Response to Intervention: An Investigation of Training, Perceptions, and Fidelity of Implementation

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Lipscomb University
Approval Page

This Capstone Project, directed and approved by a Juried Review Committee, has been accepted by the Doctor of Education Program of Lipscomb University’s College of Education in partial fulfillment of the requirements for the degree.

Response to Intervention: An Investigation of Training, Perceptions, and Fidelity of Implementation

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RESPONSE TO INTERVENTION

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Doctor of Education

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Acknowledgments

We would like to thank all staff members within our professional networks who volunteered to be participants in our study. We would also like to express our appreciation to Dr. Nikolaus and Dr. Hebert for advising us throughout our Capstone. Additionally, we are grateful for Dr. Wiemers, Dr. Medlock, and Dr. Vetter for their participation on our Juried Review Committee. Furthermore, we would like to acknowledge Kandy Smith and all she has done to aid us in our research. Moreover, we recognize the patience and encouragement of all our friends and family members as we have each completed the requirements to earn a doctorate in education.
Abstract

The authors investigated the extent to which the amount of training in Response to Intervention (RtI) impacts staff members’ perceptions of RtI, how staff members’ perceptions of RtI relate to their fidelity of implementation, and to what degree staff members’ involvement in training influences their fidelity of implementation. A convenience sampling of thirty-eight staff members in Middle Tennessee was surveyed using a questionnaire and interview. Participants in the study worked in elementary and middle schools within a large urban district lacking a well-defined RtI program and a smaller district with a well-defined program. The quantitative analysis revealed that there is no statistically significant relationship between training and teachers’ perceptions of RtI. There is a statistically significant relationship between teachers’ perceptions and fidelity of implementation as well as the amount of training they receive and fidelity of implementation. The strongest relationship found was between teachers’ perceptions of RtI and their fidelity of implementation of RtI. The qualitative analysis revealed that staff member perceptions concerning RtI effectiveness and individual comfort in implementation abilities are motivated by accountability, time, procedures, and training.

The chief recommendations the researchers made to the Tennessee Department of Education are to focus on improving perceptions of RtI and provide adequate training through adding evidence-based intervention suggestions to the state manual, determine how to unite pre-service training for RtI across the state, and create a hierarchy map of new personnel including a state-level RtI coordinator, regional coordinators, state auditors, district-level coaches, and site coaches.
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Chapter 1: Introduction

Within the last decade, education has become a hot button issue on local, national, and international levels. In 2001, the United States Congress passed the No Child Left Behind Act (Elementary and Secondary Education Act, n.d., para. 2). Education in the United States was set center stage upon approval of this legislation. Since the No Child Left Behind Act (NCLB), many other bills have also been passed at the federal and state levels. After the 2001 enactment of NCLB, the Individuals with Disabilities Education Act (IDEA) was reauthorized in 2004 to guarantee a fair education for students with disabilities (“Building the Legacy of IDEA 2004,” n.d., para. 1). All of these laws and acts have come with stipulations, rules, guidelines, and requirements in order to obtain funding for schools. Tennessee’s Department of Education (TDOE) has been charged with ensuring that all of its school districts are meeting each of the federal and state guidelines.

Tennessee responded to the federal requirement of providing students with the remediation necessary for student success by utilizing Response to Intervention (RtI) programs as a means of support. Response to Intervention is a three-tiered approach. The first tier, or Tier I, is a primary intervention level concentrating on high-quality instruction in the general education classroom or whole group setting. Tier II is where struggling students are identified and work in small groups for more guided lessons. Tier III consists of intense, individualized instruction for students who have not responded to Tiers I or II (Tyler & Yzquierdo, n.d.). Response to Intervention programs can increase students’ academic progress in areas identified as lacking appropriate growth. It can also aid in identifying students who qualify for special education services.
Problem and Purpose of Study

School systems across Middle Tennessee are experiencing various results from the use of RtI (V. McDonald, personal communication, August 29, 2012). Staff members responsible for conducting interventions are trained at varying levels. Buy-in to the RtI process among staff members may not be consistent throughout schools and school systems. Response to Intervention is being implemented with conflicting procedures and differing levels of implementation. The purpose of the study was to examine the extent to which the amount of training in RtI impacts staff members’ perceptions of RtI, to determine how staff members’ perceptions of RtI relate to their fidelity of implementation, and to establish to what degree staff members’ involvement in training influences their fidelity of implementation.

Due to Tennessee’s adoption of the Common Core State Standards, guidelines for RtI are being augmented for implementation by July of 2014 (TNCORE, 2013, pp. 6-7). Districts across Tennessee are becoming RtI districts, meaning RtI is a mandated framework and schools are going to be responsible for implementing the program with fidelity. Quantitative data are desired to convey possible effects of training in RtI to staff perceptions of RtI, how those perceptions of RtI impact staff members in their fidelity of implementation of the framework, and to ascertain the concentration of the direct involvement between staff training and their fidelity of implementation of RtI. Qualitative data are necessary to further understand staff perceptions and how they relate to training and implementation.
Significance of Study

This study will have significance for the Tennessee Department of Education as they make decisions regarding the provision of support for further implementation of RtI across the state. Because RtI is designed with guidelines for whole-group teaching in the general education setting as well as interventions for struggling students, this study will affect both general and special education departments. In addition, all school systems across the state of Tennessee will benefit from knowing the extent to which training affects perception, how perception affects implementation, and to what degree training affects implementation. Since RtI is a growing concern across the nation, this research will also be significant for other states determining intervention procedures and policies regarding the special education referral process. Furthermore, the body of literature on this topic will increase.

Research Questions

The research asked the following questions:

1. What impact does the amount of training in RtI have on staff members’ perceptions of RtI?

2. What influence does the perception of RtI have on staff member levels of fidelity of implementation?

3. How does the amount of training in RtI relate to the level of fidelity in which RtI is implemented?
Research Hypotheses

1. There is a significant positive relationship between staff training and perceptions of RtI.
2. There is a significant positive relationship between staff perceptions of RtI and the level of fidelity of implementation.
3. There is a statistically significant positive relationship between the amount of staff training in RtI and the level of fidelity of implementation.

Theoretical Framework

In 1982, the National Research Council questioned the process of placing students in special education. The following items were closely examined in this report: 1) the quality of the general education program, 2) the value of the special education program in producing important outcomes for students, and 3) the accuracy and meaningfulness of the assessment process in the identification of a disability (Heller, Holtzman, & Messick, 1982).

As Ebbert (2011) stated in his research, “A responsiveness to treatment approach has been present in fields such as medicine for decades” (p.1). Ebbert cited Gresham (2007) as noting several parallels between the medical and education fields’ approaches to RtI. First, the intensity of interventions is only increased after the patient does not respond to initial treatments. Second, the RtI approach employs data-based decision making. Third, the data are viewed as signs of overall health of the individual. Fourth, large quantities of data are gathered continuously throughout the intervention process (Ebbert, 2011, p.1).
In more recent years, several pieces of legislation have further propelled the use of RtI across the nation. The No Child Left Behind Act of 2001 has had a significant impact on the increased use of RtI, as it has stressed the use of scientifically based teaching strategies in the general education classroom. In addition, the reauthorization of IDEA in 2004 has further driven the use of RtI, as it required RtI data as a part of a student’s evaluation and stated that the IQ-achievement discrepancy model was no longer required (Ebbert, 2011, pp.2-4).

Although every state and school system has their own RtI plan, most plans are similar in including the following features: 1) scientifically based teaching strategies in the general education classroom, 2) universal screening to identify students at risk for underachievement, 3) research-based interventions alongside progress monitoring, and 4) a three-tiered approach to interventions beginning with classroom instruction, proceeding to small group instruction, and progressing to one-on-one or extremely small group instruction as needed. While continuously monitoring data during the intervention process, a decision may be made to return the student to Tier I in accordance with adequate growth in his or her progress (Ebbert, 2011, pp. 6-7).

**Scope and Bounds**

This research study examined educators’ implementation of Response to Intervention by looking at possible relationships between training, perceptions, and fidelity of implementation. The study did not examine effects or outcomes of implementing RtI as related to student performance. The research focused upon known educators within the researchers’ professional networks in Middle Tennessee who were responsible for implementation of RtI.
Definition of Terms

The following definitions relating to RtI were taken from the Glossary page of the RtI organization’s official webpage (“Glossary”, n.d.).

Fidelity of Implementation. Fidelity refers to the accurate and consistent provision or delivery of instruction in the manner in which it was designed or prescribed according to research findings and/or developers’ specifications. Five common aspects of fidelity include: adherence, exposure, program differentiation, student responsiveness, and quality of delivery.

Response to Intervention. Response to intervention integrates assessment and intervention within a multi-level prevention system to maximize student achievement and reduce behavior problems. With RtI, schools identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student’s responsiveness, and identify students with learning disabilities.

Tiered Instruction. Tiered instruction describes levels of instructional intensity within a multi-tiered prevention system. Following are detailed descriptions of each of those levels.

Primary Level of Intervention. Primary intervention is the universal core program that all students receive.

Secondary Level of Intervention. Secondary intervention supplements primary intervention (i.e., the universal core program) such that students receive additional research-based preventative treatment. Secondary level interventions are often short-term, implemented in small group settings, and may be individualized.
Tertiary Level of Intervention. Tertiary intervention supplements primary and secondary interventions to intensify instruction. Tertiary level of intervention often occurs under the auspices of special education. Individualized education program (IEP) goals are established; individualized student programs are developed formatively using systematic progress monitoring; and student progress data are also used to determine when a student may return to secondary or primary prevention. Tertiary level of intervention is usually implemented individually or in very small groups.

Summary

According to the Tennessee Department of Education, RtI is not seeing the same results in some districts and schools as it is in others (V. McDonald, personal communication, August 29, 2012). This is a concern because RtI is used to determine students’ needs for testing in order to receive special education services. Staff members have been participating in varying amounts of training in RtI. Administrators have inquired as to what is affecting staff member buy-in, or perception, and how that buy-in may affect fidelity of implementation.

Upon communication of all concerns, the researchers questioned three relationships using a quantitative design. First, they studied the association between the independent variable, amount of training, and the dependent variable, staff member perception. Next, the researchers ascertained how much the independent variable of staff member perceptions of RtI affected the dependent variable, their fidelity of implementation. Thirdly, to discover how training and fidelity relate, the researchers chose to compare the independent variable of the amount of training to the dependent variable, levels of fidelity of implementation. The researchers purposefully limited the
amount of intervening variables in the quantitative portion of the study to the amount of trainings offered and staff member perceptions. In order to gain a deeper understanding of the above relationships, staff members’ perceptions of RtI were evaluated qualitatively as well, to search for supplemental themes. Response to Intervention is based on the premise that all teachers and staff members responsible for providing intervention at any tier are implementing the program with fidelity.
Chapter 2: Literature Review

Response to Intervention (RtI) is a strategy used for struggling learners that has been utilized in classrooms for many years. The emphasis of a more formal RtI approach has occurred due to legislation that has been passed, new requirements for special education services, and the current emphasis that is put on high-stakes testing. Additionally, schools are implementing best practices and taking a scientifically based research approach in order to help their students achieve and improve academically. To many, RtI is a solution that helps students achieve (Tyler & Yzquierdo, n.d.). As with any strategy used in the classroom, teachers and administrators have varied opinions regarding RtI. Varied opinions on this topic exist because education personnel are the ones on the front lines implementing these best practices and scientifically based research methods on a daily basis. Knowing the roots of RtI is a key component to understanding its effectiveness in classrooms.

No Child Left Behind Act

Over the last several decades, many laws have been passed in regard to education. In 2001, the United States Congress passed the No Child Left Behind Act (NCLB) (Elementary and Secondary Education Act website, para. 2). The No Child Left Behind Act caused Americans, including the federal government, to look at the current laws in place for education. The No Child Left Behind Act paved the way for future legislation in the educational field.

The No Child Left Behind Act had many elements: accountability, flexibility for local agencies, more options for disadvantaged students, improving teacher quality, national assessments, and promoting English proficiency (“No Child Left Behind,”
2003). With the enactment of this new law, some schools and districts across the country could not fulfill all of these requirements. In March 2010, Barack Obama proposed several changes to NCLB. Some of those changes included closing the achievement gap, giving states more flexibility, and providing some states waivers from NCLB (“Reforming No Child Left Behind,” n.d.). Since NCLB was enacted, many other bills have been passed at the federal and state level.

**Individuals with Disabilities Education Act**

According to the United States Department of Education, the foundations of the Individuals with Disabilities Education Act go back to 1975 (“A 25 year history of IDEA,” 2007). Back in 1975, this law was known as the Education for All Handicapped Children Act (EAHCA). Before EAHCA, many children were denied education solely because they had some sort of disability. The Education for All Handicapped Children Act required school districts to educate students with disabilities (“A 25 year history of IDEA,” 2007).

In 1977, the final regulations for EAHCA were released. The final regulations, outlined by the federal government, provided a set of rules that all districts had to follow when providing education to students with disabilities. In 1986, EAHCA was amended again in order to give parents and students rights (“A 25 year history of IDEA,” 2007).

In the year 1990, EAHCA was amended for the last time under that particular name. Since 1990, the law has been known as the Individuals with Disabilities Education Act (IDEA). Major changes took place when the name was changed. One major change was that schools had to provide transition services for students with disabilities. School districts were forced to look at the outcomes of their exceptional education students. The
school districts had to provide assistance for students with disabilities transitioning to postsecondary life ("A 25 year history of IDEA," 2007).

The Individuals with Disabilities Education Act was reauthorized in 1997. This reauthorization required schools to include students with disabilities on state and district assessments. Furthermore, the 1997 reauthorization of IDEA required the general education teacher to be a part of the team utilized in making decisions on students with disabilities ("A 25 year history of IDEA," 2007).

After the 2001 passing of NCLB, the Individuals with Disabilities Education Act was reauthorized again in 2004 to guarantee a fair education for students with disabilities. Additionally, it was also revisited to ensure that it aligned with NCLB (IDEA Partnership website, para. 2). Many changes were again made with the reauthorization. One of the biggest changes was that states and local school districts were going to be held more accountable for their exceptional education students. Specifically, the federal government was asking for more data to back up outcomes. Another noteworthy change was that school districts had to provide adequate instruction and intervention for all students in order to keep them from having to enter into special education services ("A 25 year history of IDEA," 2007).

As IDEA has continued to change, its main purpose has been to ensure that the gap was bridged between students with disabilities and those without. Moreover, it was intended to strengthen expectations and accountability for students with disabilities.

All laws come with stipulations, rules, guidelines, and professional development requirements in order to obtain funding for schools. The Individuals with Disabilities
Education Act is no different. The Tennessee Department of Education has been charged with ensuring that all of its schools are meeting each federal and state guideline.

**History of Response to Intervention**

There is very little research that can be found specifically about the history of RtI. Response to Intervention was brought about because of the enactment of many laws. According to Prasse, after the enactment and reauthorization of so many laws, many were wondering if anything better could be done (n.d.). Some sort of system of reform was required in order to monitor student outcomes and bridge the gap between the special education and general education classrooms. Even though RtI began as a special education tool, it quickly began entering into the general education classroom because of the emphasis of outcomes for all students. Focusing on student outcomes is what drives RtI (Prasse, n.d.).

After IDEA, RtI was introduced as a means to qualify for special education services instead of using the IQ-achievement discrepancy model to determine a need for services (Griffin, n.d.). The IQ-achievement discrepancy model was over identifying students who qualified for special education services. Many called it a “wait to fail” model because there had to be a discrepancy between performance and observed deficiencies (Griffin, n.d.). By using the IQ-achievement discrepancy model, students were not getting the services that they needed.

Because this “wait to fail” model was not being very effective, schools wanted to know not how to get students into special education, but how to provide research-based interventions in order to help students achieve. Many educational professionals feel that supporting students effectively is not about putting students into a certain type of
program, but rather it is about applying research-based interventions and monitoring the progress of students after they have received those interventions. Response to Intervention is part of the answer to these conundrums (Prasse, n.d.).

Response to Intervention is supposed to include evidence-based interventions in order to provide effective instruction and education for all students. This requires students to be progress monitored and adjustments must be made as is necessary. Response to intervention must be implemented with fidelity in all settings in order to observe the benefits (Prasse, n.d.). Many RtI models exist. Schools and school districts must find a model that best fits the needs of their students.

It is also difficult to determine the exact history of RtI because there are so many different RtI models being used in schools across the United States. The United States Department of Education encourages the use of RtI but does not endorse a specific model (Griffin, n.d.). Very little history on RtI can be found in terms of exactly when it was founded and who the original founder was; however, the reasons why RtI came into existence are clear.

**Testing for Special Education Services**

In accordance with NCLB and IDEA, RtI has aimed to change the way students are tested for and receive special educational services. According to Greer, before the reauthorization of IDEA in 2004, students with learning disabilities were identified using a method known as the IQ-achievement discrepancy model (2005). In this model, the child’s cognitive and achievement scores were assessed. If there was some sort of discrepancy between the two, the child was considered to have a learning disability. With the reauthorization of IDEA in 2004, an alternate process was adopted to determine
if a child had a learning disability. The alternate process allows for progress monitoring through a tiered approach (Tyler & Yzquierdo, n.d., p. 3).

According to Tyler and Yzquierdo, in this three-tiered approach, students are progress monitored through increasingly more intensive tier levels (p. 3). Tier one is the level of instruction all students receive. Tiers two and three are more intense levels of intervention. Students who are receiving tier two or three instruction and are not adequately progressing academically may have a learning disability. Schools must keep careful documentation of this process (p. 3).

If a student’s academic levels are not increasing with the aid of the three-tiered approach, and the student is not meeting benchmark assessments, he or she may qualify for special educational services. A team must be put in place in order to determine whether the intervention of RtI was implemented with fidelity and rule out that the problem might be quality of instruction (p. 4). This process ensures that those who need special educational services receive them and those who do not get the instruction that best meets their needs. In other words, RtI is not just for those receiving special educational services (p. 4).

Response to Intervention

There are two major organizations recognized within the community of RtI: The National Center on Response to Intervention (NCRTI) and the RTI Action Network. Both organizations have an abundance of information for parents, teachers, administrators, policy makers, and other interested parties available online through their websites. The information includes details describing RtI and its components, research reports on RtI, and tools for implementing RtI. Although many sources were used to
gather information on the implementation of RtI, the researchers relied heavily on these organizations and their websites as they gained a deeper and more detailed understanding of RtI. Because these sources are central to the RtI community, descriptions of these organizations are provided.

The National Center on Response to Intervention works with researchers from Vanderbilt University in Nashville, Tennessee, as well as researchers from the University of Kansas. They are located in Washington, D.C. at the American Institutes for Research, and are funded by the Office of Special Education Programs (OSEP), which is a part of the United States Department of Education. The mission of NCRTI is to “provide technical assistance to states and districts and build the capacity of states to assist districts in implementing proven models for RTI” (“About Us,” n.d., para. 1).

The RTI Action Network is a resource available to both educators and families in implementing RtI. Their desire is to ensure that all children, including those with learning disabilities, have access to early identification, quality instruction, and necessary supports. They are linked with the National Center for Learning Disabilities and are funded by the Cisco Foundation. The organization has garnered partnerships with the nation’s leading education associations and top experts in the RtI field (RTI Action Network, n.d.-a, para. 1).

Both organizations define RtI similarly. NCRTI explicitly states that their definition reflects current research and evidence-based practice:

Response to intervention integrates assessment and intervention within a multi-level prevention system to maximize students’ achievement and to reduce behavioral problems. With RtI, schools use data to identify students at risk for
poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student’s responsiveness, and identify students with learning disabilities or other disabilities (National Center on Response to Intervention. [NCRTI], 2010, p. 2)

The RTI Action Network’s definition is very similar. However, they point out that the process first begins with “high-quality instruction and universal screening of all children in the general education classroom” (RTI Action Network, n.d.-b). Their definition closes by explaining that the decisions made through the RtI process are for both general education and special education. They also summarize it by emphasizing that the system integrates instruction and intervention, and that decisions are based on data collection throughout the process (RTI Action Network, n.d.-b).

The previous definitions provide technical, specific, and detailed descriptions of RtI and its processes. A more succinct description is provided by NCRTI’s report that details the components of RtI by describing what is “at the heart of RtI”: providing all students with the best strategies available, correctly identifying students with learning or behavioral problems, ensuring students receive the most effective instruction and the supports they need, integrating resources to avoid poor learning or behavioral outcomes, and strengthening the process used to identify disabilities (NCRTI, 2010, p. 8).

Three Tiers of Response to Intervention
Both the National Center on Response to Intervention and the RTI Action Network mention the use of multiple tiers. Official documents and research commonly refer to the tiers as Primary Level of Intervention, Secondary Level of Intervention, and Tertiary Level of Intervention. Some sources interchange the word “intervention” with the word “prevention” and the word “tier” with the word “level.” Teachers and administrators commonly refer to these terms using the following jargon: Tier I, Tier II, and Tier III.

**Tier I.** The first level of prevention, the Primary Level, is the least intensive and is generally characterized by the core curriculum being used in the classroom and the teaching strategies that are used for all students. This level is not specific to a single student’s needs. Rather, it is the level that determines what research-based practices are being used consistently and that differentiation is already occurring. This level is also where universal screenings are used to determine which students may need to proceed to the next level of prevention. Cut scores are used to make this determination (p. 10).

Dexter and Hughes state that Tier I has three main elements: a scientifically based core curriculum, screening and benchmark testing of students at least three times a year in order to determine instructional needs, and on-going professional development so that teachers can be as effective in the delivery process as possible. Tier I should eliminate inappropriate instruction as reason for inadequate academic progress. The cornerstone of Tier I is that it must be scientifically based (Dexter and Hughes, n.d.-b).

**Differentiation.** In a broad sense, the RTI Action Network defines differentiation as lesson plans designed to meet the needs of a range of learners (RTI Action Network, n.d.-b). The term “differentiation” has been around for many years in educational circles.
However, RtI is a fairly new term. According to Allan and Goddard (2010), instead of having to start over with RtI, differentiated instruction and RtI go hand in hand, making the paradigm shift to RtI not as difficult. They believe that one way to combat a new initiative is to use what you know, like other initiatives including differentiation. These two authors look at RtI and differentiation as overlapping. Both initiatives take into account that a “one size fits all” model does not necessarily work.

Allan and Goddard (2010) believe that differentiation should exist in each tier because each child’s needs are different. Within the regular classroom setting, particularly in Tier I, differentiation can be flexible grouping and individualized support. Students may be grouped based on readiness level, interests, or learning styles. Furthermore, a student may be grouped based on the structure he or she needs. Some students need explicit help and instruction while others thrive on assignments being more open ended.

All students require differentiation just like all students require some form of RtI. Students who struggle need differentiation and RtI, but students who are considered advanced also need differentiation and RtI as well. Differentiation and RtI require teachers to modify the curriculum in order to meet each child’s unique needs (Allan & Goddard, 2010).

*Scientifically based core curriculums.* For schools, selecting a scientifically based core curriculum can be a daunting task. The RTI Action Network makes several suggestions in order to make this process a litter easier. The RTI Action Network does not support one particular core curriculum, but has steps for schools to follow when selecting the core curriculum best for their school.
The Individuals with Disabilities Education Act does not define what scientifically based means. However, according to Dexter and Hughes, the No Child Left Behind Act defines scientifically based as “research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs” (para. 5). An abundance of research exists concerning reading core curriculum programs, but when it comes to other subjects, there is less information. The United States Department of Education has a website designed to help schools and districts determine the best scientifically based programs, particularly in reading. At the present, there is only one elementary math curriculum program listed on this site. This site endorses no particular writing, science, or social studies programs (Dexter & Hughes, n.d.-b).

Some findings about reading programs can be applied to other disciplines. Effective core curriculum should have a clearly articulated scientific research base, involve explicit instructional strategies, and provide consistent organizational and instructional routines. Dexter and Hughes suggest that classroom teachers be the ones on the front line determining core curricula. Teachers can look at teacher’s editions to determine whether or not the material is research based and clearly organized. Teachers can also look at the student editions to determine if they allow for sufficient practice in order to master skills (Dexter & Hughes, n.d.-b).

