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# Response to Intervention Program Implementation in a Suburban Elementary School Setting

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Walden University
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Abstract

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Dissertation Submitted in Fulfillment

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## Abstract

Response to Intervention (RTI) programs are designed to support students at risk of failing in school due to academic or behavioral problems. When RTI programs are applied inconsistently due to teachers' resources or knowledge, students may be wrongly identified for special education services. The purpose of this qualitative bounded descriptive case study was to explore K-4 general education teachers' experiences with RTI program implementation and the extent teachers used the RTI program in their classrooms. This study was guided by Gagné's conditions of learning theory. A purposeful sampling of 10 K-4 general education teachers, who taught an RTI program, volunteered and participated in individual semistructured interviews and classroom observations. Data were analyzed thematically using open, axial, and thematic coding. Participants revealed they needed materials and time to prepare and use interventions and desired parental participation in team meetings. Numerous interventions, large class sizes, and scheduling constraints with specialists were obstacles implementing RTI. Academic specialists' expertise, teaching methods, and assessment data assisted planning and implementing RTI in the classroom. Teachers demonstrated a high frequency of events of learning in lessons. Based on the findings, it is recommended that district personnel develop a tiered system of teacher support and a shared vision for an RTI plan, provide teachers with necessary materials and resources to deliver instruction, and plan actions for parental involvement. These endeavors may contribute to positive change by improving general education teachers' instruction to help students at risk of failure to be successful, thus, reducing unnecessary special education referrals.

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# Dedication

"Don't limit your challenges, challenge your limits." When I was younger, writing was always my challenge. In middle school, my parents sought the guidance of a tutor to help me improve. I was so excited to turn in my first paper because I had put so much effort into making it the best work I had ever completed. However, because that paper was not indicative of my prior work, my teacher accused me of cheating and threw my paper away in front of my entire class. For the rest of my school career, I avoided writing and only wrote when I had no other option. Writing this dissertation pushed me to go beyond my limits and face my challenges. That drive and determination is what I want my own children to experience and always strive to achieve.

This dissertation is dedicated to my three boys, Michael, Joseph, and Ryan. May this work be a reminder that you should always strive to achieve your goals, despite whatever challenges you face along the way. Your true success will be measured in your perseverance, determination, and passion for what you pursue.

Thank you for supporting me while I worked to achieve my degree. I love you to the moon and back! 14344

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A tree can only grow and flourish provided it is given a strong root base that is nourished and cared for. I am incredibly thankful to those who have given me their support and encouragement as I worked to pursue my doctoral degree.

To my husband, Mike: Thank you for always being my rock and my biggest cheerleader. You never let me quit, even though I wanted too many times. You are the other half to my half empty glass and together there is nothing that we can't achieve. I would not be where I am today if it weren't for your unwavering and unconditional love and support. Saying thank you seems inadequate compared to everything you do for me. I love you with all my heart. (143.446.2798)

To my parents: You planted the seed that started my love for education. From kindergarten and all the way through graduate school, you have been there encouraging me and supporting me, always wanting me to pursue my educational goals. Mom, your help gave me the opportunity to focus on my work and the boys without having to stress about the other small stuff that would have been a barrier to completing my work. Dad, I think you are more of an expert on RTI than me! Thank you for being my editor-in-chief and providing insight into my work to make sure that it was the best it could be. Thank you both for always believing in me in all that I do. I love you both!

To Dr. Ross, Dr. Hoffman, and Dr. Howe: The doctoral process was certainly a long road. Thank you for helping me every step of the way. Your expertise was evident in your critical evaluation of my work and the suggestions made to ensure the outcome produced scholarly work indicative of Walden University's caliber of students.

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# Chapter 1: Introduction to the Study

Across the United States, nearly 6,000,000 children ages 6 to 21 receive special education services in the United States (U.S. Department of Education, 2015). Students receiving special education services are categorized under the Individuals with Disabilities Education Act (IDEA) and obtain services through an Individualized Education Program (IEP). In addition to students in public schools, services are also granted to students in correctional facilities, private schools, and state facilities (U.S. Department of Education, 2015). Students are deemed eligible for services based on select criteria outlined though guidelines as developed by individual school districts and state education agencies.

In the past, teachers would often use the "wait and fail" method to determine eligibility for special services (Greenwood et al., 2011). This means that students would not receive any remediation or support until after receiving a failing grade. This can lead to the improper placement of a student in special education. The more students improperly placed means a higher number of students receiving special services. These high numbers result in excessive spending by school districts to adequately fund those students receiving services. However, when a teacher mediates instruction with interventions at the onset of failure, informed decisions can be made prior to referring students for special education services (Sullivan & Castro-Villarreal, 2013). Now, through legislative efforts, students who lag significantly behind their peers can receive assistance in school prior to failure or classification for special services through a Response to Intervention (RTI) program.

Traditionally, the 1997 amendments made to IDEA along with the No Child Left Behind Act of 2001 (NCLB) and researched recommendations from national advocacy groups, recommended early remediation for failing students (Howell, Patton, & Deiotte, 2008). RTI programs provide the first opportunity for a preventive intervention prior to student referral for special education services from elementary school though high school. RTI allows general education teachers the use of a proactive approach rather than waiting for a student to fail. Through early intervention, a student receives instructional support when showing the first signs of struggling in school, as opposed to a reactive approach after a student exhibits failure (Grosche & Volpe, 2013). If interventions are made after a student has received a failing grade, the student will fall farther behind and increase the potential of never being able to recover (Payne, 2010). RTI should be a collaborative team effort of teachers, administrators, and parents. A structured RTI program contains individualized programs to meet the needs of at-risk students. The term at-risk refers to students who have met criteria for being at risk of facing learning difficulties (Cuticelli, Coyne, Ware, Oldham, & Rattan, 2014). Individualized instruction ensures success in all areas, including both academics and behavior, to reduce the need for special education referrals. However, teachers often feel isolated throughout the RTI process when cohesion and collaboration do not exist. This isolation can lead to ineffective interventions because to successfully modify instruction, knowledge and resources must be shared (Castro-Villarreal, Rodriguez, & Moore, 2014). With collaboration and increased professional development in the RTI program, teachers will feel confident, because they are part of a team with support, and the feeling of isolation

will decrease (Wilcox, Murakami, Ramalho, & Urick, 2013). With collaboration and support, teachers will collectively use their knowledge and expertise to help at-risk students in school who demonstrate achievement through individualized interventions.

In this study, I explored how elementary school general education teachers implemented RTI programs. Teachers' experiences were based on their implementation in an RTI program. Gathering those experiences helped me better understand how the implementation of structured RTI programs can help at-risk students who are struggling in school. Sections of Chapter 1 contain descriptions of the conceptual basis for the study. The chapter includes background information, problem statement, purpose of the study, research questions, conceptual framework, nature of the study, definitions, assumptions, scope and delimitations, limitations, and significance.

## Problem Statement

Fidelity of implementation in RTI programs is compromised when the programs do not follow a structured framework. The problem was inconsistent implementation of RTI programs at three elementary schools in a suburban Northeast school district. Despite intervention efforts, referrals for special education services continue to grow based on the large number of students receiving services at the research site. According to the director of special services at the research site, the special education population in this small district represents 24% of the total student population (personal communication, January 24, 2012). The district's goal is to lessen the number of students referred for special services through intervention at an earlier age. However, the director

states that there appears to be missing components to the program. "We need answers to RTI and the strategies to implement them" (personal communication, January 24, 2012).

The National Center for Education and Evaluation (2015) released a study on RTI programs in elementary schools and the effect on special education. The most effective RTI programs offer leveled tiers of interventions with assistance for teachers when implementing those interventions, and they are driven by data to determine the types interventions used. Since the adoption of NCLB in 2001, questions have been raised in regard to RTI programs to help at-risk students struggling in school improve to overcome the need for special services (Sparks, 2015). Ineffective RTI programs can lead to an increase in students unnecessarily being identified as needing special education services. According to Preston, Wood, and Stecker (2016), the use of effective interventions in the earliest stages will produce favorable student outcomes that result in fewer referrals and classifications for special education. Currently, limited studies that connect special education referrals to RTI programs based on teachers' experiences represent a gap in available literature.

## Background to the Problem

General education teachers often watch in despair as they witness students struggling with academics or who are challenged by behaviors as they fail and fall behind their grade-level peers. These teachers may feel as if their only option to help a child succeed is to refer that student for special education services. If deemed eligible for special education services, those students will receive the help needed to succeed through an IEP. However, special education services may incorrectly classify a child because

interventions were not implemented in the general education classroom first through an RTI program. Excessive or unwarranted classifications can lead to high number of students who received special education services that may not necessarily be needed. RTI provides the necessary academic and behavioral interventions for students who demonstrate difficulty in school at the onset of failure.

RTI began in an effort to support failing schools and to close the achievement gap for students who performed significantly lower than their peers. The impetus of RTI originated from legislation created to ensure equitable education for all students. NCLB of 2001 created laws to improve elementary and secondary education in the United States. In 2004, reauthorizations of IDEA included a method to employ evidence-based instruction to aid in the identification of students with disabilities (Fuchs, Fuchs, & Compton, 2012). The need for intervention evolved into different forms and processes to help at-risk students in school and those interventions transitioned from a special education method to one that could help general education students. RTI provides the foundation to support teachers and school districts in the implementation of interventions to help students succeed. Individualized interventions can improve the performance of students who are failing and reduce the need for students to receive special education services.

Theoretically, an RTI program provides academic and behavioral support for students from elementary school to high school who perform below grade level and show signs of struggling or are at-risk of failing in school. Through an RTI program, a team of educators can create individualized interventions that target a student's area or areas of

weakness. Individualized instruction is designed to meet the educational needs unique to all students and focuses on the individual student **(**King-Sears & Bowman-Kruhm, 2011). The early application of these interventions at the first sign of a student struggling in school will help the student achieve academic success. There are six fundamental components for RTI program implementation that must be addressed to successfully meet the needs of at-risk students.

1. Curriculum and instruction: Newly adopted Common Core State Standards must be aligned to assessments and interventions to increase student achievement.
2. Assessment and use of data: Screenings should take place several times a year using district and grade level tools to determine student strengths, weaknesses, and progress.
3. Problem-solving process: Using the collected data, RTI team members (including special education teachers) should work together in making decisions using open and continual communication.
4. Family and community partnerships: Families of students receiving RTI services should be informed of the process and updated throughout the year.
5. Positive school climate: In addition to academic interventions, behavior interventions must be intertwined into the RTI process to help build a positive school climate.

6. Leadership: A clear vision through leadership among the RTI team will help establish cohesion and a common goal (Colorado Department of Education, 2008).

Successful implementation of an RTI program also includes high-quality classroom instruction, universal screening to determine areas of strength and weakness for students performing below grade level, monitoring student progress throughout the school year, and implementation of strategies with a foundation in research (Berkeley, Bender, Peaster, & Saunders, 2009). However, barriers to a successful RTI program exist among many schools today. According to Nellis (2012), obstacles include both personal barriers, such as teachers' perceptions of RTI, and practical barriers, such as policies and practices among school districts that can significantly derail reform efforts if not addressed. RTI is often viewed as a program only for special education students who fail to succeed in general education classrooms (López & Mendoza, 2013). Often, teachers assume students who do not meet grade level expectations and are in need of an RTI program would be better served in a special education setting as opposed to the general education classroom (Nellis, 2012). Furthermore, teachers may believe that applying interventions for at-risk students in school may slow the process of successfully classifying students for special services (Castro-Villarreal et al., 2014). In such cases, educators are more likely to devalue recommended strategies and interventions and ultimately not implement them in the classroom, resulting in student failure and a widening the gap in academic achievement. Practical barriers such as time, logistics, shared vision and goals, training, administrative support, and high-quality

implementation impede the RTI process (Nellis, 2012). These barriers create limited resources and support and slow the intervention process. RTI barriers of implementation are important to note because data collection will reflect teachers' experiences with RTI programs and the effectiveness in reducing special education referrals.

A summary of the literature led to a conclusion that implementing a structured RTI program will further student success both academically and behaviorally. However, a gap in practice exists between RTI research and the implementation of interventions and procedures created to provide students with necessary instruction to help them succeed (Thorius & Maxcy, 2015). According to Turse and Albrecht (2015), successful RTI needs high-quality classroom instruction, universal screening, progress monitoring, implementation of research-based strategies, and fidelity of instructional interventions. Available literature presented gaps in the limited numbers of studies conducted on teacher's experiences with RTI program implementation.

## Purpose of the Study

The purpose of this qualitative descriptive case study was to explore elementary school general education teachers' implementation of RTI programs in first through fourth grade. If RTI programs were implemented effectively, the results could possibly create a reduction in special education referrals. A teacher's confusion and frustration often occurs when RTI program implementations are inconsistent and unstructured (Werts, Carpenter, & Fewell, 2014). Gathering teacher input helped identify gaps that may occur throughout the RTI process. Examining current research on RTI program implementations that focus on policy, a comprehensive framework, and procedural steps,

provided the structure for collecting teacher's experiences with RTI program implementation. RTI program implementations were explored through a collection of teachers' experiences based on the components of RTI programs and the perceived effects on students' academic and social functioning. Components of an RTI program include aligned curriculum and instruction, data driven interventions, problem-solving process, family partnership, positive school climate, and strong leadership. Based on the analysis of teachers' experiences, results of this study determined the most effective means of RTI implementation to help students achieve success both academically and behaviorally. Ultimately, this may influence the number of students referred for special education services.

According to Creswell (2012), the central phenomenon in qualitative research is the concept or process examined in a study. The central phenomenon of this qualitative study was how teachers implemented RTI programs and the possible influence on special education referrals for students in first through fourth grade. The results from this study were intended to help educators better understand the importance of RTI program implementations on special education referrals. For districts with a special education population above the state average, such as the one in the research site, exploring RTI implementation will help school districts increase student achievement to potentially reduce special education referrals. Emphasis of the study addressed the gap between RTI policy and practice. Findings can guide RTI team members with implementation of best practices for an RTI program to help students at-risk of failing reach grade level without the need of special education services.

## Research Questions

The critical questions in this study were intended to disclose a potential gap between what was found in the research and what was being implemented in elementary school RTI programs. These research questions were designed to collect the experiences of elementary general education teachers with RTI program implementation experience. The general education elementary teachers who participated in the study provided insight into the components of RTI program implementation and how those programs work in assisting students at-risk. The conceptual framework of this study informs the research questions (see Table 1 in the following section). The following research questions gathered teachers' experiences on RTI program implementation:

RQ1: How do teachers deliver individualized instruction based on RTI implementation to students?

RQ2: To what extent are teachers implementing the RTI program in an elementary school?

## Conceptual Framework

The conceptual framework of this study was based on Gagné's conditions of learning (Gagné, 1985). This theory of learning suggests that teachers must account for all factors that influence learning when instructing students (Gagné, Briggs, & Wagner, 1988). When implementing RTI programs, teachers base instruction on each individual learner's needs. Therefore, the RTI team must know each student receiving support through the RTI program in order to deliver instruction tailored to each student. To achieve external and internal learning conditions, Gagné proposes five basic assumptions

for instructional design (Gagné et al., 1988). These assumptions show that learning individual tasks is a foundation for instruction. The five assumptions are (a) learning individualized to the learner, (b) learning tracked in phases, (c) learning that affects human development, (d) learning that follows a systems approach, and (e) foundational human learning. According to Gagné et al. (1998), effective instruction must be planned with the five basic assumptions. These assumptions show that learning individual tasks is a foundation for instruction. Based on these assumptions, instructional design is individualized to the learner, tracks in phases or steps, affects human development, follows a systems approach, and holds a foundation in human learning. RTI program implementation focuses on a student's specific weakness and creates an individualized plan of instruction to help that student succeed. Gagné's conditions of learning theory was a framework for RTI instruction because differentiation is based on a prescription to fit each learner's needs.

RTI follows Gagné's conditions of learning. As a student's need for instructional remediation increases, differentiated instruction continues along a multitier system of supports (MTSS), increasing in intensity until the top tier is reached (Gilbert et al., 2013). This tiered system works for instructional mediation as well as for positive behavioral interventions and support (PBIS), and both should be used simultaneously (Reinke, Herman, & Stormont, 2013). The Table 1 aligns each principle with the corresponding RTI implementation.

Table 1

*Parallel of Gagné's Principles to RTI Program Implementation*

| Principle | RTI program implementation |
|---|---|
| Differentiation of instruction is necessary for learning to occur. | MTSS |
| Conditions of learning are contingent upon the events of learning that take place within the learner. | Problem-solving process |
| Different instruction yields different results in learning. | Assessment and use of data |
| Sequential instruction is determined by the intellectual skills needed by the learner. | Curriculum and instruction |

Gagné's event of learning determines what makes learning possible based on processes influenced by external events (Gagné, 1988). A teacher must plan instruction in the classroom deliberately for each learning objective. These events do not occur in the order listed and may not present themselves in every lesson. Event of learning can be used as a checklist when a teacher designs instruction (Gagné, 1988). The Table 2 lists the events of learning and classroom examples for a lesson in equilateral triangles (Culatta, 2016).

Table 2

*Events of Learning and Classroom Examples*

| Events of learning | Classroom example |
|---|---|

| | |
|---|---|
| Gain attention | Show variety of computer generated triangles |
| Informing learner of the objective | Pose question: "What is an equilateral triangle?" |
| Stimulating recall of prerequisite learning | Review definitions of triangles |
| Presenting the stimulus material | Give definition of equilateral triangle |
| Provide learning guidance | Show example of how to create equilateral |
| Eliciting performance | Ask students to create 5 different examples |
| Providing feedback about performance correctness | Check all examples as correct/incorrect |
| Assessing the performance | Provide scores and remediation |
| Enhancing retention and transfer | Show pictures of objects and ask students to identify equilaterals |

Gagné's "Conditions of Learning" theory was appropriate for this descriptive case study since the emphasis of RTI is on differentiation of instruction that is tailored to each individual learner. The framework informed the research questions because Gagné's theory supports instructional design prior to classroom implementation as well as instructional events in the classroom. Interview questions were based on Gagné's principles while classroom observations were based on Gagné's events of instruction. By gathering teachers' experiences on RTI program implementation, at-risk students can receive individualized instruction to fit their needs to promote learning.

## Nature of the Study

The nature of this qualitative descriptive case study was based on qualitative methods that involved an in-depth understanding of RTI program implementation for at-risk students on an elementary school level. I conducted individual interviews with general education teachers across three elementary schools in one school district. The district serves students in preschool through twelfth grade. Data from this study were taken from teachers in first through fourth grade. These teachers who have had experience with RTI were the source of data in this study. General education teachers involved in the RTI process shared experiences regarding RTI program implementation. Interview questions focused on barriers to program implementation, the use of assessments and data, RTI program components, and the use of a MTSS. Teacher responses provided input on how RTI program implementation addresses the needs of at-risk students by overcoming barriers and whether conditions of learning were met. Questions were open-ended, and interview data was transcribed for analysis (Creswell,

2012). With participant permission, interviews were recorded using a digital recording device. I transcribed and coded information to prepare for data analysis. I sorted collected data into categories. Patterns within the different categories determined possible themes throughout the data, and I sorted and analyzed common themes within the data.

## Definitions

The definitions listed in this section were relevant in the context of the study. The purpose of these definitions was to provide clarity to the application of the terms in the research. While some of these terms may have multiple meanings, the definitions below were specific to this study.

