participants were aware that the model consisted of three tiers, they were unable to identify any research-based reading programs used to provide instruction in Tier 1 and specific intervention approaches used in Tier 2 or Tier 3 that were presented in the knowledge survey.

Reflecting on the importance of providing professional development tailored for the understanding and implementing Response to Intervention, Spear-Swerling and Cheesman
(2011) found that teachers without code-focused professional development were unfamiliar with a variety of interventions. These interventions included the five components of reading, multisensory language programs, fluency and comprehension intervention programs (Spear-Swerling & Cheesman, 2011). On a more positive note, the results indicated teachers who participated in code-focused professional development outperformed all other study participants on the knowledge survey. As a model for improving teacher knowledge and successful implementation of RTI, Spear-Swerling and Cheesman (2011) recommended a combination of content licensure exams, supervised field experiences, and professional development.

Benjamin (2011) used a case study to investigate teachers’ understanding on how to implement RTI in an elementary school. Fullan (as cited in Benjamin, 2011) contended efforts to promote a systems approach such as RTI must consider how knowledge and experience influenced the way in which teachers respond to new initiatives. Benjamin (2011) insisted a reform initiative such as RTI requires continuous professional development, clear expectations for implementation, and ample time to integrate the procedures into practice. Each of these conditions is critical to expanding teacher knowledge base of RTI and increasing the likelihood of effective implementation throughout the organization.

The study by Benjamin (2011) was premised on the notion that each teacher’s interpretation of RTI was dependent upon prior knowledge, experience, and the institutional environment in which he or she performed. Study participants included three elementary teachers with six or more years of teaching experience, who represented first, third, and fifth grade levels. Data were collected using five structured and unstructured interviews, between two to four videotaped observations in math and reading, Teacher Performance Record data, lesson
plans, and artifacts the researcher deemed relevant to advancing the understanding of RTI implementation.

The interviews exposed the way in which the participants understood and implemented RTI (Benjamin, 2011). The Teacher Performance Record or TRP was used to collect observational data about teaching behaviors” (Benjamin, 2011, p. 71). The data collected from the TRP were then analyzed using coding and category systems to identify emerging themes, which resulted in thematic analysis. Benjamin (2011) reported the study findings as they related to the research questions and the themes that emerged as a reflection of teacher knowledge of RTI, implementation of RTI, and teachers’ perceptions of the impact of RTI implementation on instructional practices.

Teachers struggled particularly with the language used to describe RTI policy. Based on the data analysis of teacher responses during the interview sessions, Benjamin (2011) surmised, the language used to describe RTI had the greatest impact on teacher knowledge and understanding. The availability of information and the ambiguity surrounding policy information impeded teacher understanding and implementation of RTI (Benjamin, 2011). Coupled with these findings, the participating teachers deemed the definition for RTI provided in the RTI manual insufficient in promoting implementation of RTI by teachers (Benjamin, 2011).

While all participants had at least 3 years of teaching experience, the study participants represented a broad group of individuals with varying backgrounds, age ranges, education attainment, and teaching experience (Benjamin, 2011). Benjamin (2011) reported the words ‘stressful,’ ‘frustrating,’ ‘overwhelmed,’ and ‘disorganized’ were among the common sentiments expressed by teachers during the initial efforts to understand RTI. During interview sessions, one teacher said she felt as if the school was “throwing RTI at us” (p. 86); another teacher stated
the transition to RTI was “very overwhelming and frustrating” (p. 87) because she detected that those “charged with the responsibility of sharing RTI knowledge were unable to do so, because of the lack of information on RTI policy” (p. 87).

In my estimation, the most critical statement came from the youngest study participant. She explained that teachers’ lack of understanding and preparation for implementing RTI stemmed from the RTI manual’s inability to supply “specific distinctions and examples of what constitutes a tier-one intervention, a tier-two intervention, or a tier-three intervention” (Benjamin, 2011, p. 87). As a result, the participant discovered mistakes in the placement of students within the tiers of RTI. When left undetected, these mistakes resulted in inaccurate or delayed interventions for students, and expose the RTI Model to criticisms of its use as a method for accurate, early identification of reading or specific learning disabilities.

The studies on RTI as a model for early identification and intervention, on the importance of professional development in RTI, and on the preparation of classroom teachers for implementing RTI varied in methodology and instrumentation for data collection. Benjamin (2011) and Kratochwill et al. (2007) used a qualitative approach; Catts et al. (2013) and Scanlon et al. (2008) conducted a quantitative study; and Spear-Swerling and Cheesman (2011) and Kerins et al. (2010) used a mixed method approach to conduct their studies. The selected studies represented a wide range of data collection methods. While the majority of the research under review used various screening methods to collect data, Catts et al. (2013), Scanlon et al. (2008), and Kerins et al. (2010) used pre-tests and post-tests to gather data for their research studies. Spear-Swerling and Cheesman (2011) and Benjamin (2011) used a combination of surveys and questionnaires to collect research data.
Review of Methodological Issues

A qualitative research design was used to conduct this study on RTI and the methods, techniques, and strategies used for effective implementation of RTI in the classroom. The focus of this qualitative research was on understanding the meaning participants held about the problem or issue under study (Creswell, 2013). This study shared the perception held by teachers as they use RTI as a means for identifying and providing intervention to students at risk of developing a reading disability. Qualitative research was most appropriate for conducting this study because the study focused on the meaning of events and actions as expressed by the participants (McMillan, 2012). Issues found in qualitative research often emerged from the people instrumental to the study (Stake, 2010). Therefore, the perspectives of multiple participants and their perceptions of RTI were used to guide this study.

Researcher bias. Qualitative research is subjective, and susceptible to researcher bias. Therefore, certain methodological issues manifest when using this design to conduct research. Bias is inevitable in research; yet, it is valuable in that it channels our interests and passion in a particular problem or issue (McGuire, 2014). Machi and McEvoy (2012) concurred that personal connection to an interest provides the passion and dedication necessary for conducting good research. This research stemmed from the my passion to reach the students who repeatedly fell through the cracks due to misidentification of learning needs and failure to receive the necessary intervention to put them on pace to reach academic success similar to their peers.

Nevertheless, McGuire (2014) recommended researchers strive for objectivity when addressing the issue of bias and suggested applying careful introspection, objectivity, and open-mindedness during this critical stage of research. These characteristics effortlessly flowed into what McGuire (2014) referred to as reflexivity—the stage at which “the researcher actively
engages in critical self-reflection about his or her potential biases and predispositions” (p. 2). Reflexivity was important because it allowed the researcher to publically display biases; otherwise, the researcher would have been severely compromised (Machi & McEvoy, 2012, p. 19). The methodological issues considered when conducting this study included researcher as interpreter, the emergent nature of qualitative research, ethical issues, and trustworthiness and credibility of the data, results, and conclusions.

**Researcher as interpreter.** Stake (2010) contended the researcher was often the main research instrument when conducting a qualitative study. Qualitative research requires that the researcher personally collect data directly from the source by interviewing participants, observing behaviors, and examining documents (Creswell, 2013). In order to obtain information directly from the source, qualitative researchers spend a considerable amount of time in direct interaction with the setting and the participants they are studying (McMillan, 2012). Due to this intimate nature of conducting research, the researcher ran the risk of going native or taking on the cultural traits of the study participants, and but avoided the possible reluctance to disclose negative or unflattering results for fear of alienating the study participants. Therefore, it was beneficial to share interview transcripts with participants and allow participants the opportunity to review and react to their own interpretation.

**Emergent nature of qualitative research.** Qualitative research is emergent in nature—it is constantly evolving. The emergent research design characteristic required the researcher to remain flexible throughout by allowing the study to evolve based on the data collected. The initial plan for qualitative research cannot be fixed. The researcher anticipated changes during all phases of the study (Creswell, 2013). Stake (2010) labeled this characteristic interpretive and noted the observer remained cognizant of unexpected developments that occurred during the
study. Different understandings were expected to emerge as part of the research and data collection process. As a result, the research questions changed and became more refined to reflect an increased understanding of the problem (Creswell, 2013).

**Ethical issues.** Ethical issues were sure to arise when conducting the research. According to Creswell (2013), the qualitative research in a good study is ethical. Awareness of ethical issues entailed more than seeking and obtaining permission for the institutional review board (IRB); it required awareness on the part of the researcher to address ethical issues through all phases of the research study (Creswell, 2013). Efforts were made to protect the participants from undue harm, to maintain privacy, and obtain informed consent. To address possible ethical issues, it was important to disclose the purpose of the study and to share data with participants through member checking, which allowed participants to review interpretations and conclusions in order to confirm the findings (McMillian, 2012).

**Trustworthiness.** Trustworthiness in qualitative research involved establishing the credibility of the human instrument used to collect data, the dependability of the findings, and the researchers’ ability to confirm the results (Lincoln & Guba, 1985). The qualitative researcher engaged in self-reflection and disclosed possible biases and background connections to the topic. It was important to establish prolonged engagement with the participants and site, and allow time for a smooth transition to withdraw from the organization without leaving the participants feeling exploited for the sake of information gathering. The dependability and confirmability of the findings were established through peer review and debriefing, which provided an external check of the research process.

Measuring qualitative research demonstrated validity, transferability of the findings to other contexts, and provided the context in which the study was conducted. Triangulation in the
form of verbatim transcripts, member checks for accuracy of field notes, and reviews of interview transcripts were used to measure and substantiate the finding for this study. Triangulation involved corroborating evidence from different sources to clarify and validate a theme or perspective (Creswell, 2013). Triangulation of data verified the credibility of research findings. Credibility of the findings was enhanced through the use of thick descriptions, which presented an abundant use of detailed descriptions about the study. The use of rich, thick descriptions allowed the reader to understand the intricacies of the site and the study participants, and set the stage for readers to make decisions regarding the application of results from the study to other contexts or settings (Creswell, 2013).

**Synthesis of Research Findings**

In the wake of reading and analyzing current research on Response to Intervention, the previous research centered on the areas of early identification and intervention for students at risk of a reading disability, implementation of RTI, and the importance of teacher knowledge and professional development on implementing RTI. The overarching goal of RTI was to prevent the past practice of delaying intervention to students who were at risk of developing reading or learning disabilities—to avoid waiting for students to fail before providing academic intervention. Kerins et al. (2010) stated, “The goal of a multi-tiered model [such as RTI] is prevention and early intervention in order to minimize failure in … children at risk for learning” (p. 287). Therefore, RTI’s promise was to proactively identify students at risk as early as kindergarten, and provide tailored intervention to these students.

In Benjamin’s (2011) qualitative study, participants expressed confidence in RTI’s intent to provide high quality instruction and research-based intervention based on individual student needs. Catts et al. (2013) cited research that used screening tests in kindergarten to predict
reading achievement in primary grades and postulated the results showed early screening that began in kindergarten led to accurate identification of students at risk for developing a reading disability. To further support the importance of early identification, Kerins et al. (2010) documented the significant role early identification in overall reading outcomes. Research suggested early identification had the ability to potentially ameliorate the problems that stemmed from delayed identification for students who experienced reading and academic disabilities.

Effective implementation of the RTI Model was critical to its success and its effect on meeting the needs of individual students. Effective implementation of RTI required particular skills such as an understanding of tiered intervention, universal screening, and progress monitoring. Spear-Swerling and Cheesman (2011) recognized the importance of possessing these skills. The study revealed that only 52.1% of teachers were familiar, though not experienced with RTI, and a mere 33.1% reported having actual experience with RTI implementation (Spear-Swerling & Cheesman, 2011). Teachers who were knowledgeable and experienced in the RTI Model had a greater chance of effectively implementing the program on a consistent basis.

According to Kratochwill et al. (2007) successful implementation of RTI is a complex task that is:

Multifaceted and involves knowledge of evidence-based interventions, multi-tiered intervention models, screening, assessments and progress monitoring, administering interventions with a high degree of integrity, support and coordinated efforts across all levels of staff and leadership within the school, and sustaining systems of prevention grounded in an RTI framework. (624)

Supporting the findings and research conducted by Spear-Swerling and Cheesman; and Kratochwill et al. (2007), Benjamin (2011) declared effective implementation of RTI depended
on quality and consist instruction at each tier along with ongoing progress monitoring of all students. Educators conducted these practices to inform instruction and to more accurately problem-solve for appropriate instructional approaches at each tier.

Lastly, previous research highlighted the key role that professional development played in improving the knowledge base of teachers and the effective implementation of Response to Intervention. Benjamin (2011) and Fuchs and Deschler (2007), maintained that there was a correlation between the accuracy of RTI implementation in the general education classroom, and funding for professional development on research-based instructional practices, intervention strategies, and the use of progress monitoring systems. Kratchowill et al. (2007) contended, effective implementation of RTI as a multi-tiered prevention model was highly dependent on the skill of educators and the system in which RTI occurred. Therefore, classroom teachers who received professional development on implementing RTI had a greater knowledge base for successfully implementing a RTI Model when compared to those who did not receive professional development opportunities.