*Universal screening.* According to Dexter and Hughes, in the context of RtI, universal screening is the first step in identifying students who might be at risk for learning difficulties. It is a way to target students when scientifically based core curriculum is already in progress in the general education setting. Universal screening is
typically done three times a year. It usually occurs in the fall, winter and spring. Universal screenings look at specific targeted skills, which can be used to predict future outcomes (Dexter & Hughes, n.d.-c).

Most research on universal screening is in the area of reading. However, some research does exist on universal screenings in the areas of writing, math, and behavior. Students are screened and those in need receive evidence-based interventions in the specific targeted area. Screening students early can help in identifying students who are at risk early on. By identifying students early, problems can be corrected before becoming detrimental to a child’s educational career. Unfortunately, if done too early, for example in kindergarten or first grade, results can give false positives and false negatives (Dexter & Hughes, n.d.-c). A false positive is when a student is deemed at risk, but really is not. A false negative is when a student is deemed not at risk and then goes on to perform poorly. The best universal screenings are those that give true positives while identifying a manageable number of those at risk, therefore limiting the number of false positives (Dexter & Hughes, n.d.-c).

The most effective universal screenings measure sensitivity, specificity, practicality, and consequential validity. Sensitivity refers to the degree in which a screening mechanism truly identifies students who are at risk. Specificity refers to the degree in which students perform satisfactorily on future tests. These are true negatives, not at risk academically. Practicality refers to the screening mechanism used that quickly identifies at-risk students with minimal loss of instructional time. The screening mechanism should be simple enough that it does not require a specialist to interpret the results. It should be able to be read by the classroom teacher. Finally, consequential
validity means that the screening tool will do no harm to the students and is linked to effective interventions. Screening mechanisms should be used consistently throughout the school year. Screening tools should not be changed in the middle of the school year. If this occurs, data obtained may not be accurate (Dexter & Hughes, n.d.-c).

Universal screenings are done in the academic areas and are either measured by accuracy or fluency. Accuracy is the number of items a student gets correct, which can reveal individual differences in knowledge. Fluency is the number a student gets correct per minute which can not only reveal differences in knowledge but also speed of processing (Dexter & Hughes, n.d.-c).

Currently, there is no consensus as to what the cut off is for at-risk students. Some organizations use cut-scores while others use percentile ranks. Benchmark assessments can also aid in whether or not a student should be considered at-risk, and thus needs to move into Tier II.

**Benchmark assessments.** The RTI Action Network believes that a benchmark assessment should be evaluating goals for a particular grade and subject area. According to the RTI Action Network, the purpose of a benchmark assessment is important to student outcomes. Benchmark assessments should determine whether or not students are achieving these goals during a school year in order to be on target for whatever the end of grade assessment is. The main drive behind benchmark assessments is to define, with data, whether or not a student is achieving grade level standards or goals (RTI Action Network, n.d.-b).

According to Dietel, Herman, and Osmundson (2010), benchmark assessments serve four purposes. One of these purposes is to communicate expectations. Benchmark
assessments let parents, teachers, and students know what essential knowledge must be learned. Additionally, it lets stakeholders know how students will be tested on this essential knowledge. Thus, teacher quality is improved because teachers will aid students and plan instruction that will help students be successful on the benchmark assessment.

The second purpose of a benchmark is to plan curriculum and instruction. Benchmark assessments determine where students are in their learning, pointing out their strengths and weaknesses. Educators can take this information and determine how future lessons should be planned. Furthermore, teachers can collaborate with one another in order to help all of their students be successful. This collaboration might take place across grade levels or subject areas. The third purpose of a benchmark assessment is to monitor and evaluate learning. Districts and schools can examine their benchmark assessment data and decide if programs and curricula that they have implemented are successful. Districts and schools can also look for patterns in trends at individual schools, with students, or with teachers. Again, collaboration comes into play. Whole schools or even teachers can assist one another in improving practices. Finally, according to Dietel et al. (2010), the purpose of benchmark assessments is to predict future performance. Benchmark assessments can help districts, schools, and teachers determine if their students are on track to meet end of grade goals. If not, teachers can make adjustments accordingly (pp. 3-5).

Dietel et al. (2010) also go on to say that because of NCLB and the emphasis on improved learning, benchmark assessments are used to guide instruction and determine which students are struggling. Benchmark assessments help schools to meet these federal guidelines.
Benchmark assessments should be selected for use based on certain criteria. First, the purpose of the assessment must be determined. Second, the criteria that will be used to select and create assessments must be determined. Finally, organizational capacity must be taken into account. Organizations need to determine what must be done to successfully support benchmark assessments. Benchmark assessments must have a clear understanding and purpose (Dietel et al., 2010).

Many benchmark assessments exist. Policy makers, districts, and schools must take many items under consideration when deciding on a particular benchmark assessment program. Validity of benchmark assessments is of extreme importance. The test must measure what it is intended to measure, and it must provide sound information for its predetermined purpose. Benchmark assessments must also have correct alignment. Alignment refers to how well what is assessed is aligned with what schools are trying to teach (Dietel et al., 2010).

Benchmark assessments must be reliable. Reliability is an indication of how consistently an assessment measures its intended target and the extent to which scores are relatively free of error. In addition, fairness, bias, and accessibility must also be considered. Fairness refers to how accessible the test is, and whether or not it enables all students to demonstrate what they know. Bias is when features of a test impede a student from displaying his or her knowledge. The test must be appropriate for all students (Dietel et al., 2010).

Instructional sensitivity and high utility must also be considered. Instructional sensitivity is the degree to which student performance reflects instruction. In order to avoid instructional sensitivity, curriculum and alignment must be taken seriously. High
utility deals with usefulness. This is when schools determine if the benchmark assessment will help them in achieving their intended purposes (Dietel et al., 2010).

Finally, a benchmark assessment must have useful reports in order to be successful for a school or school district. There must be different reporting levels. This means that data should be able to be broken down by student, classroom, school, and district levels. Reporting formats must be consistent with the intended uses at each level. Having the right level of aggregation is one need, but being able to easily fit within the intended uses is another. For instance, teachers might not only need a student breakdown, but also groupings of students performing at similar levels. The scoring metrics and reporting categories must be consistent with local circumstances and proficiency levels. Additionally, reports need to use multiple representations. Data interpretation can be difficult and fearsome. Data should be in multiple formats so all stakeholders can understand the results. Benchmark assessments need to be flexible. Assessment programs should be able to customize reports based on need. Lastly, benchmark assessments must have reliable reported scores and inferences. Reports need to be reliable and useful to the teacher in order to determine instructional needs (Dietel et al., 2010).

**Tier II.** According to the National Center on Response to Intervention (2010), the next level, called the Secondary Level, must occur in small-group sessions that use evidence-based interventions. Each school or district outlines the duration of this phase and also the duration and frequency of these sessions. During this phase, there is continuous data collection taking place, referred to as progress monitoring. The results of the progress monitoring are used to determine if the intervention is succeeding. As the
data are monitored, decisions may be made to discontinue interventions, continue interventions, or possibly move the student to the next level of intervention (pp. 10-11).

The progress monitoring data is used to determine if a student should progress to Tier III, stay in Tier II, or go back to Tier I (Dexter & Hughes, n.d.-a). Movement between tiers is extremely important. Therefore, a valid and reliable system must be put into place in order to measure progress or lack thereof. Students who are in need of progress to Tier II are most at-risk for academic failure and need specialized, intense supports in place (Dexter & Hughes, n.d.-a).

**Evidence-based interventions.** According to the RTI Action Network, evidence-based interventions are instructional practices that are supported by relevant research studies (n.d.). The National Dissemination Center for Children with Disabilities reiterates this point and believes that evidence-based interventions are key to the RtI process (RTI Action Network, n.d.-b). When using evidence-based interventions, research reveals what has been effective for students. Using evidence-based interventions are more beneficial to students and teachers. If the intervention works for some students, it is probably going to work for others (RTI Action Network, n.d.-b).

The United States Department of Education has created a guidebook that walks educators through the process of finding evidence-based interventions. This guide is user-friendly and can be found online. It begins with how to determine if an intervention has “strong” evidence of effectiveness (U.S. Department of Education Institute of Education Sciences National Center for Education Evaluation and Regional Assistance, 2003). Second, the guide explains how to determine if interventions have a “possible” effectiveness level. Next, the guide explains the important factors to consider in a
classroom when implementing an evidence-based intervention. Finally, the user-friendly guide also explains where to find evidence-based interventions, and it gives a checklist to use when evaluating if an intervention is backed by rigorous evidence (U.S. Department of Education Institute of Education Sciences National Center for Education Evaluation and Regional Assistance, 2003).

Another federal website by the Institute of Education Sciences reviews different educational practices to determine “what works.” This “What Works Clearinghouse” website gives users the answers to what works in education. Their main goal is to provide educators with enough information to make evidence-based decisions. The website provides practice guides, intervention reports, single study reviews, quick reviews on current education research, and a database with everything that their researchers have reviewed (What Works Clearinghouse, n.d.).

A similar website by Johns Hopkins University has a “Best Evidence Encyclopedia.” It claims to have reliable, unbiased reviews of research-proven educational programs. This website is designed for policy makers, teachers, principals, and researchers. The website breaks information down by subject area and grade level. This website is part of the Johns Hopkins’s Center for Data-Driven Reform in Education (Best Evidence Encyclopedia, n.d.).

**Tier III.** According to The National Association of State Directors of Special Education (2006), the final level of the RtI process, also known as the Tertiary Level, is the most intensive as it involves individualized instruction that targets an individual student’s needs (p. 11). This is the level that has the least common characteristics across schools, districts, states, and organizations. In some locations, this level is characterized
by further individualized instruction with the teacher while continuing the progress monitoring. In other locations, this is the step characterized by a student having an Individual Education Plan (IEP) developed and the instruction is delivered through specialized strategies with an additional teacher or aide (p. 1).

It is important to note that students can and should, move back and forth between these levels of intervention. The decision for this type of movement should always be based on data provided from progress monitoring during the interventions. In addition, the decision for the levels of service should be made separately for each subject area. For example, a student may receive secondary levels of intervention in reading, but receive tertiary levels of intervention in math (p. 13).

**Progress Monitoring**

According to Fuchs (n.d.), throughout this multi-level system, progress monitoring must be done. Progress monitoring is when student performance data are collected on a frequent basis. Depending on the requirements of a particular school or school district, progress monitoring should be done on a weekly or monthly basis (Fuchs, n.d.). The teacher, or other progress monitor, graphs the student’s data and draws a line of “best fit.” The hope is that a line of improvement towards grade level achievement is evident throughout the process.

Schools throughout the country use many different types of progress monitoring in the subjects of mathematics and reading. Those interested in progress monitoring would need to determine what his or her school or school district uses for progress monitoring tools (Fuchs, n.d.).
Throughout RtI and progress monitoring, students are given interventions of increasing intensity depending on their needs. The ultimate goal is for students to develop strong, long-term outcomes without wasting time and interventions with students who would develop appropriately without them. In Tier I, a strong core curriculum is implemented with assessments throughout the way. If a student is not progressing as expected in Tier I, a type of short term progress monitoring is used to determine if the use of solely a strong core curriculum is ineffective. Progress monitoring in Tier I identifies students who might be considered at risk of academic difficulties (Fuchs, n.d.).

Students who are unsuccessful in Tier I progress to Tier II, where progress monitoring continues. If Tier II is effective, students revert back to Tier I. The few that do not respond to Tier II interventions move on to Tier III. Progress monitoring is also conducted during Tier III. The progress monitoring in Tier III is also used to determine if the intense, individualized interventions are being effective (Fuchs, n.d.).

Progress monitoring has four critical roles in a multi-level systematic intervention program such as RtI. One of these roles is to determine whether or not Tier I curriculum is effective. A second critical role of progress monitoring is to determine whether Tier II interventions are working. If not, it is possible that the student might have a learning disability. A third role of progress monitoring is to create an individualized instruction plan for students that must move on to Tier III. The data from progress monitoring gauge whether or not interventions are effective. A final role of progress monitoring is to determine if a student can move back to Tiers I or II (Fuchs, n.d.).
Fidelity of Implementation

Fidelity of implementation is described similarly in the medical and education fields as faithfully applying a treatment, program, or intervention exactly as it was originally designed. The National Research Center on Learning Disabilities (NRCLD) published a report in 2006 on how to use RtI in which they devoted an entire section to fidelity of implementation. According to Johnson, Mallard, Fuchs, and McKnight (2006), fidelity of implementation is “the delivery of instruction in the way in which it was designed to be delivered” (p. 2). The report stated that in addition to fidelity with regards to instruction, fidelity is also essential for screening, progress monitoring, and the decision-making process. The authors stated that fidelity is also important at both the school level and the teacher level (p. 2).

Although fidelity of implementation is important when considering the effects of RtI on achievement of large groups of students or schools, it is also crucial for another reason. Response to Intervention can now be used as the sole determining factor to decide if a student qualifies for special education services. The use of RtI as the sole determining factor in the special education qualification process means that fidelity of implementation is crucial knowledge when a team meets to decide if the intervention has worked or not. As Bender and Shores relayed (2007), when decisions are being made to determine if a child is learning disabled or not, it is essential to know that the treatment process was applied with fidelity in order to protect the child (pp. 26-28).

The National Center on Response to Intervention (NCRTI) produced a webinar entitled “Fidelity of Implementation within an RTI Framework.” In the webinar, it is stated that “Positive student outcomes are dependent upon: fidelity of implementation of
process (at the school level); degree to which interventions are empirically supported; and fidelity of intervention implementation (at teacher level)” (National Center on Response to Intervention, 2009, p. 7).

The RTI Action Network made a similar statement regarding fidelity. Their assertion is that in order for RtI to work well, there are key components that must be “implemented with fidelity and in a rigorous manner”: high-quality, scientifically based classroom instruction; ongoing student assessment; tiered instruction; and parent involvement (RTI Action Network, n.d.-b).

The NCRLD’s report outlined three dimensions of assessing fidelity: method, frequency, and support systems. For method, they describe assessment tools for fidelity as being categorized in two groups: direct assessment and indirect assessment. Direct assessment is achieved by having qualified observers rate fidelity as interventions take place. Indirect assessments include self-reports, rating scales, interviews, and permanent products, which are samples of student work or videos of instructional sessions (Johnson et al., 2006, p. 4). Frequency of assessments varies depending on many different factors, but the report does not give a specific suggestion for frequency of fidelity checks.

Support systems are categorized by professional development and resource allocation (pp.4-5).

Training

Preparation in college. Information on college courses specifically pertaining to Response to Intervention is difficult to come by. Most college of education preparation programs have courses pertaining to special education, assessment, early intervention, and how to put interventions in place to help a child. College preparation programs may
not be calling what they are teaching as RtI, but schools are teaching future educators different components that are used in a RtI model.

Some colleges and universities have graduate programs where educators can receive a certificate in Response to Intervention. For example, the University of California has a program where people can get a strong conceptual foundation in the history and background of RtI (“Response to Intervention certificate,” n.d.). This program helps educators to become leaders in RtI. It is designed for administrators, general classroom educators, exceptional educators, and school psychologists. The overall themes of the University of California program are teaching a conceptual framework of RtI, giving help for academic and behavioral assessments including interventions and preventions, and school consultation and reform (“Response to Intervention certificate,” n.d.).

The University of Nebraska also has a similar program. Their Response to Intervention program is also in the graduate department and is a certificated program (“Response to Intervention: Reading,” 2013). The University of Nebraska has designed the program as a way for students to begin graduate study coursework while learning about practices and reforms mandated by their schools. Nebraska schools are starting to see a need for RtI in their districts (“Response to Intervention: Reading,” 2013).

**District provided professional development.** Because schools are moving towards RtI, school districts across the nation are seeing a need for training. According to Danielson, Doolittle, and Bradley (2007), when a system decides to use RtI, its people must be trained in the adoption of RtI and the implementation. They recommend dividing people into two different categories based on their needs (p. 633). For instance,
some educators will need training in the area of Tier I while others will need training in Tier II. Overall, only a few educators will need training in the intensive level of Tier III. Training will be necessary for teachers in a general education setting and those in the area of special education. Both groups of teachers will need to be trained specifically in identifying students with learning disabilities and using RtI (Danielson et al., 2007, p. 633).

Danielson et al. (2007) believe that teachers were not sufficiently trained in their pre-service training to implement and sustain RtI (p. 633). They suggest that this is due to the fact that there are so many evidence-based interventions out there. Therefore, school districts must educate their people on what is appropriate and needed in their specific districts (p. 633).

For school districts concerned about financial constraints, free online resources are available for training. When doing a web search on “Response to Intervention and professional development,” many free webinars are displayed. This could be another way that school districts train its people on RtI.

Many studies reveal that professional development for teachers impacts their classroom practices and student achievement (Danielson et al., 2007). In order to improve student achievement, high quality professional development must be in place.

**Specialists/Coaches.** When implementing something like RtI, many people are responsible and involved in the process. Response to Intervention requires not only teachers to be involved, but other specialists in a school building as well. According to Hartman and Yenni (2009), a school’s psychologist is critical in the implementation of RtI (p. 5). A school psychologist should be the go-to person with knowledge about RtI.
In general, a school psychologist should be able to help with problem solving, evidence-based interventions, and curriculum-based and alternative assessments (p. 5). A school psychologist can be utilized to help parents, teachers, administrators and students. A school psychologist could also help to ensure that teachers are implementing with fidelity (p. 6).

The use of in-house instructional coaches can also aid schools in the implementation of RtI. The RtI Action Network recommends having a specific coach for RtI (Casey, 2008). While an RtI coach might help with professional development, the main objective for an RtI coach is working with different teams that are using the RtI process. Many schools have teams that represent all positions in a building and help make sure RtI is being done properly. Teams analyze data for student progress and help grade levels or subject areas plan interventions (Casey, 2008).

Another role of an RtI coach is assisting grade level teams. The coach helps teams decide which students are in which tier. Because grade level teams have numerous responsibilities, the RtI coach can assist in data analysis, identify evidence-based interventions, and group students accordingly (Casey, 2008).

An RtI coach might have many responsibilities overseeing the implementation of the multi-tiered model. An RtI coach must communicate with the administrator in the building as to what the outcomes are when he or she meets with teams. An RtI coach needs to also share this information with others in the building implementing RtI because it might be useful to them as well. Also, an RtI coach needs to ensure that the school has a model they follow. Additionally, he or she must make sure that all staff know and completely understand the model. An RtI coach can help to make sure that progress
monitoring is happening and aid in the process. He or she would then be responsible for ensuring that all staff members understand how to use the data properly. Additionally, an RtI coach can help make sure that all teachers have a list of evidence-based practices to use. Finally, an RtI coach should be able to make sure that his or her teams learn throughout the process and can use all data on their own in order to make informed decisions (Casey, 2008).

Some states follow a state model for RtI. In some of these states, there are statewide coaches who meet with site coaches to ensure implementation and fidelity. The use of coaches helps to ensure that the infrastructure in each school is in place so that RtI can be successful (Casey, 2008).

**Professional learning communities.** A Professional Learning Community (PLC) is where collaboration takes place for educators. According to the Curriculum 21’s website Glossary, a PLC focuses on the following: shared mission, vision, values, goals, inquiry, collaboration, experimentation, improvement and results (Curriculum 21, 2013). Response to Intervention and Professional Learning Communities can work together. According to Campsen (2012), both PLCs and RtI are used to help improve student achievement. Campsen also discovered that by eliminating individualized committees and by creating learning teams that focused on student learning and student achievement, students were more successful (para. 3). In PLCs, educators create formative assessments in order to determine which students are proficient and those that are not. Student growth and program effectiveness are measured based on the data gathered. Then, decisions can be made in order to help students achieve. Additionally,
PLCs allow effective and non-effective instructional strategies to be researched and discussed (Campsen, 2012).

**Response to Intervention in Title I Schools**

A school that is considered a Title I school may wish to use Title I funds towards RtI. According to a United States Department of Education presentation, the purpose of a Title I school is to provide the lowest achieving students in high poverty areas with a high quality education through funds to improve academic growth (The United States Department of Education [DOE], n.d.). School wide Title I funds can only be used if the funds will impact the whole school when there is at least a 40% poverty level. Additionally, Title I funds can also be used for targeted assistance programs. In the case of targeted assistance programs, funds are used only for specific, at-risk students (DOE n.d.).

In Tier I of RtI, core curriculum is used in either whole group or small group instruction for all students. In most cases, Tier I and the use of the core curriculum cannot be funded by Title I. Additionally, any screening that is done for all students cannot be paid for by Title I funds. If over time a student is struggling and a research-based intervention is implemented for a specific time with increased intensity, Title I funds may be used. In general, progress monitoring can be funded by Title I schools if the progress monitoring is used to determine a response to an intervention that is supported by Title I funds (DOE, n.d.).

Before using Title I funds for RtI, the United States Department of Education recommends asking several questions. These questions include factors such as the core curriculum, interventions, requirements to obtain interventions, intensity, frequency and
duration of interventions, universal screening tools, and progress monitoring. In addition, three other factors should be considered. These factors are type of school (whether or not a school is considered Title I), eligibility of students, and supplemental funding requirements (DOE, n.d.).

**Response to Intervention in Urban Schools**

Higgins-Averill, Rinaldi, and Stuart (2011) conducted a study about teachers at a large urban elementary school and their perceptions of RtI. Of the twenty-six teachers involved, twenty-four were general education classroom teachers. The researchers were trying to gain a view of the educators’ perceptions in terms of a school reform such as RtI (p. 57).

The school under study partnered with a university at the beginning of the RtI process. The university provided all of the professional development on the front end. Additionally, the university aided this urban elementary school in creating its own RtI model (Higgins-Averill et al., 2011, p. 58). The researchers collected their data over a one-year period.

The researchers discovered that teachers’ perceptions changed from year one of implementation of RtI to year two of implementation. The teachers in year two had clearer goals, and also increased the ways that they collaborated with one another (Higgins-Averill et al., 2011, p. 60). The teachers also changed their views on student achievement and started to hold students to a higher level of accountability. Overall, teachers in this study had more satisfaction with the referral process in terms of students receiving special education services (pp. 61-62). Progress monitoring was more efficient,
collaboration became easier, and teachers felt like they were making a difference (Higgins-Averill et al., 2011, pp. 62-66).

This study indicated that teachers must meet the needs of all students. However, with the implementation of a new program, teachers needed coaching, professional development and ongoing assistance (p. 66). Planning and support are key in order for teachers to be successful with RtI. The researchers believed that RtI was implemented effectively in this particular urban school studied. Additionally, the researchers believed that once teachers perceived the benefits of RtI, they took on the challenges. The educators had to see the importance and benefit of the program. Otherwise, it would not have been as successful (Higgins-Averill et al., 2011, p. 67).

The RTI Action Network has several articles pertaining to urban schools. One by Ahram, Fergus, Noguera, and Stembridge discusses some challenges in implementing RtI in urban schools. These authors believe that one of the hurdles for urban schools and the implementation of RtI is that, in general, urban schools have populations that deal with bigger issues such as segregation and poverty (n.d.). These issues impact school structure and student achievement. There are also cultural elements to take into consideration. Some structural challenges impact student success by not addressing the needs of all students. Cultural elements can lead to misconceived perceptions of students who might have learning disabilities. All of these factors impact the implementation of RtI in urban schools (Ahram et al., n.d.).

Structural challenges include low student achievement, lack of instructional coherence, inexperienced teaching staff, lacking data management systems, and low expectations of students. The other set of challenges, which are cultural, include
perceptions of race and class that can be limiting predictors of low student achievement. These students might be perceived as not ready for school or even unable to learn. Sometimes schools view people of poverty or certain racial or ethnic groups as being intellectually below par when in reality they are not. Schools sometimes do not understand that a student’s culture must be taken into account when learning is being done. Different cultures sometimes have different types of learning styles. Some teachers in urban schools sometimes feel like this type of population simply cannot learn (Ahram et al., n.d.).

These issues must be addressed at urban schools before RtI can be implemented and be effective. Urban school systems have complex situations that must be recognized and dealt with accordingly. Because of these structural and cultural challenges, RtI sometimes becomes a tracking system for students. This is not the intended purpose of RtI, so schools need to recognize these issues if their clientele is in an urban school. These populations are delicate and must be dealt with in that manner (Ahram et al., n.d.).