*Academic and behavior interventions:* When addressed simultaneously, both academic and behavioral interventions can address a student's social and emotional needs while increasing academic success (Lewis, Mitchell, Bruntmeyer, & Sugai, 2016).

*At-risk students*: Students who have met criteria (based on data and assessments) for being at risk of facing learning difficulties (Cuticelli et al., 2014).

*Effective RTI implementation:* A program that requires training through professional development, support, and leadership for teachers, continual screening and monitoring of student progress, and implementation of individualized evidence-based practices (Castro-Villarreal et al., 2014).

*High-quality instruction:* Instruction that focuses on effective methods of acquiring knowledge. This can be achieved through explicit teaching strategies,

scaffolding support for students, sequence of instruction, use of background knowledge, and applying what has been learned (Coyne, Kame'enui, & Carnine, 2011).

*Multitiered system of support (MTSS):* A three-tiered system where instructional goals are segmented into different levels. The first tier includes interventions given to all students. The second tier gives instruction in tier 1 in addition to more intense instruction tailored to meet the needs of the student. If additional instruction is needed, the third tier provides concentrated and frequent instruction, usually given by a specialized teacher (López & Mendoza, 2013).

*Response to intervention (RTI):* An educational system developed to meet the individual needs of students who are not achieving in mathematics and literacy in three tiers of intervention support (Wilcox et al., 2013).

## Assumptions

In this study, it was assumed that the participants were mindful of the purpose of RTI and understood the reasons why implementing interventions can help at-risk students. It is also assumed that teachers were cognizant of the components necessary to implement an RTI program. This was meaningful to the study because data collection was based on teachers' experiences with RTI implementation of RTI programs. Teachers with limited or no experience with RTI would provide skewed information because of their lack of experience. The assumption was that participants had previously participated in an RTI program and can identify key terms and processes within an RTI program. It was further assumed that participating teachers understood the questions presented to them, and answered openly and honestly, and felt comfortable asking any

clarifying questions. This eliminated confusion in regard to questions directed towards the participants.

## Scope and Delimitations

The scope of this study was general education teachers in an elementary school setting who have implemented an RTI program. Data were collected across three elementary schools in a suburban setting. Information disclosed why there was a gap between policy and what was implemented in the classroom for students at-risk based on teachers' experiences. Participant selection was delimited to first through fourth-grade teachers who currently participate in the school RTI program or participated in an RTI program within the past school year. Participating teachers have experienced RTI program implementation for students in the general education curriculum. Teachers who had no experience in RTI were excluded from the study. Ten teachers who met the participant criteria were chosen through a random purposeful selection to participate in the study. Information collected from interviews provided insight for RTI implementation at this district and possibly other similar districts.

## Limitations

Researchers must be cognizant of limitations in a study to reduce threats to internal validity and provide protection of participants (Lodico, Spaulding, & Voegtle, 2010). Qualitative research is not without limitations. Since the proposed study focused on teacher experiences, identifying limitations increased internal validity (Rumrill, Cook, & Wiley, 2011). Data collection has a limitation that relies on the narrative feedback from conversations between participants and the researcher. Nevertheless, data may be

misinforming in that the interviewee may give answers they think the researcher wants to hear (Creswell, 2012). Misinterpretation can inadvertently lead to biased results or errors in the data.

In regard to researcher bias, bias was minimized when reviewing and interpreting data by including all information and not ignoring unwanted statements or embellishing others to achieve anticipated results from the study. To obtain minimal biased data, interpretation of the data adhered to objective, not subjective interpretations. I did not interject my own thoughts or perceptions during the interviews or classroom observations and further reduced potential bias in the study by demonstrating respect and sensitivity to the participants' gender, race, ethnicity, disability, age or sexual orientation (Creswell, 2012). By minimizing bias, participants focused on the interview questions without holding any negative opinions unrelated to the study that could have adversely impact the results. Furthermore, clarifying and understanding any bias that I might have brought to the study created an honest narrative through noting how any findings may have been shaped by experiences in my own background (Creswell, 2014). Following the interview protocol presented in Chapter 3 also helped limit any potential bias. By adhering to the protocol, I had the ability to keep each interview consistent and I conducted the interviews in a neutral manner. When interviewing a participant, it was important for the researcher to remain neutral in both mannerisms and in the use of words to ensure that the participants do not mimic the thoughts and feelings of the researcher (Yin, 2015). By adhering to the protocol and remaining neutral, my own bias did not influence the participant's views and effect that data.

Additional limitations also included variables related to the participants in this study. While all of the teachers participated in their school's RTI program, each participant had a varying degree of experience. A veteran teacher may have had different preconceived notions about RTI as opposed to a newer teacher in the field. Furthermore, I conducted this study among three elementary schools in one district ranging in grades from first through fifth grade. The small sample size may have reduced the ability to transfer the findings to other settings but may also still provide insight into RTI implementation in other similar districts.

## Significance

The purpose of RTI programs is to support classroom teachers to increase student achievement and reduce special education referrals (O'Connor, Bocian, Beach, Sanchez, & Flynn, 2013). However, a gap exists between RTI policy and RTI program implementation. As evidenced in the literature, RTI programs that adhere to RTI policy can benefit at-risk students. However, there is a gap between the implementation of RTI and what is actually implemented in schools. Effective RTI programs should be a collaborative effort with a team of teachers, administrators, and parents. Consultation with other teachers and RTI team members will help apply successful RTI program implementations. In this study, the data collected through teacher interviews and classroom observations revealed how teachers implement RTI, possible barriers to RTI implementation, and a possible gap between the proposed implementation of RTI and what was actually being implemented in schools.

To advance knowledge of RTI, contributions from the study based on how teachers implement RTI will help better understand and facilitate successful RTI program implementations to potentially influence the number of students referred for special services. By collecting general elementary education teachers' experiences with effective RTI programs, other schools can learn from the findings of the study and use the data to help implement effective RTI programs in their own schools and district.

The results from this study may influence social change for education practices on several levels. By implementing a structured RTI program, at-risk students will receive targeted instruction that focuses on differentiation of instruction that is tailored to each individual learner. Ultimately, the number of students recommended for special education placement may decrease, which will leave more students in a general education setting without the need for special services. This will keep a student who is struggling with academics or behaviors in an environment most suitable for his or her learning needs.

## Summary

Through legislative efforts such as IDEA, NCLB, and national advocacy groups, at-risk students no longer need to fail before receiving interventions when struggling or lagging behind their peers in school with effective RTI program implementation. At-risk students can receive interventions to help reach grade level. If students are able to achieve success with support from an RTI program, the possibility of being referred for special education services decreases. Comprehensive, quality RTI program implementations may yield positive student outcomes. Through the use of an RTI

program that supports policy, a comprehensive framework, and procedural steps, students can succeed in school without the need for special education services will decrease.

Rooted in the conceptual framework of Gagné's "Conditions of Learning" (Gagné, 1985), an RTI program can be implemented to meet the individual needs of the learner. Following a hierarchy for learning tasks, RTI programs can focus on differentiation of instruction that is student centered to each individual learner. To achieve differentiated instruction in an RTI program, implementation should include structured and collaborative components that support interventions in the classroom. Those interventions may help at-risk students obtain academic and behavioral success in the general education setting.

Even though many schools institute some form of RTI, students may still continue to fail even with interventions. Typically, those students are then referred for special education services. A growing gap between RTI policy and practice has become evident over the years (Thorius & Maxcy, 2015). Two research questions addressed in this study explored teachers' experiences RTI program implementation. Teachers shared their experiences related to the RTI process and the implementation of that program was observed in the classroom setting. Teacher input defined effective ways RTI teams can implement program components to increase student success to close the gap between the proposed implementation of RTI and what is actually being implemented in schools. As an at-risk student's performance improves, the result could possibly eliminate the need for special services for that student.

# Chapter 2: Literature Review

## Introduction

RTI brings together a team of educators to help at-risk students who struggle with academics and behaviors in school. The purpose of this study was to explore teachers' implementation of RTI in first through fourth grade. When an RTI program does not follow a structured framework, ineffective instructional interventions can lead to an increase in the number of students referred for special education services. By providing prereferral interventions, fewer students will need special education services (Hauerwas, Brown, & Scott, 2013). RTI program implementation is effective when students are given supports that encourage learning appropriate to their levels (Buffum, Mattos, & Weber, 2012). Effective RTI program implementation focuses on individual attention to the needs of each student (Dougherty Stahl, 2016). When an RTI program is implemented properly based on individual needs, students can achieve both academically and behaviorally in school. Furthermore, structured RTI programs support the interventions teachers implement in the classroom that increase student achievement and reduce special education referrals (O'Connor et al., 2013). After an RTI program has been implemented, if a student is referred for special education services, the referral is justly warranted, as students have received structured interventions through an effective program.

A gap exists between the proposed implementation of RTI what is implemented in the classroom. If an at-risk student is in need of interventions because the student is performing below grade level, teachers who implement RTI can target what that student

needs to succeed. However, if teachers implement an unstructured RTI program, an increase in students being identified to receive special education services may result (Preston et al. (2016). In public schools across the United States, approximately 11.2 % of students receive special education services (Winters, 2015).

If teachers implement RTI effectively, outcomes will result in fewer referrals and classifications for special education (Preston et al., 2016). RTI policies provide the legal underpinnings for a student at risk of failing to receive a proactive approach to learning based on individual needs. As a result of unstructured programs, a gap in practice has become evident between RTI policy and the implementation of interventions and procedures necessary to help students succeed (Thorius & Maxcy, 2015). I identified in the literature review both RTI policy and effective RTI components to help at-risk students succeed in school to bridge the gap between what should be implemented and what is actually being implemented.

Current literature presented in this study established the relevance of the RTI implementation process that included data and assessment, structured components, and the use of a tiered system. The literature review began with the conceptual framework and RTI historical significance and legislation. The components necessary for RTI program implementation based on the Colorado Department of Education's RTI program will also be described in Chapter 2. These components include curriculum and instruction, assessment and use of data, problem solving, family and community partnerships, school climate, RTI leadership, MTSS, and a positive behavior support system. I also included in the literature review the barriers within RTI programs and their

effects on special education . Contrasting views of RTI provided an alternative perspective along with a presentation of gaps in the literature in regard to RTI implementation.

## Literature Search Strategy

A comprehensive literature search strategy using peer-reviewed journals, books, and government documents from the Walden University database formed the basis for the literature review. Access to the Walden library database, as well as searches through Google Scholar, provided research-based scholarly articles for the literature review. The key terms used in the literature search included topics such as *multitiered systems of support, special education, curriculum and instruction, assessment, problem-solving, family involvement, school climate, leadership,* and *positive behavior support systems*. Appendix A lists detailed descriptions of the search terms. An iterative search process helped determine selection for each article. Each key term was searched through the Walden database and Google Scholar and matching articles were then selected based on authentication through a peer review. I selected scholarly articles written within the past 5 years for the literature review. In certain cases, I incorporated articles written beyond five years based on pertinent information. While conducting the literature search, I found a limited amount of studies on teachers' experiences implementing the RTI program. The lack of existing relevant literature established the need for further research in this study; this is further described in Chapter 2. I discuss studies related to the implementation of RTI program components and their relation to the scope of the study.

## Conceptual Framework

The conceptual framework of a study addresses the assumptions, beliefs, expectations, and theories that support the research (Creswell, 2013). The conceptual framework of this study on RTI program implementation was based on Gagné's conditions of learning (Gagné, 1985). According to Gagné et al. (1988), Gagné's conditions of learning posits external and internal learning conditions through five basic assumptions for instructional design. These assumptions show that learning individual tasks is a foundation for instruction in that learning is individualized to the learner, tracked in phases, affects human development, follows a systems approach, and holds a foundation in human learning. Therefore, the RTI team must know each student receiving support through the RTI program in order to deliver instruction that is tailored to the student. Researchers have suggested effective RTI frameworks that match the key features of Gagné's five basic assumptions for instructional design. Those features of an effective framework include a focus on student-levels of learning, coordination of school-wide intervention supports, ongoing decision making based on data, the use of evidence-based implementations, and cohesive leadership (Castro-Villarreal et al., 2014). Through effective RTI program implementation, at-risk students receive an individualized plan of instruction based on a framework that fits student needs for them to be successful and in achieving grade level standards.

Since Gagné's conditions of learning is based on a systemic approach to support each learner's individual needs, this study benefited from Gagné's theory. Based on

Gagné's theory, I intended the research questions for this study to help me gather the experiences of elementary general education teacher's implementation of RTI programs.

A gap exists between what was found in the research on RTI program implementation and what was being implemented. The literature review provided a summary related to the research questions and determined why the RTI framework selected was meaningful to the study.

## Literature Review Related to Key Concepts and Variable

### Historical Significance and Legislation

The cornerstone of RTI began in special education law. On November 29, 1975, President Ford put into effect Public Law (P.L.) 94-142, The Education for All Handicapped Act. P.L. 94-142 offered assurance that every child with special needs would receive a free and appropriate public education in an environment with the least amount of restrictions (Lloyd & Lloyd, 2015). Since that time, amendments were written to assist children who display developmental delays to reach age appropriateness prior to the onset of special education classification. Public Law 99-457 was passed in 1986 recognizing the need to assist infants and toddlers who display cognitive or psychosocial developmental delays, or those diagnosed with a physical or mental condition (Education for All Handicapped Children Act, 1986). This legislation was the first early intervention program for infants and toddlers. Early intervention would provide services through a statewide, coordinated, multidisciplinary system for eligible children from birth to three years old and their families (Bailey, Raspa, & Fox, 2012).

Early intervention promoted RTI programs for children in first through 12th grade who were at risk for failing in school. A student at-risk refers to those students who have met criteria for being at risk of facing learning difficulties (Cuticelli et al., 2014). RTI intervention services utilize an MTSS framework to distinguish types of instruction individualized for at-risk students (Fuchs et al., 2012). Through screening, diagnostics, and classroom-based instruction, legislation mandated schools to identify and teach at-risk students in ways that they can best learn throughout the child's individual education from first grade through high school (NCLB, 2001). Under the law, support for RTI programs includes professional development for general education teachers at all grade levels and for other service providers, such as therapists and guidance counselors. As part of NCLB, all teachers must employ evidence-based strategies in the classroom (Cook & Odom, 2013). Teachers can use both formative and summative data collection on each student to help determine the most effective research-based strategies to help the student's achievement. The goal is to help students reach grade level standards through an RTI program.

On December 10, 2015, under the Obama Administration, changes to education regulations in NCLB created amendments that formed Every Student Succeeds Act (ESSA). Under the provisions of ESSA (2015), school districts will continue to implement intervention programs such as RTI. Continuation of RTI ensures that at-risk students will receive the necessary support to help close the achievement gap and increase performance in school. Educational reforms surrounding RTI have shown to be some of the most notable reforms to education in recent (Gilbert et al., 2013).

**Response to Intervention and Special Education**

Applying academic or behavioral interventions for a student at risk through an RTI program in the earliest stages will produce favorable outcomes that result in fewer referrals and classifications for special education (Preston et al., 2016). When helping students at risk, structured support programs that provide flexibility for the learner are most effective (Lemons, Fuchs, Gilbert, & Fuchs, 2014). However, gaps exist in the research between RTI implementation and what is implemented in the classroom. Varying policies, frameworks, and protocol can lead to confusion and frustration in schools that creates a barrier to implementation (Werts et al., 2014). Effective RTI program implementation can overcome the divide if high quality interventions are delivered that can deemphasize the need for a special education evaluation (O'Connor et al., 2013). Without effective program implementation, students may be referred for special services without receiving all possible interventions for remediation, as the program may lack necessary components to help at-risk students succeed. For students who require intense remediation, it is highly unlikely they will receive support in the general education classroom if all the necessary components of RTI are not in place (Fuchs & Vaughn, 2012).

VanDerHeyden, Witt, and Gilbertson (2007) conducted a study to evaluate effective RTI programs to determine the influence those programs have on the identification of students with special needs. The research was conducted in a suburban school district across five schools located in the southwest United States. This district used the STEEP (System to Enhance Educational Performance) program as a framework

for the district's RTI program. STEEP is a comprehensive model used as a blueprint for RTI program implementation (Witt & VanDerHeyden, 2007). STEEP provides a systematic approach for implementing an RTI program and helps identify at-risk students. After the second year of STEEP implementation, 13% of the students who received adequate RTI program implementation were referred for special education services. These numbers show a significant reduction as compared to 92% of students who previously did not receive support from an adequate RTI program and were referred for special education services. This reduction indicates the significance of a structured RTI program implementation reducing special education referrals.

Without the assistance of an RTI program, at-risk students may fail to keep up with their peers and fall significantly behind grade level expectations, creating a gap in achievement between where the child performs and where they should be performing. As this gap grows, the need for special education services may become increasingly evident. With the implementation of an organized, structured RTI program, interventions can meet the needs of individual students to ensure academic and behavioral growth.

**Response to Intervention Components**

The rationale for selection of The Colorado Department of Education RTI framework is based on the research conducted on three Colorado schools over a span of four years. The study followed each school's RTI program and how the needs of at-risk students were addressed. Colorado's program identified six RTI components that serve as a framework for effective RTI programs. These six components are supported by the literature and form a framework of successful RTI implementation based on the outcome

of the study. The six components of the Colorado Department of Education's RTI program include

- Curriculum and Instruction
- Assessment and Use of Data
- Problem-Solving Process
- Family and Community Partnerships
- Positive School Climate
- Leadership

**Curriculum and instruction.** Each state is responsible for creating and delivering standards that will ultimately prepare students for a path in college or career after graduation. How those standards are delivered depends on the curriculum written by each school district. When intervention strategies are implemented through RTI, those strategies should follow the curriculum and adhere to the state's educational standards. Students need to be exposed to the depth and breadth of the knowledge and skills presented in the curriculum based on the same standards implemented for all students (Wixson & Lipson, 2012). However, the methods of how that instruction will be delivered to help students succeed may differ based on individual interventions that best match how a student learns. For all students, instructional emphasis should be placed on judiciously incorporating instruction and delivery of content to help struggling students reach proficiency (Clarke, Doabler, Nelson, & Shanley, 2015). Members of the RTI team need to be held by a vision that all students can succeed and reach standards with appropriate support and interventions (Colorado Department of Education, 2012).

Many states may have adopted rigorous Common Core State Standards (CCSS) or developed state education standards. These standards serve as goals for what students should know at the end of each grade level from kindergarten through high school (Common Core State Standards, 2017). While standards provide the learning outcomes for what content should be taught, standards do not include how the content should be taught. Educators must differentiate instruction to provide every student with the opportunity to learn (Konrad et al., 2014). According to Tomlinson and Imbeau (2010), differentiated instruction occurs when instruction and classroom practices are modified based on a student's individual learning profile. This involves all aspects of education, including content taught, the process in which it is taught, the product derived from what is taught, and the effect on the student. At-risk students benefit from a curriculum that meets their individual needs through dynamic instruction using strategies that incorporate varied instructional methods (Little, 2012). While instruction based on state standards is controversial, there is limited research that refutes differentiation within the standards to help students succeed. There is a gap in practice between what differentiation is practiced in the classroom and what is recommended in research.