**Critique of Previous Research**

Catts et al. (2013), Duoos (2012), Moore-Brown et al., (2005), Scanlon et al., (2008), and Shinn (2007) produced credible data used to inform this study about the tools for effective implementation of RTI in the classroom, and teachers’ perceptions of and experiences with implementing Response to Intervention. The known or assumed facts generated by the featured researchers focused on early identification of reading difficulties, RTI as a model for eligibility determination and pre-referral intervention, the knowledge and experiences of classroom teachers who implemented RTI, and professional development for teachers on implementing RTI. These researchers used various arguments to support and validate their findings. For
example, Duoos (2012) used one-on-one interviews and discovered that teachers had a desire for sustained professional development, training on research-based interventions, leadership support, and strong core instruction.

Although NCLB and IDEA cleared the path for schools to use RTI as a method for identifying students with specific learning disabilities, criticism surrounding the accuracy of the identification process was justifiable. Research by Compton et al., (2008), Fuchs and Fuchs (2006) Gersten and Domino (2006), and Scanlon et al. (2008) on false positives and false negatives alerted me to another aspect of this research topic, and triggered a review of the challenges associated with RTI in a different light. When students were misidentified as learning disabled due to an educators’ inaccurate interpretation of an RTI screening or assessment measure, the entire process of identification was scrutinized. Misidentifications were labeled as false positives. False positives generally occurred as a result of the students’ lack of experience with the testing instrument, misinterpretation of an assessment results, or poor and inadequate classroom instruction (Catts et al., 2015; Scanlon et al., 2008).

The literature on Response to Intervention indicated a need for further research due to a plethora of unanswered questions such as how to best prepare teachers candidates with the knowledge and skills necessary to implement instruction and intervention under the RTI model (Richards et al., 2007). Fuchs and Deshler (2007) posed the following questions regarding RTI:

1) What does the learning disability eligibility process look like?
2) Who is best prepared to provide interventions?
3) When is a student referred for special education?

Reynolds and Shaywitz (2011) delved deeper and probed for a definition of effective instruction, and clarification on how effective implementation was taught to teachers for the
enhancement of instruction. A review of previous research also revealed a need for increased accessibility of studies using a qualitative approach on Response to Intervention. While many of the studies used to investigate and increase my knowledge of RTI were conducted using quantitative or mixed-method approaches, McMillan (2012) reminded readers that qualitative research was no less scientific than quantitative methods.

Summary

The passage of the Individuals with Disabilities Improvement Act (IDEA, 2004) allowed students to be classified as learning disabled based on documentation of how well they responded to interventions under RTI (Bender & Shores, 2007). RTI is a multi-tiered model for the early identification and support of students with learning needs (RTI Action Network, 2013). Mesmer and Mesmer (2007) described RTI as a process that measured whether a student’s academic performance improved when provided with well defined, scientifically based intervention. The research literature seemingly reached a consensus in respect to the purpose of RTI and the importance of monitoring how students responded to the model.

Researchers agreed there was a significant need for a system that provided early identification and intervention to students at risk for reading and academic disabilities. Catts et al. (2013) viewed RTI as a model that applied universal screening to offer information pertinent to the early identification and prevention of reading disabilities. Richards et al. (2007) suggested, through early intervention, RTI developed the capacity of teachers who served students with reading or academic disabilities. Researchers also agreed that RTI allowed practitioners to utilize different approaches to deliver intervention to students identified as at risk for reading and learning disabilities.

However, researchers disagreed regarding the use of RTI as a valid method for
identifying specific learning disabilities in students. Al Otaiba et al. (2014), Beach and O’Connor (2015), and Reynolds and Shaywitz (2009) cautioned practitioners about the use of RTI as an identification model. Al Otaiba et al. (2014) examined the challenges related to RTI as a means of prevention and identification of reading difficulties and reported the possibility that Tier 2 of RTI constituted another type of wait to fail. Beach and O’Connor (2015) reported researchers hesitated to recommend RTI as a disability identification tool because of the variability in measures and criteria used by different researchers. Similarly, Reynolds and Shaywitz (2009) argued that the inconsistency and unreliable nature of RTI discouraged its use as a model for diagnosing or determining whether a disability exists. Reynolds and Shaywitz (2009) dismissed RTI by referring to it as the “watch-them-fail” model (p. 141).

This research resolved to identify the methods, techniques, and strategies used for effective implementation of RTI in the classroom. The study also provided a platform for teachers to share their perception of using RTI as a means for identifying and providing intervention to students at risk of developing a reading or learning disability, as well as their current knowledge base and preparation for implementing RTI in the classroom. This study fit within the scope of literature on the teacher’s role in effectively implementing RTI, and professional development for increasing teachers understanding and preparation for implementing Response to Intervention.
Chapter 3: Methodology

Introduction

This chapter offers an overview of RTI and provides the information by which the study’s validity was assessed. This chapter also provides a clear description of the study. The chapter explains in detail how the study was conducted, beginning with the purpose for the research study. The research methodology was guided by the research questions and provided an explanation of the overall design. The target population, sampling method, data collection method, and the data analysis procedures were also instrumental to the research methodology. Lastly, the chapter addressed the limitations of the research design, presents expected findings, and outlines the ethical issues of the study.

Response to Intervention (RTI) provides a structured process for applying scientifically based instruction designed to meet the needs of individual learners, monitoring student progress, and adjusting instruction based on the student’s responsiveness to instruction (Bender & Shores). This study sought to uncover the practices or methods used by teachers who used RTI and to glean insight into teachers’ perception of using RTI as a means for identifying and providing intervention to students at risk of developing a reading or learning disability. Amendments to IDEA allowed states to use RTI for both prevention and identification of reading disabilities (Al Otaiba et al., 2014; Compton et al., 2008; Spear-Swerling & Cheesman, 2011).

RTI evolved from a National Research Council Study conducted in 1982 to outline criteria for special education classification. This study initiated the use of RTI in determining eligibility (Bender & Shores, 2007). RTI was designed for the dual purposes of providing early intervention to students at risk of failing, and as a means for developing a more valid proactive
procedure for identifying students with a reading disability or SLD (Al Otaiba et al., 2015; Fuchs & Deshler, 2007; Fuchs & Fuchs, 2006; Gersten & Dimino, 2006).

**Context of the study.** This qualitative collective case study included participants from two elementary schools. Both elementary schools were located on the Southeast Coast of the United States, near the nation’s capital, and were racially and linguistically diverse with a student population of approximately 450 students each. The target population included kindergarten through third grade teachers with a clear understanding of RTI and experience implementing instruction and intervention using a RTI Model in their classrooms.

This population of K-3 teachers was chosen based on research conducted by the Annie E. Casey Foundation about the importance of promoting reading fluency by the end of third grade (Haywoode, 2013). This particular sample was important to the study because research indicated students “who do not read proficiently by the end of third grade are four times less likely to graduate high school by age 19 than proficient readers” (Haywoode, 2013, para. 5). Therefore, the study investigated the methods, techniques, and strategies used by K-3 teachers to provide effective instruction to students in grades kindergarten through third.

**Purpose of the Proposed Study**

The purpose of this collective case study was to identify the tools used for effective implementation of RTI in the K-3 classroom. Teachers were asked to share their perception of using RTI as a means for identifying and providing intervention to students at risk of developing a reading or learning disability. Shanklin (2008) disclosed that RTI places the responsibility of recommending students for appropriate interventions and delivering classroom-level interventions primarily on the classroom teacher. This increased responsibility heightened the need for teachers to become more informed in making data based decisions and to acquire the
skills for administering ongoing progress monitoring to all students (Fuchs & Fuchs, 2007). Such a feat requires a clear definition of the role and responsibility of teachers and professional development opportunities aimed at developing these skills.

This study was designed to offer the educational community insights into the tools used to effectively implement RTI. One aim of this research study was to lend a voice to the experiences of teachers tasked with implementing RTI by uncovering the perceptions classroom teachers hold regarding their knowledge and preparation for implementing RTI. The study also inquired about teachers’ feelings about the use RTI as a means for identifying and providing intervention to students at risk of developing a reading or learning disability.

Through the interview process, this study unveiled the tools teachers used to effectively implement RTI in the classroom. It also revealed the perceptions teachers hold about the use of RTI as a means for identifying and providing intervention to students at risk of developing a reading or learning disability. It is intended that the information gained from this study become beneficial other classroom teachers as they endeavor to implement instruction and intervention using the RTI Model.

Research Questions

**Principal research question.** What methods, techniques, and strategies do K-3 teachers use to effectively teach at-risk students under the RTI Model?

**Sub-questions:**

- How do K-3 general education teachers use the RTI Model in the classroom to identify and provide instruction to at-risk students?
- What professional development opportunities K-3 teachers believe are necessary to provide effective instruction under the RTI Model?
• How do K-3 general education teachers perceive their role and responsibilities for providing instruction within the RTI Model?

After conducting three interviews, I realized that the scripted questions were not fully addressing the research questions. With this realization, I reviewed the IRB Consent Form signed by teachers and verified that I was allowed to ask follow up questions if necessary. To gather the information needed to answer the research questions, I developed three follow-up questions, which were presented to the participating teachers who responded to the additional questions via email.

Based on the responses to the interview questions, I developed three follow-up questions for all participants. I asked teachers to answer these questions and submit them through email. The follow-up questions were:

• What criteria are used for determining the success or effectiveness of a particular technique, method, or strategy when providing intervention to students?

• What do you look for when determining if a particular technique, method, or strategy is ineffective?

• What is the timetable for determining effectiveness and what are the next steps in providing intervention to students?

**Research Design**

The purpose of research study was to describe the tools used by teachers to effectively implement RTI, and to explore teachers’ perceptions of using RTI; therefore, a multi-site collective case study was used as the research design. The qualitative collective case study was selected because it provided a general understanding using case studies that came from multiple
sites (Harling, 2012). This collective case study focused on a multiple cases studies to illustrate the issue under study.

The defining feature of a collective case study involves the examination of multiple cases to portray an issue to the audience. In an effort to present different perspectives of an issue, this multiple case study was conducted at two different sites. I elected to use this research design because a multiple case study gives the researcher the ability to explore differences within and between cases (Baxter & Jack, 2008). By offering different perspectives on the issue under study, multiple cases increased the validity of the results of the study (Creswell, 2013). This collective case study included a total of seven K-3 teachers from two different elementary schools.

The use of a collective case study came with valid challenges. Yin (2014) warned that the use of a collective case study requires an extensive amount of time beyond the capabilities of a single researcher. Creswell (2013) added, "The study of more than one case dilutes the overall analysis; the more cases an individual studies, the less the depth in any single case" (p. 101). In contrast to these challenges, Baxter and Jack (2008) declared a collective case study allows the researcher to analyze data within and across different settings, which strengthens the reliability of the evidence created from a collective case.

Qualitative research focuses on learning and interpreting the meaning that the participants hold about an issue; it does not consider the meaning that the researcher brings to the research (Creswell, 2013). The perspectives of multiple participants and their perceptions of RTI were used to guide this study. This study examined the methods, techniques, and strategies used by K-3 teachers who implement RTI in the classroom, and the results provided insight into the perceptions of classroom teachers about the implementation of RTI in the classroom.
Case study research involves the study of a case within real-world setting or context. This case study research design included the use of both methodology and inquiry, in which the investigator explored real-life cases over time and reported a case description. Case study research considers how a phenomenon such as RTI is influenced by the context in which it occurs (Baxter & Jack, 2008). Creswell (2013) posited case study research begins with the identification of a specific case or cases in which the researcher presents an in-depth understanding of the case(s) by collecting many forms of qualitative data.

This research study described the methods, techniques, and strategies, used by K-3 teachers as they implemented RTI, explored the perspectives drawn by teachers from the experience of implementing RTI in the elementary classroom. In this qualitative case study design, data was collected through interviews and direct observations, and analyzed through field notes. Inductive strategy was used to analyze the data in search of recurring patterns and common themes, and the researcher provided a rich, descriptive account of the findings through the literature that originally framed the study (Qualitative Research, n.d.).

**Target Population, Sampling Method, and Related Procedures**

**Target population.** The population from which the sample was drawn came from kindergarten through third grade teachers from one cluster of schools within the participating school district. The sample in this study consisted of seven teachers from grades kindergarten through third grade who had previous experience implementing RTI in the classroom. The sample for this research study was taken from two urban elementary schools in a public school district along the Southeast coast of the United States. Participants in this study were full time K-3 general classroom teachers, special education teachers, an interventionist, and a reading focus teacher. To gain a balanced perspective on the implementation of RTI in the classroom,
teachers of various disciplines, diverse teaching backgrounds, and varied levels of experience were important to the collection of data during the research study.

**Sampling method.** Purposeful sampling was the sampling method selected to conduct this research study. The sampling process included full time K-3 elementary classroom teachers with previous experience at implementing RTI in their classrooms. The concept of purposeful sampling is used in qualitative research. Therefore, I selected individuals and sites that could purposefully inform the research problem and the topic under study. As criteria for being included in the study, it was important that the research site and the teachers selected had experiences using the RTI Model to provide instruction and intervention.