The RTI Action Network also points out promising examples of RtI in urban schools. Specifically in urban schools, RtI and positive behavioral intervention and supports (PBIS) come into play (Fergus, Jean-Pierre, & Ripp, n.d.). Both frameworks help our ever-evolving society so that our students can be successful academically, socially, and emotionally. For instance, a child may be going through many things because he or she lives a life of poverty, but when RtI and PBIS are combined, a child can have wonderful successes.

The RTI Action Network states that for RtI and PBIS to be successful, everything depends on Tier I (Fergus et al., n.d.). Everything is from the ground up. The RTI
Action Network believes that each tier is only as good as the previous one. Tier I in an urban school cannot just be for those who are struggling. It must be for all. Poor classroom management on the part of the teacher should not necessarily be perceived as the students performing below grade level. Excellent classroom management needs to be in place in order to determine what is actually an academic issue and what is a behavioral concern. There must be integrity of curriculum, instruction, classroom management, relationships, and teacher supports (Fergus et al., n.d.).

In Tiers II and III, there needs to be a connection with Tier I. Tiers II and III should not be viewed as completely isolated. Interventions at these levels must be research based and driven by data. Meaningful data collection is crucial (Fergus et al., n.d.).

On top of all of these factors, resources must be in place for teachers and administrators. This process must be systematic and unique, particularly in urban schools. Urban schools have some unique factors that impact the implementation of RtI. These factors must be recognized and taken under advisement (Fergus et al., n.d.).

Positive and Negative Teachers’ Perceptions of Response to Intervention

Prior research indicates that teachers’ perceptions of RtI are varied, with some feeling positive about the process and its results, and others feeling negative and frustrated. Although these perceptions are on opposite ends of the spectrum, one item that most teachers have in common is a strong feeling in one direction or the other. Teachers who have a positive perception seem to be wholeheartedly in favor of RtI, readily able to list all of the benefits to both students and teachers. On the other hand, teachers who have a negative perception express strong feelings of frustration.
A qualitative study by Stuart, Rinaldi, and Higgins-Averill (2011) focused on teachers’ perceptions of RtI in one particular school during the first two years of implementation. They found that perceptions changed from the first year of implementation to the second year, noting “an overarching theme was the shift in school culture,” (p. 60). The initial reaction was that the transition to the RtI model was administrative-driven and the teachers’ feelings were “optimistic but mixed,” (p. 63). As the participants in this study described, becoming a stakeholder in the process and adopting an attitude of ownership made a difference in the results and in the teacher’s perceptions of the RtI model. As teachers made this shift, they began to work more collaboratively, taking ownership of their professional development and improvement in using data to drive instruction. As teachers’ skills with RtI improved, they noticed how effective the model was and began to see the advantages to RtI. These observations have caused the faculty to have much more favorable perceptions in the second year of implementation.

According to Brendle (2008), many teachers have a wide range of comments when it comes to RtI, especially those in rural districts. Some teachers in rural areas feel unprepared to participate in the RtI process because they have not been adequately trained (p. 27). Many rural teachers do not feel trained to monitor progress and determine into which tier students fit. Also, they do not know how to properly participate on the team that makes decisions for each child. Teachers thinking the RtI process was effective also depended on whether or not their administrators were supportive and involved in the process (Brendle, 2008, p. 39).
Teachers in rural schools sometimes feel pulled in many directions due to the lack of school personnel. Some teachers in rural school districts where RtI has been implemented feel overworked and underprepared. In some of these small districts, there is not enough funding or personnel to meet the needs of the RtI process (p. 49). For many teachers, the level of fidelity of implementation played a key role in whether or not teachers thought RtI was successful (Brendle, 2008, p. 52).

Another reason that RtI can be difficult to implement is because there are many different models that schools and school districts can follow. The United States Department of Education encourages the use of RtI but does not have a specific model to follow (Griffin, n.d.). Response to Intervention does not necessarily have a step-by-step formula. Individual schools and districts determine what model to use. Additionally, schools and districts are responsible for training their people properly. This can be frustrating for teachers and administrators alike.

Many laws, such as NCLB and IDEA, have been enacted to ensure that all students are successful and are provided with the necessary opportunities and support to make academic gains. Response to Intervention is an avenue available for teachers to explore if the need arises in his or her classroom. Teachers need to feel comfortable and properly trained in RtI for its full effects to occur.

**Strengths and Weaknesses of Response to Intervention**

**Strengths.** Response to Intervention is a relatively new concept and much research still needs to be conducted on the topic. However, there is some research discussing the strengths and weaknesses of RtI implementation. Eichhorn (2009), believes that RtI is “proactive not reactive,” (p. 9). Response to Intervention can identify
students early in their educational careers so that they do not get far behind. Additionally, data are used so that educators can collaborate and make appropriate decisions about curriculum (p. 20). Many interventions can be implemented in the classroom. Therefore, students are staying with their peers and getting the help that they need. With teachers having to look so carefully at student data, teacher quality rises as well.

According to Fletcher (n.d.), using an RtI model helps with early identification of students who need interventions or special education services (para. 36). Fletcher also believes that collaboration improves with RtI because teachers must work together to help students improve.

Brue and Wilmshurst (2011) echo many of the same sentiments as stated above. They believe wholeheartedly in the benefits of RtI. They believe that it will aid in identifying students early in their area or areas of weakness. Additionally, Brue and Wilmshurst believe that RtI is proactive and identifies students early. Brue and Wilmshurst state that another advantage is that it keeps students in the general education setting because most interventions can be done there. Finally, they also believe that RtI helps improve teacher instruction and quality. By using different interventions, teachers realize what works and what does not. In the end, all students benefit (Brue & Wilmshurst, 2011).

Johnson and Mellard (2009) and the Virginia Department of Education believe that when RtI is implemented with fidelity, all students seem to benefit. They also agree that RtI is a good tool that can identify students with academic needs early (Johnson & Mellard, 2009).
Overall, many researchers agree on several benefits of RtI. Many argue that it is proactive, identifies students early, and increases teacher quality. However, there are many arguments against the implementation of RtI.

**Weaknesses.** According to Eichhorn (2009), much of the problems with RtI implementation centers on educators interpreting what they believe to be interventions. Another problem with RtI implementation is that training and support might be implemented differently or ineffectively. Some educators fail to understand the components and approaches of RtI. There is lack of appropriate professional development and maintenance throughout the process. Many times the teacher is not qualified to implement the appropriate interventions because of lack of training. Additionally, if a teacher is not consistent with whatever RtI model their school uses, results will not be as strong (Eichhorn, 2009).

According to Fletcher, another issue with RtI is that it is not a “quick fix” and takes time to implement. As a result, schools need to realize that moving to an RtI model is a gradual change and will take several years to fully implement with fidelity.

Reynolds and Shaywitz (2009) stated some very strong arguments against RtI. They do not believe that there is enough evidence to say that it works. They believe that the term “scientifically based” should be used loosely. These two argue that strong proponents of RtI have not been completely forthcoming when looking at research support of RtI, ease of implementation, application in schools, clarity on what is considered responsiveness to the program, and the ability of RtI to help those students that might have learning disabilities (Reynolds & Shaywitz, 2010/2009).
Reynolds and Shaywitz believe, like other researchers, that the real downfall with RtI is lack of evidence to support its implementation and the implementation process in general. These researchers believe that RtI is not always implemented with fidelity, which makes seeing its impact difficult. They believe that the studies done on RtI lack large enough sample sizes to really prove anything significant. Reynolds and Shaywitz believe that RtI is a fad and not here to stay. They also believe that RtI will have long-term, negative impacts on students with disabilities (Reynolds & Shaywitz, 2010/2009).

As stated by several researchers, RtI has some shortcomings. One of the major shortcomings is that teachers are not properly trained to implement it as it should be. When that happens, the benefits of RtI cannot be seen. In addition, RtI is a gradual process that takes time. Reynolds & Shaywitz would argue that there is lack of research to support the use of RtI, and that it might not benefit all students.

**Sustainability**

When districts implement anything new, they are often met with resistance. Implementing a system like RtI in a school or school district must have sustainability. According to Danielson et al. (2007), it is not enough to have evidence-based interventions. Schools making a change must also have an evidence-based implementation plan (p. 634). An effective implementation plan must be in place in order for real change to occur.

In order for RtI to be effective and sustainable, administrators must be supportive. Additionally, there needs to be systematic interventions, proper recruitment and selection, pre-service training, consultation and coaching, staff performance evaluations, and a decision-support data system (Danielson et al., p. 634). These components must be
integrated together because they affect one another. Understanding and supporting a particular RtI model will help teachers to sustain its use because for many, RtI is a paradigm shift in instruction.

**Roles and Responsibilities**

The National Education Association (NEA) developed a policy brief supporting RtI. In this policy brief, NEA describes the different roles and responsibilities of many entities that must be in place in order for RtI to be successfully implemented (National Education Association [NEA], n.d.). The NEA looks at RtI from many viewpoints and the support that is needed from each group. One group is the federal government. According to NEA, the United States Department of Education needs to develop policies and initiatives with RtI that provide clear guidance. Additionally, the United States Department of Education needs to offer funds for data systems and professional development. Also, the United States Department of Education needs to require teacher preparation programs to include RtI. Finally, the United States Department of Education needs to coordinate RtI with the Common Core standards (NEA, n.d.).

The National Education Association also believes that help is needed from state departments as well. The NEA believes that state departments should establish a leadership team with all stakeholders, provide resources and technical assistance, and offer high quality professional development (NEA, n.d.).

The NEA believes that school districts are also responsible for implementation of RtI. When NEA discusses school districts, they do not mean just board members. They are also including community leaders and families. The NEA states that school districts should support the RtI process by learning about RtI and its potential. The National
Education Association believes that districts should keep RtI in mind when doing strategic planning. School districts should have an RtI leadership team and should provide professional development, screening tools, data systems, and time for team planning, curriculum adaptations, and interventions (NEA, n.d.).

The last group the NEA feels needs to support RtI is actual schools. The NEA believes that the school administrator is key to the RtI process as are teacher leaders, specialists, coaches, and support staff. Schools have many responsibilities when implementing RtI. First and foremost, there must be a building consensus about RtI implementation and its goals and procedures. In addition to school staff, families need to be engaged in the process as well. Whatever model of RtI is used, it must relate to the school’s mission and vision. The core curriculum and instruction that all students are receiving must be evaluated to determine effectiveness. Tools, resources and supports must be in place in order to ensure proper implementation. Responsibilities must be divided between faculty and staff. Finally, schools must provide the proper professional development for implementation and evaluate the success of the program (NEA, n.d.).

**New Mandates for RtI in Tennessee**

In Tennessee, the RtI model will be used to determine the students who will be under the umbrella of special education due to a learning disability. By 2014, Tennessee schools will have to use an RtI model instead of the IQ-achievement discrepancy model (TNCORE, 2013, pp. 6-7). The Tennessee Department of Education plans to provide professional development for leaders in school districts, psychologists, and teachers. Ongoing professional development will continue for best practices interventions. Tennessee wants all stakeholders to have a clear and consistent idea of how RtI should be
implemented. Those involved at the state level in Tennessee believe that the RtI model will close instructional gaps, use best practices, and prevent failure (TNCORE, 2013).

The Department of Education in Tennessee defines several beliefs that they feel are essential for the RtI process to be implemented correctly. The leadership must be in place at all levels, not just the state level, but also at the district level and the school level. Also, the state believes that collaboration focused on student achievement is key. Finally, the RtI process in Tennessee must focus on prevention and intervention (TNCORE, 2013).

As with implementation in other parts of the country, students in Tennessee will need to be screened multiple times a year. The data gained will be used to make instructional and intervention decisions for each individual student. Additionally, students will be able to flow through tiers. Tier I will consist of the use of Common Core standards (TNCORE, 2013). Teachers in Tier I will be given professional development on the implementation of standards and formative assessment collection. The Tennessee Department of Education believes that “80 to 85%” of students will be successful in Tier I (TNCORE, 2013).

Tier II in Tennessee is going to include struggling learners and advanced learners. On a daily basis, both groups of students should be given specialized lessons to fit their needs. The interventions chosen must be effective and delivered by highly qualified individuals. Progress monitoring will begin for those that need it in Tier II. The state believes that “10 to 15%” of students in Tennessee will require Tier II interventions (TNCORE, 2013).
Tier III will cover students that are still demonstrating difficulties in Tiers I and II. This tier might include students that are below grade level. Students should receive intensive, personalized instruction in a small group setting. All strategies employed at this level must be research-based. Progress monitoring will continue in this tier. The state believes that only “3 to 5%” of students will fall into the Tier III category (TNCORE, 2013). In order to determine what is working or not working for students in Tier III, educators can only change one or two variables at a time. These variables include changing interventions, changing who delivers the interventions, frequency of interventions, and the time of day that interventions are given (TNCORE, 2013).

In Tennessee, if Tier III is not effective, a team will be put in place in order to determine if the student qualifies for special education services. At this stage, many requirements must be met in order for a student to qualify for special education services. Duration of time in tiers, adequate progress monitoring and many other factors are taken into account at this stage (TNCORE, 2013).

Throughout the entire process, teachers must teach, assess, monitor and adjust in order for RtI to be successful. All decisions must be made based on data. The state of Tennessee gives specific amounts of time that students should spend in each tier throughout the day. Administrators, coaches, and RtI coordinators will monitor the level of fidelity in the RtI process. Ongoing professional development will be embedded throughout the process.

Summary

Because of NCLB and IDEA mandates, states across the country will have to implement some form of Response of Intervention. The state of Tennessee is not left out
of this equation. School districts across the nation will have to determine an RtI model and a roll out plan for its implementation.

Part of the purpose of this approach is to help students achieve and to close the achievement gap. Additionally, states will be using RtI as a way to determine eligibility for special education services. Response to Intervention will require states, school districts, and schools to come together, collaborate, and provide ongoing high quality professional development. Effectively implementing RtI will take time.

The key to successful implementation is training. Feelings and perceptions about RtI are mixed. Educators and researchers alike seem to have varying opinions on the use and implementation of Response to Intervention. If schools are going to be required to make a shift to using RtI, many stakeholders are going to be responsible and have roles in the process.

Like anything new, the implementation of Response to Intervention is going to take time to determine its effectiveness. Documentation of data, collaboration, and professional development must be taken seriously by all involved. Over time, all stakeholders will be able to determine the effectiveness, or possible lack thereof, of RtI in their schools and school districts.
Chapter 3: Methods

Purpose of Study

Middle Tennessee school systems are facing varied results from the use of RtI (V. McDonald, personal communication, August 29, 2012). Varying levels of training are being provided for staff members responsible for delivering interventions. Staff member buy-in to the RtI process may not be consistent throughout schools and school systems. Contradictory procedures and different levels of implementation are possibly disturbing RtI outcomes. The purpose of the study was to examine the extent to which the amount of training in RtI impacts staff members’ perceptions of RtI, to determine how staff members’ perceptions of RtI relate to their fidelity of implementation, as well as to establish to what degree staff members’ involvement in training influences their fidelity of implementation.

Procedures for RtI are being expanded and must be employed due to the adoption of Tennessee Common Core, of which the RtI initiative is a component (TDOE, 2013, p. 7). Response to Intervention is a mandated framework and schools are responsible for implementing the program with fidelity by July of 2014 (p. 6). Quantitative data are needed to relate training in RtI to staff perceptions of RtI, uncover how those perceptions of RtI influence staff members in their fidelity of implementation of the framework, and to establish the intensity of the direct association between staff training and their fidelity of implementation of RtI. Qualitative data are needed in order to broaden understandings of factors related to staff perceptions and to provide additional insight into relationships found between RtI training, perceptions, and fidelity of implementation.
Research Questions

The research began by asking the following questions:

1. What impact does the amount of training in RtI have on staff members’ perceptions of RtI?
2. What influence does the perception of RtI have on staff member levels of fidelity of implementation?
3. How does the amount of training in RtI relate to the level of fidelity in which RtI is implemented?

Null Hypotheses

The following null hypothesis was tested:

1. There is no statistically significant relationship between the amount of hours of RtI training and staff ratings of their perceptions of RtI.
2. There is no statistically significant relationship between staff ratings of their perceptions of RtI and RtI level of fidelity of implementation scores.
3. There is no statistically significant relationship between the amount of hours of RtI training and RtI level of fidelity of implementation scores.

Research Design

To accomplish the purposes of this research study, the research design was a quantitative dominant mixed methods study. The goal was to provide a detailed account and analysis of staff within two large school districts in Middle Tennessee through convenience sampling of persons within the professional network of the researchers. The quantitative segment of the research design was correlational with the goal of measuring variables for existing relationships and of making predictions based upon those
relationships. The qualitative segment of the research design was to further explain and enhance the quantitative findings while providing useful clarifications of those relationships.

The researchers examined the relationship between the independent variables, which are the amount of hours of RtI training and staff ratings of their perceptions of RtI, and the dependent variables, which are staff ratings of their perceptions of RtI and RtI level of fidelity of implementation scores with a three-portion quantitative design. They chose to first compare the independent variable of the amount of hours of RtI training to the dependent variable of staff ratings of their perceptions of RtI, in order to discover how training and perceptions relate with no intervening variables. Second, the researchers chose to compare the independent variable of staff ratings of their perceptions of RtI to the dependent variable of RtI levels of fidelity of implementation scores, in order to discover how perceptions and fidelity relate without the intervening variable of available training. Thirdly, the researchers chose evaluation to be the comparison of the independent variable of the amount of hours of RtI training to the dependent variable of RtI level of fidelity of implementation scores, in order to discover if training affected staff fidelity of implementation directly without the intervening variable of staff perceptions. To apprehend further information concerning staff perceptions of RtI, qualitative data were evaluated for dominant themes.

Throughout the three portions of the quantitative segment of the study, the roles of independent, dependent, and intervening variables are interchanged throughout the three variables: amount of RtI training, staff rating of perception, and fidelity of implementation score. The amount of RtI training functions as the independent variable
in both the first and third portions of the study, as well as the intervening variable in the second portion. The staff rating of perception operates as the dependent variable in the first portion of the study, the independent variable in the second portion, and the intervening variable in the third. The score for fidelity of implementation serves as the dependent variable in both the second and third portions of the study, yet never as the independent or intervening variable. Throughout the qualitative segment of the study, data were first coded into prime categories. Those categories were then coded once again to reveal permeating themes concerning staff perceptions of RtI.

The researchers chose to collect data by surveying elementary and middle school staff members in two neighboring districts in Middle Tennessee. Data pertaining to training and implementation were collected via the researcher-created RtI Training and Implementation Questionnaire (Appendix A) and data pertaining to perceptions were collected via interview using the researcher-created perceptions interview questions (Appendix B). The Training and Implementation Questionnaire (Appendix A) was comprised of two sections. The initial five-item section of the Training and Implementation Questionnaire (Appendix A) was created to gather detailed information on the amount of hours of differing types of RtI training in which staff members participated, while the final four-item section was created to gather evidence of school and staff member implementation of RtI to be used in assigning RtI level of fidelity of implementation scores. The perceptions interview (Appendix B) consisted of open-ended questions for collecting qualitative data, as well as Likert scale rating questions to be used as quantitative data.
In order to ensure validity, RtI level of fidelity of implementation scores for each staff member were assessed using equal definitions and scale from the Researcher Fidelity of Implementation Rubric (Appendix C), which was created by the researchers based on the National Center on Response to Intervention’s RtI Rubric (Appendix D) and RtI Worksheet (Appendix E) with assistance and approval (Appendix F) from an RtI expert assigned as a liaison between the researchers and the Tennessee State Personnel Development Grant manager for the Tennessee Department of Education.

The researchers contacted members of their professional networks within the studied districts to be surveyed using a web-based version of the Training and Implementation Questionnaire (Appendix A), which was sent to participants via e-mail. In an isolated e-mail, the researchers assigned each staff member a private code to use for identification, allowing their responses to remain confidential, and attached the link to the Training and Implementation Questionnaire (Appendix A). Upon completion of the Training and Implementation Questionnaire (Appendix A), contributors were requested to participate in either a group or individual interview to be scheduled at their convenience. Upon beginning the interview, the researchers asked each participant to inform them of their private code in order to later connect questionnaire responses to interview responses. The interviews were transcribed and answers were entered into a web-based document for sharing among the researchers, to which only they had access.

**Population and Participants**

The research design consisted of a convenience sampling from the researchers’ professional networks. The population of this study consisted of staff members in assorted middle and elementary schools from two school districts in Middle Tennessee.
The researchers' professional networks extended across two neighboring districts, labeled as District A and District B for confidentiality purposes. District A was a suburban school district located in middle Tennessee, and District B was a large urban district adjacent to District A.

District A covers 530 square miles, made up of eight cities, in a county with a population of over 155,000. In 2012, approximately 1,700 certificated teachers served over 27,000 students. Approximately 40% of students are economically disadvantaged with about 22% of students benefiting from Title I funds allotted to their schools. This district’s 46 schools consist of a predominantly Caucasian population of approximately 84%. The remaining 16% of students are minorities. Ten percent of students are African American, 5% are of Hispanic descent, and 1% of students are Asian or Pacific Islander. Two percent of students are English Language Learners, while 18% of the population is considered as having disabilities (Tennessee state report card, 2012).

District B is a consolidated city-county school district that serves more than 278,000 households over 525 square miles. As of 2012, in this 72% economically disadvantaged district, 79% of students benefit from attending schools receiving Title I funds. Approximately 46% of students are African American, 34% of students are Caucasian, 16% of students are Hispanic, and 4% are Asian or Pacific Islander. The English Language Learner population makes up for 14% of the student body, while over 12% is considered as having disabilities. In 2012, approximately 74,000 students were served by over 5,000 certificated teachers across 143 schools (Tennessee state report card, 2012).
The participants consisted of 38 individuals who responded to the questionnaire invitation and the follow-up interview invitation. Of those 38 people, there was a mixture of position types, including: administrators, specialists/coaches, counselors, related arts teachers, elementary and middle school general education teachers, elementary and middle school special education teachers, and elementary and middle school English Language Learner (ELL) teachers. These 38 responders participated in both the questionnaire and the interview.

Of the 38 individuals who participated in the questionnaire and interview, only 30 replied to the optional question about gender. The sample included 27, or 71%, who were female; 3 or 8%, who were male; and 8 or 21%, who did not respond to the gender question. Of the 38 individuals who participated in the data collection process, 35 responded to the questions about ethnicity. Of the participants, 19, or 50%, were African-American; 2, or 5%, were Hispanic; and 14, or 37%, were Caucasian; with 4, 11%, not responding. Of the 38 individuals included in the sample, 35 reported their age range. Of the participants, 2, or 5%, were 21-25 years old; 3, or 8%, were 26-30 years old; 8, or 21%, were 31-35 years old; 11, or 29%, were 36-40 years old; 11, or 29%, were 41 years old or older; and 4, or 11%, did not respond.

The participants were staff members who held varying types of licensure status and degrees. One participant, or 3%, did not report their licensure status. The Special Group license included those with a counselor, psychologist, or reading specialist license. The largest majority of participants, 63%, held a Professional Teacher license. The smallest categories were for out-of-state licenses and special groups, both at 5%. The most frequent response for the highest degree obtained was Master’s Degrees, at 66%.
The smallest response for highest degree obtained was for the Education Specialist’s degree, at 5%. The following bar graphs in Figure 1 and Figure 2 compare the varying licensure statuses and degrees of the sample.

**Figure 1.** Bar graph comparing licensure statuses of all surveyed staff members.
The participants held varying positions, and taught varying grades and subjects in varying types of schools. Of the 38 participants, some reported being teachers in the general education classroom, some were special education teachers, and some were administrators, specialists, or coaches. The largest category of responses was general education lower elementary teachers (kindergarten through second grade) at 24% and the smallest category was special education teachers in lower elementary at 3%. The types of schools included Title I schools, urban schools, rural schools, and magnet schools. The majority of schools, 55%, were Title I. Rural and urban schools accounted for 8% of responses each. The following bar graphs in Figure 3 and Figure 4 compare the varying positions and types of schools for the sample.
Figure 3. Bar graph comparing positions of all surveyed staff members.
The participants reported implementing various tiers of RtI. Some staff members had never participated in the RtI process. Others had only participated in one tier, while some had participated in multiple tiers, or all of the tiers. Of the 38 staff members, 5, or 13%, had participated in Tier I only; 2, or 5% had participated in Tier II only; 3, or 8% had participated in Tier III only; 11, or 29%, had participated in Tiers I and II; 1, or 3%, had participated in Tiers II and III; 3, or 8%, had participated in all three tiers; 5, or 13% coached others who participated in the RtI process; and 8, or 21% reported not participating in any of the tiers of RtI.