**Assessment and use of data.** Amendments to the Individuals with Disabilities Act addressed the need for data to drive instruction and monitor progress (Individuals with Disabilities Education Act, 2010). Through pre-assessments and progress monitoring, children can be identified as "at-risk students" who need assistance in the early grades and can benefit from the implementation of an RTI program (Catts, Nielsen, Bridges, Liu, & Bontempo, 2015). RTI has grown into a systematic tool for applying

interventions based on close monitoring of that student's progress (Björn, Aro, Koponen, Fuchs, & Fuchs, 2016). By using information from assessments, teachers can determine appropriate interventions for a student. Data based on a student's current level of achievement provides valuable information for determining the individual RTI implementations is necessary for improvement. With rich information on a student's strengths and weaknesses, interventions can be individualized to best fit the way a student learns. Effective RTI systems function on decisions driven by data to determine a student's instructional needs and the intensity of services needed (Reschly, 2014). By using information from assessments, teachers can determine appropriate interventions for a student. Data can also guide an appropriate placement in a Multi-Tiered System of Support (MTSS). The RTI team can make informed decisions on which student needs assistance, what the assistance is, and placement on the MTSS. Assessments are valuable tools for measuring current academic achievement and can play a pivotal role in the selection of effective interventions (Fan & Hansmann, 2015). These assessments, both formative and summative, and can be teacher or district created or derived from state assessments. When data are used to drive instruction, established processes should govern assessment, implementation, and maintenance. According to Burns and Gibbons (2013) the use of multiple measures in student assessments can support better decision-making when determining individual interventions for students. Schools should not rely on one source of data, but rather a collection of different assessments that show a complete picture of a student's overall achievement levels. Data on an individual student's strengths and weaknesses determine a plan of action. Delivery of multiple

assessments should occur several times throughout the school year. Districts can create implementation timelines to guide universal measurement procedures for data collection to determine each student's progress. By monitoring progress frequently, students demonstrate more improved performance (Goodman, McIntosh, & Bohanon, 2011). According to Crawford (2014), assessments should be carried out each quarter during the school year, low achievers monitored monthly, and students needing intense interventions observed weekly. Through a system of frequent data collection, the data can be used to evaluate a student to help the student succeed. Continual feedback obtained from assessments can help determine changes in interventions and placement on the MTSS to ensure student success.

When administering a pre-assessment, the most common measures are those based on the curriculum and focus on specific academics such as reading, mathematics, spelling, and writing (Goodman, McIntosh, & Bohanon, 2011). Often, schools use a district assessment to determine which student may be in need of RTI services. Guided by the assessment information, the RTI team can focus directly on the skills students need to master based on the district's essential standards for the student's current grade level (Buffum et al., 2012). Depending on the results of the assessment, specific areas in need of improvement can be correlated to interventions. Additional assessments can monitor progress and promote adjustments to interventions reflected in the regularly collected data. Continual use of district assessments can track student progress and evaluate effectiveness of the interventions. These assessments provide feedback to help teachers evaluate the effectiveness of instruction and identify students who are struggling

based on a comparison of grade level standards (Castillo et al., 2015). Progress monitoring combines assessment and evaluation to determine a student's progress (Christ, Zopluoglu, Monaghen, & Van Norman, 2013). This monitoring can determine where a child falls amongst their peers and within the standards for the current grade level. By monitoring progress through assessments, teachers can create and adjust modifications to instruction to meet individual needs based on a student's demonstration of strengths and weaknesses. For example, if a student lags significantly behind in reading, an assessment of phonemic vowel sounds can determine if the student is weak in the foundational skills needed to read on grade level. This can be assessed through a district reading assessment, or a formative reading assessment, such as a running record, in the classroom. While teacher intuition can also play an important role in determining the instruction, it is not as effective as making decisions based on data and statistical measures (Smolkowski & Cummings, 2015). Additional information on using data to problem solve is described in the next section.

Formative assessments can track student progress frequently during instruction. The purpose of formative instruction is to provide teachers with information on student progress to guide future decisions for instruction (Cornelius, 2013). Curriculum-Based Measurement (CBM) provides teachers with a quick and simple formative assessment tool for frequent progress monitoring (Fan & Hansmann, 2015). A CBM focuses on a specific skill and allows for the teacher to determine a student's progress over time based on how that student is responding to interventions (Buffum et al., 2012). An example of CBM is the DIBELS Oral Reading Fluency (DORF) assessment. This assessment

measures a student's overall reading competence through a timed, grade level reading passage. The DORF is a CBM because a few questions are given in a short, measured period of time to assess for fluency. Responses are recorded, graphed, and analyzed to determine strengths and weaknesses. CBMs provide valuable data for RTI team members because the assessments are given often thought the school year. Table 3 differentiates traditional testing in classrooms as compared the curriculum-based measurements that monitor student progress over time (Crawford, 2014).

Table 3

*Comparison of Traditional Testing Versus Curriculum-Based Measurement*

| Question | Traditional testing cycle | Curriculum-based measurement |
|---|---|---|
| When do you test? | Immediately after content has been taught (teach-test-teach) | Probe weekly or monthly |
| Which items are included? | Open or closed-ended test questions from a particular lesson or unit | A selection of random items chosen to represent an entire year's (or an entire semester's) curriculum |
| How long are the tests? | Often untimed; might include a time limit | Timed probes of 1 to 5 minutes |
| Why do you test? | Test because you want to know if students learned what was taught during a particular lesson or unit | Probe to see if students are showing progress over time |
| How does graphing help with data analysis? | Graphing of students' scores provides no new information | Graphing of students' scores reveals positive or negative trends over time |

*Note.* Adapted from Crawford, L. (2014). The role of assessment in a response to intervention model. *Preventing School Failure: Alternative Education for Children and Youth, 58*(4), 230-236. (Appendix B)

Through analysis of multiple measures, the RTI team can create a comprehensive analysis of the student's academic achievements. Teachers can provide additional information through behavior logs, grades, homework, and classwork. By analyzing multiple sources of data, the RTI team can create a comprehensive analysis of the student. Interventions can be determined based on current levels of performance in the classroom based on the data collected. The RTI team evaluates data collected on a student to determine which tier on the MTSS best matches a child's needs. By using data to drive instruction, team members can have deeper conversations about the student and evidence can drive decisions (Colorado Department of Education, 2012). Those decisions are flexible based on the data, and a student's level of interventions may need to be changed to adapt to changing strengths and weaknesses.

Currently, there are few studies that compare data gathered from a CBM against the effectiveness of recommended interventions to help implement interventions. Conversely, Van Norman and Christ (2016) conducted a study that focused on the accuracy of interpretations from CBM the study concluded favorable for the use of CBM. Using a panel of experts in the field of psychology, CBM measurements were analyzed and measured against the student's response to the individualized instruction given based on the CBM. Results were evaluated and there was a correlation between CBM and appropriate student interventions. However, a gap in the literature exists between CBM data and its ineffectiveness to help RTI team members create individualized interventions.

**Problem-solving**. RTI teams should have a problem-solving protocol in place to assure an efficient and effective RTI program that works to benefit the students served through the program (King & Coughlin, 2016). Problem-solving is one way to help RTI members assess problems within the RTI program, determine factors contributing to the problem, identify steps to solve the problem, and evaluate the RTI process. In a study conducted by Newton, Horner, Todd, Algozzine, and Algozzine (2012), a Team Initiated Problem-Solving (TIPS) model assisted in an RTI problem-solving process. According to the study, the TIPS model was effective because it used problem identification, the creation of a hypothesis, an action plan, discussion of possible solutions, development and implementation of an action plan based on possible solutions, and evaluation of that plan. Through the formulation of the TIPS problem-solving plan, team members can use the collected data to determine the next steps to individual student academic and behavioral interventions because they can determine what is working and what is not. The decisions made based on the problem-solving plan are data driven based on each child's individualized current instructional level (Turse & Albrecht, 2015). Because decisions are based on data, a problem-solving approach identifies skill deficits that target individual interventions to ensure proper tier placement on the MTSS (King & Coughlin, 2016). According to a study conducted by the Colorado Department of Education (2012), RTI teams should meet frequently throughout the school year to discuss solutions to problems that may arise. Discussions should focus on student data to ensure that all students are progressing and all areas of intervention are being addressed. When decisions are made based on a problem-solving model, team members must focus

on the validity of their decisions (Ball & Christ, 2012). Data and the review of information collected are critical elements in the decision-making process (Colorado Department of Education, 2012). However, Ball and Christ (2012), found inadequacies in regard to the use of data collection to adequately problem solve issues in an RTI program to help at-risk students. When determining placement on the MTSS, data was not often useful for identifying skill deficits that drive the determination for implementation of individualized interventions. According to Ball and Christ, "there is clear evidence that neither screeners nor high-stakes assessments provide sufficient information to guide intervention development for individual students" (2012, p. 235). However, there is a gap in the literature that supports further inadequacies in further studies that refute the use of problem-solving procedures in an RTI program.

**Family and school partnerships**. In 2001, the No Child Left Behind Act (NCLB) legally gave parents the opportunity to make choices for their children through access to all information on their child. NCLB also creates a shared responsibility between schools and families to help develop successful academic programs (No Child Left Behind [NCLB], 2001). The impetus for collaboration between families and school personnel came about because parental involvement during the early years of a child's development plays a pivotal role in early adolescence (Karbach, Gottschling, Spengler, Hegewald & Spinath, 2013). Collaboration between schools and family goes across grades, even after the early years of education (Galindo & Sheldon, 2012). By forming a collaborative partnership, schools can encourage parents to be a contributing part of the RTI team to ensure academic success. To effectively create a partnership between

families and schools, collaboration is essential. Both parents and teachers share a common goal in school; they both want children to be successful (Howell et al., 2008). Therefore, it is important to include family members as a part of the RTI team. A parent can contribute valuable information about their child that can help form the most appropriate interventions. For example, parents can share a child's likes or dislikes and offer information on what motivates the child. Parent involvement not only increases academic achievement but also improves student motivation through improvement of academic self-confidence and increased interest in school (Brown, Harris, Jacobson, & Trotti, 2014). In a study conducted by Núñez, Suárez, Rosário, Vallejo, and Epstein (2015), there was a direct correlation between parents who took an active interest in their child's homework and positive academic achievement in school. This study spanned across all school age levels from elementary to high school. By including parents and families in their child's education, the chances of academic success increases.

A key activity for engaging parents in the RTI process is to encourage their participation. In a study conducted by Myers and Myers (2015), parental involvement was greatest in families where children lived in biological families with both parents present and married. They also found that parental involvement was strongest in homes with a strong family structure, which included strong economic, human, and social structure. Historically, students from low-income homes show poor performance on most academic measures as compared to students from high-income homes (Reardon, 2013). Not all parents may seek out an active involvement in their child's education. However, RTI team members should provide all parents the opportunity to

share information, problem-solve, and celebrate the successes of their child with the school and team members. This gap in practice signifies a need for schools to encourage collaboration so known barriers can be lessened.

**Positive school climate and culture.** RTI typically focuses on a student when they are struggling with academics. However, students who have difficulty demonstrating appropriate behaviors in school can also receive support through an RTI program. Interventions for students who have difficulty with appropriate behaviors in school can receive support from a Positive Behavioral Interventions and Supports (PBIS) system that will be discussed later in Chapter 2. The outcomes associated with students who receive interventions for academic, behavior, or both, lead to the development of more effective, preventive, and early intervention supports (Darney, Reinke, Herman, Stormont, & Ialongo, 2013). Academic and behavior interventions should occur simultaneously to help improve those student outcomes. Intertwining both interventions fosters academic achievement and nurtures healthy development for students in a supportive learning environment (Reyes, Brackett, Rivers, White, & Salovey, 2012). By focusing on behavioral interventions with academic interventions, schools can create a positive climate that supports student success. Behavior interventions can be implemented through a Positive Behavior Intervention and Support system (PBIS).

The creation of a PBIS can encourage social and emotional growth for students. PBIS begins with the formulation of a school-wide plan that recognizes student successes, promotes conflict resolution, and encourages conversations about feelings (Colorado Department of Education, 2012). Clear expectations and reward systems

provide students with the information necessary to encourage positive behavior while understanding consequences when rules are broken. This gap in practice indicates the need for PBIS for students within an RTI program. When everyone shares responsibility, students become accountable for their actions. A discussion of PBIS will occur later in Chapter 2.

**Leadership.** According to the literature, there is a correlation between each leadership and RTI implementation (Maier et al., 2016). Educational leaders have the ability to create the foundation for making tactical decisions in education for all students by bringing all stakeholders together. According to Jordan, Brown, Revino, and Finkelstein (2013), "The ethical culture and climate of organizations are greatly influenced by executive-level leaders who set the organizational agenda in ethical as well as strategic domains" (p. 661). Within RTI teams, it is often the school principal that takes the lead initiative for RTI program implementation. Printy and Williams (2015) described the school principal's role in RTI as one that is formed based on their own understanding of the directives created in their particular school. This means that school principals base RTI on the school's established RTI program, but that program is rooted in RTI legislation. As the RTI leader, principals must convey objectives to others in the group, collaborate in planning, and provide a vision through communication (Jordan et al., 2013). For students who struggle in school, strong leadership can bring together educators to help each student succeed. The responsibility of an RTI team leader varies depending on state, district, or school policies. Regardless of who assumes leadership

responsibilities, actions are needed to successfully implement the MTSS at each level to ensure success for all students.

The Colorado Department of Education (2012) identified five themes that describe successful RTI implementation at a leadership level. The themes are

- a shared vision of leadership in which everyone is a team player assuming the responsibility of the team,
- a common belief that all students can succeed,
- a collaborative team model built on mutual respect and communication,
- a belief in diversity and inclusion for all students, and
- the use of data to drive and facilitate instruction for individual students.

To implement effective leadership in an RTI program at the school level, leaders should have a vision that includes collaboration with staff members, families, and community (Colorado Department of Education: RTI/PBIS Unit, 2011). The vision should embrace a common goal and inspire members of the RTI team. Leaders should strive to promote an RTI plan with fidelity, dedicated time and resources needed for the team, and provide support to those involved (Colorado Department of Education: RTI/PBIS Unit, 2011). Effective leaders also demonstrate positive communication and active listening (Bean & Lillenstein, 2012). The lines of communication should be open, and all members should feel comfortable expressing views while leaders listen and support. Defining the leadership role should be performed in each school. By building an effective school leadership team, members feel they are a part of a coalition in which everyone is valued for their expertise (Buffum et al., 2012). Achievement relies on the

establishment of trust between team members. Relationships among collaborative teams are most successful when there is a mutual trust and respect within the shared vision among group members (Wilcox & Angelis, 2012). It is the role of team leaders to build cohesion among group members through trust and respect. Regardless of the role an RTI team leader plays in a school or district, the goals should be standardized. It is the responsibility of the team leader to guide others toward a path of cohesion to create educational opportunities in which every child can succeed.

The leadership of an RTI team requires a continual commitment to providing team members with ongoing support to help each student succeed and reach their fullest potential. Defining roles and expectations within the group ensures accountability for all members (Grosche & Volpe, 2013). There must be a mutual understanding of trust within the group. Leaders should encourage but also step back to allow others to fulfill their roles. Job assignments to members of the group should match individual strengths. Building relationships with team members and knowing specific strengths can help develop a plan to support a working infrastructure (Colorado Department of Education, 2012). Team leaders must focus on a vision that includes a well-defined plan for the MTSS implemented within the RTI framework. Leaders must strive to create a system of collaboration, communication, and continual reflection on past practices. Discussions should improve the practice, and determine how that practice can benefit all students. Most importantly, successes should be celebrated at each step (Colorado Department of Education, 2012). Leaders and team members should recognize student achievements,

teacher competencies, and successes made throughout the team. Conversations among all team members will help leaders improve weaknesses and recognize strengths.

While leadership plays an important role in producing an effective RTI team, there is literature that refutes the efficacy of strong leadership in RTI. Sharp, Sanders, Noltemeyer, Hoffman and Boone (2016) studied the relationship between RTI implementation and reading achievement. Included in the study was a breakdown of Colorado Department of Education's six RTI components and how each affected reading achievement in elementary school aged children. Because of its low reliability, any questions that involved leadership were removed from the study's scale and found to be insignificant to the study. The gap in research regarding leadership within an RTI program needs further inquiry.

**Multitiered System of Support**

Children learn in different and unique ways that require varying levels of support based on individual challenges. To address individual student needs, the MTSS allows for an educator to tackle differing levels of intervention specific to each student (Hunter et al., 2015). By, incorporating multiple tiers of instruction in an RTI program, the intensity of teaching increases based on what each student needs (Gilbert et al., 2013). The use of tiered instruction is an effective component of RTI program implementation because it focuses on individual attention to the needs of each student (Dougherty Stahl, 2016). Each tier will be discussed further in this section. If used successfully, students should demonstrate proficiency based on the interventions received in tier 1, and not rely on interventions on Tiers 2 and 3 (Buffum et al., 2012). As

discussed earlier in the chapter, an RTI team uses information from assessments to determine an appropriate placement in the MTSS. Each tier is not finite, but rather creates a continuum of interventions that grow in concentration as students move along the continuum (Toste et al., 2014) with the interventions and support increasing in intensity to assist students as needed (Smith, 2015). Often referred to as the RTI pyramid, the first tier of interventions forms the base of the pyramid up to the third tier that completes the pyramid at the top. The bottom of the pyramid represents the largest population of students who receive Tier 1 interventions as compared to those receiving Tier 3 interventions. Within the three tiers of support, the most crucial is the first tier because it provides a foundation that the other interventions are built upon. However, when RTI teams fail to provide high-quality interventions within that first tier, it results in ineffective and disjointed implementations (Abbott, Beecher, Petersen, Greenwood, & Atwater, 2015). Each tier differs from classroom instruction recommended in research studies because the interventions provide additional support at-risk students need to achieve success in school. Figure 1 shows the delineation of interventions according to the tiers.

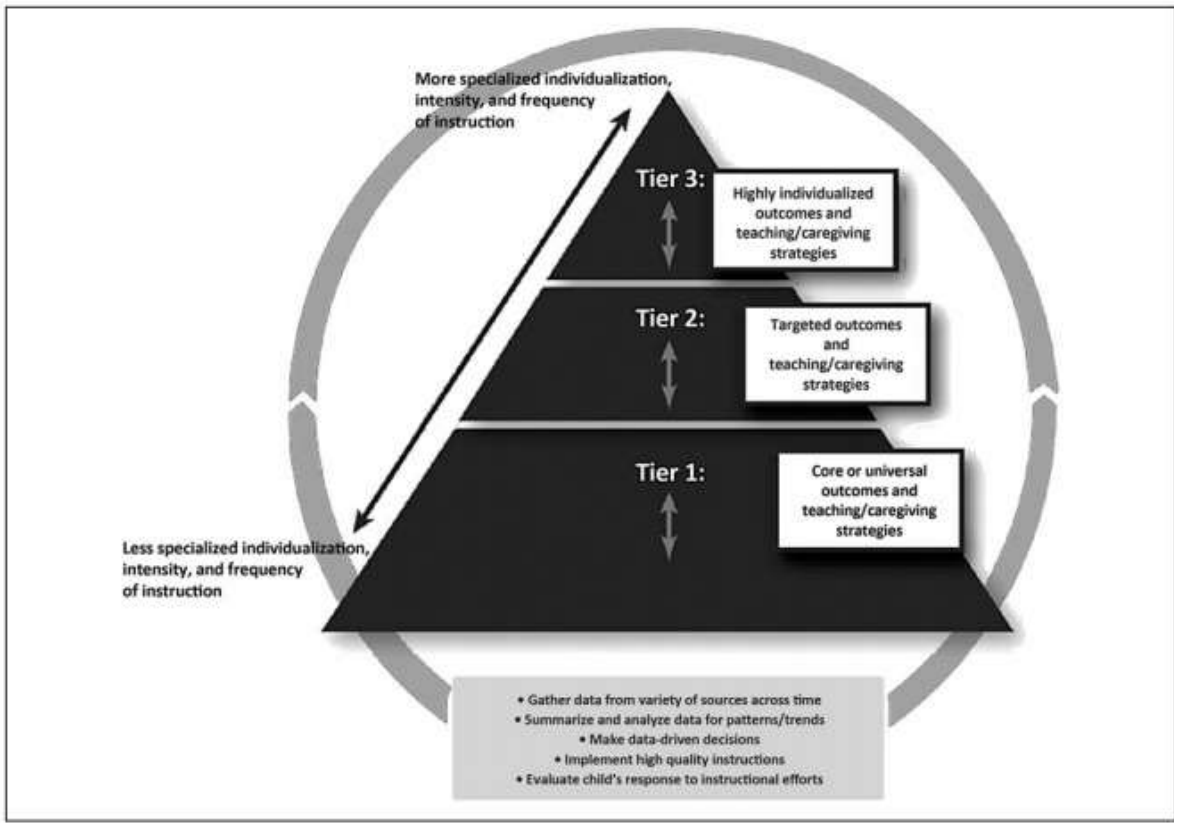


*Figure 1.* Multi-Tiered System of Support delineation of tiers in Response to Intervention. Adapted from National Head Start Association. (2014). Frameworks for response to intervention in early childhood description and implications. *Communication Disorders Quarterly*, *35*(2), 108-119. (Appendix E)

**Tier 1.** In Tier 1 of an RTI program, students are receiving provisions through the core classroom program. Tier 1 demonstrates education received by all students in the general setting (Al Otaiba et al., 2014). Approximately 80% of students whose needs are adequately met with applied interventions in the general education setting fall in the first tier (Sullivan & Castro-Villarreal, 2013). Those receiving Tier 1 interventions are at the lowest risk of failing and planned core instruction benefits all children as well

(Greenwood et al., 2014). Table 4 shows examples of common Tier 1 interventions implemented in a general education setting.