**Related Procedures.** Upon receiving approval from the Institutional Review Board (IRB), I submitted a request to the Office of Shared Responsibility (OSA) of the school district in which the research study was conducted. The district required the submission of a Request for Research Activity Form, A Research Clearance Request Form, a proposal narrative, all associated instruments, an approval letter from the IRB, and an email or letter of support from the school site impacted by the research study.

Prior to conducting the research study, I contacted the school district for recommendations of schools with experience using the RTI Model. I also used input from colleagues for possible school sites and participants to include in the research study. Once schools were identified, I sent out letters stating the purpose of the research study, which led to the identification of schools and teachers that fit the criteria for this research study. Following school district and IRB approval, teachers were contacted via email with an invitation to participate in the research study.
Teachers were given a questionnaire in which they provided demographic information to ensure selecting a diverse sample for the study. I met with each participant four times. The initial meeting was used to establish a rapport with the participants and provide an overview of the study requirements. At the second meeting, I conducted one-on-one semi-structured interviews with each participant. The third meeting was reserved for direct observations, and a final meeting was held to debrief each participant through member checking.

**Instruments**

The instruments used to collect data for this case study research included a questionnaire to obtain demographic data, a semi-structured interview protocol, and a protocol for recording information during direct observations. The information obtained from the data collection instruments was used to triangulate the collected data and to search for and identify themes across different types of data and the different participants (Creswell & Plano-Clark, 2004).

**Data Collection**

In this qualitative study describing the tools teachers used in the implementation of RTI, and exploring teachers’ perceptions of using the RTI Model as a method for identifying students at risk of developing a reading disability; I interviewed K-3 teachers and specialists. I also conducted direct observations on the implementation of Response to Intervention, reviewed relevant documents, and created field notes of the interviews and observations. Using multiple sources of data offered varied sources of evidence, which enabled triangulation of data and enhanced trustworthiness. This collective case study was bound by time and place because binding the case ensured the study remained reasonable in scope (Baxter & Jack, 2008). Over the course of two months, I conducted interviews and observations at two elementary schools using seven participants.
Unstructured and semi-structured interviews. To gather data from the participants, I conduct an initial unstructured interview and a one-on-one semi-structured interview with each participant. The unstructured interview was considered exploratory, and was used to gather demographic information and prior knowledge about RTI from each participant. The semi-structured interview was used to gather data about the tools used to provide intervention to students under the RTI model. The semi-structured interview also yielded information on teachers’ experience with and preparation for implementing RTI, as well as their perceptions on using RTI to identify and provide instruction to students. Merriam (2009) explained that semi-structured interviews contain a mix of more structured and less structured questions, which allow flexibility to the researcher and the participants.

Creswell and Plano-Clark (2004) recommended asking five to seven open-ended questions that allow the participants to create options for responding. Open-ended questions allowed the participants to voice their experiences and perspectives without feeling boxed into a response. These interviews were audio-recorded and transcribed verbatim. Upon completion of the interviews, I transcribed the content and made it available to the participants who used member checking to determine if the transcriptions were an accurate reflection of their intended message.

The participating teachers were asked about their experiences with RTI in the classroom. The semi-structured, open-ended interview format allowed the participants to expand their thoughts during the interview process. The following guiding questions were used during the one-on-one in-depth interviews.

• Describe in detail your personal experience with using RTI in the classroom.
• How do you identify students who may be at risk of developing a reading or learning
disability, and are therefore eligible for intervention under the RTI Model?

• What techniques, methods, and strategies have you found to be effective in your implementation of instruction under the RTI Model?

• Please reflect on some of the challenges and advantages to using RTI in your classroom.

• Describe the professional development training you have received regarding the implementation of RTI.

• What, if any, RTI supports did you receive that were beneficial? Why were these supports helpful?

• What RTI supports would you like to receive?

• What recommendations do you have for other teachers looking to implement RTI in their classroom or school?

• How has your experience with RTI shaped your perceptions about using RTI in the classroom? How?

• Is there anything I have not asked you that you believe would be important to know about your experience with RTI as a classroom teacher?

**Direct observations.** I used direct observation as a key instrument for collecting field data. Observations were often used in conjunction with interviews and offered a firsthand account of information provided by the participants during the interview process (Merriam, 2009). In the case study design, the researcher acted as an instrument through which meaning was negotiated. As a direct observer, I acted as an outsider and avoided participating with the participants. I watched the participants implement whole group instruction and provide Tier 2 intervention as I took field notes from a distance. During the course of the direct observations, I observed the participants as they engaged in activities and interacted with students while
implementing the aspects of RTI in the classroom. These observations were instrumental in data collection and uncovering the findings for this study.

The observations conducted during this study were based on the study’s research purpose and questions. Fischler (n.d.) noted observations enable the researcher to learn firsthand how the actions of the participants coincide with their words. Trust, relationships and obligations with others were developed through observations. As the researcher, I made preparations to identify patterns of behavior, and to handle the expected and unexpected experiences that could occur. Data from the direct observations were recorded using an observation protocol that included both descriptive and reflective notes (See Appendix F). During and after the direct observation, I recorded detailed field notes. This information was transcribed shortly after each observation, and later made available to the participants.

Field notes. Field notes consisted of the raw data collected from interviews and direct observations (Merriam, 2009). Taylor and Bogdan (1984) emphasized the importance of writing descriptive field notes as soon as an observation was completed. The field notes were important to the establishment of a connection between the interview data and the actual practice of the teachers during direct instruction and small intervention. Field notes contribute to the interpretation of the data collected, and provide insight into the outcome of the study. These notes were also a useful means of reflection for the researcher.

Operationalization of Variables

Operationalization of variables is the process of defining the measurement of a phenomenon that is not directly measurable (Leggett, 2011). This research study investigated the relationship between teacher preparation and effective implementation of RTI. Defining the variables used in the study was done to provide the reader with a precise explanation of what was
being studied, and how it was measured to increasing the quality of the results. The variables used in this case study included educational attainment, teaching experience, and knowledge of tools for providing intervention through RTI. These broad concepts, which were not directly observable, are referred to as constructs.

Developing operational definitions was a challenging task because they may not accurately capture the intended construct (Leggett, 2011). For the purposes of this research study, educational attainment was measured by highest educational degree received as documented on the demographic questionnaire presented to participants during the initial meeting. Teaching experience was based on the number of years of teaching at a public or private school. The teacher’s knowledge of tools for providing intervention through RTI was informed by the degree of professional development teachers received on the techniques, methods, and strategies used for implementing RTI in the classroom. The study criteria were limited to K-3 teachers with previous experience at implementing RTI in their classrooms.

RTI provides varied instruction following a three-tiered model. Students in Tier 1 receive differentiated instruction in the core curriculum. Tier 2 serves at-risk students who receive strategic small group instruction in addition to Tier 1 instruction. Tier 3 students require extensive instruction. RTI involves site-level decision-making designed to respond to the needs of students experiencing learning difficulties. RTI promotes data based decision-making in regards to student placement along with on-going progress monitoring. Progress monitoring is used to provide regular documentation of how students respond to intervention to determine next steps for intervention.

Data Analysis Procedures

After collecting and transcribing the data gathered through interviews and direct
observations, I prepared the data for analysis by moving through the data analysis spiral described by Creswell (2013). The process of analysis involved organizing the data, conducting a preliminary read-through of the data, reducing the data into themes by coding and condensing the codes, representing the data, and forming an interpretation of the data (Creswell, 2013). To ensure that the analysis was an accurate reflection of the participants’ thoughts and reactions, I used in vivo codes, which named the exact words used by participants (Creswell, 2013). After transcribing the data, I organized the data into various tables so they were easily located in large databases of text.

The next step in the analysis process involved reading through the data for a general understanding, and writing notes in the margins of interview transcripts and observation field notes. These notes were short phrases, ideas, or key concepts that occurred while reading through the data. This led to the formation of initial codes or categories (Creswell, 2013). As a follow-up, I created detailed descriptions of what was observed within the context of the study, and classified and interpreted the data to form codes or categories. Themes developed as data were divided into segments of information with codes to reduce overlap and redundancy. The goal was to divide the codes into five themes to be used to describe what occurred during the research study. The coding resulted in the identification of five themes.

**Limitations of the Research Design**

The most common limitations to case study research design include the researcher as an instrument for data collection and analysis, and issues of reliability, validity, and generalizability. Since the research design used was a collective multiple case study, time constraints also placed limitations on the research. To improve the validity of the study, research was conducted at multiple (two) elementary school sites. A multiple-case study can require extensive resources
and time; therefore, careful planning in the creation of interview questions and data collection instruments was critical to conducting qualitative, collective case study that yielded reliable, valid results.

**Internal validity.** In qualitative research, the idea of internal validity is often referred to as dependability. This is important to researchers because it shows the measures taken to ensure the conclusions accurately reflect what was studied. Internal validity can be strengthened through member checking and reflexivity. Through member checking, participants were asked to review interpretations and conclusions of the data to confirm the findings (McMillian, 2012). Reflexivity is another form of internal validity. McGuire (2014) referred to reflexivity as the point at which the researcher engages in self-reflection of potential biases. Merriam (2009) contributed reflexivity as a strategy that provides internal validity to a qualitative study because it helps the researcher to be aware of how their values may influence the study.

**Credibility.** McMillian (2012) described credibility as the degree to which the data, data analysis, and conclusions are accurate and trustworthy. Credibility in qualitative research is judged from a holistic perspective. Creswell (2013) suggested eight procedures for establishing credibility: prolonged engagement, member checking, triangulation, negative case analysis, peer debriefing, external audit, researcher reflection, and thick description. The application of several of these interconnected parts increased the credibility of the study. Credibility of the findings was enhanced through the use of thick descriptions, which were presented through the use of detailed descriptions about the study.

This collective case study used two research sites in an effort to increase the credibility of the results. To measure and substantiate the finding for this study, I employed triangulation in the form of verbatim transcripts, member checks for accuracy of field notes, and reviews of
interview transcripts. The process of triangulation allowed evidence from different sources to be corroborated in order to shed light on perspective of RTI. Triangulation of data verified the credibility of research findings.

**External validity.** External validity addresses whether the findings of a study are generalizable beyond the immediate study (Yin, 2014). This coincides with the goal of the collective case study, which is to replicate findings across cases (Baxter & Jack, 2008). External validity gauges the transferability of the findings to other contexts, and provides some context in which the study is conducted. External validity was achieved in this collective case study by using a real-world setting to conduct the study of the methods, techniques, and strategies K-3 teachers used to implement instruction and intervention under the RTI Model.

**Transferability.** Qualitative research addresses generalizability through transferability. McMillian (2012) argued transferability makes it easier for others who are interested in applying the results from another study to settings that are in similar context and to determine if the study is a good fit. Just as thick descriptions are important to establishing credibility, they also enable the reader to make decisions regarding transferability due to the extensive use of detail to describe the participants under study (Creswell, 2013).

**Expected Findings**

The expected findings on the tools used by experienced K-3 teachers to implement instruction and intervention under RTI in their classrooms was expected to yield information that would prove beneficial to other educators. This collective case study should provide concrete examples of the methods, strategies, and procedures K-3 teachers used to effectively implement instruction and intervention using the RTI Model in the classroom. It was expected that this information would be applied to the practices of other classroom teachers as they sought to
understand and provide instruction under the RTI Model.

**Ethical Issues**

According to Creswell (2013), ethical issues arise during several phases of the research process, and expand as the researcher becomes more sensitive to the needs of participants and research sites. The ethical issues addressed during the course of the collective case study research on tools for the effective implementation of RTI in the elementary classroom included a conflict of interest assessment, identification of the researcher’s position to the study, and the possible ethical issues in the study.

**Conflict of interest assessment.** The knowledge I hold about RTI stems from my previous work as a Title I Specialist at an elementary school in Anchorage Alaska. In the face of my experience with RTI, I remained cognizant in my role as a research instrument and avoided the projection of my personal opinions onto the participants and the misrepresentation of their responses during the study. During the research, I remained aware of potential biases I hold in regards to how I think RTI should be implemented in the classroom. However, literature showed that bias is an inevitable and valuable tool in research. Bias is valuable in that it drives our interest in a particular problem or issue (McGuire, 2014).

**Researcher’s position.** One way many recommend dealing with bias is to strive for objectivity, but McGuire (2014) recommended grappling with bias. This was accomplished through careful introspection and reflexivity about the prior knowledge and presuppositions I held in regard to implementing RTI in the elementary classroom. Reflexivity is important because it allows the researcher to publically display his or her biases; otherwise, the researcher will be severely compromised (Machi & McEvoy, 2012). Through the course of this research study I did not have any educational or academic ties to the organizations or individuals
participating in the study. As a direct observer, I avoided interaction with the participants and used the observation protocol to record field notes from each observation (Creswell, 2013). During the course of the direct observations, I examined the participants as they engaged in activities and interacted with others while implementing the aspects of RTI in the classroom. I also observed conversations between teachers as they explored and expanded their knowledge on RTI.