Figure 4. Bar graph comparing all surveyed staff members’ types of schools.
Instrumentation

Three instruments were used in this study. The first instrument used was the Training and Implementation Questionnaire (Appendix A) created by the researchers to be used for gathering quantitative data. The Training and Implementation Questionnaire (Appendix A) asked five questions pertaining to training and four questions pertaining to implementation. The questions pertaining to training inquired of the amount of hours staff members spent in five distinctive types of RtI training: college coursework, district professional development sessions, planning training with consultation on assigning students to and planning certain types of interventions, student training with private consultation concerning specific students, and class training with a consultant working alongside the teacher during intervention.

The second instrument, the Researcher Fidelity of Implementation Rubric (Appendix C), was created by the researchers to be used as a tool for assigning RtI level of fidelity of implementation scores. Scores were based on individual staff member responses to the final four questions on the above Training and Implementation Questionnaire (Appendix A), which addressed the four components of RtI implementation: curriculum, instruction, accountability, and responsiveness. The Researcher Fidelity of Implementation Rubric (Appendix C) was produced by synthesizing items from the RtI Essential Components Integrity Rubric and Worksheet, which were designed by the National Center on Response to Intervention for “collecting relevant information and for recording a school’s rating on various items related to RtI implementation” (RTI Essential Components Integrity Worksheet [RtI Worksheet], 2011). The state’s appointed RtI expert, who served as a liaison between the manager of
the Tennessee State Personnel Development Grant for the Tennessee Department of Education and the researchers, aided in the creation and approved of the use of the Researcher Fidelity of Implementation Rubric (Appendix C).

The third instrument used was a set of five perception interview questions (Appendix B). The researchers created the questions to be answered in a Likert scale format, with the option of elaboration on their ratings. Staff members chose to be interviewed individually or in a group by the researchers in order to discuss their perceptions of RtI. Interviews were transcribed and responses were entered into a web-based document for sharing among the researchers, to which only they had access. During the interview, respondents were asked five perception questions, with three of those questions utilizing a one through five rating on a Likert scale for three perception classifications: effectiveness of the RtI approach, comfort with RtI implementation ability, and leadership support. The perceptions interview (Appendix B) was created to provide both qualitative and quantitative data from one instrument. The data from the two initial open-ended interview questions, as well as the requests for explanations of the Likert scale ratings, were used as qualitative data, while the three Likert scale ratings themselves were used as quantitative data.

**Pilot Testing**

Due to the RtI Rubric and Worksheet having been used and validated by the United States Office of Special Education Programs, as well as the Researcher Fidelity of Implementation Rubric (Appendix C) being validated by Tennessee’s Department of Education appointed RtI expert liaison, the perception interview questions (Appendix B) was the only instrument that required pilot testing. Staff working in a Middle Tennessee
elementary school agreed to pilot the teacher perception interview questions (Appendix B) and provide feedback before data collection began. Seven individuals volunteered to participate: a guidance counselor, a literacy coach, a special education teacher, and one teacher from each of the first through fourth grade teams.

The guidance counselor, first grade teacher, and fourth grade teachers chose to be in a group interview, while the literacy coach and remaining teachers opted out of the group interviews and requested to answer questions in individual interviews. Upon initial conversations, one teacher decided to forfeit answering the questions and elected to discuss the validity of the questions in pertaining to the research as a whole. That teacher’s opinion was that all questions were valid, well written, and would provide adequate information relevant to teachers’ perceptions of RtI.

Interview responses were recorded and initially coded into two opposing categories. Those categories were again coded and revealed similar themes across both categories, causing four themes to emerge. Straightforward coding of results led to the conclusion that the interview questions are appropriate for the qualitative segment of the study and led to conversations addressing components of the quantitative segment of the study. Pilot interview data demonstrated that the teacher perception interview questions (Appendix B) were capable of providing qualitative data able to be coded.

**Data Collection Procedures**

To begin, the researchers contacted staff members within their professional networks who were employed by the districts under study to gain personal consent to be surveyed via questionnaire and interview. For the purpose of allowing responses to remain nameless, a private code to use for identification was allocated for each staff
member. Upon attaining their agreement to participate, an individual e-mail containing the staff member’s private code and the link to a web-based version of the Training and Implementation Questionnaire (Appendix A) was sent to each respondent via e-mail.

After completing the Training and Implementation Questionnaire (Appendix A), staff members were invited to share their perceptions of RtI in either an individual or group interview. A date and time for the interview was scheduled at the convenience of each contributor wishing to continue. The researchers asked each participant to inform them of their private code upon beginning the interview, in order to later connect questionnaire responses to interview responses. The interviews were transcribed and responses were recorded on a web-based document for viewing by the researchers into which only they had access.

Of the fifty-one subjects to complete the questionnaire, thirteen declined contributing to the interview process, resulting in 38 operational participants. Quantitative data pertaining to the amount of training received were collected via responses to the first five items on the Training and Implementation Questionnaire (Appendix A). Levels of fidelity of implementation for individual teachers and staff members were determined by the researchers using the Researcher Fidelity of Implementation Rubric (Appendix C) created in partnership with the state’s RtI expert. The Researcher Fidelity of Implementation Rubric (Appendix C) is a condensed version of the RtI Rubric and Worksheet, which were created for “recording a school’s rating on various items related to RtI implementation” by the National Center on Response to Intervention (RTI Essential Components Integrity Worksheet [RtI Worksheet], 2011). The staff members participating in the RtI process at any point in any tier were surveyed
on components of their own implementation in the form of the final four inquiries on the Training and Implementation Questionnaire (Appendix A) and, according to the Researcher Fidelity of Implementation Rubric (Appendix C), assigned scores to serve as quantitative data. Following the review of RtI fidelity of implementation scores and information on training received, the perception interview (Appendix B) responses were examined.

The researchers utilized the five inquiries on the Training and Implementation Questionnaire (Appendix A) pertaining to amount of training with the goal of providing a detailed statistical analysis of the effect of training on staff members’ perceptions of RtI. Next, fidelity of implementation scores were compared to perception ratings in order to statistically analyze the influence of each staff member’s perceptions of their level of fidelity of implementation. Additionally, the responses to questions on training were also compared to fidelity of implementation scores for the purpose of exploring the statistical relationship between training and implementation. Finally, responses to the open-ended interview questions were explored and coded for themes concerning staff perceptions of RtI.

**Description of the Dataset**

There were 23 variables in the quantitative dataset, including demographic variables of the staff members, variables pertaining to the types of schools and classes taught by staff, and variables that were created based on survey questions. The variables included:

**Code.** Each staff member was assigned a confidential code with a letter and one-to-three digit number so that they remained anonymous.
Gender. For this nominal variable, the label “one” was assigned to female staff members and the label “two” was assigned to male staff members.

Ethnicity. Ethnicity was described by assigning the letters “aa” to African American staff members, the letter “w” to White staff members, and the letter “h” to Hispanic staff members.

Age. The nominal variable of age range was described by assigning the label “one” to staff members ranging between the ages of 21 and 25. The label “two” was assigned to staff members ranging between the ages of 26 and 30. The label “three” was assigned to staff members ranging between the ages of 31 and 35. The label “four” was assigned to staff members ranging between the ages of 36 and 40. The label “five” was assigned to staff members who were 40 and above.

Licensure. This variable describes the staff members’ licensure status. The label “one” was given to administrators. The label “two” was given to professional teachers. The label “three” was given to apprentice teachers. The label “four” was given to out-of-state teachers. The label “five” was given to special group employees.

Degree. This nominal variable describes the highest degree obtained by staff members. The label “one” was assigned to staff members who had earned a Bachelor’s degree. The label “two” was assigned to staff members who had earned a Master’s degree. The label “three” was assigned to staff members who had earned an Educational Specialist degree. The label “four” was assigned to staff members who had earned a Doctorate degree.

Position. Position refers to the staff members’ job description. The label “one” was assigned to administrators. The label “two” was assigned to specialists and coaches.
The label “three” was assigned to counselors. The label “four” was assigned to aids. The label “five” was assigned to related arts teachers. The label “six” was assigned to general education lower elementary teachers, grades pre-kindergarten through second. The label “seven” was assigned to general education upper elementary teachers, grades third and fourth. The label “eight” was assigned to general education middle school teachers. The label “nine” was assigned to general education high school teachers. The label “ten” was assigned to special education lower elementary teachers, grades pre-kindergarten through second. The label “eleven” was assigned to special education upper elementary teachers, grades third and fourth. The label “twelve” was assigned to special education middle school teachers. The label “thirteen” was assigned to special education high school teachers. The label “fourteen” was assigned to English Language Learner teachers.

**Tiers.** This nominal variable of RtI tiers implemented was assigned numerical labels for each tier or combination of tiers implemented. The label “one” was assigned to staff members implementing only Tier I. The label “two” was assigned to staff members implementing only Tier II. The label “three” was assigned to staff members implementing only Tier III. The label “four” was assigned to staff members implementing both Tiers I and II. The label “five” was assigned to staff members implementing both Tiers II and III. The label “six” was assigned to staff members implementing all three tiers. The label “seven” was assigned to staff members coaching other staff members in their implementation. The label “eight” was assigned to staff members who were not directly involved in specific tiers.

**CollegeTrain.** This nominal variable refers to the amount of hours spent in training for RtI in college. A “zero” was given to staff members who had not received
any training on RtI in college. A “one” was given to staff members who had received between 1 and 5 hours of this type of training. A “two” was given to staff members who had received between 6 and 10 hours of this type of training. A “three” was given to staff members who had received between 11 and 15 hours of this type of training. A “four” was given to staff members who had received between 16 and 20 hours of this type of training. A “five” was given to staff members who had received between 21 and 25 hours of this type of training. A “six” was given to staff members who had received between 26 and 30 hours of this type of training. A “seven” was given to staff members who had received between 31 and 35 hours of this type of training. An “eight” was given to staff members who had received between 36 and 40 hours of this type of training.

**PDTrain.** This nominal variable refers to the amount of hours spent in training for RtI in district professional development sessions. A “zero” was given to staff members who had not received any district professional development training on RtI. A “one” was given to staff members who had received between 1 and 5 hours of this type of training. A “two” was given to staff members who had received between 6 and 10 hours of this type of training. A “three” was given to staff members who had received between 11 and 15 hours of this type of training. A “four” was given to staff members who had received between 16 and 20 hours of this type of training. A “five” was given to staff members who had received between 21 and 25 hours of this type of training. A “six” was given to staff members who had received between 26 and 30 hours of this type of training. A “seven” was given to staff members who had received between 31 and 35
hours of this type of training. An “eight” was given to staff members who had received between 36 and 40 hours of this type of training.

**PlanTrain.** This nominal variable refers to the amount of hours spent in training for RtI in collaboration with a school administrator or coach concerning planning interventions and identifying students. A “zero” was given to staff members who had not received any training on RtI concerning planning interventions and identifying students. A “one” was given to staff members who had received between 1 and 5 hours of this type of training. A “two” was given to staff members who had received between 6 and 10 hours of this type of training. A “three” was given to staff members who had received between 11 and 15 hours of this type of training. A “four” was given to staff members who had received between 16 and 20 hours of this type of training. A “five” was given to staff members who had received between 21 and 25 hours of this type of training. A “six” was given to staff members who had received between 26 and 30 hours of this type of training. A “seven” was given to staff members who had received between 31 and 35 hours of this type of training. An “eight” was given to staff members who had received between 36 and 40 hours of this type of training.

**StudentTrain.** This nominal variable refers to the amount of hours spent in training for RtI in consultation with an administrator or coach concerning specific students or groups of students. A “zero” was given to staff members who had not received any training or consulting on RtI for specific students or groups of students. A “one” was given to staff members who had received between 1 and 5 hours of this type of training. A “two” was given to staff members who had received between 6 and 10 hours of this type of training. A “three” was given to staff members who had received between
11 and 15 hours of this type of training. A “four” was given to staff members who had received between 16 and 20 hours of this type of training. A “five” was given to staff members who had received between 21 and 25 hours of this type of training. A “six” was given to staff members who had received between 26 and 30 hours of this type of training. A “seven” was given to staff members who had received between 31 and 35 hours of this type of training. An “eight” was given to staff members who had received between 36 and 40 hours of this type of training.

**ClassTrain.** This nominal variable refers to the amount of hours spent in training for RtI in the classroom with a consultant modeling or co-teaching interventions. A “zero” was given to staff members who had not received any training on RtI in the classroom with a consultant. A “one” was given to staff members who had received between 1 and 5 hours of this type of training. A “two” was given to staff members who had received between 6 and 10 hours of this type of training. A “three” was given to staff members who had received between 11 and 15 hours of this type of training. A “four” was given to staff members who had received between 16 and 20 hours of this type of training. A “five” was given to staff members who had received between 21 and 25 hours of this type of training. A “six” was given to staff members who had received between 26 and 30 hours of this type of training. A “seven” was given to staff members who had received between 31 and 35 hours of this type of training. An “eight” was given to staff members who had received between 36 and 40 hours of this type of training.

**CurricFidelity.** According to the Researcher Fidelity of Implementation Rubric (Appendix C), staff members were assigned a score of “one” through “five” based on
their responses to item 6 of the Training and Implementation Questionnaire (Appendix A), concerning their intervention curriculum.

**InstructFidelity.** According to the Researcher Fidelity of Implementation Rubric (Appendix C), staff members were assigned a score of “one” through “five” based on their responses to item 7 of the Training and Implementation Questionnaire (Appendix A), concerning their intervention instruction methods.

**AccountabilityFidelity.** According to the Researcher Fidelity of Implementation Rubric (Appendix C), staff members were assigned a score of “one” through “five” based on their responses to item 8 of the Training and Implementation Questionnaire (Appendix A), concerning their intervention accountability procedures.

**ResponseFidelity.** According to the Researcher Fidelity of Implementation Rubric (Appendix C), staff members were assigned a score of “one” through “five” based on their responses to item 9 of the Training and Implementation Questionnaire (Appendix A) concerning their intervention responsiveness determining strategies.

**EffectivenessPercep.** Staff members rated their perceptions of the effectiveness of RtI on a scale of “one” through “five”.

**ImplementPercep.** Staff members rated their perceptions of their comfort with their own ability to implement RtI on a scale of “one” through “five”.

**SupportPercep.** Staff members rated their perceptions of leadership support when implementing RtI on a scale of “one” through “five”.

**TotalTrain.** This continuous variable refers to the total number of hours in RtI training, combining CollegeTrain, PDTrain, PlanTrain, StudentTrain, and ClassTrain.
**TotalFidelity.** This continuous variable refers to the total fidelity score, combining CurricFidelity, InstructFidelity, AccountabilityFidelity, and ResponseFidelity.

**TotalPercep.** This continuous variable refers to the total perceptions rating, combining EffectivenessPercep, EffectivenessPercep, and SupportPercep.

**Data Analysis**

Prior to the inferential statistics being performed, descriptive statistics were established. Due to the quantitative segment of the research being correlational in design, a Pearson r was performed measuring the strength of relationship between the total amount of hours of training and the total perceptions ratings. A second Pearson r was performed measuring the strength of the relationship between the total perceptions ratings and the total level of fidelity of implementation scores. A third Pearson r was performed measuring the strength of the relationship between the total amount of hours of training and the total level of fidelity of implementation scores.

Next, a Simple Linear Regression was performed to test the relationship between total training hours and total perception rates in order to show the relationship of the two variables and to make predictions based on those relationships. A second Simple Linear Regression was performed to test the relationship between total perception rates and total fidelity scores in order to show the relationship of the two variables and to make predictions based on those relationships. A third Simple Linear Regression was performed to test the relationship between total training hours and total fidelity scores in order to show the relationship of the two variables and to make predictions based on those relationships.
Additionally, for the purpose of taking a deeper look into the association between perceptions and fidelity, a Spearman rho was performed to measure the strength of the relationships between the perception classifications: effectiveness of the RtI approach, comfort with ability to implement RtI, and leadership support and the four components of implementation: curriculum, instruction, accountability, and responsiveness. Finally, for a closer look into how training relates to fidelity, another Spearman rho was performed to measure the strength of the relationship between the amount of hours spent in each type of training: college, professional development sessions, planning training, student training, and class training and the four components of implementation of RtI: curriculum, instruction, accountability, and responsiveness.

Finally, for the qualitative segment of the research, interview responses were coded and categorized to identify themes pertaining to perceptions of RtI. Those themes were used to develop conclusions between level of fidelity of implementation, training, and staff perceptions.

No identifying marks were left on the data. Staff members’ names remained anonymous due to being labeled with confidential codes. The quantitative segment of the research design was correlational and had the goal of measuring variables for existing relationships between training and perceptions, perceptions and implementation, and training and implementation, and of making predictions based upon those relationships. The qualitative data’s purpose was to further explain and enhance the quantitative findings.
Chapter 4: Findings and Analysis

Quantitative Analysis of Null Hypotheses

**Descriptive statistics.** The survey tools contained questions pertaining to training for RtI implementation, perceptions of RtI, and fidelity of staff members to the RtI design. Thirty-eight participants answered all of the questions, covering each of these categories. Each hypothesis was tested by first examining the descriptive statistics to determine that the variables were normally distributed. The descriptive statistics are displayed in Table 1. Then, the statistics were analyzed after the Pearson r and Simple Linear Regression tests had been run.

Participants were first asked to approximate how many hours of training they had received while attending college. They were then asked to approximate how many hours of training they had received during the previous school year in the following different areas: professional development sessions, intervention planning meetings, private consultations regarding specific students, and one-on-one in-class coaching or modeling. Replies ranged between 0 and 40 hours. Responses to the five training items on the questionnaire were added together to find the Total Training amount, with a possible range of 0 – 200 hours.

During the interview, respondents were asked to rate three perception classifications on a Likert scale of 1 to 5. The perception questions sought participants’ perceptions on the effectiveness of the RtI approach, their comfort with ability to implement RtI, and leadership support. The sum of those scores was found to create the Total Perceptions score, with a range of 3-15.

Four questions on the questionnaire addressed areas concerning levels of fidelity
of implementation of RtI components. The components of RtI considered were
curriculum, instruction, accountability, and responsiveness. Responses were rated on a
scale of 0 – 5 by the researchers according to the condensed version of the RtI Rubric.
Those scores were added together to find the Total Fidelity level, with a range of 0 – 20.

Table 1.

*Descriptive Statistics*

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
<th>Skew</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total training amount</td>
<td>38</td>
<td>0</td>
<td>26</td>
<td>5.24</td>
<td>6.03</td>
<td>2.22</td>
</tr>
<tr>
<td>Total perceptions score</td>
<td>38</td>
<td>3</td>
<td>15</td>
<td>3.40</td>
<td>3.02</td>
<td>-0.33</td>
</tr>
<tr>
<td>Total fidelity level</td>
<td>38</td>
<td>1</td>
<td>20</td>
<td>11.29</td>
<td>6.72</td>
<td>-0.20</td>
</tr>
</tbody>
</table>

*Note:* Total perceptions score and total fidelity level both had minimums at the bottom of
the possible ranges and maximums at the top of the possible ranges, while total training
amount maximum was far below the possible range.
Inferential statistics. A Pearson r was performed to measure the strength of all possible relationships, focusing on the relationship between total training amount and total perceptions score, the relationship between total perceptions score and total fidelity level, as well as the relationship between total training amount and total fidelity level. A Simple Linear Regression was performed to determine if three possible relationships had predictive value: total training amount’s effect on total perceptions score, total perceptions score’s effect on total fidelity level, and total training amount’s effect on total fidelity level.

H01 There is no statistically significant relationship between the amount of all types of training in RtI and the perceptions scores.

For this null hypothesis, a Pearson r analysis was performed to measure the strength of the possible relationship between the amount of training and perceptions of RtI. Because there was no statistically significant relationship found at the .05 level, the null hypothesis was retained. Since there was not a statistically significant relationship found, the researchers cannot say for certain that a positive relationship was due to anything other than sampling error and no generalizations can be made to a larger population. The researchers also used a simple linear regression to determine a predictive value for the relationship, as shown in Table 2. As a result of this analysis, Table 2 reveals a predictive formula could be written that shows that total perception equals 8.635 + 1.45(Total Training) +/− 2.928.
Table 2.

*Regression and Predictive Formulas*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Independent</th>
<th>Dependent</th>
<th>n</th>
<th>r</th>
<th>r²</th>
<th>p</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT</td>
<td>TP</td>
<td>38</td>
<td>.290</td>
<td>.084</td>
<td>.077</td>
<td></td>
<td>TP = 8.635 + .145(TT) +/− 2.928</td>
</tr>
<tr>
<td>TP</td>
<td>TF</td>
<td>38</td>
<td>.527</td>
<td>.278</td>
<td>.001*</td>
<td></td>
<td>TF = .258 + 1.174(TP) +/− 5.786</td>
</tr>
<tr>
<td>TT</td>
<td>TF</td>
<td>38</td>
<td>.431</td>
<td>.186</td>
<td>.007*</td>
<td></td>
<td>TF = 8.776 + .480(TT) +/− 6.145</td>
</tr>
</tbody>
</table>

*Note:* TT = Total training amount, TP = Total perceptions score, TF = Total fidelity level.

*Statistical significance at the .05 level.

H₀₂ There is no statistically significant relationship between the perceptions scores and the level of fidelity of implementation.

A Pearson r was performed to measure the strength of the possible relationship between perceptions of RtI and the level of fidelity of implementation. The null hypothesis was rejected because a statistically significant relationship was discovered, (p = .001). Approximately 27.8% of the variation in fidelity of implementation can be explained by educators’ perceptions concerning RtI, as shown in Figure 5. This analysis revealed that perception has a moderately strong relationship with fidelity of implementation. As a result of this analysis, Table 2 reveals that a predictive formula
could be written that shows that total fidelity equals $0.258 + 1.174 \times \text{Total Perception} +/-.5.786$.

*Figure 5.* A scatterplot showing the relationship between total perception scores and total fidelity level.
There is no statistically significant relationship between the amount of all types of training in RtI and the level of fidelity of implementation.

A Pearson r was performed to measure the strength of the possible relationship between the amount of training in RtI and the level of fidelity of implementation. The null hypothesis was rejected because a statistically significant difference was found at $p=.007$. Figure 6 reveals that 18.6% of the variation in total fidelity can be explained by total training. As a result of this analysis, Table 2 reveals that a predictive formula could be written that shows that total fidelity equals $8.776 + .480(\text{Total Training}) +/-.145$.

\[ y = 8.776 + .480x \]

Figure 6. A scatterplot showing the relationship between total training amount and total fidelity level.
Of the three null hypotheses, one was retained and two were rejected. There is no statistically significant relationship between the amount of training teachers receive and their perceptions of RtI. There is a statistically significant relationship between teachers’ perceptions of RtI and their level of fidelity of implementation. Additionally, there is a statistically significant relationship between the amount of training teachers receive on RtI and their level of fidelity of implementation. Table 3 is a display of all of these results.

Table 3.

*Correlations Between Total Training Amount, Total Perceptions Score, and Total Fidelity Level*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Null</th>
<th>Independent</th>
<th>Dependent</th>
<th>Direction</th>
<th>Decision</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Total training</td>
<td>Total perceptions</td>
<td>+</td>
<td>Retain</td>
<td>8.4% variation</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Total perceptions</td>
<td>Total fidelity</td>
<td>+</td>
<td>Reject</td>
<td>27.8% variation</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Total training</td>
<td>Total fidelity</td>
<td>+</td>
<td>Reject</td>
<td>18.6% variation</td>
<td></td>
</tr>
</tbody>
</table>

*Note:* Variation below 9% is too low to be considered significant in a sample of this size.
Other Quantitative Results

Relating perceptions to fidelity. The researchers performed a Spearman rho in order to measure the strength of the most statistically significant relationship found, the relationship between the independent variables of three perceptions of RtI classifications and dependent variables of levels of four components of fidelity of implementation. Perception classifications consisted of: effectiveness of the RtI approach, comfort with ability to implement RtI, and leadership support. Fidelity components of RtI consisted of: curriculum, instruction, accountability, and responsiveness. The following Tables 4 through 6 display the results of the analyses.