Table 4

*Example of Tier 1 Interventions*

| Interventions |
| --- |
| Teacher proximity/preferential seating |
| Reduction of distractions |
| Modeling/visual aids |
| Multisensory instruction |
| Peer collaboration/grouping |
| Progress monitoring (formative/summative assessment) |
| Direct instruction |
| Feedback/Positive reinforcement |
| Graphic organizers |
| Restating/clarifying directions |
| Goal setting |
| Nonverbal cues |
| Breaks/movement between assignments |

**Tier 2.** When students do not demonstrate adequate progress through Tier 1, implementations of secondary interventions are needed. Approximately 10% to 15% of students benefit from more intense interventions in Tier 2 (Reschly, 2014). While still delivered in the general education setting, Tier 2 interventions vary depending on student need. Decisions on which interventions best fit a child develop around progress monitoring, data collection, and the RTI team's approach to problem solving. Based on

the information collected, a more intense, explicit, targeted, and individualized instruction plan will be developed to best meet the needs of a struggling student (Cho, Compton Fuchs, Fuchs, & Bouton, 2014). Table 5 lists examples of Tier 2 interventions implemented in a general education setting. The second tier of interventions occur in conjunction with continual interventions from Tier 1.

Table 5

*Example of Tier 2 Interventions*

| Interventions |
| --- |
| Basic skills/reading specialist intervention |
| Small group instruction |
| Technology as a supplement |
| Extended time on classwork/assignments |
| Self-assessment rubrics/self-monitoring |
| Reading/writing organizers |
| Step sheets |
| Peer tutoring |
| Study skills strategies |

**Tier 3.** Research supports positive outcomes to interventions in the first two tiers for many students (Fuchs, Fuchs, & Vaughn, 2014). However, when students demonstrate significant learning discrepancies after intervention from the first and second tiers, more intense instruction must take place in the third tier. In the third level, implementation of special education and related services provide a systematic and specialized approach from general education instruction alone (Jennings, McDowell,

Carroll, & Bohn-Gettler, 2015). Students receiving Tier 3 interventions will need long-term intervention (Reschly, 2014). But it does not mean that a student in Tier 3 will receive special education accommodations. Not all interventions are specially designed for special education services. Special education placements may be considered for some students (Reschly, 2014). Often students may need interventions from Tier 3 to help better remediate their skill deficits (Fuchs & Vaughn, 2012). Students on Tier 3 often benefit from ongoing, sustained, intense programs such as Orton-Gillingham, Project Read, Touch Math, or Reading Recovery in small group sessions. Determination of intensive programs hinges on the data collected within the first and second tiers. Students who continually show little academic growth as compared to their peers may be considered for special education services (O'Connor et al., 2013). The gap in research in regard to the MTSS within an RTI program needs further inquiry. Currently, there is limited research that refutes the use of a MTSS to help at-risk students.

**Positive Behavior Interventions System**

Implementing a PBIS system in RTI should intertwine seamlessly with academic interventions because teachers can increase academic engagement to promote success by decreasing disruptive behaviors through behavior intervention (Reinke et al., 2013). When addressed simultaneously, both academic and behavioral interventions can address a student's social and emotional needs while increasing academic success (Lewis et al., 2016). A positive school climate mimics experiences of school life and reflects the norms, goals, values, relationships, educational practices, and organizational structures of school life (Thapa, Cohen, Guffey, & Higgins-D'Alessandro, 2013). A positive climate

promotes school safety and healthy relationships develop because learning takes place in a supportive environment. When students receive and display the positive behaviors reflected in the school climate, learning can take place. With less undesirable behaviors in the classroom, instruction time is increased.

The integration of a PBIS system in RTI improves social behaviors and can reduce referrals for special education (Grosche & Volpe, 2013). A three-tiered PBIS model is designed to prevent disruptive behavior and promote positive change (Debnam, Pas, & Bradshaw, 2012). A tiered PBIS model closely follows the RTI model for academic interventions. At each tier, specific levels of interventions target undesirable behaviors. Similar to the academic tiers, the first PBIS tier is universal and supports interventions for an entire school or grade level. For example, the first tier of interventions may include hallway protocols, using hall passes or student identification cards, or penalties for tardiness or absenteeism. The second tier applies interventions for a specific, targeted group. The movement to Tier 2 begins when students do not respond to Tier 1 supports and continually struggle with behaviors. An example of a tier-two intervention may be a Functional Behavioral Assessment (FBA), or sticker chart reward incentives. If a student reaches the third tier, a more intensive PBIS is needed. Tier 3 may need to be tailored to fit a child's individual needs based on data collected from the first and second tier. Figure 2 depicts how the tiers in a PBIS integrate with the academic tiers in and RTI Pyramid. Many of these classroom management techniques were used before PBIS. PBIS is different from classroom management techniques because it provides interventions beyond what is typically given in the classroom.

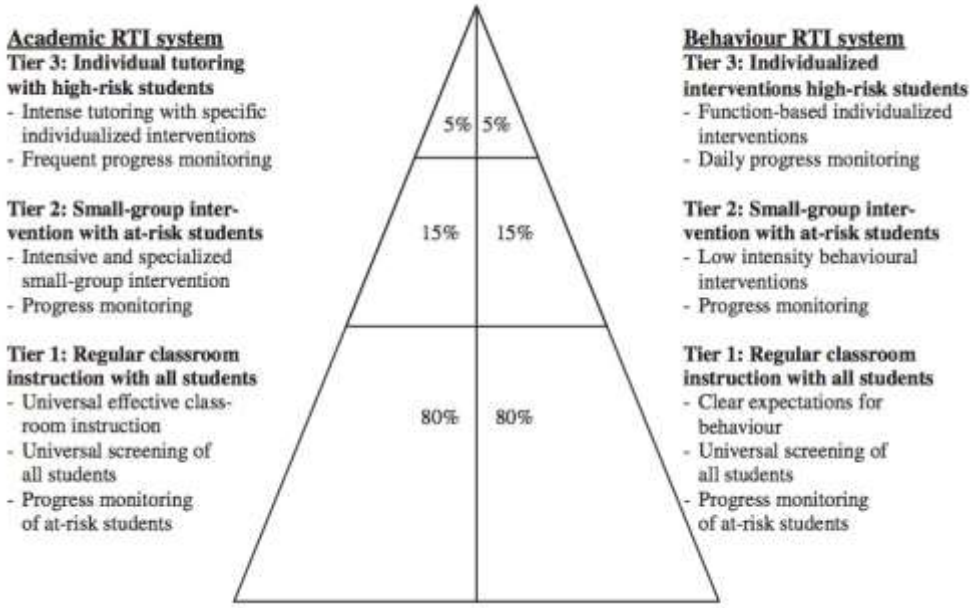


*Figure 2.* The RTI/PBIS pyramid adopted from Grosche, M., & Volpe, R. J. (2013). Response-to-intervention (RTI) as a model to facilitate inclusion for students with learning and behaviour problems. *European Journal of Special Needs Education, 28*(3), 254-269. (Appendix E)

According to Goodman, McIntosh, Bohanon (2011), when teaching behaviors to students, the expectations should be the same as when teaching academics. However, there are some differences that distinguish academic interventions and behavioral interventions in a PBIS. As stated by McIntosh and Goodman (2016), when implementing behavioral interventions, emphasis resides on social behaviors. Interventions connected to those behaviors continue throughout the year and focus on a school-wide approach as opposed to grade level. Materials used to remedy targeted behaviors adapt to fit a school's individual situation. Not unlike academic interventions, interventions in a PBIS are researched based, follow a MTSS, utilize a problem-solving

approach, and follow a screening program to begin interventions as soon as they are needed (McIntosh & Goodman, 2016).

A gap in practice exists in the need for more understanding in the development of intervention services for students who need support with behaviors in school (Spear, Strickland-Cohen, Romer, & Albin, 2013). PBIS practices need to be presented with clear expectations. Students should receive models on how to behave appropriately, and those examples should be practiced until students understand the concept. When teaching lessons on appropriate behavior, it should take place in the same environment where the behaviors will mostly likely occur (Goodman et al., 2011). For example, if modeling appropriate behavior for the cafeteria, such as sitting appropriately and demonstrating table manners, those behaviors should be instructed and practiced in the cafeteria. By giving students effective behavioral supports within the RTI framework, it can result in improved outcome for students struggling with behavior. By addressing behavioral concerns with the RTI team, implemented interventions and progress of those behavioral concerns can be monitored over time to assure behavioral and academic success for the student.

**Response to Intervention Gap in Practice**

Children are individuals and often learn in diverse and unique ways to be successful. Teaching requires instruction that differentiates according to what students need. RTI gives educators the ability to instruct students in a manner that fits individual learning styles before the onset of failure leading to poor academic outcomes. As noted previously in this chapter, numerous studies show the benefits to providing early

intervention for struggling students. However, gaps often impede the implementation process, making RTI programs ineffective at remediating student achievement. Barriers include a lack of training (Castro-Villarreal et al., 2014), missing components within the RTI framework (VanDerHeyden et al., 2016), and poorly targeted instruction (Burr, Haas, & Ferriere, 2015).

**Training and Support.** RTI produces favorable outcomes in student achievement with effective teacher preparation (Barrio & Combes, 2015). This is especially true for general education teachers implementing RTI interventions in a general education setting. General education teachers implement and instruct RTI recommendations (Barrio, Lindo, Combes, Hovey, 2015). The greatest barrier to implementing an effective RTI program is rooted in a lack of teacher training (Castro-Villarreal et al., 2014). It has been recommended that teachers receive effective professional development that focuses on the key components for the successful implementation of RTI. To aid in the delivery of RTI interventions, teachers can be provided with support to ensure improved student outcomes through additional coaching and feedback (McKenna, Flower, & Ciullo, 2014). Learning the specific directions on implementation procedures as well as intervention strategies will help teachers in the classroom (Björn et al., 2016). Donnell and Gettinger (2015), conducted a study on 209 elementary school teachers to determine if teachers who believe in a unilateral method of teaching without applying different methods of instruction showed resistance toward the implementation of RTI interventions. As per the results of the study, the success of an RTI program is dependent upon the support that teachers receive when implementing

new practices and this will reduce teacher resistance. To address teacher resistance, training should be ongoing and provide support to teachers as needed throughout the school year. Furthermore, training gives teachers the ability to work and collaborate with other educators. For teachers to fully implement an RTI program that addresses the gap between policy and practice, there needs to be a committed implementation of communication and supports for teachers (Thorius & Maxcy, 2015).

**Teacher "Buy-In."** Teachers often feel isolated throughout the RTI process, and isolation leads to ineffective interventions (Castro-Villarreal et al., 2014). Teachers may be resistant toward implementing interventions and strategies if they feel insecure because of the lack of supports available to them. Teacher frustration also increases with limited professional development, support, and limited resources for intervention implementation (Meyer & Behar-Horenstein, 2015). Supports from other teachers, professional development, and intervention resources will help teachers feel more confident in the RTI process and will encourage teacher "buy-in." With proper training, effective interventions can be provided to students and teachers can navigate an RTI program effectively.

Inadequacies found within an RTI program center around a structurally unsound framework that results in the wrong implementation of interventions. Furthermore, many schools have difficulty implementing interventions that rely heavily on what individual students need (VanDerHeyden et al., 2016). Murakami-Ramalho and Wilcox (2012) conducted a case study that examined school wide RTI approached and strategies in an elementary school to determine effective RTI program implementation. Through data

collection from observation of RTI implementation, researchers concluded in the findings that RTI programs should include superlative instruction, differentiation of content, meaningful assessments, collaboration within the RTI team, and teacher expertise. Implementing an RTI program that includes those components will assist in developing the proper interventions for a student. Additionally, a well-structured RTI program will provide support for teachers implementing those interventions. With support and training, teachers are more likely to accept the interventions and implement those recommendations in the classroom. Furthermore, the developments of teacher learning frameworks that address policy also limit barriers to such policies, thus closing the gap between policy and practice (Thorius, Maxcy, Macey, & Cox, 2014).

## Summary and Conclusions

The importance of an RTI implementation through a structured framework as evidenced by the Colorado Department of Education was outlined in Chapter 2. To help students at risk of failing, implementation of RTI interventions can help students at-risk reach grade level goals and avoid the eminent possibility of being referred for special education services. RTI policy and legislation mandated schools to help at-risk students from kindergarten through high school. However, there is a gap in practice between RTI implementation and what is implemented in classrooms. The literature presented in Chapter 2 established the relevance of RTI policy and the RTI implementation process. Through a structured RTI program, at-risk students benefit from interventions tailored to meet individual needs. The present study analyzed teachers' implementation of an RTI program to determine if practice is matching the research.

A structured RTI program contains six essential components serving as a framework for successful implementation (Colorado Department of Education, 2012). The components include

- curriculum and instruction aligned to rigorous standards;
- assessment and use of data to determine student strengths, weaknesses, and to monitor progress;
- a problem-solving process used by the RTI team make decisions;
- family and community partnerships that include parents in the RTI process;
- a positive school climate linked to behavior interventions; and
- leadership that establishes cohesion and a common goal.

It has been shown through the research how teachers can overcome barriers to RTI. By implementing a structured RTI program driven by data collected through comprehensive assessments, students can receive the appropriately targeted instruction. Individualized instruction follows along a continuum of remediation through a structured MTSS. By addressing any possible barriers, students can achieve grade level goals and the need for referring students for special education evaluations diminish because the chance of failure decreases. However, if a student is referred for special education testing, information rich data collected on the student throughout the RTI process will provide precise justification as to why the student is being referred. Comprehensive data will reduce the risk of unwarranted referrals.

RTI implementation creates opportunities for students to grow both academically and behaviorally to achieve grade level success. Through a collection of teachers'

experiences in RTI implementation, school systems will be able to provide students with support from an RTI program. To close the gap between research and practice, the following study addressed the gap in the literature in regard to the teacher's experiences of RTI program implementation.

# Chapter 3: Research Method

## Introduction

The purpose of this qualitative descriptive case study was to explore elementary school general education teacher's experiences in first through fourth grade with RTI program implementations. I investigated RTI program implementations through a collection of teachers' experiences based on the components of RTI programs and the perceived effects on students' academic and social functioning. Components of a structured RTI program included aligned curriculum and instruction, data driven interventions, problem-solving processes, partnerships with families, positive school climate, and strong leadership. I restate the research questions, research and design, and rationale for this study in Chapter 3. I also describe the role of the researcher, methodology used to select participants, and data collection. This chapter also includes an explanation of trustworthiness and ethical procedures to protect the participants.

## Research Design and Rationale

In this study, general education elementary teachers participating in an RTI program provided insight into the components of RTI program implementation and how those programs work in assisting at-risk students. Collected information helped assist schools in implementing a more effective RTI program. I intended the critical questions in this study to disclose a gap between current RTI research and implementation practices. According to Creswell (2012), in qualitative research, the central phenomenon is the concept or process examined in a study. The central concept of this qualitative study to analyze teachers' implementation of RTI programs for at-risk students in first

through fourth grade. The conceptual framework in Gagné's conditions of learning informed the research questions in this study. The following research questions spoke to teachers' experiences on RTI program implementation.

RQ1: How do teachers deliver individualized instruction based on RTI implementation to students?

RQ2: To what extent are teachers implementing the RTI program in an elementary school?

Qualitative research designs include case study, ethnographic study, grounded theory, and phenomenology (Lodico et al., 2010). In a case study, focus is placed on events, activities, or programs of groups or individuals (Creswell, 2012). More specifically, this study aligned with a descriptive case study design (Yin, 2014). In a descriptive case study, the purpose is to explain phenomena that can answer a question (Rumrill et al., 2011). The research questions focus on teacher implementation with RTI. Data collected through teacher interviews and classroom observations provided a wide range of responses regarding experiences with RTI implementation and provided answers to the questions. Analysis of this data brought to light barriers that prevented successful implementation of the schools' RTI programs. The results from this study may improve future RTI implementations by helping reduce unnecessary special education referrals caused by poor implementation of RTI programs. This case study was descriptive because the purpose of this type of case study was to describe the phenomenon in the study (Yin, 2014). The phenomenon in this study was inconsistent implementation of RTI programs in first through fourth grades. The experiences teachers faced in RTI

implementation helped them learn about special education referrals. In this descriptive case study, the case refers to the teachers implementing RTI; the case was bounded to three elementary schools in a suburban Northeast school district.

Other qualitative designs, such as grounded theory, ethnographic, and historical study were not chosen. A qualitative grounded theory design did not match this study because I am not developing a theory or explaining a process (Creswell, 2012). An ethnographic study explores cultural groups and their interactions and influences by the greater society (Lodico et al., 2010). Since this study does not focus on a cultural group, an ethnographic study was not appropriate. A phenomenological study is similar to a case study as it allows the researcher to learn about particular phenomenon through the eyes of participants over an extended period of time (Creswell, 2012). Due to time constraints with this study, a phenomenological study could not be used. Based on the various criteria of each study type, I considered a descriptive case study design the best design choice.

Although a qualitative research method was chosen for this study, quantitative designs such as experimental, correlational, and survey, were not applicable to this study as they yield numerical results. Numerical data was not appropriate for this study because a survey yielding numerical data would not be given. I used only narrative data collected through interviews. If both survey and interviews were to be used, a mixed method approach would have been an appropriate method. Based on the narrative data collection, a qualitative design was appropriate because data collected from this study was presented through narrative descriptions.