**Ethical issues in the proposed study.** Prior to conducting the study I sought out approval from the institutional review board and from local school sites to conduct research and collect data. Once approval was granted, I obtained informed consent from the participating teachers, disclosed the purpose of the study, and shared data with participants through member checking, which allowed participants to review the interpretations in order to confirm the findings. Privacy was maintained throughout the research study and participants were protected from undue harm. I recognized and acknowledged that the harm associated with qualitative research is generally mental or emotional in nature, and could occur in the form of adverse reactions to study findings.

**Summary**

The purpose of this collective case study was to describe the methods, techniques, and strategies used by teachers in the implementation of RTI, and to explore teachers’ perceptions of using RTI to identify and provide intervention to at-risk students. The study used in-depth interviews and direct observations of K-3 teachers who had previous experience in implementing RTI in their classrooms. I also reviewed documents pertinent to understanding the process of implementing RTI in the schools and to corroborate the data obtained through interviews and observations. The information obtained from the participating teachers is expected to become a
useful resource for other teachers tasked with implementing instruction and intervention using the RTI Model in their classrooms.
Chapter 4: Data Analysis and Results

Introduction

The purpose of this qualitative research study on Tools for Effective Implementation of RTI in the Elementary Classroom was to identify the methods, techniques, and strategies used by K-3 teachers for the effective implementation of RTI in the classroom. Teachers were also asked to share their perspective on using RTI as a means for identifying and providing intervention to students at risk of developing a reading or learning disability. The research took place at two elementary schools, with varying student and staff demographics, within the same school district. A qualitative collective case study was the methodological approach used to conduct the research. Case study research considers how a phenomenon is influenced by the setting in which it is investigated (Baxter & Jack, 2008). This qualitative case study examined the implementation of RTI within the elementary classroom.

Case study research involves the study of cases within a real-world context or setting. This approach included the use of both methodology and inquiry in which the investigator explored real-life cases over time and reported a case description. This methodological approach was appropriate because data were collected through semi-structured interviews and direct observations at two elementary schools. The data were then analyzed through interview transcripts and observation field notes. This chapter provides a rich description of the sample of teachers who shared their strategies for implementing RTI in the elementary classroom, unveils the research methodology and analysis, offers a summary of the findings, and a presentation of the data and results.
The study was guided by the principal research question, that the research sought to have answered using the interview protocol (See Appendix D). This principal question is found below:

- What methods, techniques, and strategies do K-3 teachers use to provide instruction and intervention to at-risk students under the RTI Model?

Three sub-questions were used to strengthen the validity and reliability of the information obtained from participating teachers:

- How do K-3 general education teachers use RTI in the classroom to identify and provide instruction to at-risk students?
- What professional development opportunities do K-3 teachers believe are necessary to provide effective instruction under the RTI Model?
- How do K-3 general education teachers perceive their role and responsibilities for providing instruction within the RTI Model?

Data were analyzed using Creswell’s (2013) data analysis spiral. Through this process, I conducted multiple reads over the interview transcripts and the field notes taken from the direct observations. *In vivo* coding was used to illustrate thematic similarities and to uncover patterns within the teachers’ responses to the interview questions. The results of the data analysis of the interview questions and the field notes taken from observations laid the groundwork for answering the research questions. This information was organized into tables that have been placed in the body of this chapter.

The findings from the semi-structured interviews unveiled themes that indicated a need for extra support for teachers to effectively implement RTI in the classroom. The findings also showed a clear need for professional development opportunities for all teachers charged with
providing intervention under RTI. The need for professional development did not color the perception teachers shared about their role and responsibilities for providing instruction within the RTI Model, however. Lastly, the findings revealed the challenges faced by the teachers as they attempted to implement instruction following the RTI Model.

The findings from the direct observations demonstrated the teachers’ clear understanding and application of the methods, techniques, and strategies used to provide instruction to students under the RTI Model. I observed each of the participating teachers as she conducted small group Tier 2 interventions. The three general education teachers also conducted whole group instruction during the direct observations. The two special education teachers, the interventionist, and the reading focus teacher kept their instruction focused on small group intervention. These Tier 2 intervention groups provided 30 minutes of instruction and included three students.

The findings also highlighted the consistency in the protocol used by participating teachers for identifying students and placing them into intervention under RTI, or Documentation of Intervention (DOI), as it is referred to by the participating school district. Teachers believed following the RTI Model made them more aware of students’ needs, and guided the type of intervention each student needed. However, two of the participants perceived RTI as an added responsibility that teachers may not be able to handle.

The role of the researcher in this qualitative case study was multifaceted. While working as a site-based instructional specialist at an elementary school, I became disillusioned with the methods and strategies used for implementing RTI to students who were at risk of developing a reading disability. I also questioned the usefulness of the analysis based on the data that were
collected from the implementation of RTI. I participated in data meetings, which were held to
discuss student diagnostic and follow-up data from universal screenings.

During these meetings we would place students into a particular tier in the RTI Model,
but there were no checks and balances to ensure interventionists were properly trained or
interventions were being implemented with fidelity. This experience resulted in a motivation to
pursue information on the methods, techniques, and strategies that experienced teachers found
useful when implementing RTI for students in the elementary classroom. The purpose of this
research was to share those tools and techniques with all teachers tasked with the responsibility
of implementing RTI in the classroom.

After receiving permission from Concordia University’s Institutional Review Board
(IRB) to conduct the research study, I researched the local school district to determine a cluster
of elementary schools that would potentially provide information significant to the questions
presented in the research study. I then completed the district’s process for permission to conduct
research and communicated with the Director for Elementary Schools in the Office of School
Support and Improvement. I gained permission and began meeting with elementary school
principals to discuss the study requirements and recruitment of teachers who volunteered to
participate in the study. Prior to beginning data collection, I met with each interested teacher to
discuss the study requirements and parameters. At the conclusion of the initial meetings, each
teacher signed a consent form with the assurance that confidentially would be maintained by the
researcher.

I acted as the main research instrument by collecting the data directly from the research
participants through semi-structured interviews and direct observations. While observing
teaching behaviors, I was able to review documents used by the participating teachers as they
provided intervention to students. I was also the primary interpreter of the data that were collected and analyzed through the interview and observation processes. Interview data was transcribed and field notes were created to capture the essences of data from the direct observations. Data analysis involved Creswell’s (2013) data analysis spiral and in vivo codes, which reflect the exact words used by participants (Creswell, 2013). At the conclusion of data collection and transcription, I used member checking to share interview transcripts with participants, which afforded participants the opportunity to review and react to their own responses and interpretation of the interview questions and observation field notes.

**Description of the Sample**

The research population and participant sample was drawn from two elementary schools within the same school district using purposeful sampling. Through purposeful sampling, I selected participants and sites that would purposefully inform the understanding of the research problem and topic of interest for the study. The participating schools were in the third year of practicing RTI, which was referred to as Documentation of Intervention (DOI) by the participating school district. I met with the principals at the participating elementary schools and provided fliers that were distributed to the staff. I was then contacted via email with a list of teachers who expressed an interest in the study, along with their position and the grade level.

After contacting the possible participants, I obtained signed consent and was ready to begin the study with seven subjects. The study consisted of four teachers from Breezeway Elementary School and three teachers from Comprehensive Elementary School. The study included three regular education teachers, an academic interventionist, a reading focus teacher, and two special education teachers. The names used for the participants and schools are pseudonyms assigned by the researcher. All the participants were female and each held a
master’s degree. Demographics data for the sample population was obtained using a survey (See Appendix C) that unveiled the information presented in Table 1.
Table 1

Sample Population Demographics

<table>
<thead>
<tr>
<th>Breezeway Elementary School</th>
<th>Race/Ethnicity-Self-Identified</th>
<th>Age</th>
<th>Highest Educational Attainment</th>
<th>Number of Years Teaching</th>
<th>Number of Years in Current Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary</td>
<td>Other</td>
<td>32</td>
<td>Masters</td>
<td>5</td>
<td>5 – Special Education/Reading Intervention- K-5</td>
</tr>
<tr>
<td>Wendy</td>
<td>Black</td>
<td>40</td>
<td>Masters-Special Ed</td>
<td>11</td>
<td>1 – 3rd grade</td>
</tr>
<tr>
<td>Vanessa</td>
<td>White</td>
<td>31</td>
<td>Masters-Reading</td>
<td>7</td>
<td>1 – 3rd grade</td>
</tr>
<tr>
<td>Angela</td>
<td>Brazilian</td>
<td>45</td>
<td>Masters in STEM Education</td>
<td>4</td>
<td>4 – 1st Grade</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comprehensive Elementary School</th>
<th>Race/Ethnicity-Self-Identified</th>
<th>Age</th>
<th>Highest Educational Attainment</th>
<th>Number of Years Teaching</th>
<th>Number of Years in Current Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelly</td>
<td>White</td>
<td>45</td>
<td>Masters</td>
<td>18</td>
<td>13 – Academic Intervention-Grades 3-5</td>
</tr>
<tr>
<td>Melissa</td>
<td>White</td>
<td>46</td>
<td>Masters</td>
<td>17</td>
<td>8 – Focus Teacher/Intervention K-5</td>
</tr>
<tr>
<td>Felecia</td>
<td>White/Caucasian</td>
<td>27</td>
<td>Masters</td>
<td>4.5</td>
<td>3 – Special Education- Grades 3-5</td>
</tr>
</tbody>
</table>
The response rate from the recruitment of participants was calculated at 64%, with 7 of the 11 teachers recruited agreeing to participate in the study. Each participating teacher was given a copy of the interview questions prior to the interview session. Participants used this opportunity to read over the interview questions prior to the one-on-one semi-structured interview session. Two teachers from Comprehensive Elementary used the questions to type up their responses prior to the interview, but elaborated on their responses during the interview. The initial read through showed remarkable similarities in the responses of these two teachers and caused concern. I was concerned because the responses I received from the two teachers were markedly similar, almost parroted. However, after re-reading the transcripts and paying particular attention to the elaborations, I found useful pieces of information that contributed to the findings and results of the research study.

The study participants partook in a brief initial unstructured interview that offered information on the parameters of the research study and the expectations for participating in the study. Individual in-depth, semi-structured interviews were then conducted with each teacher and were followed with a direct observation. After conducting the first three semi-structured interviews, I determined there was a need for three follow-up questions in order to elicit the information needed to answer the principal research question. Once the in-depth interviews and observation field notes were transcribed, the information was shared with the participants during a member check session, which was conducted via email.

**Research Methodology and Analysis**

Response to Intervention (RTI) is a model used to measure whether a student’s academic performance improves when provided with scientifically based intervention (Mesmer & Mesmer, 2007). Research on tools for the effective implementation of RTI in the elementary classroom
suggested RTI builds the capacity of teachers who serve students with reading or academic
disabilities (Richards et al., 2007). This study provided a stage for teachers to share their
perception of using RTI as a means for identifying and providing intervention to students at risk
of developing a reading or learning disability, as well as the teachers’ current knowledge base of
the tools for effectively implementing RTI in the elementary classroom.

**Case study methodological approach.** Creswell’s (2013) data analysis spiral was the
analysis method applied to the research study, and it fit the chosen methodological approach of a
qualitative collective case study. This methodological approach was appropriate for research on
tools for the identification of methods, techniques, and strategies used by teachers to effectively
implement RTI, and to explore teachers’ perceptions of using RTI in the elementary classroom,
because it focused on multiple cases studies to illustrate the issue under study (Creswell, 2013).

Researchers such as Yin (2014) and Creswell (2013) warned about the requirement of
extensive time and resources and the possible dilution of the overall analysis of results when
using a collective case study. Yet, Baxter and Jack (2008) articulated that the collective case
study gives the researcher the ability to analyze similarities and differences within each setting
and across settings, which added to the reliability of the evidence obtained from this type of
study. This methodological approach gave the researcher the ability to research, collect, and
analyze data within each setting to gain the perspectives of multiple participants and their
perceptions of RTI. These data were used to answer the research questions that guided this
study.

**Research analysis.** During this qualitative collective case study, data were gathered
from in-depth interviews and direct observations that aligned with the study’s research questions.
Creswell’s (2013) data analysis spiral involved organizing the data, conducting a preliminary
read-through of the data, reducing the data into themes by coding and condensing the codes, and forming an interpretation of the data (Creswell, 2013). *In vivo* codes were used to present an accurate reflection of the participants’ responses to the interview questions (Creswell, 2013, p. 185). Data were read through several times and organized into themes and categories, which were presented in data tables found in the report and the appendices.

Triangulation, which is used to corroborate evidence from different sources, was conducted in the form of reviews of verbatim transcripts and field notes of observations followed by member checks for accuracy. Data analysis involved making sense of the data collected while conducting fieldwork for the research study, and triangulation was instrumental in the credibility of the research findings. The focus of the data analysis was to successfully answer the research questions. Therefore, interview transcripts, field notes, and documents were studied and analyzed. An inductive strategy was used to analyze the data in search of recurring patterns and common themes (Qualitative Research, n.d.). The researcher used literature that originally framed the study to provide a rich, descriptive account of the findings.