Table 4.

Relationship Between Perception of RtI Effectiveness and Fidelity of Implementation of RtI Components

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variables</th>
<th>rho</th>
<th>p</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Curriculum fidelity</td>
<td>.351</td>
<td>.031*</td>
<td>Yes</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Instructional fidelity</td>
<td>.382</td>
<td>.018*</td>
<td>Yes</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Accountability fidelity</td>
<td>.303</td>
<td>.064</td>
<td>No</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Responsiveness fidelity</td>
<td>.289</td>
<td>.078</td>
<td>No</td>
</tr>
</tbody>
</table>

Note: Number, or “n” = 38 for all.

*Statistical significance at the .05 level.
Table 5.

*Relationship Between Perception of Comfort with Ability to Implement RtI and Fidelity of Implementation of RtI Components*

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variables</th>
<th>rho</th>
<th>p</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfort</td>
<td>Curriculum fidelity</td>
<td>.592</td>
<td>.000*</td>
<td>Yes</td>
</tr>
<tr>
<td>Comfort</td>
<td>Instructional fidelity</td>
<td>.385</td>
<td>.017*</td>
<td>Yes</td>
</tr>
<tr>
<td>Comfort</td>
<td>Accountability fidelity</td>
<td>.546</td>
<td>.000*</td>
<td>Yes</td>
</tr>
<tr>
<td>Comfort</td>
<td>Responsiveness fidelity</td>
<td>.545</td>
<td>.004*</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Note:* Number, or “n” = 38 for all.

*Statistical significance at the .05 level.*
Table 6.

Relationship Between Perception of Leadership Support and Fidelity of Implementation of RtI Components

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variables</th>
<th>rho</th>
<th>p</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support</td>
<td>Curriculum fidelity</td>
<td>.279</td>
<td>.089</td>
<td>No</td>
</tr>
<tr>
<td>Support</td>
<td>Instructional fidelity</td>
<td>.056</td>
<td>.739</td>
<td>No</td>
</tr>
<tr>
<td>Support</td>
<td>Accountability fidelity</td>
<td>.356</td>
<td>.028*</td>
<td>Yes</td>
</tr>
<tr>
<td>Support</td>
<td>Responsiveness fidelity</td>
<td>.276</td>
<td>.094</td>
<td>No</td>
</tr>
</tbody>
</table>

*Note: Number, or “n” = 38 for all.

*Statistical significance at the .05 level.

The statistical analysis revealed that the independent variables of teachers’ perceptions of the effectiveness of RtI and their comfort with their ability to implement were strongly related to both dependent variables of curriculum fidelity (r=.351, p=.031; r=.592, p=.000) and instructional fidelity (r=.382, p=.018; r=.385, p=.017), as seen in the top two rows of Tables 4 and 5. There was no statistically significant relationship between the independent variable of leadership support and the dependent variables of curriculum fidelity (r=.279, p=.089) and instructional fidelity (r=.056, p=.739), as seen in the top two rows of Table 6. The independent variables of teachers’ level of comfort in implementing RtI and leadership support were found to be significant in the relationship to the dependent variable of level of accountability fidelity (r=.356, p=.028), as seen in row three of Tables 5 and 6. Row three of Table 4 shows that there was not a statistically
significant relationship between the independent variable of teachers’ perceptions of the effectiveness of RtI and the dependent variable of their accountability fidelity ($r=303, p=.064$). The final row of Table 5 shows that the independent variable of teachers’ comfort with their own ability to implement RtI had a statistically significant relationship with the dependent variable of responsiveness fidelity ($r=.545, p=.004$). There was no statistically significant relationship between the independent variables of teachers’ perceptions of effectiveness of RtI ($r=.289, p=.078$) or leadership support ($r=.276, p=.094$) and the dependent variable of responsiveness fidelity, as seen in Tables 4 and 6.

Overall, staff members’ comfort with their ability to implement RtI is the perceptions classification having the most statistically significant relationship with fidelity of implementation, affecting all four perceptions classifications of curriculum fidelity, instruction fidelity, accountability fidelity, and responsiveness fidelity.

**Relating training to fidelity.** Although not as significant as the relationship between perceptions and fidelity, the relationship between training and fidelity was highly significant. In order to take a closer look into another statistically significant relationship, a Spearman rho was performed to measure the strength of the relationship between the independent variables of amount of hours in each of the five types of training and dependent variables of levels of fidelity of implementation in the four components of RtI. The five types of training were: planning sessions, college, professional development sessions, student-specific coaching, and in-class coaching. Fidelity of implementation, again, consisted of the four components of RtI: curriculum, instruction, accountability, and responsiveness. As seen in Table 7, there is a statistically significant relationship between the independent variable of planning training, where teachers
receive consultation to plan interventions, and the dependent variables of curriculum fidelity, accountability fidelity, and responsiveness fidelity. This relationship between planning training and three of the four components of RtI fidelity of implementation was the most significant relationship found between training and fidelity.

Table 7.

*Relationship Between Planning Training and Fidelity of Implementation of RtI Components*

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variables</th>
<th>rho</th>
<th>P</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning training</td>
<td>Curriculum fidelity</td>
<td>.499</td>
<td>.001*</td>
<td>Yes</td>
</tr>
<tr>
<td>Planning training</td>
<td>Instructional fidelity</td>
<td>.106</td>
<td>.525</td>
<td>No</td>
</tr>
<tr>
<td>Planning training</td>
<td>Accountability fidelity</td>
<td>.428</td>
<td>.007*</td>
<td>Yes</td>
</tr>
<tr>
<td>Planning training</td>
<td>Responsiveness fidelity</td>
<td>.537</td>
<td>.001*</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Note:* Number, or “n” = 38 for all.

*Statistical significance at the .05 level.*
Table 8 reveals there is a statistically significant relationship between the independent variable of college training and the dependent variables of accountability fidelity and responsiveness fidelity.

Table 8.

*Relationship Between College Training and Fidelity of Implementation of RtI Components*

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variables</th>
<th>rho</th>
<th>p</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>College training</td>
<td>Curriculum fidelity</td>
<td>.275</td>
<td>.095</td>
<td>No</td>
</tr>
<tr>
<td>College training</td>
<td>Instructional fidelity</td>
<td>.264</td>
<td>.109</td>
<td>No</td>
</tr>
<tr>
<td>College training</td>
<td>Accountability fidelity</td>
<td>.451</td>
<td>.005*</td>
<td>Yes</td>
</tr>
<tr>
<td>College training</td>
<td>Responsiveness fidelity</td>
<td>.328</td>
<td>.044*</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Note:* Number, or “n” = 38 for all.

*Statistical significance at the .05 level.
There was no statistically significant relationship between professional development and fidelity to the RtI program, as seen in Table 9.

Table 9.

*Relationship Between Professional Development Training and Fidelity of Implementation of RtI Components*

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variables</th>
<th>rho</th>
<th>p</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
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</tr>
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<td>.163</td>
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</tr>
<tr>
<td>Professional development</td>
<td>Responsiveness fidelity</td>
<td>.110</td>
<td>.512</td>
<td>No</td>
</tr>
</tbody>
</table>

*Note:* Number, or “n” = 38 for all.

*Note:* No statistical significance at the .05 level.
There was no statistically significant relationship between student training and fidelity to the RtI program, as seen in Table 10.

Table 10.

Relationship Between Student Training and Fidelity of Implementation of RtI Components

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variables</th>
<th>rho</th>
<th>p</th>
<th>Significance</th>
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</table>

Note. Number, or “n” = 38 for all.

Note. No statistical significance at the .05 level.
There was no statistically significant relationship between class training and fidelity to the RtI program, as seen in Table 11.

Table 11.

*Relationship Between Class Training and Fidelity of Implementation of RtI Components*

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>rho</th>
<th>p</th>
<th>Significance</th>
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*Note.* Number, or “n” = 38 for all.

*Note.* No statistical significance at the .05 level.
Qualitative Analysis

Understanding of Response to Intervention. To gain insight of staff members’ overall understanding of RtI, interview respondents were asked to describe RtI, its purpose, and how it is used. Seven out of 38, or 18%, of the sample population’s responses exhibited an adept understanding of the framework. An example of a response displaying a knowledgeable understanding was:

Response to Intervention is a process to use intervention strategies and identify struggling students. It is a three-step process to provide different levels of interventions based on students’ needs. If students do not make adequate progress during the interventions, they are then referred to special education where they are tested to see if they may have a disability. The purpose is to try to remediate the problem in the general education setting. The teachers are to use different teaching strategies and modifications to reach all students.

A similar, more detailed knowledgeable response was:

[Response to Intervention] is a response to intervene when students are not being successful in the regular education setting. There are three tiers of intervention. The classroom teacher is responsible for discovering where and why the student is having trouble in a certain subject area by doing assessments and progress monitoring. Tier III is the most important because these students are the ones they may be identified through assessments as needing special [education]. Tier II is more for struggling students who need small group time with [a] teacher to reteach. [Response to Intervention] helps teachers identify and assist students who need more support.
Eleven respondents, 29%, exhibited a basic understanding. An example of a response displaying a basic understanding was:

The child needs some type of intervention. You have to figure out why the child has challenges. Is it fluency, vocabulary, [or] comprehension? [Response to Intervention] should give them the skills necessary to succeed in the classroom.

An additional thirty minutes outside of your normal reading block.

Another basic response was: “[Response to Intervention] is a way to collect data to drive instruction to improve on how effective your teaching and interventions are. It helps break down whether the child is learning specifically what they need to learn.”

Twenty, or 53% of respondents, exhibited little or no understanding of RtI, with responses akin to, “educational jargon,” or “the purpose is to document actions.” One teacher began to define the purpose of RtI strongly, yet skewed the information in the final sentence:

The purpose of RtI is to give each student the best possible education no matter [his or her] disabilities. This gives them the best chance for success. Teachers who have special education students are the most likely to use this, but those who have widely varying abilities in a class could use it as well.

Another staff member declared that RtI “is used to help a child reach an academic gap.”

**General perceptions of implementing Response to Intervention.** To gain further information regarding the effect of staff perceptions on the implementation of RtI, interview responses were studied for prevalent themes using the conventional qualitative content analysis approach of inductive reasoning.

Participants were asked to describe what comes to mind when asked to implement
RtI. Responses were initially coded into two opposing categories: positive perceptions and negative perceptions. Positive perceptions consisted of matter-of-fact explanations of RtI as well as perspectives pertaining to how RtI works within the classroom. A number of staff members felt the need to urge others to recognize that RtI is within the list of teacher responsibilities that “just need to be done” and it is “part of the routine” to which educators must become accustomed. Negative perceptions consisted of questions like, “When will I get the time?”, “How do they want me to do it?”, “When do they want me to do it?”, “When will we actually use the data?” as well as concerns including, “It takes a lot of time learning all of the different schedules for my different students; I need to take time to collaborate with the general education teachers,” and “Setting up the interventions takes time; I need to create a very structured schedule so I can follow through.”

Those positive and negative categories were again coded, and both revealed teacher-oriented responses like, “It’ll be good with grading for learning,” and

It seems to be a name given to what teachers normally do to insure students’ understanding. We do testing at the end of the year, which seems like a waste because the data is not used to drive instruction. During the year we test … which may or may not have covered the material at the time of the testing and again can only drive instruction if we have taught the areas being tested. Data is only helpful if it is current. Children's lives are impacted by so many things that take a few days to see if they have mastered learning; [it] is ridiculous.

In addition to teacher-oriented responses, positive perception consisted of student-oriented responses similar to, “[Response to Intervention provides] focused, academic
instruction based on the students' needs in order to meet their benchmarks.” Furthermore, negative responses consisted of administration-oriented responses comparable to the reply:

The first thing that comes to mind is ‘frustrating!’ There are many unanswered questions regarding RTI, such as, ‘at what point should we suspect a disability?’ ‘When should the process be shortened?’ It is also very confusing to teachers who do not always understand the process and see it as a gateway to special education rather than as a preventive process. It is also very difficult to provide adequate [professional development] with constraints on pulling teachers out of their classes. It is a very challenging process.

Thus, four groupings of responses from participants emerged: positive teacher-oriented perceptions, positive student-oriented perceptions, negative teacher-oriented perceptions, and negative administration-oriented perceptions.

**Procedures.** Positive teacher-oriented responses identified RtI as specifying a routine and curriculum in order for teachers to know what to do, thus revealing “procedures” as a prevalent theme. As one teacher stated, “I just feel like RtI helps motivate me to work with my students.” Staff members correspondingly described RtI as “strategies that are different from your everyday whole-class strategies” and an “accountability structure” with “data and assessments used to determine level of intervention needed.” Additionally, RtI data empowers teachers with the necessary information needed to “modify instruction [and] intervention based on students' needs, in order to reach the goal.”

Positive student-oriented responses acknowledged RtI as a procedure to meet
explicit student academic needs by “grouping students based on the outcome of a specific assessment.” Response to Intervention affords students more personalized attention within small groups and provides disadvantaged students with an alternative setting. One teacher specified that RtI is a way to provide for the “need to help kids whose parents don’t help them at home.” Another respondent affirmed that RtI provides “intensive intervention to the lowest and most needy students,” while another gave specific examples for alternative settings: “peer tutoring, differentiated instruction, special seating in class, [and an] educational aide.” Additionally, a staff member wanted to urge teachers to participate in RtI with purpose by expressing,

you have to understand the purpose of your intervention. Intervening is trying to change the course of something and you have to know what you want to see and whether it’s better to intervene or observe longer to see if an intervention is necessary.

**Time.** Whether for planning or implementing RtI, “lack of time” emerged as a theme from the data as a negative teacher-oriented response. An example of a time-associated response is, “Do I have enough time to implement RtI? I would love to implement to help my students, but I don't have any extra time in my day to implement it.” Supplemental to the above questions, another teacher stated, “I don’t know where to find the thirty minutes of additional time. I’m not against RtI, but it is hard to do.” Equally, a kindergarten teacher asserted,

How am I going to fit it into my block? It's really difficult for kindergarten, in particular, because we have specials in the middle of our reading block, so a lot of time is wasted. It is hard to add another component in there.
**Accountability.** Negative administration-oriented perceptions consisted of statements concerning lack of support for teachers when they have questions, concerns, or new ideas. Likewise, there was a request for accountability throughout schools and meaningful curriculum selection, with staff members asking questions like, “Are teachers really implementing interventions?” and stating, “I would like to have someone help me help the students that are struggling.” The theme of “supportive accountability” in conjunction with “time” surfaced from the data with many respondents alluding to the desire to have more autonomy in the RtI process: “Making a list of steps for intervention will not make me a better teacher. Time to create interesting and meaningful instruction will make my students better learners, not interventions.” Furthermore, the need for classroom assistance from an intervention specialist or aid was also noted with inquiries similar to: “Is there someone like an assistant that I can use that can work with my students?”

**Training.** Finally, the need for “additional training” materialized as a theme since some responses revealed a lack of knowledge concerning all the facets of RtI, due to respondents describing RtI as “small groups, leveled readers, testing, bubble kids, no set curriculum.” The need for appropriate training was recorded as a negative teacher-oriented response, with comments resembling:

I feel as if there is stress to implement pointless paper trails, which will result in skewed and misrepresented results. Due to the lack of training and ineffective administration I believe that the structure has potential to give adequate data but it is not properly used due to lack of training and time consuming practice.

Training is needed to assure that teachers are equipped with the skills to “assess the kid,
figure out what skills need attention, and then [they] have to essentially design an intervention that targets the kid’s learning needs.”

**Overview of effectiveness perceptions.** Participants were asked to rate the effectiveness of the RtI approach on a Likert scale of “one” through “five” with a rating of one meaning “a complete waste of time and effort,” and five meaning “the most effective approach I have experienced.” They were also asked to provide explanations of their ratings. Seven people, or 18%, expressed their perceptions negatively, with ratings of a one or a two. One middle school teacher said,

> Every year, someone writes down common sense and sells it to a district as the ‘Word for all teaching.’ Teaching is raising kids and sometimes the Dr. Spock book needs to be put back on the shelf. There is not a Band-Aid to fix education. It requires a commitment from the parents that education is important, and until that happens, it will not change.

A moderate rating of a “three” was assigned by half of the respondents. Response to Intervention “can work if problems are identified early enough,” according to one teacher, “but when teachers, administrators, and parents delay needed actions for fear of labels, RTI can be a waste of time.” The same teacher continued by adding, “The strategies that can be used may not be good enough. When the RTI team is not fully committed the RTI process will not work.” Another teacher expressed,

> I agree with the premise, but some students are still being missed in the process. There is just not enough time in the day to do all that is required of teachers and students. I think this process is better than just testing all students but it also prolongs the process of students getting into special education and we know that
early intervention is the key.

Twelve people, or 32%, rated their perceptions as positive with a “four” or a “five”. An example of a response from a staff member that rated the effectiveness of the RtI approach with a “five” stated, “I think that RtI really helps us to work with the kids on their individual levels and it lets the teachers know how we need to reach all of our kids.” Another example of a response from a teacher who rated RtI effectiveness highly is: “I think RTI can be very effective when done correctly. Unfortunately, implementing the process takes money, training, and effort that goes beyond what many school districts have access to.”

**Overview of comfort perceptions.** Next, participants were asked to rate how comfortable they are with their ability to implement RtI, with a Likert scale rating of “one” meaning “I am not equipped to do this,” and “five” meaning “I should train others on implementation.” They were also asked to provide explanations of their ratings. Twenty people, over half of the sample population, rated their perceptions positively with a “four” or “five.” One teacher who chose a five stated, “I have been involved in the RtI process for the last eight years. I have attended numerous trainings and implemented it, so I understand it.” A teacher who rated comfort with a “four” explained,

> It took me most of the year to learn the system, but now I feel proficient. I had a lot of coursework, but now I have the experience necessary. Now, as a [general education] teacher I am able to see what I can do in the classroom before sending them to special [education].

A negative rating of “one” or “two” was given by nine people, or 24% of participants. An example of why a teacher rated comfort negatively is: “I do not feel
comfortable implementing the process without guidance and specific instructions from someone who is very knowledgeable about RtI.” Another teacher clarified, “I am okay with it but I couldn’t train anyone else.”

Eight people, or 21%, rated their perceptions with a middle rating of “three.” To defend choosing a three rather than a higher rating, one teacher explained, “I think I have some ideas that I have seen be successful in classrooms but I have not collected the data myself for a long enough period to comfortably say a five.” Another teacher claimed to be “fairly confident,” adding that RtI “just seems like a waste of time,” and asserting that “someone else should do it.”

**Support perceptions.** Staff members were questioned, “How supported are you by those in leadership in order to assure that you are implementing RtI with fidelity?” They were to rate their perceived support on a Likert scale of “one” through “five” with the rating of “one” meaning ”I have not received any support,” and “five” meaning “I receive consistent support on a regular basis.” Upon rating their perceptions of leadership support, respondents were also asked to rationalize their rating choices. The intermediate rating of a “three” was chosen by 18% of the respondents, expressing how resources had been given to them and support was available when teachers sought out the leadership support they needed. “I get help if I ask for it,” and “They supply the stuff and I can always ask questions,” are examples of clarifications concerning rating RtI support with a “three.”

The 32% of people who rated the support they receive with a one responded with very negative remarks about leadership, illustrating their frustration by saying, “Everything I do, I've done on my own. I've not been supported at all.” Eighteen percent
rated support with a “two” and they explained accounts of support having been prevalent in the beginning of their implementation of RtI, and then fading as newness wore off: “I have experienced very supportive leadership early on in the process. However, as budgets got tighter, there has been less support.”

Choosing a high rating of a “four,” 11% of people were pleased with their hands-on leadership team and their willingness to find answers for staff members in need. One staff member labeled an administrator as “outgoing,” stating that the principal is “very hands-on and interested in improving standardized test scores. She encourages us to participate in in-service activities based on this.” Twenty-one percent of the sample population rated support from leadership as high, choosing to rate their experiences with a five, giving accolades of supportiveness and knowledge. One staff member summarized by proclaiming, “The school has a fantastic support group. The principal does a lot of research.”

**Themes concerning effectiveness, comfort, and support perceptions.** In addition to the previous comments concerning overall perceptions of RtI, comments associated with Likert scale ratings concerning perceptions of the effectiveness of the RtI approach, perceptions of staff comfort with their abilities to implement the framework, and perceptions of leadership support were coded using the summative content analysis approach of inductive reasoning. The same four themes emerged: procedures, time, accountability, and training. Upon the emergence of the four fundamental themes, the researchers noted that these themes were associated with the aforementioned quantitative findings and also used the directed content analysis approach of inductive reasoning to extend the framework of the concepts generated.
**Procedures.** Another frequent theme found as an effect on staff perceptions was procedures. Procedures were discussed as being needed in order to guarantee that RtI is being implemented consistently across schools, districts, and the state. Procedures for strategies used in implementing each tier, progress monitoring, utilizing data to place students in groups according to their needs, drive instruction, and determining responsiveness were identified as influencing RtI perceptions. In discussing the importance of procedures concerning data collection, one teacher insisted that RtI is effective “when the data given on the student, benchmarks met and not met, is accurate. If the strategy is implemented with inaccurate data, it is not effective.” Although procedures for implementation were said to be necessary, the use of prescribed programs was commonly renounced. A staff member rating the effectiveness of RtI with a two described the rationalization for rejecting prescribed programs:

> If people understand what they are trying to accomplish and how specific students need to be taught, we can implement good Tier II interventions, but using a prescribed program for everyone across the board is not the way to intervene. [Response to Intervention] is the best approach when we use it effectively, but when we simplify it to a specific plan that should work for everyone, it does not work. The theory behind RtI works, but the way we are using it, allowing it to become a money-maker for specific publishing companies, is not following the theory correctly and it makes it meaningless.

**Time.** Time was a common theme found encompassing staff perceptions of RtI. Teachers are required to accomplish an abundance of duties on a daily basis and the allotment of a limited amount of time leads to the distress of not being able to perform
each requirement to the fullest level of devotion. It was felt that the additional responsibilities of RtI reduce the amount of time needed for other forms of instruction and teachers are left overburdened. According to one teacher with a negative perception of the effectiveness of RtI, “We do not have enough time in the day to do everything we are supposed to be doing. There is no way to do everything we are required to do in the classroom to the fullest.” Scheduling Tier I interventions in class, Tier II pull-outs with another teacher, and progress monitoring assessments all fell into the category of time as a factor of staff perceptions.

**Accountability.** The predominant theme of accountability refers to teachers, school-wide leaders, and district officials. Response to Intervention was declared repeatedly to only be as effective as teachers make it by implementing the program with fidelity. Instruction is to be explicit and consistent, using accurate data and proper strategies. Proper implementation was believed to be securable by holding teachers accountable unfailingly. School-wide leaders are not only to hold teachers accountable, but also provide support to them on a regular basis. Emphasizing the importance, validity, and significance of RtI was alluded to as being imperative to promoting teacher buy-in. In addition to putting emphasis on RtI as a mandated framework, it was desired that school-wide leaders and district officials view teachers as valuable experts on education and enlist them to contribute to the decisions regarding RtI. One building administrator’s response on accountability combined with support was:

> When trying to get teachers to be sensitive and conscious of what they are doing, you need to let the teachers tell you what they think would work and why. Asking them to explain interventions they would use if they had the time and training to
implement them is the best way to create interventions that will work for each student. If we had administrative support and support from the school system to make these decisions, it would work better. We need to collect and review data over a long period of time before trusting that certain programs will work. I would like to let my teachers create interventions and implement [them] over a semester so I could see what is and is not working.

A leading concern regarding district officials was the purchasing of prescribed programs from specific publishing companies rather than using those funds to hire additional staff to aid teachers in implementing the three tiers.

**Training.** The permeating theme of training found throughout interview responses infiltrated conversations concerning procedures as well as the aforementioned themes. Staff members having negative perceptions of RtI spoke on their lack of knowledge regarding the framework, their roles, and implementation. Without ongoing training, the purpose of RtI is lost and practices become inconsistent. Training was not only alluded to as being necessary for teachers implementing the interventions, but also for administrators, psychologists, and all staff members. Training was mentioned as being important in a number of forms, including modeling, coaching support, professional development, and coursework in collegiate teacher preparation programs. The availability of training for staff members differed greatly from staff member to staff member, with one teacher attesting, “Our coach is very helpful and I have received a lot of professional development,” and another testifying,

In my Masters’ classes, there were two to three courses when I worked with RtI in Reading. I became very familiar with the process and felt good about my
knowledge. However, that was two years ago, and I have not been trained from my school or county in the five years that I have taught here.