## Role of the Researcher

During the time of this study, I have been an employee in the district since 1997. Since that period of time, I have taught general education and special education from second grade through fourth grade. Currently, I am a second grade special education teacher. Throughout my employment in the district, I have sought to build trusting collegial relationships throughout the district with both teachers and administrators. My credibility has been established through various leadership roles, such as technology leader and curriculum writer, and by also serving on numerous committees in my school and district. Since my current teaching experiences focus on special education, I may have had bias toward applying interventions to help students who need individualized instruction. However, when I was a general education teacher, there were no federal mandates for RTI. Therefore, I have not served on an RTI team, and I do not have prior experiences with RTI implementation. Special education teachers do not serve on the RTI team in my district. Potential bias may have included my own perceptions on what an effective RTI program should look like and how it should be implemented. In my district, a special education teacher do contribute to the RTI program. I refrained from showing any emotion or expression when gathering data from participants. In this study, I was a nonparticipant observer. I visited each site and only took notes on the data I observed without involving myself in any of the activities (Creswell, 2012). When observing the participants' classroom instruction, I watched and recorded from the back or side of the room. My goal was to remove myself from any actual experiences and focus on only observing the phenomena around me. The participants in this study resided

in the district where I am also an employee. I do not hold a supervisory role in the district, and my relationship with the participants was on a peer-to-peer colleague level. The collegial relationships I hold with the participants minimized any influence on their participation in the study.

While I do not serve on an RTI team, my own views of the need for implementing and integrating individualized interventions in the classroom created some bias toward the study. I believe that individuals should be taught in a way that they can best receive and retain information to help achieve success in school. I refrained from interjecting my own personal views during participant interviews and observations to reduce bias from personal beliefs and strictly adhered to the information each participant shared. To guard against bias in my data, I took copious notes and cross-referenced those notes with the digital recordings during the interviews. This reduced the temptation to interject my opinions regarding what I thought the participant said. I relied strictly on the information given to me. If I was unclear about a participant's response, I asked for clarification to avoid adding my own interpretations.

## Methodology

### Participant Selection

Participants in this study were elementary school teachers in first grade through fourth grade. These general education teachers had experience working with an RTI program with students in their classroom. Since the selected participants were chosen based on their knowledge of the subject matter, I used a random purposeful sampling strategy (Lodico et al., 2010). Teachers participating in this study were derived from a

purposeful random sampling based on their experiences in RTI. Teachers without RTI experience were not selected for the study.

To determine participant eligibility, an electronic demographic questionnaire was sent via e-mail to approximately 40 general education teachers who teach in first through fifth grades (Appendix B). Each of the three elementary schools contained only two grade levels. The first school housed kindergarten and first grade, the second school second and third grade and the third school fourth and fifth grade. Each grade level had between six and seven classes. Each teacher's e-mail address was obtained through the district's staff directory located on each school's website. In the email, participants were given a link to the electronic demographic questionnaire created through a Google form. Those who received the e-mail could only access a link to the secure Google form to complete the demographic questionnaire. I received notification when each teacher had completed the demographic questionnaire. Teachers who completed the questionnaire and have implemented RTI were placed in a participant pool. Two teachers from each grade level first through fourth, were taken from a purposeful random sampling, thus the number of participants equaled 10 teachers. This sample size was chosen because it allowed for ample representation for each grade level while keeping the number of participants to a manageable number. If any participants decided not to participate, the next volunteer would have been chosen. All teachers who responded to the demographic questionnaire were notified via alternate e-mail (obtained through the questionnaire) regarding their selection or rejection to participate in the study. Participants were given

two weeks to respond to the demographic questionnaire and they were notified of their selection or rejection a week after the questionnaire deadline.

**Instrumentation**

When conducting a qualitative descriptive case study, the use of multiple sources of evidence increases the construct validity. Construct validity identifies the operational methods for what is being studied in the research (Yin, 2014). To test for construct validity, multiple sources of data were collected though individual interviews with participants and classroom observations. Content validity was established through careful review of the instruments by experts in the field (Rumrill et al., 2011). The instruments in this study refer to the interview questions and observation protocol. To test for content validity and assess the instruments used, I sought the expertise of both a special education teacher and the school guidance counselor. The special education teacher was an expert in differentiation and interventions while the guidance counselor was an expert in RTI because she heads RTI program implementation.

To establish validity during the interviews, the questions focused directly on the descriptive case study topics and provided explanations and personal views from the participants (Yin, 2014). The interview questions used for this study reflected Gagné's four principles and the connection to RTI implementation (Appendix C). Those questions gathered participant's personal views on differentiation of instruction, conditions of learning, results in learning, and sequential instruction. Participants shared their personal views regarding RTI implementation in the classroom. The data collected through teacher interviews revealed positive and negative teachers' experiences with RTI

implementation and exposed possible gaps between RTI implementation and what was implemented in the classroom.

Participants were observed delivering RTI implementation during classroom instruction. To verify validity, the observations took place in real time and in the setting of the case (Yin, 2014). Teachers were observed in their everyday environment. Observations occurred during a regularly scheduled class time in the teacher's classroom with students. The observation protocol used to collect data was formulated using Gagné's events of instruction as a guide (Appendix D). Teachers demonstrated the degree to which RTI implementations were applied in classroom instruction. Demonstration of the Events of Learning in classroom instruction were ranked on a five-point scale, with five showing the strongest evidence and one demonstrating the lowest amount of evidence. I also made additional comments in what I observed during the classroom lesson.

**Procedures for Recruitment, Participation, and Data Collection**

As described in Participant Selection, after taking the demographic survey, selected teachers received an email notifying them of their participation in the study. At that time, educators not selected for the study were also notified. Initial email addresses were obtained through the school district's email directory hosted on the district's website. Alternate email addresses were collected through the demographic survey. All further communications were conducted through the alternative email provided since school district email cannot be considered private or confidential as school district staff may access these accounts without the knowledge or consent of the researcher or

participant. The email contained an attachment with a letter of consent to participate in the study. Participants were instructed to reply to the email with "I consent" if they agreed to participate. Participants were also informed in the email that I would provide hard copies at the interview if the participant would like a hard copy of the consent form. Compensation was provided in the form of a 10-dollar gift card to thank the participants for taking part in the study. If a participant chose to withdraw at any time throughout the study, they still received compensation.

The email also had a link to a Doodle Poll to schedule their interview. Participants had one week to schedule their interview. By using a Doodle Poll, participants had the option of selecting from several interview dates and times that fit my schedule as well as theirs. If the listed dates and times on the poll were not convenient for the participant, I reached out to the participant via email and scheduled a date and time for the interview. As much flexibility was offered as possible to allow for convenient scheduling times. If a participant did not schedule the interview by the one-week deadline, I followed up with a phone call.

Interviews were conducted in a location comfortable to the participant. The time of the interview varied based on participant availability. Interviews were not conducted during instruction times, but occurred during a participant's break period. Some interviews were also conducted before or after school. Creating an atmosphere of comfort helped the participants feel at ease during the interviews and reduced anxiety. The interview settings were in a school setting, such as an empty classroom or in an off-site location, such as the local café or coffee shop. When using an empty classroom, I

posted a Do Not Disturb, Interview in Progress sign on the door. Each interview lasted approximately 45-60 minutes, and the total data collection period took approximately one month. This was ample time to allow for all participants to be interviewed.

Prior to the start of each interview, I discussed with each participant the expectations and purpose of the study as stated in the interview protocol (Table 6). They were also reminded that their responses would be held in strict confidentiality. Participants were reminded that their participation in the interviews was voluntary and will be recorded; however, they can decline to answer questions or cease participation at any time. If a participant decided to cancel their participation, I would select the next participant that submitted their demographic questionnaire and then follow the same procedures for notification and scheduling. Interviews were recorded using an iPad voice recorder, to ensure that my interview notes were accurate. When transcribing, I cross referenced my notes and compared those notes to what the participant said. I also used the digital recording to ensure that I captured all of the participant's responses in my notes and I did not miss any information. Recording also ensured credibility as it provided a reliable source of information. During the interview, participants were asked to expand or clarify information they provided. Table 6 outlines the interview schedule that was followed for all participants.

Table 6

*Interview Protocol*

| Step | Procedure |
|---|---|
| 1 | Introductions of researcher and participant |
| 2 | Discussion of expectations and purpose of the study |
| 3 | Review of confidentiality |
| 4 | Review of recording policies and ability to cancel interview |
| 5 | Participant questions/clarifications |
| 6 | Interview questions given in order |
| 7 | Open for additional participant discussion |
| 9 | Thank the participant for their time |

Once the interviews were completed, the procedure will repeat for scheduling classroom observations. However, instead of sending a Doodle Poll, participants were requested to send several observations times via email. Since I was an outsider going into the world of the case, I may have needed to make special arrangements to observe (Yin, 2014). By requesting several different days and times, I had some flexibility in choosing an appropriate time to observe. Participants had 1 week to respond to the email.

In any study, participants have the right to receive the findings upon completion of the study (Rumrill et al., 2011). Debriefing procedures for this study provided participants with a disclosure of the findings. An exit email was sent to the participants. The email addresses used to conclude the study were the same addresses obtained for the demographic questionnaire in the beginning of the study. The email contained a

summary of the findings along with a note thanking the participant for their willingness to serve in this study.

**Data Analysis Plan**

Data analysis refers to the process of collecting and collating the information gathered to allow the researcher to produce findings from the study (Bogdan & Biklen, 2007). The research questions developed for this study provided a focus for the data collection and helped organize the interview questions. By using the research questions as a framework to guide the interview questions, a connection is made between the framework theory, data collected and the research questions. The interview questions for this study focused on teachers' implementation of RTI and RTI program components.

In qualitative research, it is important for the researcher to avoid any misrepresentation or misunderstanding of the data collected (Yazan, 2015). To avoid misrepresentation, member checking will guarantee validity (Yin, 2002). Often through interview summaries, a member check allows participants the opportunity to check the data or findings provided by the researcher to assure accuracy (Voght, 2005). After each participant completed the interview and classroom observations, I transcribed the digital recordings, notes, and observation protocol checklists. Each participant received the findings from their interview to check for accuracy. The findings were sent via email. By member checking, I ensured that I accurately captured the experiences the teachers shared with me through detailed narrative that supported the themes that emerged. Participants read the findings and commented on any missing or inaccurate information. Teachers had two weeks to review the findings and reply to me via email. Through

member checking, I obtained confirmation that what I interpreted in the data collection was credible (Stake, 1995).

When analyzing data, a descriptive case study begins with a detailed description of an individual, grade level or school, which is then followed by an analysis of the themes uncovered in the coding process (Creswell, 2014). Since the interviews and observations produced a large quantity of descriptive information, the information needed to be organized (Wiersma & Jurs, 2005). I used thematic analysis to identify patterns within the data that related to the research questions (Braun & Clark, 2014). Within the thematic analysis, open, axial, and thematic coding strategies were used to analyze data thematically. Key words or phrases that represented the concepts in the initial review of the data were noted (Lodico et al., 2010). Those key words and phrases that emerged often in the data were noted as possible themes. As I read through my notes and listened to the interviews, I conducted open coding in which I made note of any other emerging themes in the data. Themes were separated into categories and those categories help sort descriptions in the data, which were then physically separated and analyzed (Bogdan & Biklen, 2007).

For this study, I used thematic analysis of the transcriptions and assigning codes without the use of computer software. Since I only interviewed and observed 10 participants, the sample size was small enough so that I could review the data personally without the assistance of a computer program. Based on the coding methods by Creswell (2014), I followed the following steps to code and analyze the data using open, axial, and thematic coding strategies. I first organized the data and compared the notes I took

during the interviews to the digital recordings. Next, all data was reviewed to become familiar with the data and reflect on the information collected. In the next three steps, I began open, axial, and thematic coding strategies. In open coding, data were placed in broad categories and the broken down further into sub categories. In axial coding, similar categories were combined to further reduce the data. Finally, in thematic coding, emergent themes were identified.

Real life situations are usually presented with different perspectives that may not match what a researcher intends to find (Creswell, 2012). Any discrepant information was noted and discussed to add to the credibility of the data. I reviewed the data for any conflicting perspectives and presented them in the data. This contrary evidence supported validity to the information because the participants' accounts become more realistic.

## Trustworthiness

Trustworthiness is necessary in qualitative research because it supports that the findings of the study are credible (Elo, Kääriäinen, Kanste, Pölkki, Utriainen, & Kyngäs, 2014). In qualitative research, strategies to evaluate procedures build upon the credibility of the results (Noble & Smith, 2015). Rigor, integrity, and validity of this study were increased by examining the procedures conducted for evidence of reliability, transferability, dependability, and confirmability.

### Credibility

Throughout the data collection process, the information gathered must demonstrate accuracy through validity (Creswell, 2012). To establish credibility in a

study, internal validity was established. Internal validity examines any threats that would affect the researcher's ability to accurately draw conclusions from the data obtained from the participants (Creswell, 2014). Participants are reliable judges when determining the credibility and validity in a qualitative study (Trochim, 2006). Member checks were utilized to reduce internal validity threats. This procedure ensured credibility because participants reviewed the findings and checked for data accuracy. The findings for each interview were sent to the corresponding participant, via email. Participants checked the findings for accuracy of their data. Teachers had two weeks to review the findings and reply to me via email. If participants agreed to the accuracy of the findings that was presented to them, then it was concluded that the information was credible.

**Transferability**

To determine if the findings in a study have a larger significance, those findings need to be transferable to other contexts (Miles & Huberman, 2014). Transferability presents challenges in qualitative research if external validity is not established. External validity is established if the findings in a study are applicable to other situations or settings (Merriam, 1998). One way to determine transferability was to provide a thick description of the findings. A thick description in qualitative research provides the reader with detailed information describing what has been explored and to what extent within the contexts (Shenton, 2004). In this study, I used a thick description by providing excerpts from transcripts to support the findings, data interpretation, and explanation of the findings. By providing as much detailed information as possible, connections can be made between RTI implementation at this district and possibly other similar districts.

**Dependability**

Dependability in qualitative research is important because it ensures constancy between one researcher's methods as compared to other researchers (Gibbs, 2007). To establish dependability, records of the research provided audit trails in a study. Audit trails are records kept by the researcher in a qualitative study (Brinkmann, 2012). To create my audit trail, I kept notes throughout my research and data collection process. I documented each step in my research in regard to my study. My notes were an accurate description of what I was observing and what I am learning. I made notes of the decisions I made based on participant sampling, ethical concerns, and other questions that may have arisen throughout the study. The audit trail also included the research design and decisions I made when I analyzed the data, including decisions on coding and categorizing the data.

**Confirmability**

In qualitative analysis, confirmability validates that the findings reflect the conditions of the inquiry and the inquirer (Miles & Huberman, 1994). To establish confirmability, I used a reflexive journal to explicitly detail my own assumptions and biases throughout the duration of the study. A reflexive journal documented my experiences as the researcher, including my personal reflections (Anny, 2014). By documenting my experiences, I reflected on my own influences, perceptions, and background knowledge. Describing each step of the study built credibility based on the consistency and insight to verify the processes used throughout the study (Creswell, 2014). By using a reflexive journal, I confirmed the decisions I made throughout the

study and documented justification for those decisions. The journal also documented my values and beliefs to confirm how my background and experiences in the research shaped the direction of the study. A reflexive journal supports justification and validation for other researchers because they can look at the study from a different perspective.

## Ethical Procedures

As a researcher, I abided by ethical research methods and anticipated any issues that may arise throughout the study, especially while collecting data and presenting the results (Creswell, 2012). Following Walden University's policy, I completed the National Institute of Health (NIH) training course, Protecting Human Research participants. By taking this course, I ensured that the research methods used in this study were ethical and provide exemplary protection to the participants. Ethical concerns related to data collection might have included participants refusing to participate or withdraw early from the study. Since I let the participants know that they could withdraw at any time from the study prior to starting the interview, I did not foresee any adverse ethical concerns. If a participant removed him or herself, I would select the next participant that submitted the demographic questionnaire from that grade level and then follow the same procedures for notification and scheduling. To provide fair and ethical treatment of the human participants, I received IRB. Permission to conduct the study was granted by the participating school district.

Participation in this study was strictly voluntary. Participants were made aware of their participation via a letter sent through electronic mail and acknowledged their voluntary participation by a signed consent letter. All collected data were held in the

strictest confidence and participants' identity remained confidential. Storage of confidential participant information was kept in a secure folder on my password-protected computer. Data will be destroyed after five years after the study is completed. At that time, any electronic data will be removed and erased securely from the computer and hard copies of data will be shredded.

## Summary

The central elements of Chapter 3 included the research design, the rationale for the design, the role of the researcher, methodology, data collection, data analysis, trustworthiness, and ethical procedures. The purpose of this qualitative descriptive case study was to explore general education teachers' implementation of RTI in first through fourth grade. Two research questions were designed for this study. If RTI programs are implemented effectively, the results could possibly lead to a reduction in special education referrals. Structured RTI program implementations support classroom teachers to increase student achievement and reduce special education referrals (O'Connor et al., 2013). RTI program implementations were explored through a collection of teachers' experiences based on the components of RTI programs and the perceived effects on students' academic and social functioning.

A purposeful random sampling strategy was used to select participants in this study. Participants were general education, elementary school teachers in first grade through fourth grade. Ten teachers were selected to participate in the study. I abided by ethical research methods and ensured that all data was held in the strictest confidence and

participants' identity remained confidential. IRB approvals and relevant IRB approval number will safeguard the fair and ethical treatment of the participants.

After data collection through interviews, the data were coded and categorized into themes. Discrepant cases were noted and included in the data. Evidence of credibility, transferability, dependability, and confirmability will be established. By using prolonged contact, thick description, audit trails, and a reflexive journal, trustworthiness was achieved.

Based on the information presented in Chapter 3, the following chapter will address the results of the data collected and analyzed. Chapter 4 describes the setting, which included participant demographics and characteristics relevant to the study, as well as data collection and analysis. The chapter also included results from the data and how it addressed each research question. Evidence of trustworthiness will show the credibility, transferability, dependability, and confirmability as described in Chapter 3.

# Chapter 4: Reflections and Conclusions

The purpose of this qualitative descriptive case study was to explore elementary school general education teachers' implementation of RTI programs in first through fourth grade. If RTI programs are implemented effectively, the results could possibly create a reduction in special education referrals. The critical questions in this study were intended to disclose a potential gap between what is found in the research and what is being implemented in elementary school RTI programs. The two research questions developed for this study gathered teachers' experiences on RTI program implementation in their respective schools.

RQ1: How did teachers deliver individualized instruction based on RTI implementation to students?

RQ2: To what extent are teachers implementing the RTI program in an elementary school?

The conceptual framework of this study and the basis for the research questions was Gagné's conditions of learning theory (1985). Gagné suggests that teachers must account for all factors that influence learning when instructing students (Gagné et al., 1988). Gagné's conditions of learning theory was appropriate for this descriptive case study because the RTI focuses on differentiation of instruction that is tailored to each individual learner. The framework supports the research questions because Gagné's theory supports instructional design prior to classroom implementation as well as instructional events in the classroom.

In Chapter 4, I discuss the data collection and analysis procedures throughout the course of the study. I explain the participants and setting, the method in which data were generated, collected, and recorded, and describe any unusual circumstances encountered throughout the data collection process. In Chapter 4 I also explain how thematic analysis and open, axial, and thematic coding strategies were used to analyze the data. In the Results section I address each research question with data to support each finding. I also provide evidence of trustworthiness, including credibility, transferability, dependability, and confirmability, followed by a summary of the chapter.

## Setting

### Conditions

On September 29, 2017, Walden University's Institutional Review Board approved my application (Approval Number 09-29-17-0334379 which expires on September 28, 2018) to conduct my research study at three elementary schools in a suburban Northeast school district. The following week, I began collecting data through teacher interviews and classroom observations. This data collection resulted in teachers' responses regarding experiences with RTI implementation and provided answers to the research questions.