**Summary of the Findings**

During the analysis of the in-depth, semi-structured interviews and direct observations, themes and patterns began to emerge. In the analysis of the interview data, some of the themes overlapped, but as I examined and coded the data, five major themes became evident. These themes included support, training and professional development, tools and strategies, effective intervention, and challenges. These five themes represented the thoughts and perceptions of the participating teachers as they responded to the interview questions, and produced the findings for this research study, and are displayed in Table 2.
Table 2

*Description of Themes*

<table>
<thead>
<tr>
<th><strong>Theme</strong></th>
<th><strong>Description of the Theme</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Support</td>
<td>What is available to teachers for the successful implementation of RTI and what is needed?</td>
</tr>
<tr>
<td>Training and Professional Development</td>
<td>What preparations are in place for those tasked with implementing RTI?</td>
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<tr>
<td>Tools and Strategies for Implementing Response to Intervention</td>
<td>How is RTI implemented and monitored by the participating teachers?</td>
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<tr>
<td>Effective Intervention</td>
<td>What constitutes effective implementation of Intervention?</td>
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<tr>
<td>Challenges</td>
<td>Circumstances and situations that impede the implementation of RTI.</td>
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**Support.** The information provided by the participants yielded varied perspectives in regards to the support made available to teachers. The data revealed some positive aspects regarding support for implementing RTI in the form of collaboration and human resources. Collaboration is a form of support that is critical to the success of RTI. Opportunities for regular education and special education teachers to collaborate and share information on students needing intervention must be prioritized. All of the participants spoke of instances in which instructional strategies that worked were shared with other teachers. Two participants shared that they had trained or received training from another teacher at their site.

Human resources such as special education/resource teachers, reading coaches, and interventionists were described as important sources of support. At the time of this study, these human resources served primarily as Tier 2 and Tier 3 interventionists who pulled students from the general education classroom to receive small group intervention. In addition to this form of support, Wendy said she would like support in the form of coaching and having someone model a lesson specific to the needs of her students. She viewed this as an opportunity for her to receive strategic support that she could incorporate into her instructional practices through the gradual release of responsibility model.

Resource teachers provided an overview of the support they provided to general education teachers at both school sites through either pullout or push-in intervention services for students identified as at risk of developing a reading or learning disability. The Reading Focus Teacher and interventionist at Comprehensive Elementary School shared that they had been tasked with providing training on Documentation of Intervention (DOI) to all certified staff members in the upcoming school year.
However, teachers acknowledged they do not have all the support they need for effectively implementing RTI in the elementary classroom. Teachers need human resources such as reading focus teachers, paraprofessionals, and training in instructional programs to enhance intervention services. Mary, a special education teacher, expressed strong feelings that paraprofessionals should be trained and allowed to conduct interventions in an effort to serve more students who were at risk. She also stated that more training and support needed to be made available to general education teachers. Angela, a general education teacher, was straightforward in her stance that she would like to receive more support in providing reading interventions. She said, “I just think that it’s important to know exactly what it is and how to implement it and not just looking at a website and trying to figure out.”

**Training and professional development.** Current literature on RTI highlights the importance of professional development for effective implementation. The data received from the participating teachers indicated a clear need for professional development for all educators. The findings showed that professional development on RTI was limited to a select few teachers, based on teaching position and of funding. Based on the data received from the interviews, all special education teachers and support teachers such as interventionists, reading focus teachers, and learning center teachers received professional development on programs designed to provide intervention to students using the RTI Model. There were few reports of professional development opportunities made available to general education teachers.

Mary, a special education teacher at Breezeway Elementary School, reported receiving training in several instructional and intervention programs during the school year. She added however, that these trainings were generally a one-time event that presented a lot of information at once. Vanessa and Angela, both general education teachers, verified the limitation of
professional development for all teachers. Angela shared that “much of the training is restricted to SPED [Special Education], but more training needs to be made available to Gen Ed teachers.” Vanessa added, “We need more professional development on RTI and how to use the district’s DOI system to see the structure and process so it can be done better and more fluidly.” This discrepancy in the availability of professional development to all teachers is important to note because Kratochwill et al. (2007) hypothesized effective professional development would increase the probability of proper implementation of RTI in the classroom.

**Tools and strategies.** The tools and strategies used to provide intervention to students are paramount to the effectiveness of a response to intervention program. The participating school district referred to RTI as Documentation of Intervention (DOI). Prior to assigning students to intervention under RTI/DOI, teachers examined End of Year data such as mClass, MIRL (Monitoring Instructional Reading Level), and PARCC (Partnership for the Assessment of Readiness College and Careers). Participating teachers described mClass as a tool that quickly identifies the needs of each student and informs next steps in using DIBELS Next, a research-based assessment. This assessment provided teachers with an analysis report along with instructional planning tools that tailored instruction and intervention to the needs of each student. I learned that MIRL is a reading assessment tool that measures fluency and reading comprehension skills, and PARCC is designed to prepare students for success after high school.

The findings from teacher interviews yielded information that teachers used guided reading, fluency and decoding practice, word work using Words Their Way®, and comprehension strategies as instructional intervention practices through small group intervention. The participating teachers also relied on programs such as Fast Track Reading for Phonics and Comprehension, Fountas & Pinnell Guided Reading, Phonics for Reading, Sheltered
Instruction Observation Protocol (SIOP), and Early Interventions for Reading (EIR). These were all research based intervention programs designed to meet the needs of at-risk students in need of small group intervention.

Three of the four participants at Breezeway Elementary used SIOP to provide intervention to their population of English Language Learners. Using SIOP as an intervention consisted of providing students with intentional academic vocabulary instruction, anchor charts, sentence frames, and visual aids to meet their learning needs. Mary and Wendy stressed the importance of providing students with the foundational skills needed to be successful. Mary said, “I really need to make sure that students have the foundational skills so they are truly understanding.”

All participating teachers used the district’s version of RTI or DOI to document the type of intervention, frequency of intervention, and the results of the intervention provided to each student. This computerized monitoring tool was updated every 4 to 6 weeks and made available to all stakeholders. Melissa, from Comprehensive Elementary said that not all stakeholders were able to attend the student DOI meetings, so she added a narrative to all documents to explain the charts so other teachers could understand the progress the student was or was not making. In the event that all of the above mentioned intervention strategies failed, students were then taken before the school’s Educational Management Team (EMT) where recommendations for special education testing and referrals are made.

**Effective intervention.** This research study on Tools for the Effective Implementation of RTI used the semi-structured interview to inquire about what the participants deemed effective intervention. The results revealed teachers took measured steps to determine whether an intervention was effective for an at-risk student. Teachers began by setting a realistic goal,
selecting a time frame between 4 and 8 weeks, and monitoring the progress students made towards reaching the goal within the designated timeframe. The data analysis showed effectiveness was measured differently for each student. Some students needed a second dose of the same intervention while others required a completely different type of intervention for meeting their needs and reaching their goal.

Participating teachers from both sites discussed how a team of teachers would meet every 4 to 6 weeks to review and discuss the progress monitoring data of students who received intervention through DOI. Melissa stated “if they are doing well, then we’re going to keep them on track, but if they are not making progress, we look for a better intervention group that would meet their needs.” Kelly said, “We set realistic goals and we have a tracking system where we monitor students using the following categories: no progress, minimal progress, making progress, or target met.” It was determined that if students were meeting the set goals, then the intervention would be considered a success and therefore effective. For example, Felicia looked for the students’ ability to apply the strategies learned through intervention to other situations as a sign of effective intervention.

Challenges. The participants discussed several challenges associated with implementing RTI in the elementary classroom. These challenges included time, space and environment, and providing uninterrupted intervention to students at risk of developing a reading or learning disability. The most frequently mentioned challenge reported by the participants was time. Participants echoed the notion of not having enough time to work with students in need of intervention. Since most of the intervention that took place at the participating school sites required students be pulled out of the general education classroom, transition time was a factor. Transition time cut into both intervention and instructional time. Another challenge in regard to
time was the time allotted to teachers for training and preparation in learning and practicing intervention strategies and techniques.

The participating teachers also viewed space and environment as challenges. This was especially true for those who pulled students out of the general education classroom. These teachers oftentimes lacked a space that was conducive to learning. Mary, in particular, spoke about places that were too noisy or changed from week to week. Due to these challenges, she settled on setting up a workspace located in the hallway between the second and third grade students she serviced. Teachers who pushed-in to another teacher’s class for intervention mentioned they experienced trouble concentrating, particularly if the classroom teacher was too loud or animated.

Lastly, general education teachers who conducted small group intervention during center time spoke of not being able to give students receiving intervention their undivided attention. This challenge was evident during the direct observations. These teachers’ attention was pulled in various directions, such as checking for student engagement in different learning centers that focused on specific skills. In our discussion about challenges, Angela said,

I don't like the fact that I have to hurry and just do things and, just you know, not be able to really pay attention to my students. That is a big challenge. And when I am doing running records, if I have my three students here and I am doing running records on this one, I am not able to pay attention to the other ones because I am not a machine.

Mary, a special education teacher stated, “for intervention groups–realistically in the general education classroom, it’s not possible.” Along with monitoring the level of engagement for all
students, the general education teachers were also responsible for answering questions and attending to the physical needs of the other students, all while they conducted interventions.

The direct observations substantiated the interview data and supported the themes that developed over the course of data analysis. Support, Tools and strategies for implementation of RTI, and Challenges were the themes that were easily observed during data collection. Support in the form of human resources such as special education teachers, reading focus teachers, and interventionists was valuable to the general education teachers and this study. During the direct observations, I noticed that each of the support teachers conducted intervention to groups of three students. These sources of support allowed students to receive more focused, tailored intervention than that offered in the general education setting.

During direct observations, I noticed the use of specific instructional approaches, research-based programs, and tools and strategies for implementing RTI in the classroom. Mary used the research-based programs she discussed during the interview. These included Fast Track Live Reading Comprehension and Reading A-Z, a guided reading program. Kelly and Lauren used a non-computerized version of Fast Track Guided Reading Program, Wendy used leveled reading books, and Melissa used the Phonics for Reading Program. Angela and Vanessa provided their students with anchor charts and sentence frames during whole group instruction. Through these direct observations, teachers demonstrated proficiency in the tools and strategies necessary for providing intervention to the students. This was evident in the students’ response to instruction and intervention and the teachers’ guidance and support to all students during the process aimed at meeting their learning goals.

Direct observations revealed some of the challenges teachers faced as they implemented RTI in the classroom. These challenges included space and environment, multi-
tasking, and disruptions. Mary held her intervention group, which consisted of three students, at a table located in the hallway near the second and third grade classrooms. At one point during the observation, Mary had to leave the table to walk across the hall and make a hard copy of the reading assignment students were working to complete. The fact that Mary held her group in the hallway revealed a challenge associated with effectively implementing RTI in the elementary classroom.

During her 15-minute Tier 2 intervention, Angela was able to demonstrate her multitasking ability with the small group of four students. After providing direct instruction and modeling the lesson to all students, Angela instructed three of the students to whisper read aloud while she conducted a MIRL or running record with the fourth student of the group. Melissa and Vanessa dealt with behavioral distractions as they conducted small group Tier 2 intervention. Melissa was faced with constant disruptions by one of her three students. At times the student refused to participate and made remarks that led to Melissa reminding students to make sure they were treating each other with kindness and respect. This behavior remained constant throughout the 30-minute intervention session, but Melissa kept the other student on track despite these disruptions.

Finally, during her observation, Vanessa had one student become nonresponsive during small group. She asked the student to show her that he was ready to be a part of the group. The student responded by getting up from the group table and walking out of the classroom. Vanessa stopped working with the group and notified the front office that the student had left the room without permission. These were a few ways in which the direct observations substantiated the interview data and supplemented the findings of the study. I included two transcripts of the field notes from direct observations in Appendix G.
Presentation of the Data and Results

Each of the participating teachers was experienced in using RTI, which was referred to as DOI by the participating school district. Kelly shared that DOI is a program designed to explain why students require intervention, the type of intervention that will be provided, and the duration of the intervention. This document was used throughout the school district and transferred with students who relocated to other schools within the school district.