School psychologists, counselors, and instructional coaches were listed as having provided a number of teachers with helpful training, while many staff members continued to speak on the need for additional training for all parties involved. One teacher summed the need for training for everyone involved by expressing, “In a perfect world where there would have been a discussion and understanding and training for all teachers, students, parents, and administrators, it could work really well.”

**Summary**

Of the three relationships, one was not significant, and two were significant. The quantitative analysis revealed that there is not a statistically significant relationship between training and teachers’ perceptions of RtI. There is, however, a statistically significant relationship between teachers’ perceptions and fidelity of implementation and also between the amount of training they receive and fidelity of implementation. The strongest relationship found was between teachers’ perceptions of RtI and their fidelity of implementation of RtI.

General staff perceptions of RtI are comprised of positive teacher-oriented perceptions, positive student-oriented perceptions, negative teacher-oriented perceptions, and negative administration-oriented perceptions. Staff member perceptions concerning RtI effectiveness, individual comfort in implementation abilities, and leadership support are determined by procedures, time, accountability, and training. Although the relationship between training and perceptions was not found to be statistically significant in the quantitative portion of the study, the qualitative data revealed that having an adept
understanding of the framework, which only 18% of the participants exhibited, affects staff perceptions. It is possible that the lack of training received throughout the research population caused the test results to show a non-significant relationship.
Chapter 5: Conclusions and Discussion

Summary

Response to Intervention is receiving much attention as a more effective way to meet all students’ needs. Legislation such as NCLB and IDEA include demands to ensure that all students’ academic needs are met, including those with learning disabilities ("Building the Legacy of IDEA 2004,” n.d.; Elementary and Secondary Education Act, n.d.). These laws require that public schools close the achievement gap between students without disabilities and students with disabilities. The Individuals with Disabilities Education Act requires students with disabilities participate in state and national tests. The No Child Left Behind act includes accountability for special education students ("IDEA History,” 2007). In addition to these legal regulations, the old system of identifying students who require special education services through the IQ-achievement discrepancy model has been found ineffective (Griffin, n.d.).

Response to Intervention has been implemented as one method to meet the aforementioned legal demands. It is also a more effective method to identify students who truly need services (Griffin, n.d.). Tennessee has recently chosen RtI over the IQ-achievement discrepancy model as the method to determine which students will receive special education services. By July 2014, RtI will be mandated across the state, but many school districts are already transitioning to the RtI model (TNCore, 2013).

School systems across Middle Tennessee are experiencing various results from the use of RtI. The purpose of the study was to examine the extent to which the amount and type of training in RtI impacts staff members’ perceptions of RtI, to determine how staff members’ perceptions of RtI relate to their fidelity of implementation, as well as to
establish to what degree staff members’ involvement in training influences their fidelity of implementation.

Response to Intervention’s main components include: universal screening; three tiers, or levels, of intervention; interventions which are proven by research as having evidence of being effective; continual data collection to document progress throughout the interventions; and decisions made about continuance in the interventions, referral to testing for special education services, or discontinuance for interventions according to data that has been collected (National Center on Response to Intervention. [NCRTI], 2010).

Tier I includes all students in the general education program. This ensures that all students receive evidence-based, high-quality instruction. All students are screened with a universal test and those scores determine whether Tier I is meeting students’ needs or not. If the test results reveal students who are not achieving at the appropriate benchmark standard, then students begin receiving more intense intervention through Tier II, which includes small-group instruction and progress monitoring (NCRTI, 2010). Through progress monitoring, if the data collected does not reveal progress in Tier II, the student may be moved to Tier III, the most intense level of intervention, often administered one-on-one (The National Association of State Directors of Special Education [NASDSE], 2006).

The strengths of RtI include the view of education becoming more proactive rather than reactive, earlier identification of students who have needs, an increase in collaboration among teachers, the inclusion of students within the general education setting, and an increase in the quality of instruction delivered (Brue & Wilmshurst, 2011;
Eichhorn, 2009; Fletcher, n.d.; Johnson & Mellard, 2009). The weaknesses of RtI discovered in previous research include: lack of fidelity of implementation, lack of proper training for teachers administering interventions, the time consumption of the process for all stakeholders, and the lack of research with large samples providing evidence of effectiveness (Eichhorn, 2009; Reynolds & Shaywitz, 2009).

Fidelity of implementation of RtI is essential to the success of the model. The meaning of fidelity of implementation of RtI is similar to treatment fidelity as seen in the medical field: it is methodically applying the treatment according to the original design. Considerations of fidelity also include the areas of screening, progress monitoring, and data-based decision making, as well as the instruction delivered in all three tiers of the RtI model. Fidelity must be considered on both the individual teacher level, as well as on the school wide level (Johnson et al., 2006).

Training for RtI occurs through several formats. It begins with pre-service training in college preparatory programs. It continues with in-service training through professional development, on-site specialists and coaches who consult with teachers, and professional learning communities (PLC) of which teachers may be a part (Campsen, 2012).

Educators have varying perceptions of RtI, both positive and negative. Positive perceptions of RtI seem to come from personal experiences of success and an opportunity to witness its effectiveness firsthand (Higgins-Averill et al., 2011). Negative perceptions seem to stem from frustrations related to a lack of preparation and adequate training, an absence of specific information on details of the model, and a lack of manpower in
support positions to assist teachers in the rigorous and time-consuming work involved in implementing RtI (Brendle, 2008).

Researchers collected data by surveying 51 educators in two school systems in Tennessee, but only used responses of the 38 who also completed the follow-up interview. The follow-up interview allowed the participants to discuss their perceptions of RtI and provided both quantitative and qualitative data. Hours of training in RtI for the respondents was informed by their responses to the first five questionnaire items. Levels of fidelity of implementation for individual teachers and staff members were determined by the researchers using the Researcher Fidelity of Implementation Rubric (Appendix C) to score responses to the last four questionnaire items. Perception ratings were based off of three Likert scale questions from the interview. The remaining interview items were used to provide qualitative data in order to provide a deeper understanding of perceptions of RtI (Reynolds & Shaywitz, 2010/2009).

**Findings and Conclusions**

Previous research reveals support for Response to Intervention as a better method over the IQ-achievement discrepancy model of identifying students who do and do not need special education services (Greer, 2005). Prior research also reveals that as the RtI process is administered, all students benefit from evidence-based instruction, especially students who are not performing adequately, but yet do not qualify for special education services (Greer, 2005). Because of the way the RtI model is designed, students can receive intervention even without being tested for or qualifying for special education services. The state of Tennessee is adopting the RtI model as a state regulation in order to meet legal obligations. Additionally, the state’s adoption signals a desire to meet all
students’ needs, since updated research has revealed RtI as best practice (TNCORE, 2013).

Adopting a model and mandating it across the state is not the final step towards success and achieving desired outcomes. Along with adoption comes implementation, which, as many educators have experienced, is sometimes particularly challenging. Reforms are only as beneficial as their implementation. In other words, a particular model can be adopted, but unless the model is implemented accurately and consistently, the promised results are unlikely to be realized. The main factor to be considered with implementation is fidelity of that implementation. Much like the medical community discusses fidelity of implementation, the education community also recognizes it as the accurate and consistently delivered evidence-based treatment for a particular deficiency (Ebbert, 2011).

The researchers discovered that the major considerations of implementing Response to Intervention involve training (both pre-service and in-service), perceptions of educators who are administering the model, and fidelity of implementation of the model. The researchers set out to determine the relationships among these three factors. Three null hypotheses were tested. Of the three null hypotheses, one was retained and two were rejected.

**Research Question #1: What impact does the amount and type of training in RtI have on staff members’ perceptions of RtI?** Though there was a positive relationship found between the amount of training teachers receive and their perceptions of RtI, it was not statistically significant. Since there was not a statistically significant relationship found, the researchers cannot say for certain that a positive relationship was
due to anything other than sampling error and no generalizations can be made to a larger population. Although no statistically significant relationship was found between training and perceptions in the quantitative portion of the study, the qualitative portion of the study revealed training as a prevalent theme affecting staff perceptions of the effectiveness of the RtI approach and their comfort in implementing the framework, thus alluding to the training as having an impact on perceptions.

Research Question #2: What influence does the perception of RtI have on staff member levels of fidelity of implementation? There was a statistically significant relationship found between teachers’ perceptions of RtI and their level of fidelity of implementation. The statistical analysis of the quantitative portion of the study revealed teachers’ perceptions of the effectiveness of RtI was strongly related to both curriculum fidelity and instructional fidelity. Leadership support was found to have a strong relationship with level of accountability fidelity. Overall, staff member’s comfort with their ability to implement RtI is the perceptions classification having the most statistically significant relationship with fidelity of implementation, affecting the level of curriculum fidelity, instruction fidelity, accountability fidelity, and responsiveness fidelity.

The researchers discovered that the level of fidelity with which educators implement RtI is tied to both their perceptions of the RtI process and their perceptions of the effectiveness of RtI. The research revealed that educators have both positive and negative perceptions of RtI, and they are related to teacher perspectives, student perspectives, and administrative perspectives.

Positive teacher-oriented perceptions were related to RtI giving a teacher the necessary data to apply needed interventions for students and the motivation to serve
students thoroughly. Negative teacher-oriented perceptions were connected to frustrations of lack of time to implement all of the steps of RtI and also lack of proper training.

Positive student-oriented responses revealed teachers’ perceptions that RtI can especially assist struggling students who are in need of interventions. Data revealed that teachers perceive RtI as providing them with very specific data about the interventions needed.

Negative administration-oriented perceptions were expressed by teachers’ frustrations with a lack of support when they have questions or concerns about implementing RtI. Teachers relayed that they do not desire a step-by-step process. Instead, they desire more training to better understand how to meet students’ needs and then they want to be allowed to make instructional decisions based on the data they have and the training they have received.

Several educators expressed a concern that accountability procedures be in place in order to ensure that RtI is effective for the students. Their perceptions were that this was the only way to ensure that all students were being served effectively. They also mentioned that educators be considered stakeholders in the process and should be included in the decisions made before enforcing accountability measures.

One of the predominant negative perceptions of RtI is the concern for lack of time to implement it properly. Teachers expressed concerns about time to implement Tier I interventions, Tier II pull-outs, and also time to complete progress monitoring. Teachers mentioned how stressful it is to accomplish everything needed on a daily basis, even
before implementing RtI. Response to Intervention compounds a stressful issue teachers are already dealing with.

Teachers’ perceptions of procedures were that there is a lack of procedures for specific steps of the RtI process. Teachers seemed to want more specific directions on how to implement each tier, as well as how to progress monitor and make instructional decisions; however, they were adamant about not wanting to implement a purchased program that prescribes each step.

Another predominantly negative perception of RtI was the lack of adequate training. Educators expressed several needs for improvement in the area of training in order to feel more confident about RtI implementation. Comments expressed the need for training for all staff members, including administration and psychologists, as well as teachers. Additionally, it was expressed that training needs to be varied between opportunities to observe modeling, opportunities for coaching support, and additional opportunities for professional development trainings, as well as suggestions for increased coursework in teacher preparation programs.

Research Question #3: How does the amount and type of training in RtI relate to the level of fidelity in which RtI is implemented? There was a statistically significant relationship found between the amount of training teachers receive on RtI and their level of fidelity of implementation. The quantitative portion of the study revealed that there was a statistically significant relationship between planning training, and curriculum fidelity, accountability fidelity, and responsiveness fidelity. There was also a statistically significant relationship between college training and accountability fidelity and responsiveness fidelity. The relationship between planning training and three of the
four components of RtI fidelity of implementation was the most significant relationship found between training and fidelity.

The researchers concluded that training is imperative to the success of the Response to Intervention model. Research revealed that fidelity is essential for RtI to have a positive impact on students’ academic success and fidelity is not possible without proper training. Increased training not only increases educators’ understanding of implementing the RtI model, but it can also possibly affect their perceptions of RtI, which also determines their level of fidelity.

Training for educators can be divided into two major categories: pre-service and in-service. Pre-service training occurs within college preparatory programs in which students learn and practice teaching methods and pedagogy before being hired in the professional community. Students both learn in classes and through practicums. Professors with previous teaching experience lead classes, and the learning occurs through textbooks, class discussions, and assignments. Practicums are opportunities for college students to receive live experiences in genuine classroom settings, in which they both observe master teachers and also practice delivering lessons with feedback from the master teacher.

In-service training for this research included three types: professional development seminars, conferences, and meetings delivered by the educators’ school or school system; one-on-one or small group consultations led by a specialist or coach within the educators’ schools; and professional learning communities that educators may be involved with in which small groups of teachers learn together through professional readings and analyzing of practices.
Since training does not have a strong relationship with teachers’ perceptions, school systems have less control over teachers’ perceptions of RtI, but might have some positive impact. The researchers found the most interesting data revelation to be the relationship between the amount of training teachers receive and their level of fidelity because training is something that school systems can control. The researchers discovered that the strongest relationship found was between consultation trainings with teachers on specific implementations and their fidelity. Consultation trainings occur with specialists and coaches located within the schools.

The researchers have therefore concluded that training should be at the forefront of any implementation plans made in Tennessee. The RTI² manual does state that high-level professional development is being planned and will be provided, but there are no details pertaining to the amount of training or the topics being considered (TNCORE, 2013).

These results led to the answers of the research questions. The researchers discovered results that impact fidelity of implementation of RtI. The research indicated that both educators’ perceptions and the amount of training educators receive in RtI have an impact on their fidelity of implementation.

Qualitative analysis concluded that positive perceptions of RtI are lacking due to issues with: training (professional development); accountability; support from leadership, consultants, and aides; schedules which allow for planning and time for implementing interventions; and specific procedures. Although some participants said that they see the validity in RtI, they do not see how it can be realistically implemented without the aforementioned issues being addressed.
Connections to Previous Research

Prior research has revealed that teachers’ perceptions of RtI vary due to their experiences while implementing RtI. Positive perceptions seem to increase as teachers progress from having a fear of RtI to becoming more comfortable with the process. Becoming more comfortable with the process seems to occur when teachers are allowed to be involved in the decision making process of implementing RtI. Teachers also seem to become more comfortable with implementing RtI as they experience positive outcomes while working with students (Higgins-Averill et al., 2011). Teachers’ perceptions of the effectiveness of RtI are also dependent on the level of support and involvement of their administrators (Brendle, 2008).

In some school districts, teachers feel pulled in many different directions. This occurs particularly in smaller districts. Due to feeling overworked and underprepared, teachers have negative perceptions of having to implement a mandated framework such as RtI. Additionally, some smaller districts do not have enough funding or personnel to meet the needs of RtI. For many school districts that fall into this category, fidelity of implementation determined whether or not teachers thought RtI was successful (Brendle, 2008).

Many educators have negative perceptions of RtI because there are many different models of RtI that schools and school districts can follow. In fact, the United States Department of Education does not have a specific model that they endorse. This can negatively affect teacher’s perception of RtI, and therefore also affect their fidelity of implementation (Griffin, n.d.)
Increased training in RtI is supported repeatedly throughout available research. There is a strong connection between the revelation discovered in the data analysis of this research project and previous research conducted around the country that training is essential to the success of RtI implementation. Many researchers have mentioned the need for training and the different formats in which it can be provided. Higgins-Averill et al. (2011) found that support in the forms of coaching, professional development and ongoing assistance were essential to altering educators’ perceptions of RtI and successful implementation of RtI as a new referral method.

Data collected revealed that few educators receive pre-service training in RtI. According to research, this is not unusual. Research also revealed that states are seeing the need for increased training by offering graduate programs that certify educators specifically in the area of RtI, such as the states of California and Nebraska. An entire certification program for the specific area of Response to Intervention confirms the need for highly trained personnel in this area (“Response to Intervention certificate,” n.d.; “Response to Invention: Reading,” 2013).

Educators need multiple training opportunities because they need training on all of the various components of RtI: evidence-based interventions, data collection, data-based decision making, the importance of fidelity, identifying students with learning disabilities, and knowledge of the differences between each of the three tiers. Danielson et al. (2007) support differentiating the training based on the educators’ needs of knowledge among the tiers (p. 633). All general education and special education teachers will need training on Tiers I and II. Only a few educators, most likely specialists and special education teachers, will need training on Tier III. School psychologists will need
training in all tiers in order to adequately support the RtI process with all involved throughout the building (Hartman & Yenni, 2009).

Training can be provided through many different platforms. It can be delivered in the form of meetings similar to mini-seminars that are provided to the whole faculty or school system, or it can be delivered through small groups of people working in a PLC format. In large group meetings, a present such as an administrator, school psychologist, central office personnel, or a local university professor can deliver training. Professional Learning Communities can study RtI through professional readings, work under the guidance of a specialist or coach while analyzing data, or participate in online courses.

The combination of RtI and PLCs has been found effective and would meet several needs. Together, RtI and PLCs will increase training needs, data analysis, teacher collaboration, and student achievement. Schools may find a combination of various strategies helpful (Campsen, 2012).

Another idea supported by research for implementing increased training is to employ in-house instructional coaches or even RtI coaches. Response to Intervention coaches are recommended by the RTI Action Network, a national organization, and are declared to be beneficial in several ways (Casey, 2008). The amount of training would be increased in a school or school system that employs someone in this position. Training could be provided in all of the ways previously mentioned: whole group faculty meetings, PLC groups, and one-on-one consultations for specialized needs.

Most teachers feel overwhelmed by RtI due to the time-consuming nature of the process (Brendle, 2008) and the lack of strict guidelines for an RtI model (Griffin, n.d.). The qualitative results of this study paralleled these findings with comments from
teachers such as, “When will I get the time?” “When do they want me to do it?” and “How do they want me to do it?” Training would help teachers become more efficient with the time-consuming process of data collection and analysis. Training would also help teachers feel more confident about what interventions to use with students for specific needs.

Danielson et al. (2007) suggested that for RtI implementation to be effective and sustainable, an implementation plan must be in place. They suggested several parts for the plan, and specifically mention pre-service training, consultation and coaching, and staff performance evaluations.

Additionally, the National Education Association (NEA) supported RtI and also made recommendations for increased training. On the district level, they suggested that school districts provide professional development, and also provide time for educators to dedicate to team planning, curriculum adaptations, and implementation. On the school level, they suggested that schools provide professional development and evaluate the success of the program (n.d.).

Finally, the Tennessee Department of Education (TDOE) has stated that their plan to implement RtI across the state does include professional development. The Deputy Commissioner of Education stated in the RTI² manual that “Professional development for district leaders, school psychologists, and teachers in the RTI model will be provided… Our intent is to create a statewide RTI plan… with the necessary supports to create a smooth transition,” (TNCORE, 2013, p.6). This suggests that the state department sees training as an essential component to the success of the implementation of the new RtI model.
Recommendations for Implementation of Response to Intervention

The first recommendation the researchers suggest is that training be increased significantly in the area of Response to Intervention across the state of Tennessee in both pre-service and in-service training models. Training will need to be ongoing and repeated as necessary. It will also need to be both broad and detailed to cover the various components. A broad overview is needed to allow educators to understand the overall picture of RtI and to assist educators in developing a positive perception of RtI and the potential it has for student achievement. Training will also need to be more detailed to focus on specific components of RtI, such as specific information on each of the tiers, how to progress monitor, how to make data-based decisions, and so forth. The RTI\textsuperscript{2} manual seems to indicate that this is to occur, yet does not currently outline the specifics.

A mass training exercise similar to the Common Core statewide trainings, which occurred in the summer of 2013, would be highly effective in ensuring that all educators across the state receive the same training. Consistent training across the state would be more likely to induce fidelity to Tennessee’s RtI model. The researchers would also like to note that it would be imperative to include school psychologists and guidance counselors in these trainings so that they will be fully equipped to support teachers and RtI teams.

In order for a seamless transition to occur between pre-service training and on-the-job implementation as teachers begin working full-time in their own classrooms, the second recommendation is that the state department work with all colleges and universities statewide to coordinate proper training of the adopted model of RtI. Pre-service teachers need more training in their preparatory programs before entering the
profession. Colleges and universities need to have specific coursework dedicated to the understanding of the RtI framework. Although most programs are known to already be teaching evidence-based instructional methods for whole group teaching situations, preservice students seem to desire a better understanding of the model as a whole, data collection methods, time management for completing all the components of the RtI model, and a better understanding of the impact of fidelity of implementation. As the TDOE works with both private and public institutions across the state, all college graduates will be more likely to have received the same training regarding RtI, and should be prepared to implement without an extensive orientation to RtI upon being hired.

In addition, the third recommendation is that the state department should consider making specific components of RtI training a stipulation for state licensure in order to ensure that all colleges and universities are aligned with school districts.

The fourth recommendation is that professional development (“on-the-job” training) be increased once educators join the profession in a full-time capacity. The training needs to be delivered on a continual basis, as it cannot be mastered by just attending one seminar or conference. This is supported by the fact that most participants in the research indicated they had received some training, but still did not feel confident in implementing the RtI model. Educators need continual training on the model and may also need additional one-on-one coaching for special, individualized cases. As teachers expressed a tone of bitterness in the interview process due to feeling overwhelmed, and it is noted that there is already a great deal of training associated with Common Core, the researchers would like to express the importance of differentiating the RtI training to fit
teachers’ needs. By offering whole group training, small-group training for specific positions, and additional support through one-on-one coaching as needed, teachers may begin to view training as support, rather than becoming more bitter due to increased training demands. Differentiation of training will allow the training to be tailored to teachers’ needs, and will therefore likely be more effective.

As a part of the planning process that has already occurred through the documentation recorded in the RTI\(^2\) manual, the researchers’ fifth recommendation is that Tennessee needs to have a very specific model for the RtI process. It was noted in prior research studies, as well as this study, that one of the frustrations of teachers who have negative perceptions of RtI was due to a lack of strict guidelines for implementing RtI (Tennessee Department of Education [TNCore], n.d.). This process has begun with the creation of the manual; however, a few more guidelines or suggestions would be helpful concerning evidence-based interventions. Although the manual gives the definition of evidence-based interventions, no examples are provided. The researchers have inferred that the state department is attempting to allow districts across the state to have the ability to make district-level decisions. While this is understandable, a list of interventions for teachers to choose from might be helpful, similar to the examples already provided in the manual of what instruction looks like for each of the different tiers. The state could easily add these examples by using the resources mentioned in the Literature Review: the guidebook created by the United States Department of Education and the “What Works Clearinghouse” website (http://ies.ed.gov/ncee/wwc/).

Although the state department is planning to provide training through the regional CORE offices, the sixth recommendation is that the state department prepare training
materials for districts’ use to ensure fidelity in the training across the state. The training materials can suggest topics to be covered in the sessions, sources of information to be included in the sessions, and ready-to-use resources, such as pre-made PowerPoints and handouts. This would ensure fidelity of the training across the state.

In order to accomplish this, the researchers’ seventh recommendation is to hire a state RtI coordinator to oversee RtI implementation statewide. The state coordinator will most likely need a regional coordinator in each of the three grand divisions of the state of Tennessee in order to ensure that synchronized implementation occurs across the state.

The eighth recommendation is to employ “RtI auditors,” which is another way to ensure that evidence-based interventions are being used consistently across the state. The RtI auditors could audit each district to ensure that their plan includes only interventions that are evidence-based and that the plan is being implemented with fidelity. The auditor would be responsible for visiting districts across their assigned region. Using the RtI Rubric and Worksheet, the auditor would score each district’s level of fidelity of implementation. Auditors are different from coaches, in that coaches provide training and support without auditing, whereas the auditors purpose is to provide an evaluation in the whole districts’ progress in implementing the RtI framework.