Early in September, prior to my IRB approval, I learned that the participating district received the New Jersey Tiered System of Support for Early Reading (NJTSS-ER) grant from the New Jersey Department of Education. NJTSS-ER is designed to increase quality professional development, fidelity, and improve reading scores in RTI tiered systems of support. Training will be provided to 60 school districts in New Jersey,

and the district participating in my study was chosen as one of the 60 cohorts. Since my data collection started before any state training was delivered to the participants in the study, the grant should not influence participant experiences in RTI that may affect interpretation of the study results. It is for this reason that I chose to expedite my data collection to collect as much data as possible before the first round of trainings sessions started. It was possible that the information delivered on RTI implementation and interventions could skew the study results. During my data collection period, only administrators, achievement coaches, guidance counselors, and a small group of four teachers participated in one training session and this group did not affect my data.

**Participant Demographics**

To determine participant eligibility, an electronic demographic questionnaire was sent via e-mail to approximately 40 general education teachers who teach in first through fifth grades in the participating school district (Appendix B). Each teacher's e-mail address was obtained through the district's staff directory located on each school's website. In the e-mail, participants were provided a link to the electronic questionnaire created using a Google form. Teachers who completed the questionnaire and who had implemented RTI were placed in a participant pool. Two teachers from first though fourth grades were selected through a purposeful random sampling. Since I did not receive any responses from fifth grade teachers, I randomly selected two additional teachers from the pool of eligible participants to keep the number of participants at 10 teachers. The selection of participants across grade levels contained: first grade, two participants; second grade, three participants; third grade, three participants; and fourth

grade, two participants. The participant number and their years of experience with RTI implementation are presented in Table 7. To ensure confidentiality, grade levels were not matched with the corresponding participant.

Table 7

*Participant Number and Years' Experience*

| Participant | RTI experience |
|---|---|
| 1 | 5+ Years |
| 2 | 1-5 Years |
| 3 | 5+ Years |
| 4 | 5+ Years |
| 5 | 1-5 Years |
| 6 | 1-5 Years |
| 7 | 1-5 Years |
| 8 | 5+ Years |
| 9 | 5+ Years |
| 10 | 5+ Years |

## Data Collection

### Participants

Within 1 week after the survey deadline, all teachers who responded to the demographic questionnaire were notified via alternate e-mail (obtained through the questionnaire) regarding their selection or rejection to participate in the study. The randomly selected 10 participants also received a consent form. To indicate their consent to participate in the study, they were asked to reply to the e-mail with the words, "I consent." Data collection did not begin for any participants who had yet to consent to participate. All 10 participants gave consent with the understanding that participation was confidential and voluntary. If any teacher decided to participate but changed their mind later, the teacher could stop at any time without any recourse. If a participant chose

to end participation, another eligible teacher obtained through the demographic questionnaire would be randomly selected. If a participant chose to withdraw at any time throughout the study, the participant would still receive compensation in the form of a $10 gift card.

## Data Collection

Participation in this study included an interview, a classroom observation, and participant review of the findings. Via e-mail, participants received a link to a Doodle Poll to schedule interviews. If the listed dates and times on the poll were not convenient for the participant, I reached out the participant via e-mail and scheduled a date and time for the interview. Following the interview, I sent participants an e-mail requesting several observation days and times. Based on the results, I was able to schedule classroom observations around my teaching schedule.

Each interview took approximately 45-60 minutes. The time and location of the interviews were left to the discretion of the participant. All participants chose to conduct the interviews in their classrooms or in a quiet room in their school. I followed the interview protocol identified in Chapter 3 for every interview. Interviews were not conducted during classroom times but either after school or during a break period. A "Do Not Disturb" sign was posted on the door to limit interruptions during the interview. With participant permission, interviews were digitally recorded using a voice recorder on my iPad while I also typed the information on my personal, password-protected computer. The digital recordings were transferred to my personal computer and deleted from my iPad. When transcribing, I cross-referenced my notes to the participant's

recording so that my notes accurately reflected what the participant stated in the interview, and my own biases where not reflected in the data. The digital recording also helped me to capture all of the participant's responses in my notes so that I did not miss any information.

Classroom observations lasted between 45-60 minutes. The time and subject being taught were left to the discretion of the participant. Teachers were observed during a regularly scheduled class time in the teacher's classroom. I chose to extend the observation times to reduce the Hawthorne Effect. The Hawthorne Effect can occur when a participant's behavior is changed because they know that they are being watched or studied (Oswald, Sherratt, & Smith, 2014). With an extended observation period, I was assured that the participants' behavior was consistent and did not change. Because students were in the room, observations were not recorded. Observations were solely conducted on the teacher delivering instruction, not on the students. During classroom observation, teachers inherently demonstrated the degree to which RTI implementations were being applied. The observation protocol used to collect data was formulated using Gagné's events of instruction as a guide (Appendix D) and to help me focus only on the teacher's instruction.

**Variations in Data Collection**

There were no variations in the actual data collection from the data collection plan presented in Chapter 3. However, I did have to make two adjustments to the participant pool and the observation scheduling. I did not have any participant volunteers from fifth grade. To compensate for this variation, I randomly selected two additional teachers

from the pool of eligible participants to keep the number of participants to 10 teachers. One teacher from second grade and one teacher from third grade were selected. This increased the number of participants in the second and third grades from two participants to three. Additionally, I had difficulty scheduling the classroom observations because of conflicts between my teaching schedule and the schedule of the participants. To overcome this hurdle, I took a personal day to observe the teachers whose classroom schedules did not fit with my lunch or break times.

### Unusual Circumstances in Data Collection

The only unusual circumstance I encountered during the data collection process was the difficulty of keeping participant confidentiality when visiting different schools and classrooms. For security purposes, I had to sign in at each school's main office, state my reason for being there, and identify the teacher I was meeting. To protect confidentiality, I asked the office staff if I could only identify the grade level of the teacher I was meeting. When I signed in, I only documented the reason for my visit as a meeting. This was acceptable to the office staff, and I did not have to divulge the teacher's name.

## Data Analysis

### Interviews

Thematic analysis was used to analyze the data with open, axial, and thematic coding strategies. Since I only interviewed and observed 10 participants, the sample size was small enough so that I could review the data personally without the assistance of a

computer program. Based on the qualitative analysis methods by Creswell (2014), I followed the following steps to code and provide a thematic analysis the data.

- Step 1: I organized the data collected by transcribing the interviews based on the digital recordings and the notes I took throughout the interview. I compared the notes and recording to make sure that I did not miss any information shared during the interview in my notes.
- Step 2: I reviewed the data to become familiar with what the participants were trying to convey and to provide an overall reflection on the information presented. According to Creswell (2014), taking notes on overall impressions of the data can help shape ideas about the data presented. My thoughts were recorded in the reflexive journal.
- Step 3: In this phase of the data collection, open coding segmented the data into broad categories (Creswell, 2012). This process was done in Microsoft Word. Each color was coded and given a category title. The data were then sorted in a Microsoft Excel spreadsheet with each column containing a separate code. The color-coded data were placed under the matching column. Within these broad categories, subcategories were created to provide more detail within the broad category.
- Step 4: The next step in the thematic analysis used axial coding to relate the categories developed during open coding (Creswell, 2012). Further axial coding was conducted to confirm and explore the concepts and categories (Miles & Huberman, 1994). Categories that were similar in nature required

further reduction of the data and merged within one category. For example, the code "parent support" and "needed materials" were combined under the code of "support."

- Step 5: Using thematic coding, I then looked for the interrelationships that emerged from the categories developed during axial coding (Creswell, 2012). Through this analysis, emergent themes were identified. Description involves reducing the information to develop a theme (Creswell, 2014). I examined each of the codes and generated the themes that appeared to encapsulate the major findings from the data.

Once thematic data analysis was completed, participants were asked to provide a member check to review the findings. Member checking is considered an important process in the credibility of a qualitative study (Rumrill et al., 2011). To complete the member check, participants received the results of participant data to analyze via email. Participants were given 1 week to review the findings for accuracy of their data. As a researcher, member checking helped me to include the voices of the participants in the analysis and interpretation of the data (Anney, 2014). Participants replied to the email with any additional comments or clarifications, or to ensure that the information was presented correctly. Only two participants added additional information to their findings and those data were inserted into the findings.

**Observations**

Research question two focused on the extent to which teachers implemented the RTI program in their elementary school. I chose to conduct classroom observations to

provide evidence of implementation. I created an observation protocol to use as a tool to record my observations. This single page sheet contained one column with each of Gagne's Events of Learning, a column for the evidence score, and a third column to note my observations and comments. The third column contained my descriptive notes, observed dialogue, a description of the setting, and accounts of the events and activities (Creswell, 2014). Since the classroom observations were framed around on Gagne's Events of Learning, those observations focused on what makes learning possible based on processes influenced by external events (Gagné, 1988). The observation elements were directed at RTI versus regular instruction based on the literature pertaining to each tier of instruction on an MTSS. Since I did not have access to the RTI plans for each student, I chose to conduct my observations based on the interventions I observed the teacher delivering. When I observed a tiered intervention, I matched that intervention with the Event of Learning. Since I did not have information on the district's tiered program, I used the information in Tables 4 and 5 as examples of tiered interventions. As each teacher showed an Event of Learning through an example of tiered support, I tallied that event. Once all of the observations were complete, I averaged all of the tallies and generated the final score on a 1-5 Likert scale that demonstrated the Level of Frequency the event was used.

To analyze the data collected through the classroom observations, thematic analysis was also used to analyze the data with open, axial, and coding strategies. I coded the data by highlighting similar pieces of information in different colors within the observation protocol form. This process was done Microsoft Word. Each color was

coded, given a category title, and sorted in a Microsoft Excel spreadsheet with each column containing a separate code. Further axial coding was conducted to further confirm and explore the concepts and categories (Miles & Huberman, 1994). Categories that were similar in nature required further reduction of the data and merged within one category. Finally, after creating the spreadsheet with the coded data, I analyzed possible themes that emerged from the data by generating a description. Description involves reducing the information to develop a theme (Creswell, 2014). I examined each of the codes and generated the themes that appeared to encapsulate the major findings from the data. The data were collated under each event of learning and then themes were extracted from each event. Themes emerged based on patterns and relationships among the categories.

Table 8

*Events of Learning and Practices*

| Events of learning | Practices |
|---|---|
| Gain attention | Use of technology |
| Informing learner of the objective | Posted objectives |
| Stimulating recall of prerequisite learning | Use of questioning |
| Presenting the stimulus material<br>Provide learning guidance | Showed variety of examples |
| Eliciting performance | Demonstrate through performance |
| Providing feedback about performance correctness | Use of verbal/nonverbal feedback |
| Assessing the performance | Use of formative assessment |
| Enhancing retention and transfer | Independent student work |

**Discrepant Cases**

Different themes that may not match what I intended to find were noted throughout the data collection process. This discrepant information adds to the credibility of the data (Creswell, 2012). All participant perspectives are important in qualitative research and all data were included during data analysis. However, during the interviews and observation, no discrepant data were found.

## Results

**Interview Results**

Thematic coding analysis was used to analyze the data collected in the study. I conducted open coding in which I made note broad categories and subcategories. Axial

coding related the categories while thematic coding explored the categories for patterns and relationships from the axial codes. Three themes emerged from the thematic analysis: Challenges in RTI Implementation in the Classroom Teachers, Teachers' Knowledge of RTI implementation, and Use of Data and Assessments to plan RTI Implementation in the Classroom. The following analysis provides data that supports each finding as evidence from the data.

RQ1: How are teachers delivering individualized instruction based on RTI implementation to students?

**Theme 1: Challenges in RTI implementation in the classroom.** When implementing RTI programs in the classroom, the participants shared several barriers they have encountered. Some of these barriers include lack of time, limited parent participation as discussed earlier, scheduling constraints, and lack of materials. Lack of time and limited materials were the greatest barriers expressed by all of the participants. 90% of participants expressed a lack of time to prepare and implement RTI interventions and 80% of the participants stated that they need access to more materials to implement interventions. Participants expressed that an obstacle to RTI implementation was often in inaccessibility to external resources.

As evidenced by the participants, lack of time was an obstacle. According to Participant 1, "Time is a big one. Any time there is a suggestion put out that includes creating something for an intervention, my thought is-when am I supposed to do this?" Additionally, Participant 7 stated that more "time is needed to do all of the little things for each student with only one adult in the classroom." Another weakness presented in

the data was the lack of preparation time teachers receive for paperwork, meetings, and professional development. Since teachers are constantly documenting student progress and filling out reports, it is difficult to find time during the day to complete the necessary paperwork. Participant 3 stated, "Because we are always getting new referrals, it would be helpful to have a heads up to give us time to collect data and fill out paperwork." In addition, Participant 1 added that "There is a lot of prep work to gather documentation for the meetings." There also seems to be a lack of teacher training in RTI interventions according to Participant 6. "I don't feel that we were trained in any sort of way. It's what we learn from teachers and others, no school or district initiative as to the process of the program."

Limited materials and resources created a barrier to implementation. Participant 6 stated: "The RTI plan has suggestions, but not materials. I am on my own for that." Additionally, Participant 6 suggested that "it would be beneficial for the teacher from the previous year to attach the materials used." Another suggestion was to create an area for teachers as a resource for RTI materials instead of having to create everything or borrow from other teachers. Participant 8 added, "I am constantly creating materials. I wish I had more books, more manipulatives and things that I didn't have to hunt for." Participant 3 stated that RTI programs need "more funding. Lots of times there are things that are mentioned that can help a student, such as a yoga ball to sit on or pencil grips, but we need more money to support those accommodations." Additionally, Participant 5 reported that "I beg, borrow, and steal materials that I need for my students. If you have a classroom with low level students, you should be supplied with classroom materials."

A maintained library of previous RTI materials developed to implement RTI suggestions would eliminate the lack of materials barrier.

Another barrier expressed by many teachers is that the reading specialist and basic skills teachers often get pulled from their teaching assignments to cover other classes when there is no substitute teacher available. Participant 9 stated, "The reading specialist comes into my room, but she has been pulled for so many other different things so she isn't consistently in the room. She is often pulled at the last minute and that affects our lesson planned for that day." Half of the participants expressed a level of frustration with the frequency that specialists are removed from the classroom. Teachers would like additional support in the form of materials, extra support in the classroom such as a paraprofessional or classroom aide, funding for supplies, time to collaborate with specialists, and professional development on RTI. Consistent support in the classroom would assist in fluid RTI implementations.

Lack of parent participation was reported as a common weakness to successful RTI implementation. Teachers expressed their frustration with the missing parental component in the RTI team. It was reported that parents are invited to all RTI meetings but the majority of them rarely attend. Participant 8 stated, "Many parents don't get involved or attend the meetings because they are working. Parents are given work to do outside of school to help their kid and support is not always there." This was reported as a frustration because according to Participant 3. "When parents don't attend meetings, you lose the communication. I have parents that don't show up for meetings and you are losing the opportunity to make a connection between school and home." The absence of

parent support is also felt in the classroom. Participant 1 stated that "Parents have their part in it too, and they don't do what they are supposed to do at home to help meet the needs of the kids."

Teachers shared several strengths in RTI implementation. A strength noted among most teachers was the support received from academic specialists such as the reading specialist and basic skills instructor. Participant 8 stated, "We get extra support from the reading specialist and basic skills teacher." It was also stated by Participant 4 that "you get feedback from other teachers and you get their support." Another area of strength was in the RTI team meetings. Participant 1 stated, "There are so many of us involved in the meetings and everyone has such great ideas." In addition, it was noted by Participant 6 that the team used all resources available to help a student. "The team is good about getting other expert opinions from therapists, reading specialist, etc., to help the students." Collaboration with other teachers was also noted as an area of strength among teachers. As evidence of support, Participant 1 stated: "The guidance counselor comes in and checks up on things. We rely on the staff and share ideas. We can bridge from one year to the other to get information from other teachers from the previous year."

All participants stated that RTI meetings are managed by the school's guidance counselor. Participant 33 stated that "The guidance counselor runs the meetings, books the meetings, and makes appointments." During most interviews, in regard to the role of the principal in RTI meetings, nine teachers stated that the principal usually attends. Not one participant commented on how the hierarchy of leadership is determined. Everyone knows who is in charge, but no one knows why. Participant 9 stated that leadership is

"just understood. The guidance counselor is the one who organizes and runs the meetings and the principal sits in on the meetings."

While incorporating interventions in an RTI plan is essential to help students who are struggling in school, many teachers also felt that the interventions posed a weakness in the system. The number of interventions and the types of interventions were found to be an obstacle as opposed to being helpful. Participant 2 stated that "There are so many interventions listed and it is difficult to put them all in place." In addition, Participant 1 added that "Sometimes suggestions are made that aren't realistic. That gets to be frustrating. It sounds great but it's not going to work." Teachers find applying all the suggested interventions as difficult. According to Participant 5, "It is difficult to ensure that all students are receiving all of what RTI paperwork suggests and mandates when there are so many different strategies listed."

Furthermore, the number of students in a class also posed a challenge when delivering interventions in the classroom. As stated by Participant 2, "When you have so many children in one room and they all have accommodations, it's just not practical and interventions are hard to follow because of the amount of kids there are." For example, Participant 10 expressed that nine students receive preferential seating as an intervention and that made up almost half of the class. "Because there are so many students, I feel like I can't give my students everything they need all the time. They need to be spread out into different classes." In addition, because of the large number of students receiving RTI interventions in one room, teachers are spending vast amounts of time outside of the classroom attending RTI meetings. Participant 1 stated that "If you have a class with a

lot of kids in need, you spend an exorbitant amount of time in meetings and you are not teaching your kids."

**Theme 2: Teachers' knowledge of RTI implementation.** All participants did not know the tiers implemented in their RTI program. The most common answer was "I don't know" or "I have never heard them use the word tier before." An interesting response to this question was from Participant 9. "I have always been told that students are receiving RTI, but I have never been exposed to tiers."

Despite not having a formal tiered system in place, teachers shared a variety of methods that they use to differentiate instruction in the classroom. These methods included small group instruction, flexible grouping, station teaching, and one-on-one instruction, and various technologies. This demonstrates a variety of methods to support individualized learning. Every teacher mentioned the use of small group instruction in their lessons. Participant 4 stated, "I do a lot of small group and one on one instruction. I use different materials, teaching the same objective but giving instruction on their level." All of the strategies shared focus on giving students individual instruction. Participant 7 shared that "I keep things different for everyone." Additionally, Participant 5 remarked: "Based on the data and observation, I try to work in small groups to see what students need, providing interactive activities and mnemonic devices, to try and make learning fun and engaging. The content is difficult and I ensure they are still learning the curriculum in a fun and engaging way that meets their needs." Through small group instruction, teachers were able to support individualized learning and meet the needs of each student.

The participants used technology in a variety of contexts to help students learn based on individual needs. The different technologies the participants stated included iPads, SMART Boards and Activ Boards, computer software that differentiates based on student need, and videos. The technology participants used helped to hone in on individual skills, both in school and at home. As per Participant 2, "technology is incorporated into my class and the students are allowed to bring their iPads home to practice and share with their families." By incorporating technology in lessons, individual needs can be met and work is differentiated to each student.