The presentation of the data was organized by the principal research question and sub-questions. Organization of the presentation was dependent on the purpose, and understandability of the data that was collected via semi-structured interviews and direct observations. While there were common practices shared by both participating elementary schools, each school also had its own unique practices for providing intervention to students. This was reflected in the data collection process, which was a clear and coherent attempt to answer the principal research question and the three sub-questions, which are displayed in Table 3.
Table 3

Analysis of Research Questions

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Teacher Response</th>
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<tbody>
<tr>
<td>PRQ. What methods, techniques, and strategies do K-3 teachers use to provide</td>
<td>Fast Track Reading and Comprehension</td>
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<td>instruction and intervention to at-risk students under the RTI Model?</td>
<td>Guided Reading Instruction – Fountas &amp; Pinnell</td>
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<td></td>
<td>Early Interventions in Reading (EIR)</td>
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<td></td>
<td>Fluency Practice</td>
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<td></td>
<td>Phonics for Reading</td>
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<td>Soar to Success</td>
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<td></td>
<td>Running Records - MIRL (Monitoring Instructional Reading Level)</td>
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<td></td>
<td>Words Their Way and Sight Word Instruction</td>
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<td></td>
<td>Read Naturally Live</td>
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<td></td>
<td>Visuals such as posters, anchor chart, language frames, sentence starters, and</td>
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<tr>
<td></td>
<td>graphic organizers</td>
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<tr>
<td></td>
<td>Repetition, consistency, and fidelity</td>
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<tr>
<td>SQ1. How do K-3 general education teachers use RTI in the classroom to identify</td>
<td>Measures of Academic Progress for Reading (MAP-R)</td>
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<td>and provide instruction to at-risk students?</td>
<td>Guided Reading Levels</td>
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<td></td>
<td>mClass data from EOY (End of Year) results</td>
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<td></td>
<td>PARCC Data</td>
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<td></td>
<td>Teacher anecdotal notes and recommendations</td>
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<td></td>
<td>Placement on DOI and progress monitoring. If progress is not made, students are</td>
</tr>
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<td></td>
<td>taken to the Emergency Management Team (EMT).</td>
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<td></td>
<td>Data are recorded for 6-8 weeks and a team determines next steps.</td>
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<tr>
<td>SQ2. What professional development opportunities do K-3 teachers believe are</td>
<td>Training on intervention programs:</td>
</tr>
<tr>
<td>necessary to provide effective instruction under the RTI Model?</td>
<td>Fast Track Reading, Read Naturally Live, EIR, Phonics for Reading, and DOI.</td>
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<tr>
<td></td>
<td>PD for paraprofessionals on intervention programs</td>
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<td></td>
<td>Increased PD for General Education teachers</td>
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<td></td>
<td>On-site PD and Coaching or Modeling</td>
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<td></td>
<td>Collaborative planning for teachers</td>
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<tr>
<td>SQ3. How do K-3 general education teachers perceive their role and responsibilities for providing instruction within the RTI Model?</td>
<td>Positive experience</td>
</tr>
<tr>
<td></td>
<td>Brings to the forefront students who are at risk</td>
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<tr>
<td></td>
<td>Guides the teacher in providing intervention</td>
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<td></td>
<td>Build the foundational skills of students</td>
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Analysis of Research Questions

**Principal research question.** What methods, techniques, and strategies do K-3 teachers use to provide instruction and intervention to at-risk students under the RTI Model?

Based on the data gathered through semi-structured interviews, the participants were fairly consistent in describing the methods, techniques, and strategies used to provide instruction and intervention to at-risk students. In addition to the research-based programs used to provide intervention, the use of visual aids, the practice of scaffolding lessons and support, and the application of repetition and consistency were key in providing intervention. In their practices, participating teachers covered the gamut of possible strategies for intervention, to include: guided reading, fluency practice, word work with segmenting and blending, reading comprehension, and teaching students how to apply these techniques to writing and other content area reading. However, there were concerns surrounding the fidelity of the interventions provided by teachers due to the discrepancy in professional development on RTI for general education teachers.

**Sub-question 1.** How do K-3 general education teachers use RTI in the classroom to identify and provide instruction to at-risk students?

Teachers reported the first step in identifying students who are at risk involved analyzing the existing EOY data from mClass and the PARCC assessments. This was followed with the administration of universal screenings such as MAP-R and MIRL that identified the students’ current instructional level. If the measurements revealed that a student was at risk, the student was placed on a DOI Plan, which the teachers viewed as equivalent to the RTI Model. One aspect of DOI is to identify the intervention used to meet the students’ needs for progressing to
grade level proficiency. The students continued to receive Tier 1 instruction through the school’s core curriculum, along with Tier 2 intervention through small group guided reading in the general education classroom or through pullout intervention, which involved more strategic strategies and techniques.

**Sub-question 2.** What professional development opportunities do K-3 teachers believe are necessary to provide effective instruction under the RTI Model?

The participants believed it was necessary to receive professional development on the research-based intervention programs adopted by the school district, as well as DOI, the system selected by the school district for monitoring the academic progress of students who received intervention. Teachers also expressed a desire for on-site professional development through coaching and collaborative planning. Wendy, from Breezeway Elementary, believed these types of professional development opportunities would allow teachers to tailor instruction to the specific needs of their students and give teachers an opportunity to learn and grow with and from each other.

When discussing the methods, techniques, and strategies used to provide instruction and intervention to at-risk students under the RTI Model, the question of fidelity to implementation arose. This was primarily due to the manner in which professional development opportunities were provided to teachers by the participating schools. The data collected for this research study showed many of these opportunities were only afforded to special education and support area teachers, and neglected the inclusion of general education teachers. Based on previous research, it is believed that effective professional development would increase the potential for effective RTI implementation (Kratchowill et al., 2007). Therefore, the limited access to professional development for all teachers had an impact on the fidelity of the implementation of intervention.
Sub-question 3. How do K-3 general education teachers perceive their role and responsibilities for providing instruction within the RTI Model?

Even though there was a reported disparity in the receipt of professional development for RTI for general education teachers and special education or support teachers, the participants displayed a positive perception of their role and responsibilities for providing instruction and intervention under the RTI Model. Three of the participants used the word “forced” in their account of using RTI. Melissa, Kelly, and Vanessa all said RTI makes them more aware of the students’ needs and forces them to monitor the progress of those students while trying to improve their areas of need.

The participants believed RTI places the students who are at risk of developing a reading or learning disability at the forefront, and guided the teacher as she provided intervention to these students. Some of the participants believed the programs used to provide intervention to students helped build the foundational skills students needed for making progress in their areas of need. Although teachers primarily expressed positive feelings about RTI, they also spoke of the overwhelming nature of RTI and viewed it as another required task placed on them by administrators and school district personnel.

Summary

The participating teachers at both research sites referred to RTI as Documentation of Intervention (DOI). This program was used to monitor the progress of students who received intervention due to reading difficulties. Under the DOI system, teachers identified at-risk students, set goals, selected specific interventions, frequency of intervention, and the results of the intervention provided to each student. The findings from the interviews and observations revealed five themes, which included support, training and professional development, tools and
strategies, effective intervention, and challenges. These five themes represented the thoughts and perceptions of the participating teachers as they responded to the interview questions. The themes and findings uncovered during this research study will offer insight to the educational community on the tools used to effectively implement RTI in the elementary classroom.

The methods, strategies, and techniques identified during the semi-structured interviews were on display during instruction and intervention. The observation of teaching behaviors during intervention corroborated the findings from the teacher interviews. Although the findings showed that teachers used research-based programs to provide intervention to students, there was concern regarding the fidelity of implementation, since professional development was not made available to all teachers providing intervention. The findings revealed that these opportunities were reserved for special education and support teachers such as reading focus teachers and interventionists. These findings will be further examined in Chapter 5 during the discussions and conclusions of the research study. The evidence will be used to draw valid inferences that will explore the implications of the results and recommendations for further research.
Chapter 5: Discussions and Conclusions

Introduction

The purpose of this chapter is to discuss the conclusions reached by the researcher based on the literature, fieldwork, and data analysis of the research study on tools for the effective implementation of RTI in the elementary classroom. The analysis of the research data led to the identification of five themes: support, training and professional development, tools and strategies, effective intervention, and challenges. These themes contributed to the key findings and the inferences drawn to reach conclusions for this study. The key findings from the research study touched on professional development, the use of research based intervention programs and strategies, fidelity of implementation, and a myriad of challenges faced by teachers as they attempted to implement RTI in the elementary classroom.

The review of current literature showed that RTI is being used by school districts across the nation to offer specifically tailored instruction and intervention to students identified as at risk of developing a learning disability. Additionally, the research showed an apparent disconnect between the theory and the practice of implementing RTI in the elementary classroom. These conclusions developed as a result of the analysis of the data derived from interviews and observations conducted during this research study. The conclusions are presented through a summary and discussion of the results, as well as how the results relate to the literature. The chapter also presents the limitations of the research, the implication of the results for practice, policy, and theory, and recommendations for further research.

Summary of Results

The purpose of this research study was to identify the tools used by K-3 teachers for the effective implementation of RTI in the classroom. The participating teachers were asked to
share their perspective on using RTI as a means for identifying and providing intervention to students at risk of developing a reading or learning disability. The study was guided by a principal research questions and three sub-questions designed to elicit information that could be applied to the practice and policy of identifying tools for the effective implementation of RTI in the elementary classroom. The questions were as follows.

**Principal research question.** What methods, techniques, and strategies do K-3 teachers use to provide instruction and intervention to at-risk students under the RTI Model?

**Sub-Questions:**
- How do K-3 general education teachers use RTI in the classroom to identify and provide instruction to at-risk students?
- What professional development opportunities do K-3 teachers believe are necessary to provide effective instruction under the RTI Model?
- How do K-3 general education teachers perceive their role and responsibilities for providing instruction within the RTI Model?

**Theory and significance.** Theory surrounding RTI centered on the communication, collaboration, and reflection needed for assessing the implementation of instruction and intervention to at-risk students. Therefore, the theoretical perspectives of Vygotsky’s (1978) Social Constructivism and Schön’s (1983) Reflective Learning Theory were applied to this research study. These theoretical perspectives supported the collaborative practices envisioned by the staff members responsible for implementing RTI during this study. Theory supported the notion that collaboration and communication among staff aided in maintaining fidelity for applying the components of the RTI Model. According to Miller (2010), fidelity of implementation features a set of clearly defined elements that provided a common understanding
of RTI and led to consistency in the practices of RTI among all stakeholders. The findings showed collaboration among staff members was a challenge faced by the participants in this research study.

The significance of this study revolved around the usefulness and applicability the results will provide to educators and stakeholders in schools across the country on the methods, techniques and strategies needed for effective implementation of RTI. The results will assist district and local educational leaders in the decision making process regarding the appropriation of funds, instructional resources, and training opportunities for all educators tasked with providing instruction and intervention to students.

**Review of seminal literature.** Seminal literature on Vygotsky’s (1978) Social Constructionism was instrumental to this research study. Social constructionism was significant to teachers and educational support staff for implementing RTI. Through social constructionism, educators build knowledge as a group. This knowledge building is done primarily through goal oriented professional development, which gives educators an opportunity to share knowledge, apply that knowledge to practice, and return to the group to reflect on that practice. Choi, Oh, Yoon, and Hong (2012) postulated the importance of providing individual level interventions and developing a school level support structure in which general education and special education teachers work together to monitoring student progress and determine optimal interventions.

Like the theory of social constructionism, reflective practice is also instrumental to the successful implementation of RTI. A major belief that stemmed from Schön’s (1983) Reflective Practice Theory is knowledge comes from continuous professional practice. During this research study, participating teachers cited a lack of professional development opportunities as a major challenge for implementing RTI to at-risk students. In a case study conducted by Benjamin
(2011), the results led the researcher to conclude that a reform initiative such as RTI involves prolonged professional development, clear expectations for the implementation, and considerable time to integrate these procedures into practice.

The findings from this study indicated that professional development opportunities were not adequately provided to teachers, with general education teachers receiving little to no professional development on RTI. Choi et al. (2012) substantiated this finding and viewed a lack of professional development as a roadblock for implementing RTI. Choi et al. (2012) concluded general education teachers do not receive the necessary training for responding to the needs of students with disabilities, and this lack of knowledge contributed to the difficulties associated with implementing RTI.

The research conducted at Breezeway Elementary and Comprehensive Elementary demonstrated general education classroom teachers were not equipped to provide intervention to students at risk of developing a reading or learning disability. The interviews and observations with the participating teachers revealed that much of the intervention provided to students was done through pull-out programs headed by special education teachers, reading focus teachers, or interventionists. Mary, Kelly, Melissa, and Felicia all provided pull-out interventions to various groups of students throughout the school day. The students they served were pulled from the general education classroom, including the classrooms of the other participants in this study.

This study found the general classroom teacher was relegated to providing small group guided reading instruction during centers, which occurred when students were separated into small groups to work on and strengthen skills previously taught during whole group instruction. During centers, the general education teacher was responsible for supervising all groups from afar while providing small group intervention to at-risk students. This observation showed the
teacher’s attention was divided and confirmed the finding that teachers need more support to provide effective intervention to students at risk of a reading disability.

**Methodology and summary of the findings.** This qualitative collective case study on tools for the effective implementation of RTI in the elementary classroom used semi-structured interviews and direct observations to collect data. This data were analyzed using transcripts, field notes, and *in vivo* coding, which uncovered five themes used to substantiate the findings for this study. The themes that emerged through data analysis were support, training and professional development, tools and strategies, effective intervention, and challenges.