The ninth recommendation is that each district employ its own RtI coach who is only responsible for RtI training and fidelity checks, so that continual training will be more likely to occur. These district coaches would also work with the regional coordinators in order to ensure fidelity across the district that is aligned to the model the state has chosen. These positions will allow the state to monitor fidelity to the model on a large-scale basis.
Additionally, a tenth recommendation is that districts also hire RtI site coaches for each school to work cooperatively with the district-level RtI coach, in order for districts to be even more successful. While district and site-level coaches would be employed to ensure fidelity remains intact, they will need to be more of a facilitator than an auditor or director. Research results from previous studies, as well as this one, revealed that when educators become stakeholders in the implementation process and are allowed to gain ownership of the process, positive perceptions of RtI increased (Higgins-Averill et al., 2011). As perceptions had a strong relationship with fidelity, this is an important consideration. It will be imperative that district and school-level coaches fully understand this concept in order to drive their positions more towards facilitation than dictatorship. The coaches should also find ways to encourage faculty in the implementation process by sharing success stories of the RtI process, which will also improve perceptions of RtI.

Further fidelity could be ensured with the eleventh recommendation that the state department hire RtI coaches and train them all together before disseminating them across the state to then coach educators on the district level.

The twelfth and final recommendation is that the TDOE assist districts in funding issues. The state department should first relay to districts what state funds are available to them to help meet the needs suggested here, such as funds for training and filling positions for district and school-level coaches. Then, the state should make recommendations for how districts can secure the funding needed to fill the gaps left open by state funding. This would be a preventive measure to decrease the likelihood of districts not fulfilling the state recommendations simply due to financial constraints.
Due to the researchers’ recommendations of additional personnel throughout the state, additional funding is going to be needed. To mitigate the cost for this additional funding, professional development can be personalized based on teachers’ specific needs. For example, all teachers will need training in Tier I, since all students receive Tier I instruction. However, not all teachers will need training in Tier II. Even fewer teachers will need training in Tier III interventions, since most students will have their needs met in Tiers I and II.

**Limitations of the Study**

The study was limited to a 12-month research timeframe as part of a doctoral program in a cohort model with a finite timeline.

Another limitation was the potential bias of the researchers. As all three of the researchers were teachers in general education classrooms who had some experience with implementing portions of the RtI model, or knew of someone in their school who had, their own perceptions of the model may have influenced their research.

The population of Middle Tennessee under study was comprised of staff members working in various elementary and middle schools. One portion of the population was within a large urban district lacking a well-defined program of implementation of RtI across the school system. Another portion of the population sample was from staff members employed in a smaller district that incorporates a well-defined RtI program for students in grades kindergarten through second. The researchers assumed that individual teacher and staff responses to surveys were true and accurate.

The research design was adapted several times throughout the data collection process due to issues with the availability of data. As the availability of data became an
issue, the research design was adjusted for both the population and the purpose of the research. The researchers chose to adjust the population by using a convenience sampling of those within their professional networks. The convenience sampling consisted of participants who volunteered to respond to a questionnaire and an interview. As the availability of data did not include student achievement outcomes, the purpose of the research was changed from the effects of RtI to an investigation of training, perceptions, and fidelity of implementation of RtI.

**Recommendations for Further Research**

The researchers recommend further research on the success of RtI and student achievement in general. Increasing the body of research in this area as proof that RtI has a strong record of effectiveness will affect educators’ perceptions of RtI, which was revealed as having a relationship with fidelity of implementation. Further research also needs to be completed on additional ways to change teacher perceptions.

Additionally, the researchers recommend further research on the types of training and how they affect fidelity of implementation. The impact of the research will increase as more studies are done, especially with larger samples. Research needs to be more detailed in which types of training are the most effective for impacting educators’ levels of fidelity of implementation.

The researchers would also like to suggest that other researchers ensure they will have access to adequate data for their research before beginning. Schools and school systems seem to feel uncomfortable about being vulnerable with revealing fidelity data and data on results of student achievement outcomes. The research will be more valuable if conducted in a school system that strongly desires improvement in student achievement
and recognizes that the path to improved results will most likely include a deeper introspection than most are comfortable with. Along with supervisors and decision-makers’ willingness to participate, there will also need to be a willingness of employees to provide data that may be time-consuming to locate, and a willingness of teachers to be transparent in their practices. Without willingness on all of these levels, the impact of the research is weakened.

**Summary of Recommendations**

The chief recommendation the researchers would like to make to the Tennessee Department of Education is to focus on improving perceptions of RtI and providing adequate training to all staff members. The researchers feel that this process has been initiated, but needs to be elaborated upon and further clarified. First, it is recommended that the state add evidence-based intervention suggestions to the state manual for districts to choose from, as explicit guidelines can be viewed as procedures that help improve positive perceptions. Next, it is recommended that the state determine how to unite pre-service training for RtI across the state, possibly by amending licensure requirements that include specific amounts of pre-service training and a manual that all colleges and universities will use to make training as common as possible.

Finally, it is recommended that the state organize the new positions suggested previously by utilizing the hierarchy map of new personnel, as seen in Appendix E. This organization of new positions can be used to ensure fidelity of implementation across the state. The hierarchy map is a visual representation of the new positions, which includes a state-level RtI coordinator, regional coordinators, state auditors, district-level coaches, and recommended site coaches.
In the interest of continuous improvement, it is recommended that TDOE consider partnering with universities across the state to continue research on RtI implementation, comparing and contrasting success stories with situations in need of improvement. The recommendations for further research suggested above could be provided to universities across the state that have research departments to gain more specific data. With concerted, intentional efforts by the state department to unite all stakeholders across the state, Tennessee can emerge as a national leader in successful implementation of RtI.

Researchers’ Reflections

As the researchers reflect on their own experiences with RtI, in combination with their new insights throughout the research process, their understandings of RtI have evolved. By going through this process, the researchers have seen that many education professionals do not have an accurate understanding of the RtI process, even though they believe they do. Many educators wholeheartedly believe they are implementing RtI with true fidelity. These educators should not be viewed as apathetic, but as educators who have not been properly trained.

The researchers believe that when RtI is fully implemented in the state of Tennessee, a paradigm shift will be needed for educators because of their misunderstandings. Educators essentially need to be “retaught” the RtI framework and how to truly implement it with fidelity.

The researchers also believe, due to the demands of the profession, educators across the state of Tennessee are overstressed. For many educators, the thought of having to add “one more thing to their plate” is extremely overwhelming. That is why the rollout of RtI requires much consideration and planning from the TDOE. The training
that the state delivers for RtI must be done in a way that is sensitive to teachers’ current level of frustration.

For the researchers involved in this study, the theoretical framework relating RtI to the medical field stood out. By connecting interventions for students to the treatment of patients, this analogy can be used to further educators’ understanding of the RtI framework.

The research process has been challenging at times, but also insightful. The researchers have grown personally and professionally throughout this process. The researchers believe that by completing this research study, they will be able to impact their future students, no matter the path their careers take.
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Appendix A

Response to Intervention (RtI) Training and Implementation Questionnaire
By participating in this survey you agree to the publishing of your responses. Any information that is obtained in connection with this study and that can be identified with you, your school, or your district will remain confidential and will not be disclosed. There are no known discomforts or inconveniences other than the amount of time required to finish the survey. As we know it, there are no risks to be expected. Benefits consist of more knowledge on the relationship between staff members’ perceptions of RtI and the level of fidelity in which RtI is implemented as well as the relationship between training and staff perceptions of RtI, thus leading to the effects of training in RtI to the level of fidelity in RtI implementation.

Your decision whether or not to participate will not prejudice your future relationships with your district, the Tennessee Department of Education, or Lipscomb University. If you decide to participate, you are free to discontinue participation at any time without prejudice. Please feel free to ask questions regarding this study. You may contact us later if you have any additional questions at klcarpenter@mail.lipscomb.edu, njison@mail.lipscomb.edu, and/or knlatacha@mail.lipscomb.edu.

In order for your questionnaire responses to remain confidential, we gave you a Teacher Code to use rather than your name.

Teacher Code

RtI Tiers in which you have participated [Tier I, Tier II, Tier III]

School Type (all that apply) [Title I, Urban, Rural, Magnet, Charter, Alternative]

Ethnicity (optional) Gender (optional) Age Range [21-25, 26-30, 31-35, 36-40, 41+]

Position/Grade Levels (all that apply) and years of experience in each [Administrator, General Education Teacher, Special Education Teacher, English Language Learning Teacher, Related Arts Teacher, Math Teacher, Reading/Language Arts Teacher, Science Teacher, Social Studies Teacher, Health Teacher, Counselor, Psychologist, Specialist, Coach, Aide]

Licensure [Administrative, Apprentice Special Group/Professional School Service, Professional Teacher, Apprentice Teacher, Alternative Teacher, Interim Teacher, Apprentice Occupational Teacher, Out-of-State Teacher, Student Teacher]

Highest Degree Obtained [Bachelor’s, Master’s, Educational Specialist, Doctorate]

Training/Support

1. How many hours of RtI training did you receive while attending college?
   Undergraduate Graduate
2. How many hours did you spend attending RtI Professional Development sessions throughout the school year and/or summer? Please list PD session topics.

3. How many hours did your consultant or coach spend going over RtI plans with you throughout the school year?

4. How many hours of consultation did you receive, in regards to working with particular students or groups of students?

5. How many hours did a consultant or coach spend with you while meeting with a student or group of students in order to assist you in your intervention or monitoring?
Implementation

Please respond to the numbered questions by briefly answering the two lettered parts of each question.

6. Is your Curriculum/Intervention research/evidence based?
   a. What program are you using for intervention?

   b. How do you know that this program was created for your population?

7. Is the level of instruction you are trained to provide adequate for the specific group?
   a. How many hours of each type of training did you receive to assure that you are adequately trained to provide the tier of intervention you are providing?

   b. How many students are in your small group?

8. Are there procedures for accountability in place?
   a. Are procedures in place to monitor your fidelity of implementing this intervention?

   b. Are you following the developer guidelines for your program?

9. How do you determine a student’s responsiveness to intervention at this tier?
   a. What do you use to progress monitor and how often do you use it?

   b. What are the criteria for a student’s responsiveness to be considered not adequate enough to remain in this tier, in order to determine their shift to the next tier?
Appendix B

Response to Intervention (RtI) Perceptions Interview

By participating in this survey you agree to the publishing of your responses. Any information that is obtained in connection with this study and that can be identified with you, your school, or your district will remain confidential and will not be disclosed. There are no known discomforts or inconveniences other than the amount of time required to finish the survey. As we know it, there are no risks to be expected. Benefits consist of more knowledge on the relationship between staff members’ perceptions of RtI and the level of fidelity in which RtI is implemented as well as the relationship between training and staff perceptions of RtI, thus leading to the effects of training in RtI to the level of fidelity in RtI implementation.

Your decision whether or not to participate will not prejudice your future relationships with your district, the Tennessee Department of Education, or Lipscomb University. If you decide to participate, you are free to discontinue participation at any time without prejudice. Please feel free to ask questions regarding this study. You may contact us later if you have any additional questions at klcarpenter@mail.lipscomb.edu, njison@mail.lipscomb.edu, and/or knlatacha@mail.lipscomb.edu.

In order for your responses to remain confidential, we gave you a Teacher Code we will use rather than your name.

Perceptions

1. Please describe what comes to mind when asked to implement RtI.

2. In your own words, please describe RtI, including how it is used and its purpose.
3. On a scale of 1-5, how effective is the RtI approach (is the outcome worth the
time and effort needed to implement the program)?
Allow a score of 1 to mean “a complete waste of time and effort”
and a score of 5 to mean “the most effective approach I have experienced”

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<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

4. On a scale of 1-5, how comfortable are you with your ability to implement RtI?
Allow a score of 1 to mean “I am not equipped to do this”
and a score of 5 to mean “I should train others on implementation.”

<table>
<thead>
<tr>
<th></th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

5. On a scale of 1-5, how supported are you by those in leadership (administrators,
mentors, coaches, specialists, instructional facilitators, etc.) in order to assure that
you are implementing RtI with fidelity?
Allow a score of 1 to mean “I am on my own”
and allow a score of 5 to mean “I could not ask for better support.”

<table>
<thead>
<tr>
<th></th>
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<th>4</th>
<th>5</th>
</tr>
</thead>
</table>
## Appendix C

### Researcher Fidelity of Implementation Rubric

The Researcher Fidelity of Implementation Rubric is a modified version of the RtI Implementation Rubric and Worksheet the researchers used to assign Fidelity scores, based on respondents’ replies to the Implementation items when surveyed using the RtI Questionnaire.

<table>
<thead>
<tr>
<th>Question</th>
<th>Correlation to RtI Rubric &amp; Worksheet Items</th>
<th>Score of 1</th>
<th>Score of 3</th>
<th>Score of 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is your Curriculum/Intervention research/evidence based?</td>
<td>a. teacher-made interventions, no specific curriculum, b. no district approval</td>
<td>a. admin. or counselor designed</td>
<td>a. Sidewalks, Spire, Dibels, Passport, Voyager, Read 180, District Reading Clinic, Think-Through Math, Study Island, Wilson Reading, Accelerated Math</td>
<td>b. District-mandated</td>
</tr>
<tr>
<td>a. What program are you using for intervention?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. How do you know that this program was created for your population?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Is the level of instruction you are trained to provide adequate for the specific group?</td>
<td>Neither condition is met: a. 5+ hrs training b. 1-5 students</td>
<td>One condition is met: a. 5+ hrs training b. 1-5 students</td>
<td>Both conditions are met: a. 5+ hrs training b. 1-5 students</td>
<td></td>
</tr>
<tr>
<td>a. How many hours of each type of training did you receive to assure that you are adequately trained to provide the tier of intervention you are providing?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. How many students are in your small group?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Are there procedures for accountability in place?</td>
<td>Neither condition is met: a. Procedures are in place to monitor b. implemented according to developer guidelines</td>
<td>One condition is met: a. Procedures are in place to monitor b. implemented according to developer guidelines</td>
<td>Both conditions are met: a. Procedures are in place to monitor b. implemented according to developer guidelines</td>
<td></td>
</tr>
<tr>
<td>a. Are procedures in place to monitor your fidelity of implementing this intervention?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Are you following the developer guidelines for your program?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. How do you determine a student’s responsiveness to</td>
<td>Neither condition is met: a. teacher-made interventions, no specific curriculum, b. no district approval</td>
<td>One condition is met: a. admin. or counselor designed</td>
<td>Both conditions are met: a. Sidewalks, Spire, Dibels, Passport, Voyager, Read 180, District Reading Clinic, Think-Through Math, Study Island, Wilson Reading, Accelerated Math</td>
<td>b. District-mandated</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>intervention at this tier?</td>
<td>a. What do you use to progress monitor and how often do you use it?</td>
<td>b. What are the criteria for a student’s responsiveness to be considered not adequate enough to remain in this tier, in order to determine their shift to the next tier?</td>
<td>a. Dibels or developer Progress Monitoring assessment at least every 3 weeks</td>
<td>b. Decisions are based on valid progress monitoring data</td>
</tr>
</tbody>
</table>
### Appendix D

#### RTI Essential Components Integrity Rubric

The RTI Essential Components Integrity Rubric is for use by individuals who are responsible for monitoring school-level fidelity of RTI implementation. The rubric is aligned with *Essential Components of RTI: A Close Look at Response to Intervention* (National Center on Response to Intervention, 2010).

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>3</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening Tools</td>
<td>Insufficient evidence that the screening tools are reliable or that correlations between the instruments and valued outcomes are strong, or that predictions of risk status are accurate.</td>
<td>Evidence indicates that the screening tools are reliable and that correlations between the instruments and valued outcomes are strong. However, there is insufficient evidence that predictions of risk status are accurate.</td>
<td>Evidence indicates that the screening tools are reliable, correlations between the instruments and valued outcomes are strong, and predictions of risk status are accurate.</td>
</tr>
<tr>
<td>Universal Screening</td>
<td>Neither condition is met: (1) Screening is conducted for all students (i.e., universal); (2) procedures are in place to ensure implementation accuracy (i.e., all students are tested, scores are accurate, all points/decisions are accurate).</td>
<td>Only one condition is met: (1) Screening is conducted for all students (i.e., universal); (2) procedures are in place to ensure implementation accuracy (i.e., all students are tested, scores are accurate, all points/decisions are accurate).</td>
<td>Both conditions are met: (1) Screening is conducted for all students (i.e., universal); (2) procedures are in place to ensure implementation accuracy (i.e., all students are tested, scores are accurate, all points/decisions are accurate).</td>
</tr>
</tbody>
</table>
### Multi-level Prevention/Intervention System—The framework includes a school-wide, multi-level system for preventing school failure

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>3</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research-based Curriculum Materials</strong></td>
<td>The core curriculum materials are largely not research-based for the target population of learners. (Including subgroups.)</td>
<td>Some of the core curriculum materials are research-based for the target population of learners. (Including subgroups.)</td>
<td>All of the core curriculum materials are research-based for the target population of learners. (Including subgroups.)</td>
</tr>
<tr>
<td><strong>Fidelity</strong></td>
<td>Neither condition is met: (1) Procedures are in place to monitor the fidelity of implementation of the core curriculum. (2) the preponderance of evidence supports fidelity (i.e. the teacher rarely deviates from the materials or venues-recommended activities, such as lesson content or pacing).</td>
<td>One condition is met: (1) Procedures are in place to monitor the fidelity of implementation of the core curriculum. (2) the preponderance of evidence supports fidelity (i.e. the teacher rarely deviates from the materials or venues-recommended activities, such as lesson content or pacing).</td>
<td>Both conditions are met: (1) Procedures are in place to monitor the fidelity of implementation of the core curriculum. (2) the preponderance of evidence supports fidelity (i.e. the teacher rarely deviates from the materials or venues-recommended activities, such as lesson content or pacing).</td>
</tr>
<tr>
<td><strong>Articulation of Teaching and Learning (in and across grade levels)</strong></td>
<td>Neither condition is met: (1) Teaching and learning is well articulated from one grade to another. (2) teaching and learning is well articulated within grade levels so that students have highly similar experiences, regardless of their assigned teacher.</td>
<td>Only one condition is met: (1) Teaching and learning is well articulated from one grade to another. (2) teaching and learning is well articulated within grade levels so that students have highly similar experiences, regardless of their assigned teacher.</td>
<td>Both conditions are met: (1) Teaching and learning is well articulated from one grade to another. (2) teaching and learning is well articulated within grade levels so that students have highly similar experiences, regardless of their assigned teacher.</td>
</tr>
<tr>
<td><strong>Instruction</strong></td>
<td>Neither condition is met: (1) Most or all teachers differentiate instruction; (2) teachers use students’ assessment data to identify the needs of students.</td>
<td>Only one condition is met: (1) Most or all teachers differentiate instruction; (2) teachers use students’ assessment data to identify the needs of students.</td>
<td>Both conditions are met: (1) Most or all teachers differentiate instruction; (2) teachers use students’ assessment data to identify the needs of students.</td>
</tr>
<tr>
<td><strong>School-Based Professional Development</strong></td>
<td>The school has no well-defined, school-based professional development mechanism to support continuous improvement of instructional practice.</td>
<td>Some forms of professional development are available to teachers to support continuous improvement of instructional practice. (But most are not school-based and do not establish a mechanism to continuously improve instructional practice.)</td>
<td>School-based professional development is institutionalised and structured so that all teachers continuously examine, reflect upon, and improve instructional practice.</td>
</tr>
<tr>
<td>Item</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>------------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Primary Level Prevention/Core Curriculum</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evidence-Based Intervention</td>
<td>The secondary level interventions are not evidence-based.</td>
<td>The secondary level interventions consist of a variety of strategies, of which only some are evidence-based and some are not.</td>
<td>All secondary level interventions are evidence-based.</td>
</tr>
<tr>
<td>Complements Core Instruction</td>
<td>Secondary level prevention is poorly aligned with core instruction and incorporates different topics, even though several topics are not foundational skills that support core instruction.</td>
<td>Secondary level prevention is generally aligned with core instruction but only occasionally incorporates foundational skills that support core instruction.</td>
<td>Secondary level prevention is well aligned with core instruction and incorporates foundational skills that support core instruction.</td>
</tr>
<tr>
<td>Fidelity</td>
<td>Neither condition is met. (1) Procedures are in place to monitor the fidelity of implementation of secondary level interventions; (2) secondary level implementation is generally implemented with fidelity in accordance with developer guidelines.</td>
<td>Only one condition is met. (1) Procedures are in place to monitor the fidelity of implementation of secondary level interventions; (2) secondary level implementation is generally implemented with fidelity in accordance with developer guidelines.</td>
<td>Both conditions are met. (1) Procedures are in place to monitor the fidelity of implementation of secondary level interventions; (2) secondary level implementation is generally implemented with fidelity in accordance with developer guidelines.</td>
</tr>
<tr>
<td>Instruction</td>
<td>Neither condition is met. (1) Secondary level interventions are led by well-trained staff; (2) group size is optimal (according to research) for the age and needs of students.</td>
<td>Only one condition is met. (1) Secondary level interventions are led by well-trained staff; (2) group size is optimal (according to research) for the age and needs of students.</td>
<td>Both conditions are met. (1) Secondary level interventions are led by well-trained staff; (2) group size is optimal (according to research) for the age and needs of students.</td>
</tr>
<tr>
<td>Determining Responsiveness to Secondary Level Prevention</td>
<td>Neither condition is met. (1) Decisions about responsiveness to intervention are based on reliable and valid progress monitoring data to reflect the goals of improvement or final status at the end of secondary level prevention; (2) these decision-making criteria are implemented accurately.</td>
<td>Only one condition is met. (1) Decisions about responsiveness to intervention are based on reliable and valid progress monitoring data to reflect the goals of improvement or final status at the end of secondary level prevention; (2) these decision-making criteria are implemented accurately.</td>
<td>Both conditions are met. (1) Decisions about responsiveness to intervention are based on reliable and valid progress monitoring data to reflect the goals of improvement or final status at the end of secondary level prevention; (2) these decision-making criteria are implemented accurately.</td>
</tr>
<tr>
<td>Addition to Primary</td>
<td>Secondary level interventions replace core instruction.</td>
<td>Secondary level interventions sometimes supplement core instruction and sometimes replace core instruction.</td>
<td>Secondary level interventions supplement core instruction.</td>
</tr>
<tr>
<td>Item</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Primary Level Prevention/Core Curriculum</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evidence-Based Intervention</td>
<td>Neither condition is met: (1) Tertiary level interventions are</td>
<td>Only one condition is met: (1) Tertiary level interventions are</td>
<td>Both conditions are met: (1) Tertiary level interventions are</td>
</tr>
<tr>
<td></td>
<td>evidence-based standard protocols or based on validated progress</td>
<td>evidence-based standard protocols or based on validated progress</td>
<td>evidence-based standard protocols or based on validated progress</td>
</tr>
<tr>
<td></td>
<td>monitoring methods for individualizing instruction; (2) tertiary</td>
<td>monitoring methods for individualizing instruction; (2) tertiary</td>
<td>monitoring methods for individualizing instruction; (2) tertiary</td>
</tr>
<tr>
<td></td>
<td>interventions are more intensive than secondary interventions.</td>
<td>interventions are more intensive than secondary interventions.</td>
<td>interventions are more intensive than secondary interventions.</td>
</tr>
<tr>
<td>Fidelity</td>
<td>Neither condition is met: (1) Procedures are in place to monitor</td>
<td>Only one condition is met: (1) Procedures are in place to monitor</td>
<td>Both conditions are met: (1) Procedures are in place to monitor</td>
</tr>
<tr>
<td></td>
<td>the fidelity of implementation of tertiary level interventions; (2)</td>
<td>the fidelity of implementation of tertiary level interventions;</td>
<td>the fidelity of implementation of tertiary level interventions;</td>
</tr>
<tr>
<td></td>
<td>the predominance of evidence supports fidelity.</td>
<td>(2) the predominance of evidence supports fidelity.</td>
<td>(2) the predominance of evidence supports fidelity.</td>
</tr>
<tr>
<td>Instruction</td>
<td>Neither condition is met: (1) Tertiary level interventions are</td>
<td>Only one condition is met: (1) Tertiary level interventions are</td>
<td>Both conditions are met: (1) Tertiary level interventions are</td>
</tr>
<tr>
<td></td>
<td>led by well-trained staff; (2) group size is optimal (according</td>
<td>led by well-trained staff; (2) group size is optimal (according</td>
<td>led by well-trained staff; (2) group size is optimal (according</td>
</tr>
<tr>
<td></td>
<td>to research) for the age and needs of students.</td>
<td>to research) for the age and needs of students.</td>
<td>to research) for the age and needs of students.</td>
</tr>
<tr>
<td>Determining Responsiveness to Tertiary Level</td>
<td>Neither condition is met: (1) Decisions about responsiveness to</td>
<td>Only one condition is met: (1) Decisions about responsiveness to</td>
<td>Both conditions are met: (1) Decisions about responsiveness to</td>
</tr>
<tr>
<td>Prevention</td>
<td>intervention are based on reliable and valid progress monitoring</td>
<td>intervention are based on reliable and valid progress monitoring</td>
<td>intervention are based on reliable and valid progress monitoring</td>
</tr>
<tr>
<td></td>
<td>data to reflect slope of improvement or final status at the end</td>
<td>data to reflect slope of improvement or final status at the end</td>
<td>data to reflect slope of improvement or final status at the end</td>
</tr>
<tr>
<td></td>
<td>of tertiary level prevention; (2) those decision making criteria</td>
<td>of tertiary level prevention; (2) those decision making criteria</td>
<td>of tertiary level prevention; (2) those decision making criteria</td>
</tr>
<tr>
<td></td>
<td>are implemented accurately.</td>
<td>are implemented accurately.</td>
<td>are implemented accurately.</td>
</tr>
<tr>
<td>Relationship to Primary</td>
<td>Neither condition is met: (1) Decisions regarding student</td>
<td>Only one condition is met: (1) Decisions regarding student</td>
<td>Both conditions are met: (1) Decisions regarding student</td>
</tr>
<tr>
<td></td>
<td>participation in both primary and tertiary levels of prevention</td>
<td>participation in both primary and tertiary levels of prevention</td>
<td>participation in both primary and tertiary levels of prevention</td>
</tr>
<tr>
<td></td>
<td>are made on a case-by-case basis, according to student need; (2)</td>
<td>are made on a case-by-case basis, according to student need; (2)</td>
<td>are made on a case-by-case basis, according to student need; (2)</td>
</tr>
<tr>
<td></td>
<td>tertiary level interventions address the general education</td>
<td>tertiary level interventions address the general education</td>
<td>tertiary level interventions address the general education</td>
</tr>
<tr>
<td></td>
<td>curriculum in an appropriate manner for students.</td>
<td>curriculum in an appropriate manner for students.</td>
<td>curriculum in an appropriate manner for students.</td>
</tr>
</tbody>
</table>
**Progress Monitoring**—Ongoing and frequent monitoring of progress quantifies rates of improvement and informs instructional practice and the development of individualized programs:

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Progress Monitoring Tools</strong></td>
<td>Selected progress monitoring tools must exceed one of the following criteria: 1) Has at least nine alternate forms of equal and controlled difficulty; 2) specifies minimum acceptable growth; 3) provides benchmarks for minimum acceptable end-of-year performance; 4) reliability and validity information for the performance level score are available.</td>
<td>Selected progress monitoring tools must exceed two of the following criteria: 1) Has at least nine alternate forms of equal and controlled difficulty; 2) specifies minimum acceptable growth; 3) provides benchmarks for minimum acceptable end-of-year performance; 4) reliability and validity information for the performance level score are available.</td>
<td>Selected progress monitoring tools must exceed all of the following criteria: 1) Has at least nine alternate forms of equal and controlled difficulty; 2) specifies minimum acceptable growth; 3) provides benchmarks for minimum acceptable end-of-year performance; 4) reliability and validity information for the performance level score are available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Monitoring Progress</strong></td>
<td>Neither condition is met: 1) Frequency is at least monthly for students receiving secondary level interventions and at least weekly for students receiving tertiary interventions; 2) procedures are in place to ensure implementation accuracy (i.e., appropriate students are tested, scores are accurate; decision making rules are applied consistently).</td>
<td>Only one condition is met: 1) Frequency is at least monthly for students receiving secondary level interventions and at least weekly for students receiving tertiary interventions; 2) procedures are in place to ensure implementation accuracy (i.e., appropriate students are tested, scores are accurate; decision making rules are applied consistently).</td>
<td>Both conditions are met: 1) Frequency is at least monthly for students receiving secondary level interventions and at least weekly for students receiving tertiary interventions; 2) procedures are in place to ensure implementation accuracy (i.e., appropriate students are tested, scores are accurate; decision making rules are applied consistently).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Data-Based Decision Making**—Data-based decision making processes are used to inform instruction, movement within the multi-level system, and disability identification (in accordance with state law):

<p>| Decision making Process | The mechanism for making decisions about the participation of students in the prevention levels meets no more than one of the following criteria: the process (1) is data-driven and based on validated methods; (2) involves a broad base of stakeholders; (3) is operationalized with objective criteria. | The mechanism for making decisions about the participation of students in the prevention levels meets two of these criteria: the process (1) is data-driven and based on validated methods; (2) involves a broad base of stakeholders; (3) is operationalized with objective criteria. | The mechanism for making decisions about the participation of students in the prevention levels meets all of these criteria: the process (1) is data-driven and based on validated methods; (2) involves a broad base of stakeholders; (3) is operationalized with objective criteria. |</p>
<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>3</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prevention Focus</strong></td>
<td>Staff perceive RTI as a pre-referral process that students must complete in order to be referred to special education.</td>
<td>Differences are noted among staff regarding their understanding of the purpose of RTI.</td>
<td>Staff believe that the primary purpose of RTI is to use early interventions as a way to prevent students from having academic and/or behavioral problems.</td>
</tr>
<tr>
<td><strong>Leadership</strong></td>
<td>Decisions and actions by school and district leaders undermine the effectiveness of the essential components of the RTI framework at the school.</td>
<td>Decisions and actions by school and district leaders are inconsistent and only somewhat supportive of the essential components of the RTI framework at the school.</td>
<td>Decisions and actions by school and district leaders proactively support the essential components of the RTI framework at the school and make the RTI framework more effective.</td>
</tr>
<tr>
<td><strong>Staff Qualifications</strong></td>
<td>Staff responsible for providing secondary and tertiary level interventions have not been adequately trained for their responsibilities.</td>
<td>Some of the staff responsible for providing secondary and tertiary level interventions have been trained, but gaps exist in the professional development of some staff or in their use of the evidence-based interventions.</td>
<td>All of the staff responsible for providing secondary and tertiary level interventions have been fully trained on RTI and on evidence-based interventions, and ongoing professional development is available as needed.</td>
</tr>
<tr>
<td><strong>Culturally and Linguistically Responsive</strong></td>
<td>Core instruction and secondary and tertiary level interventions do not account for cultural, linguistic, and socioeconomic factors.</td>
<td>Core instruction and secondary and tertiary level interventions strive to consider cultural, linguistic, and socioeconomic factors, but some areas need improvement.</td>
<td>Core instruction and secondary and tertiary level interventions reflect cultural, linguistic, and socioeconomic factors.</td>
</tr>
<tr>
<td><strong>Communications With and Involvement of Parents</strong></td>
<td>No conditions are met: (1) A description of the school’s essential components of RTI is shared with parents; (2) a coherent mechanism is implemented for updating parents on the progress of their child who is receiving secondary or tertiary interventions; (3) parents are involved during decision-making regarding participation of their child in the prevention levels.</td>
<td>At least one condition is met: (1) A description of the school’s essential components of RTI is shared with parents; (2) a coherent mechanism is implemented for updating parents on the progress of their child who is receiving secondary or tertiary interventions; (3) parents are involved during decision-making regarding participation of their child in the prevention levels.</td>
<td>All conditions are met: (1) A description of the school’s essential components of RTI is shared with parents; (2) a coherent mechanism is implemented for updating parents on the progress of their child who is receiving secondary or tertiary interventions; (3) parents are involved during decision-making regarding participation of their child in the prevention levels.</td>
</tr>
</tbody>
</table>

This document was produced under U.S. Department of Education, Office of Special Education Programs Grant No. HI325170044 to the American Institutes for Research, with the assistance of IMC Research Corporation. Grace Carter-Dean and Triostat, Inc. served as the OSEP project offices. The views expressed herein do not necessarily represent the positions or policies of the Department of Education. No official endorsement by the U.S. Department of Education of any product, commodity, service or enterprise mentioned in this publication is intended or should be inferred. The product is public domain. Authorization to reproduce it in whole or in part, for noncommercial purposes, is granted. Any commercial use of the tool is expressly prohibited. While permission to reprint this publication is not necessary, the citation should be National Center on Response to Intervention (August 2011). RTI Essentials Components (Avery Hallin and Triostat, Inc.) Change is Good, Washington, DC: U.S. Department of Education, Office of Special Education Programs, National Center on Response to Intervention.
Appendix E

RTI Essential Components Integrity Worksheet

<table>
<thead>
<tr>
<th>School</th>
<th>District</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades of Student Population: K 1 2 3 4 5 6 7 8 9 10 11 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persons Interviewed: _____________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interviewer: _____________________________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Focus Area:  
- Reading/Language Arts  
- Mathematics  
- Behavior  
<table>
<thead>
<tr>
<th>Grades:</th>
</tr>
</thead>
</table>

The RTI Essential Components Integrity Rubric and the RTI Essential Components Integrity Worksheet are for use by individuals responsible for monitoring the school-level fidelity of Response to Intervention (RTI) implementation. They may also be used by schools for self-appraisal, however, they were not designed for compliance monitoring and therefore should not be used for this purpose.

The rubric and the worksheet are designed to be used together and are aligned with the *Essential Components of RTI: A Closer Look at Response to Intervention* (National Center on Response to Intervention, 2010).

Instructions—The purpose of this worksheet is to provide a framework for collecting relevant information and for recording a school’s rating on various items related to RTI implementation. Descriptors of ratings for each item are provided on the RTI Essential Components Integrity Rubric.

Information about school-level implementation should be collected through interviews with school personnel (sample interview questions are provided below) and through observations and document review. After all of the information has been collected, use your notes and the RTI Essential Components Integrity Rubric to rate the school on each item. The Rubric provides a five-point rating scale and descriptions of practices that would score a 1, 3, and 5. If you judge a school’s practice to fall between the described ratings, assign the school a rating of 2 or 4. For example, if you judge a school to be performing at a level higher than the Rubric describes for a 3 rating but not quite at the level described for a 5, rate the school as performing at a 4.

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IDEA at Work  
U.S. Office of Special Education Programs
<table>
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<tr>
<th>Item</th>
<th>Sample Interview Questions</th>
<th>Comments/Remarks</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Screening Tools</strong></td>
<td>What tools do you use for universal screening? When your school selected the screening tool(s), how much attention was paid to the evidence from the vendor regarding the validity, reliability, and accuracy of the tool? Does your school have documentation from the vendor that these tools have been shown to be valid, reliable, and accurate (including with subgroups)? Do you have reason to believe that the screening tool(s) that you use may have issues with validity, reliability, or accuracy (including with subgroups)? If so, please explain.</td>
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<tr>
<td>2. <strong>Universal Screening</strong></td>
<td>Are all students at the target grade levels screened at the beginning of the school year? Does your school conduct screening throughout the school year? If so, how many times during the school year are students in the target grade levels typically screened? Is a well-defined cut score used to identify students at risk? Do you conduct a follow-up assessment to ensure that the results of the initial screening were accurate before placing a student in secondary prevention? If so, please describe. Describe the process for conducting the screenings. To what extent is this process consistently followed? How closely does the administration of the screening follow the developer guidelines? Are there differences in the process for different students? If yes, describe these differences. Is there anything about the process that you feel would jeopardize the accuracy of the results? If so, please describe.</td>
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<tr>
<td>3. Research-Based Curriculum Materials</td>
<td>When your school selected its core instructional materials, how much attention was paid to the evidence from the vendor regarding effectiveness of the materials when used with fidelity? Does your school have a practice of maintaining documentation from the vendor about the evidence of the effectiveness of the materials when used with fidelity?</td>
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<td>4. Fidelity</td>
<td>Is the core curriculum delivered with fidelity? If so, what evidence indicates this? Are procedures in place to monitor the fidelity of delivery of the core curriculum?</td>
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<td>5.</td>
<td>Articulation of Teaching and Learning (in and across grade levels)</td>
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<td>What efforts have been made to articulate teaching and learning from one grade to another?</td>
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<td>Describe the process that supports the articulation of teaching and learning from one grade to another.</td>
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<td>What efforts have been made to articulate teaching and learning within grade levels or subject areas?</td>
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<td></td>
<td>Describe the process that supports the articulation of learning and learning from one teacher to another within the same grade.</td>
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<td></td>
<td>How consistent is the learning experience among students in the same grade and subject with different teachers?</td>
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<td>6.</td>
<td>Instruction</td>
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<td></td>
<td>To what extent do teachers use student assessment data and knowledge of student readiness, language, and culture to offer different teaching and learning strategies that address individual needs?</td>
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<td></td>
<td>How consistent is this effort among the teaching staff?</td>
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<td>7.</td>
<td>School-based Professional Development</td>
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<td></td>
<td>Do the teachers regularly participate in school-based professional development that is structured so that teachers continuously examine, reflect upon, and improve instructional practice?</td>
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<td>If not, please describe this professional development.</td>
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<td></td>
<td>How frequently is professional development provided?</td>
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<td>What percentage of the teaching staff participates?</td>
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## Secondary Level Prevention

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<tr>
<td>6. Evidence-Based Intervention</td>
<td>What program(s) does your school use for secondary intervention? Have these programs demonstrated efficacy with the target populations (e.g., has research shown that the interventions positively impact student achievement)?</td>
<td></td>
<td>1 2 3 4 5</td>
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<tr>
<td>9. Compliance with Core Instruction</td>
<td>How do the instructors of the secondary level intervention ensure that the content that they address is well aligned and complements the core instruction for each student? Have any foundational skills that support core instruction incorporated into secondary level intervention?</td>
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<tr>
<td>10. Fidelity</td>
<td>Are procedures in place to monitor the fidelity of implementation of the secondary level interventions? If so, please describe. Does the evidence indicate that the intervention is implemented with fidelity?</td>
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<tr>
<td>11. Instruction</td>
<td>Are the secondary level interventions always led by staff adequately trained to implement the interventions with fidelity? If not, who provides the secondary level intervention and what is their background? Are the secondary interventions always conducted with small groups of students? What is the maximum small group size? Describe a typical secondary level experience for students.</td>
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<tr>
<td>12. Determining Responsiveness to Secondary Level Prevention</td>
<td>Are the decisions about whether or not a student is responding to secondary level interventions based on progress monitoring data? Are the decisions made based on the slope of a student’s progress or on the student’s final status at the end of secondary level prevention? Are the criteria implemented accurately and consistently?</td>
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<tr>
<td>13. Addition to Primary</td>
<td>Are the secondary level interventions always implemented as a supplement to the core curriculum? If not, please explain.</td>
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<tr>
<td>14. Evidence-Based Intervention</td>
<td>What evidence-based instructional practices are implemented at the tertiary level? How were the interventions used at the tertiary level developed? Are the tertiary level interventions more intense than the secondary level intervention? If so, how are they more intense?</td>
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<tr>
<td>15. Fidelity</td>
<td>Are procedures in place to monitor the fidelity of implementation of the tertiary level interventions? How do you ensure that the individualized instruction at the tertiary level includes evidence-based instructional practices?</td>
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<tr>
<td>16. Instruction</td>
<td>Are the tertiary level interventions always led by staff adequately trained to implement the interventions as designed? If not, who provide the tertiary level intervention and what is their background? Does the group size allow for the instructional to adjust and individualize instruction to address the needs of each student? What is the maximum small group size? Describe a typical tertiary level experience for students.</td>
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<tr>
<td>17. Determining Responsiveness to Tertiary Level Intervention</td>
<td>Are the decisions about whether or not a student is responding to tertiary level interventions based on progress monitoring data? Are the decisions made based on the slope of a student's progress, or on the student's final status at the end of tertiary level prevention? Are the criteria implemented accurately and consistently?</td>
<td></td>
<td>(1 2 3 4 5)</td>
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<tr>
<td>18. Relationship to Primary</td>
<td>Are tertiary level interventions always implemented as a supplement to the core curriculum or do tertiary level interventions replace the core curriculum for some students? How do you decide if a student receiving tertiary instruction should remain in primary prevention? How do you ensure meaningful connections exist between tertiary intervention and the core curriculum?</td>
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| 15   | Progress Monitoring Tools   | What tools are used for progress monitoring? How many alternate forms of equal difficulty are available?  
When your school selected the progress monitoring tool(s), how much attention was paid to the evidence from the vendor regarding the validity, reliability, and accuracy of the tool(s)?  
Does your school have documentation from the vendor that these tools have been shown to be valid, reliable, and accurate (including with sub-groups)?  
Do you have reason to believe that the progress monitoring tool(s) used may have issues with validity, reliability, or accuracy (including with sub-groups)? If so, please explain.  
Has the tool been validated for use with student populations similar to yours?  
Does the scoring manual or other information provided by the vendor provide benchmarks for acceptable growth? | | 🟠🟠🟠🟠
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| 20. Monitoring Progress  | How often is the progress of students at the secondary level monitored?  
|                | How often is the progress of students at the tertiary level monitored?  
|                | Is progress monitoring conducted frequently enough to show a trend in academic (or behavioral) development over time?  
|                | Describe the process used for monitoring progress.  
|                | Are the progress monitoring measures administered according to developer guidelines?  
|                | To what extent is this process consistently followed?  
|                | Are there differences in the process for different students? If yes, describe these differences.  
|                | Is there anything about the process that would jeopardize the accuracy of the results? If so, please describe. | | | |
| 21. Decision-Making Process | Describe how decisions are made to move students between levels.  
|                | Who is involved in decision making?  
|                | What data are used to inform these decisions, and how are they used?  
|                | What criteria and guidelines are used for making decisions?  
|                | Do you have reason to believe that the decision-making process may be subject to bias or inappropriate influence?  
|                | To what extent are the screening, progress monitoring, and other assessment tools used to inform instruction at all levels, including the core instruction?  
<p>|                | Are consistent decision making models used with all students? | | | |</p>
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<tr>
<td><strong>22. Prevention Focus</strong></td>
<td>To what extent do you believe the teaching staff views the purpose of RTI as primarily to prevent students from having academic and/or behavioral problems? What portion of the teaching staff view RTI as primarily a means for special education identification?</td>
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<tr>
<td><strong>23. Leadership</strong></td>
<td>To what extent are the school and district administrators aware of the RTI framework at your school? To what extent do the actions taken and decisions made by district administrators improve the effectiveness of the RTI framework at your school? To what extent do the actions taken and decisions made by school administrators improve the effectiveness of the RTI framework at your school? Does your school have a designated person who oversees and manages RTI implementation? If yes, what percentage of that person's time is devoted to overseeing and managing RTI?</td>
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<tr>
<td><strong>24. Staff Qualifications</strong></td>
<td>Describe the training and qualifications for staff who provide the secondary and tertiary interventions. What ongoing professional development is available to staff who provide secondary and tertiary interventions?</td>
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<tr>
<td>25. Culturally and Linguistically Responsive</td>
<td>What efforts have been made to ensure that core instruction and secondary and tertiary level interventions take into account cultural, linguistic, and socioeconomic factors for students?</td>
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<tr>
<td>26. Communication With and Involvement of Parents</td>
<td>Are parents knowledgeable about the RTI framework in your school? How are parents of students at the secondary or tertiary level kept informed of the progress of their child? How are parents involved in decision making regarding the participation of their child in secondary or tertiary levels of prevention?</td>
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Appendix F

Kandy Smith, Middle Tennessee Consultant

The University of Tennessee
Tennessee State Personnel Development Grant (TN SPDG)
Graduate School of Education
UT Conference Center, Suite 210
600 Henley Street
Knoxville, TN 37996
Office phone: 865-974-2760
Cell phone: 615-489-6912

To Whom It May Concern:

I have reviewed the Researcher Fidelity of Implementation Rubric that is being used to evaluate teacher fidelity in this research project and believe it to be a very strong, reliable research tool that is based on the research and work of many (Fuchs, Allington, Vaughn, etc.). I was asked by the researchers in this project to review and approve this rubric because they believe my work and knowledge concerning Response to Intervention, especially in Tennessee, to be that of an expert. At the time of this research, I am considered to be one of the leading voices in Response to Intervention across the state of Tennessee. I have presented at numerous State-wide conferences and worked with many school systems as they have implemented the RtI framework into their instructional work. The project for which I work (TN SPDG) has been the leading force in RtI in Tennessee for the past five years.

I am currently a doctoral candidate for a PhD in Literacy at the University of Tennessee; my research involved studying the implementation of RtI in a third and fourth grade classroom (case study/ethnography). Because of that work, I am very well-read in the research and theory concerning RtI. I also have recently co-written a chapter with Dr. Anne McGill-Franzen from the University of Tennessee entitled “RtI and the Common Core.” That chapter is included in an International Reading Association book entitled *Quality Reading Instruction in the Age of Common Core Standards* (Neuman & Gambrell, 2013).

Again, I believe this rubric to be a strong data collection tool for this research.

Sincerely,

Kandy Smith
Appendix G

Hierarchy of RtI Personnel for TDOE
Appendix H

Informed Consent

You are invited to participate in a study of Response to Intervention (RtI). We hope to learn how training impacts staff members’ perceptions, staff members’ perceptions relate to fidelity of implementation, and to what degree training affects fidelity of implementation.

You were selected as a possible participant in this study because you work within the professional networks of the researchers.

If you decide to participate, we will survey you through a nine-item online questionnaire and follow up by facilitating conversations about your perceptions of RtI in an interview. The questionnaire will take no longer than 20 minutes and the interview will not exceed 15 minutes, with each only occurring once. There are no known discomforts and inconveniences other than the amount of time required to finish the RtI questionnaire and interview. As we know it, there are no risks to be expected and benefits consist of more knowledge on RtI and the relationships between training, perceptions, and fidelity of implementation.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will not be disclosed.

Your decision whether or not to participate will not prejudice your future relationships with the Tennessee Department of Education or Lipscomb University. If you decide to participate, you are free to discontinue participation at any time without prejudice.

Please feel free to ask questions regarding this study. You may contact us later if you have any additional questions at klcarpenter@mail.lipscomb.edu, njison@mail.lipscomb.edu, and/or knlatacha@mail.lipscomb.edu.

Your signature is only necessary should you choose to withdraw from participation.

We appreciate your participation,

Karen L. Carpenter, Natalie J. Ison, and Kathryn N. Latacha

________________________  ____________________________
Withdrawing participant                Date
Appendix I

Certificates of Completion for NIH Course

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that Karen Carpenter successfully completed the NIH Web-based training course “Protecting Human Research Participants”.

Date of completion: 09/30/2012
Certification Number: 1015653

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that Natalie Ison successfully completed the NIH Web-based training course “Protecting Human Research Participants”.

Date of completion: 10/01/2012
Certification Number: 1017187

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that Kathryn Latacha successfully completed the NIH Web-based training course “Protecting Human Research Participants”.

Date of completion: 09/28/2012
Certification Number: 1010999
Appendix J

Authors’ Biographies

Karen L. Carpenter was born to Larry and Pat Carpenter and raised with her younger brother and sister in Wilson, North Carolina. She completed her undergraduate degree at Lambuth University in Jackson, Tennessee in 1998 and earned her Master of Arts in Teaching degree at University of Memphis in Memphis, Tennessee in 2009. She continued in Nashville, Tennessee at Lipscomb University, earning her Doctorate of Education in 2013 while teaching for Sumner County Schools during the eighth year of her teaching career.

Natalie Ison Cureton was born to Elijah and Jossie Ison and raised with her nine older siblings in Lewisburg, Ohio. She completed her undergraduate degree at Welch College (formerly Free Will Baptist Bible College) in Nashville, Tennessee in 2008 and earned her Master of Arts in Teaching English Language Learners degree at Lipscomb University in Nashville, Tennessee in 2010. She continued at Lipscomb University, earning her Doctorate of Education in 2013 after completing her fifth year of teaching inner-city students for Metro Nashville Public Schools.

Kathryn N. Latacha was born to Stanley and Diann Latacha and raised with her older brother throughout different regions of the United States. She completed her undergraduate degree at Middle Tennessee State University in Murfreesboro, Tennessee in 2007 and earned her Master of Arts in Teaching, Learning, and Leading degree at Lipscomb University in Nashville, Tennessee in 2011. She continued at Lipscomb University, earning her Doctorate of Education in 2013 during her seventh year of teaching inner-city students for Metro Nashville Public Schools.