**Theme 3: Use of data and assessments to plan RTI implementation in the classroom.** Early identification and early dissemination of paperwork were also noted as strength by teachers. Paperwork is given to teachers early in the year so teachers can identify those students in the RTI program and interventions can begin immediately. Participant 3 stated, "I like getting an action plan at the beginning of the year for students who are already involved in RTI so you can see what has worked and what hasn't."

The use of data is an area of strength. Teachers commented on the common district assessments and how they are used to determine differentiation of instruction and how data from those assessments drives decisions made for each student. The common district assessments include Star Renaissance, Star Math, Accelerated Math, Developmental Reading Assessment (DRA), Smarty Ants, and Achieve 3000.

All participants mentioned the above assessments are used as a benchmark to identify students eligible for RTI and also to determine needed RTI interventions during RTI meetings. Data is also used for ongoing formative assessment to gauge instruction

throughout the year in between RTI meetings. As stated by Participant 1: "We sit and look at what works and what doesn't work. We use the data to determine if you continue or try something new." Participant 3 also noted additional assessments used in the classroom to determine what student need on a daily basis to guide instruction. "Every day I am assessing my students to see what they need. Not everyone needs the same thing." These assessments included running records, guided reading groups, student conferences, portfolios, anecdotal records, tests, quizzes, formative assessment techniques, fluency passages, and writing samples. Participant 9 commented on data usage stating that data are used "to level my students" and to determine "which kids need more support and more accommodations and data provides information so I can plan out what is next. I know what to teach and how to teach it." As per Participant 3, "A lot of what we do in the beginning of the year is giving baseline assessments. The first marking period is used to do assessment to see where the students fall and then we take it from there." Participant 1 stated: "I will cover every lesson, but how deep and how long will be determined by the assessment."

Sequential learning was an area of strength used in RTI implementation. Teachers noted that sequential learning was led by a specific program, curriculum, standards, or individual student need. Participant 5 stated, "I build upon their prior knowledge and tailor lessons and activities based on what they might need." Two Participants noted that sequential learning is also driven by the curriculum. Participant 9 stated, "We follow the curriculum and we know the sequence of what students need for reading and writing. It's what we have come up with for ourselves. I know the kids and

I'll pull them individually and give them what they need." Additionally, Participant 4 stated, "I try to follow the scope and sequence and go by the standards. Then I go down or up and instruct as my students need it." All participants noted that sequential learning is also determined by the data that is collected based on the assessments given.

RQ2: To what extent are teachers implementing the RTI program in an elementary school?

**Observation results.** The observation protocol used to collect data was formulated using Gagné's Events of Instruction as a guide (Appendix D) and answered research question 2. Teachers demonstrated the degree to which RTI implementations were applied during classroom instruction. As each teacher showed an Event of Learning through an example of tiered support, I tallied that event. Once all of the observations were completed, I totaled then averaged all of the tallies and generated the final score on a 1-5 Likert scale that demonstrated the Level of Frequency the event was used. A 5 showed the strongest frequency and a 1 demonstrated no frequency at all. The narratives and tables below reflect each Event of Learning and observations in the classroom that supports the event.

The use of gaining attention as an instructional event of learning incorporates techniques where the instructor commands the attention of the learner (Gagné et al., 1988). Attention can be gained through a changing of stimulus or appealing to the learner's interest. In every observation, a form of technology was used to gain students' attention during a lesson. All classrooms had an interactive whiteboard, such as a SMARTBoard or ActiveBoard, where information was presented. In the first and second

grades, teachers used technology in the form of iPads, and in third and fourth grade, students used Chromebooks. It was observed that the technology used in the classroom held the students' interest in the lesson and kept them engaged and focused on the information presented.

Table 9

*Events of Learning: Gain Attention*

| Event of learning | Level of frequency | Observations |
|---|---|---|
| Gain attention | 4.7 | - iPads "Show me the letter on your iPad"<br>-Student Chromebooks<br>-Demonstration on SMART Board or Activboard (video, game, pictures)<br>-Brain Pop Jr. |

Informing the learner of the objective is an instructional event of learning that helps the learner know what is to be expected and accomplished by the end of the lesson (Gagné et al., 1988). Teachers should never assume that students know the lesson objective, but rather communicate expectations to help the learner stay on target. The purpose of stating lesson objectives is to guide the student to know when they have learned the material. In every classroom observed, all participants had the lesson objectives posted in the room in an area visible to the students. These objectives were in student friendly language to help students easily understand the objectives for each lesson. Teachers referred to the lesson objectives either prior to the lesson or during the lesson.

Table 10

*Events of Learning: Informing the Learner of the Objective*

| Event of learning | Level of frequency | Observations |
|---|---|---|
| Informing the learner of the objective | 5 | -All teachers observed had lesson objectives posted in the classroom that could be easily viewed by students.<br>-"Today we are going to talk about reading and writing numbers." |

When students learn new information, it is often the combination of old and new ideas. The use of stimulating recall of prerequisite learned skills helps students apply what they know with a new skill they are learning (Gagné et al., 1988). An effective use of this event is through questioning. When students are posed with a question based on previously learned material, their accessibility to recalled prior knowledge is heightened. All teachers were observed demonstrating this event. Teachers either posed a question based on a previous lesson, referred students to materials used on a prior day, or asked probing questions based on experiences related to the topic. Culminating prior knowledge with new material helps students learn and retain the information presented (Gagné et al., 1988).

Table 11

*Events of Learning: Stimulating Recall of Prerequisite Learning*

| Event of learning | Level of frequency | Observations |
|---|---|---|
| Stimulating recall of prerequisite learning | 5 | - "Who can give me an example of a consonant?"<br>- "Come to the carpet if your table is an even number."<br>- "When was there a time when you protested something?"<br>- "Do you remember the hook from yesterday? Today we are going to figure out what the hook is."<br>- "Who can raise their hand and tell me what we have been learning about?"<br>-Teacher referred back to a book that was read earlier in the year.<br>- "What reading strategy can you use to read the number word?"<br>"Remember the clue that will help you to spell the word." |

By presenting the stimulus material, importance is placed on the appropriate stimulus that reflects what is to be learned (Gagné et al., 1988). This type of performance allows for the learner to select the important when emphasis is placed on the features presented. Emphasis may be in the text, such as italics or bold print or pictures and diagrams. However the stimulus is presented, it should be through the use of a variety of examples. Teachers were observed using a variety of examples in their lessons. In addition to the technology used that also gained attention, teachers used videos, manipulatives such as mathematics counters and letter charts, anchor charts, and verbal examples. The bold colors, pictures and graphs, and voice intonation and inflection helped students discern the important information presented.

Table 12

*Events of Learning: Presenting the Stimulus Material*

| Event of learning | Level of frequency | Observations |
|---|---|---|
| Presenting the stimulus material | 4.6 | - SMART board<br>-Anchor charts, chart paper<br>-iPad<br>-Verbal examples<br>-Videos<br>-Manipulatives<br>-Game<br>-Dry erase boards |

The use of providing learning guidance is an event of learning that does not tell the student the answer but helps lead them to learning the information (Gagné et al., 1988). Based on each learner, the amount of guidance provided is altered to meet individual needs. Some students may require more guidance while others may not need as much. If students learn the information too quickly, guidance may need to decrease; however, limited guidance may cause frustration. Throughout the classroom observations, teachers demonstrated guidance through the use of showing examples. These examples were presented visually and verbally through a variety of classroom activities or different teaching strategies.

Table 13

*Events of Learning: Provide Learning Guidance*

| Event of learning | Level of frequency | Observations |
|---|---|---|
| Providing learning guidance | 4.7 | - "Mirror with words." Teacher talks and the students repeat.<br>- "Watch my mouth, 'p', repeat the sound."<br>-Teacher showed an example on the board and students followed the example.<br>-Teacher used an anchor chart to demonstrate writing examples.<br>-Demonstration of how to solve the mathematics problem on the SMART Board.<br>-Teacher says the sentence, pounds the sentence out with her fist, and writes the sentence. Students repeat. |

In addition to providing learner guidance through showing examples, another event of learning is also eliciting performance. After receiving an ample amount of learner guidance, students should demonstrate what they have learned (Gagné et al., 1988). This involves the student showing what they learned or the work they finished. Students demonstrated their learning through independent classwork or performance of the task while teachers monitored the students' performance.

Table 14

*Events of Learning: Eliciting Performance*

| Event of learning | Level of frequency | Observations |
|---|---|---|
| Eliciting performance | 4.6 | -Sharing performance with the class, "Can I show the class what you wrote?"<br>-Writing words on the iPad, showing them to the teacher<br>-Constantly monitoring while students are working to check that students are on task<br>-Students completed a workbook page that continued on the lesson learned<br>-Teacher used two hula hoops and counters to demonstrate multiplication |

After performance of a task, teachers should provide feedback about performance correctness (Gagné et al., 1988). This event of learning gives the learner confirmation to the correctness of their work. This type of response can be delivered in different ways, such as verbally or nonverbally as in a nod or smile. Teachers used both verbal and nonverbal feedback during classroom observations. Most feedback was delivered verbally, but teachers also gave nonverbal feedback in the form of a smile, nod, or high five.

Table 15

*Events of Learning: Providing Feedback about Performance Correctness*

| Event of learning | Level of frequency | Observations |
|---|---|---|
| Providing feedback about performance | 5 | -Practice spelling test: teacher walked around the room and provided verbal feedback with suggestions or comments<br>-Checked journals individually with students and provided feedback if information was missing<br>- "You have all of your work with your labels on your answers. Nice work!"<br>- "That's a good problem-solving strategy."<br>- "I like how you spotted something with the plural noun. What did you change?"<br>- "Remember to slow down when you read. Use your finger to help track your words." |

Assessing the performance of the learner is the event of learning that determines if the desired outcomes have occurred (Gagné et al., 1988). Performance is based on the learning objective and should not be based on a single example, but rather observed through several performances that demonstrate understanding. Teachers used a variety of formative assessment strategies, or informal assessments, to determine if learning occurred from the lessons presented. Assessments included exit tickets and observations that demonstrated student learning.

Table 16

*Events of Learning: Assessing the Performance*

| Event of Learning | Level of frequency | Observations |
|---|---|---|
| Assessing the performance | 5 | -In small groups, students worked with the teacher as she checked for correctness and provided additional feedback if needed<br>-Thumbs up, thumbs down if you know the answer<br>-Exit ticket with QR code<br>-"Build your cube tower and whisper talk. I'm going to walk around and listen to you."<br>-"Put your finger on your nose when you solved the problem. I will come around and check."<br>-Four corners: The teacher gives the students a question and the students go to the appropriate corner with the answer.<br>-Teacher walks around the room and listens to children as they read. Teacher takes notes and comments in grade book to assess students. |

The last event of learning is enhancing retention and transfer, which is used to demonstrate a student's recall of information and to the degree in which the information was retained (Gagné et al., 1988). Among all the participants, retention and transfer was demonstrated in the form of individual work. This work was either as seatwork, such as a worksheet or workbook page, or a more hands-on activity that could be measured to gauge retention. Evidence of how learning was retained is shown in the examples in Table 17.

Table 17

*Events of Learning: Enhancing Retention and Transfer*

| Event of learning | Level of frequency | Observations |
|---|---|---|
| Enhancing retention and transfer | 4.8 | -Word problems were given after a review lesson on multiplication facts<br>-After learning the letter sound, students spelled words with that sound<br>-Students use manipulatives to complete workbook page<br>-Work in learning centers<br>-Students spelled the word learned in a dictation sentence. |

## Evidence of Trustworthiness

Throughout this study, several procedures were employed to add credibility. Those procedures were conducted for evidence of credibility, transferability, dependability, and confirmability. Trustworthiness is necessary in qualitative research because it supports that the findings of the study are credible (Elo et al., 2014). The strategies used to build upon the credibility of the results included member checks, a thick description of the results, audit trails, and a reflexive journal.

### Credibility

By conducting a member check, participants were given the opportunity to provide feedback to ensure accuracy of their data (Koelsch, 2013). After an analysis of the data, a two-page summary of the findings was sent to each participant via email. The participants had 1 week to check the findings for accuracy of their data and reply to the email. All teachers verified accuracy of their data in the findings. Member checking is used to ensure credibility and internal validity because I included their input in the data

analysis and interpretation of the study (Anney, 2014). There were no adjustments or changes to the credibility strategy stated in Chapter 3.

**Transferability**

External validity is established if the findings in a study are applicable to other situations or settings (Merriam, 1998). To determine transferability in this study, I provided a thick description of the findings to determine if the findings of the study have a larger significance and are transferable to other contexts (Miles & Huberman, 2014). A thick description in qualitative research provides detailed information describing what has been explored and to what extent within each context (Shenton, 2004). For this study, I applied a thick description of the findings by providing excerpts from transcripts to support the findings, data interpretation, and explanation of the findings. By providing information of the context, participants, protocol, and resources used to conduct interviews; other audiences can have an understanding of the phenomenon that will allow them to transfer the findings to their settings. There were no adjustments or changes to the transferability strategy stated in Chapter 3.

**Dependability**

Dependability in a study is important because it ensures constancy between one researcher's methods as compared to other researchers (Gibbs, 2007). To establish dependability in this qualitative descriptive case study, I kept records of the research through the use of audit trails (Brinkmann, 2012). I created my audit trail by keeping notes throughout my research and data collection process. Each step in my research was documented and my notes became an accurate description of what I observed and learned

throughout the process. I also included my thoughts, feelings, and other personal information so I when I was analyzing the data, I could ensure that my own biases and feelings were not reflected in the thoughts and feelings of others. I also made notes on any concerns I had during the data collection processes, such as confidentiality of the participants. For example, one entry in my audit journal reflected the school check-in process.

> Today I conducted my first interview. Upon entering the school, I had to sign in as a guest, write down my reason for visiting and indicate the teacher who I was meeting with. I wrote down my name and my reason was for a meeting. I asked the secretary if I could replace the teacher name with just the grade level of the teacher for confidentiality reasons. She indicated that just a grade level would be fine. I will be using this same procedure when visiting the other schools. If I encounter any resistance from any school, I will either speak to the principal or cancel the interview until confidentially can be established.

By indicating experiences such as this, I was able to provide consistency throughout the data collection process. There were no adjustments or changes to the dependability strategy stated in Chapter 3.

**Confirmability**

In additional to an audit trail, I also kept a reflexive journal to document my experiences as a researcher, including my own personal reflections (Anny, 2014). Through documentation of my experiences, I reflected on my own influences, perceptions, and background knowledge. By describing each step of the study, I built

credibility based consistency and insight to verify the process (Creswell, 2014). The journal also documented my values and beliefs to confirm how my background and experiences in the research shaped the direction of the study. Although this journal had personal reflections, one such entry was regarding the teacher observations.

> After conducting the teacher interviews, I knew that the observations would validate the expertise and knowledge the teachers possessed on applying interventions in the classroom. I was impressed by the dedication the teachers have toward helping their students experience success in the classroom. The teachers certainly go above and beyond (such as making and finding materials listed in the RTI plan when they are not readily available in the school and district). I am anxious to see this in action during the classroom observations.

A reflexive journal supports justification and validation for other researchers because they can look at the study from a different perspective. There were no adjustments or changes to the confirmability strategy stated in Chapter 3.

## Summary

From the data collected through interviews and teacher observations in this qualitative descriptive case study, I extracted three themes from the data. These themes were: Challenges in RTI Implementation in the Classroom, Teachers' Knowledge of RTI implementation, and Use of Data and Assessments to plan RTI Implementation in the Classroom. Classroom observations also revealed the degree to which teachers demonstrated RTI implementations during classroom instruction. The information in Chapter 4 included the data collection process and analysis including participant

information, the setting, data collection procedures and protocols, results from data collection, and evidence of trustworthiness. Chapter 5 will present a discussion of the findings. Information will include interpretation of the findings and limitations to the study. Recommendations for further research and the potential impact for positive social change will also be included. A study summary will provide the key essence of the study.

# Chapter 5: Discussion, Conclusions, and Recommendations

The problem in this qualitative descriptive case study was the inconsistency of implementation of RTI programs at three elementary schools in a suburban Northeast school district. When RTI programs do not follow a structured framework, fidelity of implementation can be compromised. Inconsistent procedures and processes could lead to varying results. This may be the cause for a large number of students receiving special education services at the research site. The purpose of this qualitative descriptive case study was to explore elementary school general education teacher's implementation of RTI programs in first through fourth grade. Structured RTI program implementations support classroom teachers to increase student achievement and reduce special education referrals (O'Connor et al., 2013).

The nature of this qualitative descriptive case study was based on qualitative methods that involved an in-depth understanding of RTI program implementation for students at-risk on an elementary school level. Using teacher interviews and classroom observations as data sources, the information gathered was analyzed for emerging themes. In Chapter 5 I discuss an interpretation of the findings with a comparison to literature related to RTI, limitations to the study, recommendations based on the findings, and implications for positive social change.

## Interpretation of the Findings

The research questions developed for this study were intended to disclose a potential gap between what is found in the research and what is being implemented in elementary school RTI programs. The findings in this study will answer the research

questions through a comparison to the research found in literature. Each of the themes was embedded within the two research questions. These themes were: (a) challenges in RTI implementation in the classroom, (b) Teachers' knowledge of RTI implementation, and (c) use of data and assessments to plan RTI Implementation in the classroom. The research questions provided the impetus to gather teachers' experiences on RTI program implementation in their respective schools.

RQ1: How do teachers deliver individualized instruction to students based on RTI implementation?

RQ2: To what extent are teachers implementing the RTI program in an elementary school?

The conceptual framework of this study was based on Gagné's "conditions of learning theory (Gagné, 1985). This theory of learning suggests that teachers must account for all factors that influence learning when instructing students (Gagné et al., 1988). The five assumptions are (a) learning individualized to the learner, (b) learning tracked in phases, (c) learning that affects human development, (d) learning that follows follows a systems approach, and (e) foundational human learning. According to Gagné et al. (1988), effective instruction must be planned with the five basic assumptions. These assumptions showed that learning individual tasks was a foundation for instruction. Based on findings of the study, instructional design was individualized to the learner through RTI classroom implementation, tracked in phases or steps through sequential learning, and affected human development based on individualized needs. However,

based on the assumptions, RTI needs to follow a systems approach in a tiered system, and hold a foundation in human learning through RTI support.

**Findings**

One area in need of support for implementation of the RTI program is the use of a MTSS. Every teacher who was interviewed had no knowledge of what tiers were used when determining interventions in an RTI program. Unfortunately, this lack of knowledge strongly suggests that an MTSS is not in place in the RTI program at the research site. An MTSS allows for an educator to tackle differing levels of intervention specific to each student to address individual student needs (Hunter et al., 2015). Teachers shared their frustrations with the amount of interventions that each student receives according to their RTI plan. There seems to be an issue over the quantity of interventions, rather than the quality. If a tiered system is implemented, students can receive targeted, specific interventions that would address specific needs. Each tier is not finite, but rather creates a continuum of interventions that grow in concentration as students move along the continuum (Toste et al., 2014) with the interventions and support increasing in intensity to assist students as needed (Smith, 2015). The RTI pyramid has three tiers. The first tier of interventions is at the base of the pyramid and the third tier completes the pyramid at the top. The bottom of the pyramid represents the largest population of students who receive tier 1 interventions as compared to those receiving tier 3 interventions. Within the three tiers of support, the most crucial is the first tier because it provides a foundation that the other interventions are built upon. However, when RTI teams fail to provide high-quality interventions in that first tier, it results in

ineffective and disjointed implementations (Abbott et al., 2015). Without the use of an MTSS, there is no continuation of interventions for a student and the determination for a student to get referred for special services is subjective. However, based on a tiered system, students who continually show little academic growth as compared to their peers may be considered for special education services (O'Connor et al., 2013). Gagné's conditions of learning theory is based on a prescription of differentiated instruction to fit each learner's needs. An MTSS follows Gagné's conditions of learning because as a student's need for instructional remediation increases, differentiated instruction continues along an MTSS, increasing in intensity until the top tier is reached (Gilbert et al., 2013).