The findings showed teachers had a positive perspective in regards to their role for providing instruction and intervention under the RTI Model. As noted through direct observations, teachers were knowledgeable and experienced in using the research-based tools and strategies for providing instruction and intervention to students. However, teachers expressed concerns in the areas of support and professional development opportunities needed for providing effective intervention. The research showed professional development opportunities made available to special education teachers, were not offered to general education teachers, which led to fidelity issues in regards to the effectiveness of intervention.

**Discussion of the Results**

The results of this study were a byproduct of the principal research question and the three sub-questions that drove the review of literature and the data collection for the study. The principal research question sought to uncover the methods, techniques, and strategies used by kindergarten to third grade teachers to provide instruction and intervention to at-risk students under the RTI Model. The study found these teachers used research-based programs such as Fast Track Reading, Early Interventions in Reading, Phonics for Reading, Read Naturally Live,
Words Their Way, Soar to Success, and Fountas & Pinnell Guided Reading Instruction. These research-based programs have proven effective under the RTI Model and were selected by the school district to provide intervention to identified students. During direct observations, the participating teachers used these programs to provide instruction and intervention.

The methods, techniques, and strategies used to implement these research-based programs included small group direct instruction, repeated reading practice, fluency practice, sight word instruction, and the use of visual aids such as anchor charts, and sentence frames. The participants also used running records to monitor students’ reading fluency and level of comprehension. A program called MIRL (Monitoring Instructional Reading Level) was used to administer and monitor the administration of running records on a monthly basis. Felicia, a special education teacher, reported the most important aspects of implementing these methods, techniques, and strategies were repetition and consistency, which increased fidelity. The identification of the tools used by the participants contributed to the providing a response to the principal research question.

The first sub-question gleaned information as to how K-3 general education teachers used RTI in the classroom to identify and provide instruction to at-risk students. The purpose of this question was to gain insight into the steps taken to accurately identify students who are at risk of developing a reading difficulty, and determine the proper course of intervention under the RTI Model. The study participants consisted of general education and special education teachers, as well as a reading focus teacher and an interventionist. The inclusion of teachers of different disciplines broadened the scope of the information gathered through interviews and observations.

The data collection process revealed teachers used MAP-R as one method to identify at-risk students. Teachers also used end of year data taken from mClass and PARCC assessments
for identification purposes. Other methods of identification included anecdotal notes provided by classroom teachers and the instructional reading level of the students. The results of the research indicated that the use of multiple measures and data points was important to the identification process. This extra precaution decreased the likelihood of false positives and increased the probability that students were correctly identified and placed into the most effective intervention for meeting individual student needs.

Once students were identified as at-risk, they were placed into the DOI Process. Under DOI, teachers monitored students’ progress and provided intervention using research-based programs. Vanessa, Kelly, and Mary specifically stated DOI was their school district’s version of RTI. Kelly added, “The DOI is what we use once we’ve identified the students” as at risk for reading difficulties. During the DOI process, intervention was provided to students in six-week increments after which, a team of teachers met to discuss the progress and next steps for students. These approaches were instrumental to determining how the participating teachers used RTI to identify and provide instruction to at-risk students, and these findings aligned with current research on the identification process.

The literature on RTI stressed the importance of professional development for effectively implementing RTI in the classroom. Therefore, the second sub-question of this study aimed to uncover the type of professional development the participating teachers believed was necessary to provide effective instruction under the RTI Model. Since the school district used DOI as a monitoring device for students identified as at risk of developing a reading disability, teachers were interested in receiving professional development on the DOI Program. Kelly, an interventionist at Comprehensive Elementary, shared that she and the school’s reading focus
teacher were appointed to lead a training session on DOI in the upcoming school year because general education teachers were not familiar with the DOI process.

The participating teachers expressed an interest in receiving professional development for research-based programs such as Fast Track Reading, Read Naturally Live, Early Interventions in Reading, and Phonics for Reading. This finding was expected based on the research supporting professional development on RTI. At the time of data collection, only the special education teachers, reading focus teacher, and interventionist had received training on implementing these programs. Teachers expressed an interest in receiving professional development in the form of coaching, modeling, and on-site collaborative planning with other teachers. Wendy from Breezeway Elementary viewed these forms of professional development as intimate ways to receive support that could be incorporated into her instructional practices for improving student learning.

The final sub-question delved into the perspective teachers held regarding their role and responsibilities for providing instruction within the RTI Model. Mary, a special education teacher, viewed RTI as a necessary component to student success, but also spoke of its overwhelming nature. She, along with Angela, a first grade teacher, stated that some fellow teachers viewed RTI as simply one more required task on an already full plate of responsibilities. Kelly, an interventionist at Comprehensive Elementary shared that teachers have so much data to look at—“they have MAP-R, mClass, and PARCC, and now we’re adding another piece.”

I found the overall mood of teachers, when sharing about their experience with RTI, rather positive and upbeat. These teachers spoke about the inherent ability of RTI to place student data to the forefront of teacher discussions, and to guide teachers in their selection and provision of interventions for students who had been identified as at risk for a reading disability.
Following the RTI Model allowed teachers to develop a roadmap for strengthening the foundational skills of these students. The teachers appreciated the structure established through the RTI or DOI Model. The organization of the district’s DOI process began with establishing a goal for each student, documenting progress towards the goal through interventions, recording the data, and meeting every 4 to 6 weeks to discuss data. Following the RTI Model supplied teachers with the data and documentation necessary for moving students through the proper tiers of instruction and determining if students required a referral for special education.

**Discussion of Results in Relation to the Literature**

The problem addressed in this study focused on the notion that teachers lacked the knowledge for understanding the tools necessary for implementing instruction and intervention under the RTI Model. In light of this problem, it was important to demonstrate how the results of the study related and connected to the literature and the wider community of practice and scholars. The results, as related to the literature, focused on the methods for providing intervention, the identification of at-risk students, professional development for teachers, and the perceptions of using RTI through the eyes the teachers. The results of this research coincided with the problem under study and the data collected from the participants aligned with the literature gathered during the research process.

One goal of this research study was to provide teachers with an array of tools that have proven successful for other educators who implemented instruction under the RTI Model. Research conducted by Spear-Swerling and Cheeseman (2011) found teachers needed an understanding of research-based interventions when working with students under the RTI Model. Spear-Swerling and Cheesman (2011) showed that teachers without focused professional development were unfamiliar with a variety of interventions such as reading comprehension,
multisensory language programs, and fluency programs. The present study supported this finding as the participating teachers felt limited in their ability to provide students with an array of interventions due to restricted professional development opportunities. However, the direct observations revealed teachers were knowledgeable in the interventions they were able to provide to students at risk of reading difficulties.

The results of this study also aligned with research on the identification of at-risk students using RTI and the type of instruction needed by the students. The participants in this study used universal screening, EOY data, and anecdotal notes to identify students in need of intervention. Once identified, students were placed on a DOI in which goals were set, specific interventions were determined, timeframes were established, and progress monitoring began. Gersten and Dimino (2006) concluded RTI “provided teachers with a consistent, straightforward framework for assessing students and making data-based instructional decisions” (p. 101).

It is my belief that professional development is the crux of effective implementation of RTI. The results of this study corroborate the research conducted on professional development and RTI. Noll (2013) argued that there are no quick or easy models to successful implementation of RTI; so, schools must invest in teacher professional development. She also believed that ongoing professional development on RTI was critical to improving teachers’ knowledge based and their capacity to implement RTI in the classroom setting. Scanlon et al. (2007) found that teachers who participated in professional development to improve instruction in early reading literacy were able to raise the level of student achievement in reading.

Lastly, this study assessed teachers’ perception of their role and responsibilities for providing instruction under the RTI Model. The results of this study revealed teachers found RTI challenging, but expressed positivity and great appreciation for the structure it provided for
identifying students at risk and selecting specifically tailored interventions for meeting the needs of all students. Teachers who participated in a study by Stuart, Rinaldi, and Higgins-Averill (2011), indicated that after a year of practice, their perceptions of RTI shifted from viewing RTI as an administrative directive to one in which they viewed themselves as agents of change and problem solvers for their school (Rinaldi, Higgins-Averill, & Stuart, 2010).

**Limitations**

The limitations of this research study surrounded the scope of the study and included sample size and selection, time of study, and assumptions about the validity and honesty of the information provided by participants. As I reflected on the sample of participants and the sample size for this research study, I realized that the study did not include a full representation of the elementary teaching population. The sample population consisted of seven Kindergarten through Third grade elementary teachers from two elementary schools within the same school district. While the participants represented a diverse range in age and experience, all the teachers were women.

The analysis of the data revealed another limitation to the research study. I found the decision to collect data from two schools in the same school district a limiting factor to the potential information and data gathered through this research study. The participants from both schools used the same methods and programs for conducting intervention and instruction and followed the same protocol for identifying students at risk of developing a reading disability. If the sample selection had been expanded to include two school districts, it is likely the data would have resulted in a wider range of identified programs and strategies on the tools used by K-3 teachers for the effective implementation of RTI in the elementary classroom.
A further limitation of this research study pertains to the time of year in which data collection began for the study. This limitation should not be generalized to other researchers because program flexibility would allow the researcher to adjust the time frame for data collection. The data collection for this research study occurred between late April and June of 2016. The goal of the researcher was to analyze data collected from eight elementary teachers based on their experience and perspective on the implementation of RTI in the classroom.

During the recruitment phase, 10 teachers agreed to participate in the study; but as I set about scheduling interviews, three of the prospects expressed difficulty with scheduling and eventually failed to respond to my correspondence. Each of these potential participants was a general education teacher. Since the research study was conducted at the end of the school year, the timing likely factored into the limited number of general education teachers who volunteered to participate in the study.

Finally, the validity and truthfulness of the information provided by participants was considered a limitation. As I entered into the fieldwork, I assumed teachers would provide honest, valid information about the methods, strategies, and techniques used to implement RTI in the classroom. During the one-on-one interviews, four of the seven participants asked if their responses to the interview questions were what I was looking for in an answer. This quest for reassurance created concern regarding teacher confidence, and concerns for the validity of the data. I assured the participants that there were no right or wrong answers and that it was my responsibility to let the data guide the research without imposing any preconceived notions about the results of the research study.

There are steps that, if implemented, would have strengthened the study. If this study was to be replicated, the researcher should increase the sample size, engage in fieldwork at a
time that does not conflict with end of year assessments and closing duties, and conduct the fieldwork at schools from two different school districts.

Implications of the Results for Practice, Policy, and Theory

Implications for practice. The implications of the results for practice are far-reaching for current educators. This study highlighted the importance of providing support, professional development, and the appropriate instructional environment to all teachers. The participants sought support in the areas of coaching and collaboration with colleagues, more training on interventions, and assistance from specialty areas teachers. If teachers are to be successful at effectively implementing RTI in the classroom, they must receive sustained and focused professional development on the RTI process and the tools and strategies for implementing RTI to students at risk of developing a reading disability.

Equally important to practice is the ability to provide instruction and intervention to students in an environment that is conducive to learning. The analysis of the results of this study determined students lost valuable time on task due to transition time, lack of space, and exposure to high traffic environments during intervention, which interfered with the student’s ability to remain focused during instruction. The general education teachers who provided intervention in the regular education setting reported an inability to offer their undivided attention to students during guided reading and small group intervention. This was evident in the distractions and multi-tasking required of teachers during the direct observations. It is suggested that school and district administrators consider the challenges faced by teachers who implement RTI into practice.

Implications for policy. The challenges that affected the teachers’ ability to put RTI into practice must be tackled through policy. Research suggests local and state agencies
establish definitive guidelines regarding teacher knowledge and implementation of RTI throughout the school district. Fuchs and Bergeron (2013) reported teachers found it challenging to “implement RTI without written district guidelines and without the time and resources needed” to successfully implement the RTI Model (p. 5). This finding was corroborated by the results of this research study, which revealed teachers lacked proper training and knowledge on the district’s DOI Program.

It is also important to incorporate continuous, structured professional development to all teachers into policy. The findings of this study established the biggest obstacle faced by the participants was the lack of opportunity to participate in professional development. Results of this study aligned with the findings of Kratochwill et al. (2007) who viewed professional development as a key element for effective program implementation. A primary reason for limited opportunities to participate in professional development could rest with restricted funding faced by schools.

However, Benjamin (2011) and Fuchs and Deschler (2007) showed a correlation between accurate implementation of RTI in the general education classroom and funding for professional development on research-based instructional practices and intervention strategies. Therefore, it is imperative that future policy includes stipulations for the provision of professional development in RTI for all teachers. This step in planning and preparation should become a priority at end of year budgeting meetings when decisions are made to designate funds for the upcoming school year.

**Implications for theory.** It is my belief that theory for implementing RTI in the classroom is disconnected from actual practice. In order to bridge the gap, it is important that theory become more applicable to current practice. The results from this study, as well as
literature on the topic, suggest reasons for the perceived gap between theory and practice. Theory on RTI recommends that the general education teachers provide small group intervention in the general education setting. Shanklin (2008) affirmed this notion as he noted, “It is the job of the classroom teachers to recommend students for appropriate interventions and to deliver interventions themselves” (p. 62).

The results of this study demonstrated that the participants deemed it improbable for general education teachers to provide effective intervention in the regular classroom setting. In each of the general education settings, the observations revealed the challenges the teachers faced to provide uninterrupted intervention to the students. To address this reason for disconnect, theorists must enlist the perspective of those on the frontlines of putting RTI into practice. This research study engaged the perspective of practicing teachers to gain insight on what is needed for the effective implementation of RTI.

**Recommendations for Further Research**

It is recommended that further research on tools for effective implementation of RTI in the elementary classroom include a more diverse sample population and wider range of participants, from two or more school districts. The sample for this research study only included seven participants. In theory, seven participants were ideal for the study because a relatively small number of participants would allow the researcher to delve deeper into the data collection process and spend more time gathering and analyzing information from each participant. However, the seven participants used in this research study were obtained from the same school district, which limited the possibility of gathering data on alternate approaches to implementing RTI in the elementary classroom. If this study were conducted again, I would recommend the use of a sample population from two neighboring school districts.
The results from this research study indicated an overwhelming need for professional development for all teachers. Current research showed participation in quality, sustained professional development improved the potential for effective implementation of RTI and increased fidelity of implementation. It is recommended that policy is put into place to ensure all teachers receive quality, sustained professional development on understanding the framework of RTI, and guided practice for providing instruction and intervention using research-based programs, strategies, and techniques designed to implement RTI in the elementary classroom. This professional development can be conducted in the form of on-site professional learning communities and peer coaching.

Lastly, I recommend further research in the area of understanding the structure and framework of the RTI Model. General education and special area teachers are tasked with the added responsibility of providing intervention to students following the RTI Model. In order for this task to be effective, the implementation process requires a clear definition of the roles and responsibilities of teachers as well as professional development opportunities aimed at developing the necessary skills. Further research in these areas will have a positive effect on the practice and policy of implementing RTI in the elementary classroom.

**Conclusion**

Response to Intervention is a research-based, multi-tiered general education model that emerged from the reauthorization of the Individuals with Disabilities Education Improvement Act (IDEA) of 2004. The purpose of this research study was to uncover the tools K-3 general education teachers used to effectively implement RTI in the classroom. The study also examined teachers’ perspective on using RTI as a means for identifying and providing intervention to students at risk of developing a reading or learning disability. The results of the study were
derived from the experiences and perspectives of the participants as they responded to the research questions. Through the data gathered from the seven participants, five themes emerged. These themes were support, training and professional development, tools and strategies, effective intervention, and challenges.

The analysis of the research questions revealed the participating teachers used research-based programs to provide interventions in reading comprehension, fluency, and word analysis to at-risk students. The methods, techniques, and strategies used to provide intervention consisted of repeated readings, the use of visual aids, scaffolding lessons, consistency, and the application of strategies into practice. A major promise of RTI is the offering of early identification and intervention to struggling learners. The study found the participating teachers used universal screening, end-of-year data, guided reading levels, and anecdotal notes to identify students at risk if developing a reading disability. The identified students were then placed on a DOI, which the teachers viewed as the school district’s version of RTI. However, the literature on RTI distinguishes it from the DOI because RTI is used to identify students at risk and provide structured intervention for those students. On the other hand, the findings from this research study revealed the DOI process does not begin until students have been identified as at risk of developing a reading disability.

Further analysis of the research questions indicated a clear need for continuous professional development on understanding and implementing RTI in the elementary classroom. Many of the professional development opportunities were reserved for special education and support teachers. The lack of professional development opportunities for general education teachers affected the fidelity of interventions provided to students. As the study examined teachers’ perspective on RTI, some of the participants viewed RTI as another mandated task that
could be overwhelming. However, all of the participants expressed positive feelings about the structure provided by RTI for implementing interventions in the classroom.

The problem addressed and the catalyst for this research study was the perceived lack of knowledge in understanding the tools used to implement instruction and intervention under the RTI Model on the part of the teacher. The results of this research study did not confirm the problem statement that teachers lacked the knowledge for understanding the strategies needed for implementing RTI in the elementary classroom. The study participants demonstrated knowledge and understanding of the strategies used to provide intervention to students as evident through interview responses and observations during data collection. This research study demonstrated that the problem extended beyond the knowledge and understanding of the teachers. It stretched into the area of the importance of professional development as a means of providing teachers with preparation in an array of tools and strategies for implementing RTI in the classroom.

This research study is a valuable addition to the current research on tools for implementing RTI in the elementary classroom. The findings will serve as a guide for teachers and administrators as they take steps to implement RTI in their classrooms and buildings. Due to the scope of this research study, the results of this research study would not be generalizable at other schools because the tools used by the participating school district were specific to that particular district. Conducted in a different state or school district, this study would likely yield different suggestions on the tools for the effective implementation of RTI. Therefore, further research is required to extend the findings and make them more applicable to other educational settings.
References


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National Center on Response to Intervention. (2010). *What is response RTI and what are the essential components that must be present for it to be implemented with fidelity?* Washington, D.C.: American Institute for Research.


Appendix A

IRB Approval Letter
DATE: February 29, 2016
TO: Tonia Manning
FROM: Concordia University – Portland IRB (CU IRB)
PROJECT TITLE: [857299-1] Tools for Effective Implementation of Response to Intervention in the Elementary Classroom
REFERENCE #: EDD-20160229-McCann-Manning
SUBMISSION TYPE: New Project
ACTION: APPROVED
APPROVAL DATE: February 29, 2016
EXPIRATION DATE: March 1, 2017
REVIEW TYPE: Expedited Review


The Concordia University - Portland IRB (CU IRB) has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio. All research must be conducted in accordance with this approved submission. You must use the stamped copy of the approved consent form from the CU IRB before you can begin your research. The stamped copy is attached to this approval notice.

Your project includes research that will be conducted within an institution that is not Concordia University. As such, you need to have that institution’s approval to conduct research. You are responsible for following the procedures and policies of Concordia University and any other institution where you conduct research.

This submission has received IRB Review based on the applicable federal regulations.

Please remember that informed consent is a process beginning with a description of the project and assurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require that each participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the appropriate revision forms for this procedure.

All Unanticipated Problems involving risks to subjects or others (UPIROs) and Serious and Unexpected adverse events must be reported promptly to this office. Please use the appropriate reporting forms for this procedure. Any and all FDA and sponsor reporting requirements should also be followed. All Non-compliance issues or Complaints regarding this project must be reported promptly to this office.
This project, [857299-1] Tools for Effective Implementation of Response to Intervention in the Elementary Classroom, has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review by this committee on an annual basis. Please use the appropriate forms for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of March 1, 2017.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact Dr. OraLee Branch at 503-493-6390 or irb@cu-portland.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Concordia University - Portland IRB (CU IRB)'s records. February 29, 2016
Appendix B

Concordia University – Portland Institutional Review Board
Approved: February 29, 2016; will Expire: March 1, 2017

CONSENT FORM

Research Study Title: Tools for Effective Implementation of Response to Intervention in the Elementary Classroom
Principal Investigator: Tonia Y. Manning
Research Institution: Concordia University - Portland
Faculty Advisor: Julie McCann, Ph.D.

Purpose and what you will be doing:
The purpose of this research study is to identify the methods, techniques, and strategies used for effective implementation of Response to Intervention (RTI) in the elementary classroom. Teachers will be asked to share their perception on using RTI as a means for identifying and providing intervention to students at risk of developing a reading or learning disability. We expect approximately eight (8) volunteers. You will be given a $10.00 gift card to be in the study. We will begin enrolment on May 2, 2016 and end enrollment on May 13, 2016.

To be in the study, you will be asked to:
- Read and sign a Consent Form for participation in the research study
- Complete a demographic survey that discloses information such as your name, age, gender, years of teaching experience, level of educational attainment
- Participate in one semi-structured interview to answer questions about the methods, strategies and techniques used to implement RTI, and about perceptions of using RTI
- Allow the researcher to observe instruction and interaction with students in a classroom setting
- Allow the researcher to review documents such as curriculum guides, school improvement plan, and lesson plans
- Be available for follow-up questions and member checking to review interpretations and conclusions about the research study
- Inform the researcher at any point if you would like to withdraw from the study

Doing these things should take approximately four (4) hours or less of your time.

Risks:
There are no risks to participating in this study other than providing your information. We will protect your information, and any personal information you provide will be coded so it cannot be
linked to you. Any name or identifying information you give will be kept secure via electronic passcode or locked inside a file cabinet in my home. When the data is reviewed and analyzed, none of the data will contain your name or identifying information. You will not be identified in any publication or report. Your information will be kept private at all times and all study documents will be destroyed 3 years after we conclude this study.

Benefits:
Information you provide will offer insight to the educational community on the tools used to effectively implement response to intervention (RTI). You could benefit from this research by reflecting critically on ways to improve your knowledge base on the tools used for effective implementation of response to intervention in the classroom.

Confidentiality:
This information will not be distributed to any other agency and will be kept private and confidential. It will be published in my dissertation. The only exception to this is if you tell us about abuse or neglect that makes us seriously concerned for your immediate health and safety.

Right to Withdraw:
Your participation is greatly appreciated, but we acknowledge that the questions we are asking are personal in nature. You are free at any point to choose not to engage with or stop the study. You may skip any questions you do not wish to answer. This study is not required and there is no penalty for not participating. If at any time you experience a bad emotion from answering the questions, we will stop asking you questions.

Contact Information:
You will receive a copy of this consent form. If you have questions you can talk to or write the principal investigator, Tonia Manning at email tonia_manning@yahoo.com. If you want to talk with a participant advocate other than the investigator, you can write or call the director of our institutional review board, Dr. OraLee Branch (email obranch@cu-portland.edu or call 503-493-6390).

Your Statement of Consent:
I have read the above information. I asked questions if I had them, and my questions were answered. I volunteer my consent for this study.

Participant Name __________________________ Date __________________________
Participant Signature __________________________ Date __________________________
Investigator Name __________________________ Date __________________________
Investigator Signature __________________________ Date __________________________
Appendix C

Unstructured Interview Survey

**Demographic Data for Sample**

Name or pseudonym
Race/Ethnicity – Self-identified
Age
Highest Educational Attainment
Number of Years Teaching
Length of time in current position- grade level
Experience with Response to Intervention
Appendix D
Interview Protocol

Guiding Interview Questions

Name of Interviewer:
Name or Pseudonym of Interviewee:
Time and Length of Interview:
Date and Location of Interview:

Semi-structured Interview Questions:

• Describe in detail your personal experience using RTI in the classroom.

• How do you identify students who may be at risk of developing a reading or learning disability, and are therefore eligible for intervention under the RTI model?

• What techniques, methods, and strategies have you found to be effective in your implementation of instruction under the RTI model?

• Please reflect on some of the challenges and advantages to using RTI in your classroom.

• Describe the professional development training you have received regarding the implementation of RTI.

• What RTI supports did you receive that were beneficial? Why were these supports helpful?

• What RTI supports would you like to receive?

• What recommendations do you have for other teachers looking to implement RTI in their classroom or school?

• How has your experience with RTI shaped your perceptions about using RTI in the classroom? How?

• Is there anything I have not asked you that you believe would be important to know about your experience with RTI as a classroom teacher?
### Observation Protocol

**Date:** _________________________  
**Beginning Time:** __________  **End Time:** ________

**Observer:** _____________________________  
**School:** _____________________________

**Teacher:** _____________________________  
**Grade Level:** _____________________________

**Grouping Format:**  
- [ ] Whole Group  
- [ ] Small Group  
- [ ] Paired Grouping

<table>
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<tr>
<th>Observations</th>
<th>Reflective Thoughts</th>
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**Materials/Programs:**

**Learning Objective(s) for Instruction/Intervention:**

**Teacher demonstrates knowledge of content and intervention strategy:**

**Teacher Provides clear, explicit instructions for all students:**

**Teacher provides positive, constructive feedback to all students:**

**Learning Objectives are met by students:**
Appendix F

Member Checking

Member checking is viewed as a technique for establishing the validity of an account and will serve as a debriefing method after data has been collected from interviews and observations. This can be done both formally and informally as opportunities for member checks may arise during the normal course of observation and conversation.

Transcripts are supposed to document natural conversational language, which rarely consists of complete and grammatically correct sentences. Your contributions are worthy, valid and respected and your signature and voice are of higher value than the accuracy of the grammar depicted in the transcript (Carlson, 2010). However, any quotes used in the final dissertation will be grammatically edited for professional purposes.

I, __________________________________________, would / would not like to listen to the audio of the interview.

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<th>Member Checking Discussion: Please indicate the question(s) and page number(s) you would like to edit/revise.</th>
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I, __________________________________________, agree or disagree that the transcript reflects my views, feelings, and experiences, and that accuracy and completeness are or are not affirmed.