Through a classroom observation of 10 participants using the observation protocol, I found that the teachers demonstrated evidence of the events of learning in their classroom lessons. The average level of evidence score was 4.82, which shows that the events were frequently used in the classroom and RTI implementation was evident. While a teacher must plan instruction in the classroom deliberately for each learning objective, these events do not necessarily occur in every lesson (Gagné, 1988). For all students, instructional emphasis should be placed on judiciously incorporating instruction and delivery of content to help struggling students reach proficiency (Clarke et al., 2015). Those interventions followed the curriculum and adhered to the state's educational standards. Students need to be exposed to the depth and breadth of the knowledge and skills presented in the curriculum based on the same standards implemented for all students (Wixson & Lipson, 2012). Participants demonstrated evidence of the standards by informing the learner of the objective before every lesson. Every teacher had the

lesson objectives posted visibly in the classroom. Those standards were aligned to the state standards.

During classroom observations, teachers demonstrated a high level of evidence in the events of learning through the materials they used during instruction, despite the lack of support and materials they were given to support RTI Implementation. When asked about supports needed to better implement RTI interventions in the classroom, most participants listed professional development on the RTI process, time to prepare, materials listed in the RTI plan, funding for supplies, and time for collaboration with specialists and peers. It would be beneficial for teachers to receive RTI training because RTI implementation produces favorable outcomes in student achievement with effective teacher preparation (Barrio & Combes, 2015). Professional development training such as workshops, mentoring in the classroom, or turnkey training are beneficial to teachers because learning the specific directions on implementation procedures as well as intervention strategies will help teachers in the classroom (Björn et al., 2016). Furthermore, teacher frustration also increases with limited professional development, support, and limited resources for intervention implementation (Meyer & Behar-Horenstein, 2015). Teacher frustration was evident during the interviews when discussing those supports. With additional supports, effective interventions can be provided to students, and teachers can navigate an RTI program effectively.

Teachers noted that a positive support in the classroom came from the basic skills teacher and the reading specialist. With academic skills support in the classroom, students were able to receive additional support as noted in the RTI plan. Since a

teacher's isolation throughout the RTI process leads to ineffective interventions (Castro-Villarreal et al., 2014), support from academic specialists help deliver more effective interventions. However, teachers expressed frustration because specialists are often pulled to cover other classes when there is a shortage of substitute teachers, leaving the classroom teacher without additional supports. The absence of academic skills support was evident in two out of the 10 classroom observations. Since Gagné's events of learning determine what makes learning possible based on processes influenced by external events (Gagné, 1988), a teacher must plan instruction in the classroom deliberately for each learning objective. However, if a teacher's plans are changed or altered based on last minute changes to support in the room, student learning could be affected.

A weakness found in RTI implementation was the lack of parent involvement in RTI meetings**.** Both parents and teachers share a common goal in school; they both want children to be successful (Howell et al., 2008). Parent participation in RTI implementation plays an important role in a student's success. By forming a collaborative partnership, schools can encourage parents to be a contributing part of the RTI team to ensure academic success. Collaboration is essential to effectively create a partnership between families and schools. Parent involvement not only increases academic achievement but also improves student motivation through improvement of academic self-confidence and increased interest in school (Brown et al., 2014). A lack of parent participation was a common observation by the teachers participating in this study. While parents are invited to attend RTI meetings, the majority of them rarely attend. If

parents attend RTI meetings, they can be given suggestions and strategies on how to help their child at home. However, the ability to connect home and school is lost without parent support. There is a direct correlation between parents who take an active interest in their child and positive academic achievement in school (Núñez et al., 2015). Since all factors that influence learning must be taken into account when instructing students (Gagné et al., 1988), it is important to include family members as a part of the RTI team so that parents can convey valuable information about their child to help form the most appropriate interventions.

During the interviews, teachers did not mention discussion of goals and visions during RTI team meetings. Effective leaders convey objectives to others in the group, collaborate in planning, and provide a vision through communication (Jordan et al., 2013). A shared vision can bring together educators to help each student succeed. This vision should include collaboration with staff members, families, and community (Colorado Department of Education: RTI/PBIS Unit, 2011). Leaders and team members should recognize student achievements, teacher competencies, and successes made throughout the team. Conversations among all team members will help leaders improve weaknesses and recognize strengths. All teachers noted the role of the guidance counselor as the leader in RTI implementation. The guidance counselor was responsible for scheduling and leading the RTI meetings, contacting parents, and documenting the meetings. It was also noted that the guidance counselors provided support to teachers when asked, and teachers felt that they could go to the guidance counselor for assistance with RTI implementation. The leadership of an RTI team requires a continual

commitment to providing team members with ongoing support to help each student succeed and reach their fullest potential. Defining roles and expectations within the group ensures accountability for all members (Grosche & Volpe, 2013). Achievement relies on the establishment of trust between team members. Relationships among collaborative teams are most successful when there is a mutual trust and respect within the shared vision among group members (Wilcox & Angelis, 2012). Most teachers also noted the role of the school principal in the RTI team. The principal usually attended all meetings and provided input.

District assessments were used to determine the decisions made for each student and contained a multitude of assessments. The common assessments noted by the participants were Star Renaissance, Star Math, Accelerated Math, Developmental Reading Assessment, and Smarty Ants, and Achieve 3000. According to Burns and Gibbons (2013), the use of multiple measures in student assessments can support better decision-making when determining individual interventions for students. Through the use of the assessments, the RTI Team is able to determine RTI eligibility and to provide documentation for a student's achievement. These assessments are used for early identification of a student who is at-risk. Through preassessments and progress monitoring, children can be identified as students at risk who need assistance in the early grades and can benefit from the implementation of an RTI program (Catts et al., 2015). During the classroom observation, formative assessments such as running records, guided reading groups, student conferences, portfolios, anecdotal records, tests, quizzes, formative assessment techniques, fluency passages, and writing samples were also noted.

Those formative assessments provided teachers with feedback on what individual students need on a daily basis to guide instruction. Effective RTI systems function on decisions driven by data to determine a student's instructional needs and the intensity of services needed (Reschly, 2014). Those data are used to level students and formulate appropriate accommodations. According Gagné's principles of learning (1988), different instruction yields different results in learning. That instruction is based on the information obtained on a student through assessment and data collection.

## Limitations of the Study

Qualitative data collection can pose limitations because the data are based on narrative feedback from conversations between participants and the researcher. These conversations may inadvertently sway interviewee to give answers they think the researcher wants to hear (Creswell, 2012). Any misinterpretation can result in biased data. To minimize researcher bias, I included all information, did not ignore unwanted statements, and did not embellish answers to achieve anticipated results in the study. Interpretation of the data was objective, not subjective, and I did not interject my own thoughts or perceptions during the interviews or classroom observations. Bias was minimized by conducting member checks, reviewing the recorded sessions, adhering to the interview protocol, and following the observation protocol. By adhering to the protocols, I was able to keep each interview and observation consistent and did so in a neutral manner. By adhering to the protocol and remaining neutral, my own biases were minimized and I did not influence the participants' views which could have affected the data.

Trustworthiness is necessary in qualitative research because it supports that the findings of the study are credible (Elo et al., 2014). However, limitations to trustworthiness were encountered throughout the study. Limitations included participant experience, participant size, and setting of the study. All of the teachers who participated in the study had experience in their school's RTI program. However, each participant had a varying degree of experience. While the criteria of the study required that all teachers have a minimum of one year of experience with RTI, participant experiences still varied. Four teachers had between one and five years' experience, while six teachers had more than five years' experience. Varying degrees of experience may give different opinions on RTI program implementation and alter the degree to which other audiences relate the findings in their own settings. As participant 9 stated in the interview: "A lot of how I differentiation in the classroom comes down to common sense. After doing this for so long, you just know what to do." Not all teachers may have that experience and be able to apply the common sense that Participant 9 discussed. Thus, transferability may be affected.

Findings in a study need to be transferable to other contexts to determine if the findings have a larger significance (Miles & Huberman, 2014). Another limitation resides in the sample size of the participants and the setting of the study. I conducted this study among three elementary schools in one district ranging in grades from first through fifth grade. Only teachers in first through fourth grade participated. The small sample size may reduce the ability to transfer the findings to other settings. Because only 10 participants were used in the study, and the study occurred in a small, suburban district,

audiences in larger districts of different community characteristics, such as urban or rural, may have difficulty transferring the context to their own setting. However, data will still provide insight into RTI implementation in other similar districts.

## Recommendations

Based on the data findings, data analysis, and current literature, several recommendations have been made to improve RTI implementation at the research site. Recommendations include the formation of a tiered system of support, teacher support for RTI implementation, creation of a shared vision, and increased family involvement. The recommendations based on the data are as follows below.

### Multitiered System of Support.

The implementation of a tiered system was a weakness in the data. An MTSS should be created to guide the RTI interventions for students at-risk. As a student's need for instructional remediation increases, differentiated instruction continues along an MTSS, increasing in intensity until the top tier is reached (Gilbert et al., 2013). Tier 1 should incorporate the interventions that most students receive in the general education setting (approximately 80%). Those receiving Tier 1 interventions are at the lowest risk of failing and planned core instruction benefits all children as well (Greenwood et al., 2014). Those interventions may include, but are not limited to preferential seating, visual aids, direct instruction, graphic organizers, and restating or clarifying directions. If students need additional interventions than those given on Tier 1, then they progress to Tier 2. In Tier 2, approximately 10% to 15% of students benefit from more intense interventions in this tier (Reschly, 2014). Second tier interventions occur in conjunction

with continual interventions from Tier 1. Tier 2 interventions may include basic skills or reading specialist interventions, small group instruction, technology as a supplement, and extended time on classwork or assignments. Research supports positive outcomes to interventions in the first two tiers for many students (Fuchs et al., 2014). However, if a student at-risk is still struggling after receiving interventions on the first two tiers, more intense instruction can be given on Tier 3. Students receiving Tier 3 interventions will need long-term intervention (Reschly, 2014). Tier 3 may include special education services or sustained, intense programs such as Orton-Gillingham, Project Read, Touch Math, or Reading Recovery in small group sessions. After receiving these types of intense interventions, students who continually show little academic growth as compared to their peers may be considered for special education services (O'Connor et al., 2013).

During the classroom observations, all tier levels of interventions were observed. Therefore, the RTI program has implementation the interventions on all three tiers, but they are not organized formally into a tiered system. When helping students at-risk, structured support programs that provide flexibility for the learner are most effective (Lemons et al., 2014). By using a tiered system, a student's interventions can be tracked, monitored, and adjusted to meet individual needs. If a student is referred for special services, that referral is justly warranted because all the necessary interventions have been applied and tracked throughout each tier.

**Response to Intervention Support**

Another area of weakness was found in the supports received both in RTI implementation and for RTI implementation. Teachers at the research site received

support in the classroom with the assistance from academic skills teachers. However, that support is inconsistent because the academic skills teachers are often pulled from their regular classroom duties to cover other classrooms when a substitute teacher is not available. This inconsistency in the classroom causes teacher frustration, affects the overall lesson plan for the day, and ultimately affects RTI implementation because interventions are not being met. Administration at the research site should evaluate the substitute teacher coverage issue to eliminate the need for using academic skills teachers as fill-in substitute teachers.

Furthermore, teachers needed materials and resources noted in the RTI implementation to help accommodate all of the interventions listed for each student. Funding for materials, an RTI teacher resource area, and time to create materials would be beneficial for teachers implementing interventions. Additionally, because general education teachers implement and instruct RTI recommendations (Barrio, Lindo, Combes, Hovey, 2015) those teachers may not be as well informed in interventions as compared to special education teachers. The greatest barrier to implementing an effective RTI program is rooted in a lack of teacher training (Castro-Villarreal et al., 2014). Effective and relevant professional development in RTI implementation would help teachers better understand and apply RTI program implementation.

Another area that lacked support was with family involvement in RTI. Parents need to become more involved in the education of their children. Collaboration between schools and family goes across grades, even after the early years of education (Galindo & Sheldon, 2012). If family members are not participating in the RTI process, the school

district needs to research the reason for lack of parent involvement. According to Myers and Meyers (2015), parental involvement is greatest in families where children live in biological families with both parents present and married. Parental involvement is also strongest in homes with a strong economic, human, and social structure (Myers & Myers, 2015). Parent workshops, informational packets in different languages, and flexible meeting times may help reach more parents and encourage participation in RTI meetings.

### Shared Vision

The last area of weakness was found in the district's hierarchy of RTI leadership. The leadership should create a shared vision for the implementation of the district's RTI plan. If one is already formulated, it should be disseminated to all teachers who work within the RTI program. Team leaders must focus on a vision that includes a well-defined plan for the MTSS implemented within the RTI framework. Relationships among collaborative teams are most successful when there is a mutual trust and respect within the shared vision among group members (Wilcox & Angelis, 2012). It is the role of team leaders to build cohesion among group members through trust and respect. Regardless of the role an RTI team leader plays in a school or district, the goals should be standardized. It is the responsibility of the team leader to guide others toward a path of cohesion to create educational opportunities in which every child can succeed.

## Implications

The purpose of this qualitative descriptive case study was to explore elementary school, general education teachers' implementation of RTI programs in first through fourth grade. Data collected from this study allowed me to explore the two research

questions posed in this study and support those questions through the current literature on RTI. The findings of this study revealed both positive and negative components to the current RTI implementation at the research site. Classroom observations showed that teachers demonstrated strong evidence in Gagné's Events of Learning with an overall Likert score of 4.8 and classroom instruction delivered differentiation of instruction that was tailored to each individual learner. However, weaknesses in RTI implementation were found in the structure and support of the RTI program.

This study has the potential to promote positive social change among school districts, administrators, and teachers to ensure that a structured RTI program is implemented for students at-risk. Those students can receive targeted instruction focusing on differentiation tailored to each individual learner. By implementing a structured RTI program, the number of students recommended for special education referrals may decrease, which will leave more students in a general education setting without the need for special services. This will keep a student who is struggling with academics or behaviors in an environment most suitable for his or her learning needs. By studying the experiences of elementary school general education teachers, the problem of inconsistent implementation of RTI programs could be examined in other school districts and lead to stronger RTI programs. Other school districts and administrators can continue their own research based on results from this study and use the data to help implement effective RTI programs in their own schools and district.

## Conclusion

When a child is at risk for failing in school, RTI programs can provide support through individualized interventions. When RTI programs are not implemented with fidelity, the results can adversely lead to an increase in the number of students referred for special education services. The purpose of this qualitative descriptive case study was to explore elementary general education teachers' experiences in first through fourth grade with RTI program implementations. Guided by Gagné's "Conditions of Learning," the research questions in this study determined RTI program implementation the extent that teachers were implementing the RTI program in the classroom. Also, the study showed how those teachers were supported when delivering individualized instruction to students based on RTI implementation. The analysis of teachers' experiences determined the need for an MTSS, increased support for teachers in the classroom, and the need for a shared vision among RTI team members. The results from this study will contribute to social change by helping students at-risk receive the support needed to be successful while reducing unnecessary special education referrals as a result of inconsistent implementation of RTI programs.

Through the data collected from this study, I learned that RTI implementation at the research site has weaknesses in the process, not the product. The teachers who participated in this study are implementing the RTI program with limited resources and supports. However, they are working tirelessly to make sure that students in need of interventions are receiving all the help they can. Those teachers are dedicating their time, money, and resources to help students succeed. To improve RTI implementation, RTI

leaders need to create a shared vision to ensure that one common goal can be achieved. For administrators, the challenge is to support teachers' by providing them with access to a variety of RTI materials, provide consistent supports in the classroom, and encourage family involvement.

Throughout the course of this study, I had the ability to view teachers and teacher practices from a different lens. I saw how dedicated and motivated teachers are toward their students regarding their academic and social success. I witnessed how unstructured programs increase teacher frustration and hinder the ability to give each student what he or she needs to succeed. My journey as a researcher may not have uncovered all of the barriers to successful RTI implementation; however, it is my hope that I may have sparked a fuse that will continue to burn until every child receives the education they so rightly deserve. Every child has the right to an education that helps them grow and foster a love for learning and a feeling of success. If I can make a difference in just one district, school, teacher, or administrator through my research, then I have effectively helped a child reach their fullest potential in school and in life.

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Appendix A: Search Terms

| Term | Description |
|---|---|
| Historical Significance Legislation | Carries the underpinnings for Response to Intervention |
| Multi-Tiered System of Support | Contains three tiers of varying interventions |
| Curriculum and Instruction | Alignment to assessments and interventions to increase student achievement |
| Assessment and Use of Data | Occurs throughout the year to determine student strengths, weaknesses, and progress. |
| Problem-solving Process | Using data, RTI team members work together in making decisions |
| Family and Community Partnership | Families are informed and a part of the RTI of the process |
| Positive School Climate | Behavior interventions are intertwined into the RTI process to build a positive school climate |
| Leadership | Leadership with a clear vision will help establish cohesion and a common goal |
| Positive Behavior Support System | Should be intertwined with academic interventions |
| Implementation | The process by which the interventions are given |

# Appendix B: Participant Demographic Questionnaire

1. Name

2. Home Email Address

3. Home or Cell Phone Number

4. Alternative Email Address *(School district email cannot be considered private or confidential as school district staff may access these accounts without the knowledge or consent of the researcher or participant. Please provide an alternate email for communication for this study.)*

5. School

6. Grade Level
   - 1
   - 2
   - 3
   - 4
   - 5

7. Number of Years' Experience with Response to Intervention (I&RS)
   - 0-less than 1 Year
   - 1-5 Years
   - 5+ Years

8. Would you be interested in voluntarily participating in a research study on teachers' perceptions on Response to Intervention? All participant information is strictly confidential.
   - Yes
   - No

Thank you. You will be contacted with more information regarding the research study.

# Appendix C: Interview Questions

RQ1: To what extent are teachers implementing the RTI program in an elementary school?

- Describe the strengths and weakness in your RTI implementation?
- How is the hierarchy of leadership determined in your RTI program?
- How do you use assessments to determine differentiation of instruction?
- How do data drive the decision-making process?
- Describe how sequential instruction is determined to support student learning.
- What interventions are provided in the first tier for all students in your MTSS program?
- What additional instruction is provided to meet the needs of the students in tier 2 in your MTSS program?
- What additional instruction is provided, how frequently instruction provided, and by whom for students in tier 3 in your MTSS program?

RQ2: How are teachers delivering individualized instruction based on RTI implementation to students?

- How do you differentiate instruction in the classroom?
- What barriers have you encountered when implementing your RTI program?
- What supports do you receive to help implement RTI interventions in the classroom?
- What supports do you need to receive to better implement interventions in the classroom?

# Appendix D: Observation Protocol Checklist

| Events of Learning | Level of Frequency | Observations/Comments |
|---|---|---|
| Gain attention | | |
| Informing learner of the objective | | |
| Stimulating recall of prerequisite learning | | |
| Presenting the stimulus material | | |
| Provide learning guidance | | |
| Eliciting performance | | |
| Providing feedback about performance correctness | | |
| Assessing the performance | | |
| Enhancing retention and transfer | | |

# Appendix E: Permissions

Figure 1.


Figure 2.