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Response to Intervention:  
K-8 Regular Education Teachers' Perceptions of Effectiveness

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A dissertation

Presented to

The faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

Of the requirements for the degree

Doctor of Education in Educational Leadership

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by

Whitney L. Bruner

August 2016

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Dr. John Boyd

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Dr. Karin Keith

Keywords: Response to Intervention, Intervention, Tiered Instruction, Teacher Perceptions

## ABSTRACT

Response to Intervention:

K-8 Regular Education Teachers' Perceptions of Effectiveness

by

Whitney L. Bruner

The purpose of this quantitative study was to investigate the perceptions K-8 regular education teachers have of the Response to Intervention framework. Participants of the study included 1,036 K-8 regular education teachers from 4 East Tennessee districts. The survey achieved a 28% return rate for a total of 277 participants. Specifically, this research assessed K-8 regular education teachers' perceptions of the effectiveness of the RTI framework overall, in aiding in the accurate identification of students with learning disabilities, closing skills gaps for students, and in aiding in the early identification of students with learning difficulties. The data source analyzed consisted of a survey design using a 5-point Likert type scale. There were 5 research questions with 4 corresponding null hypothesis for each question. Research questions were analyzed using a single sample t test, independent t test, or an ANOVA. Results indicated that teachers perceived the Response to Intervention framework effective to a significant extent overall, in closing skills gaps, and aiding in the early identification of students with learning difficulties. They did not see the framework effective to a significant extent in aiding in the accurate identification of students with learning difficulties.

## DEDICATION

Throughout this process I have been reminded of what great friends and family I have. This study is dedicated to all of those who have helped and encouraged me along the way.

To my brother, Zachary: Without you I would never be the teacher that I am. You helped me understand what it is like for a student to have a learning disability. Your greatest struggle helped build my greatest strength, and for that I (and many, many kids) are forever grateful.

To my Pop: My love for learning was certainly passed down from you. You instilled the importance of education in me and I hope to pass that on. Although you passed long before the process was finished, I know that you are proud of my greatest accomplishment yet.

To Tyler: You have endured the most and I cannot tell you how appreciative I am of everything you did in order to get me to the finish line. Words are unable to express my gratitude for all your love and patience you have had with me throughout this process. Thank you for everything you have done to ensure that I reached my goals.

To Mom and Dad: You are my biggest supporters and I would never have made it this far without your support.

To "The Girls": Thank you for always taking care of me. You have analyzed more sentences than I know you cared to. Your late night encouraging text will always be cherished.

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TABLE OF CONTENTS

	Page
ABSTRACT .....	2
DEDICATION .....	3
ACKNOWLEDGEMENTS.....	4
TABLE OF FIGURES.....	8
Chapter	
1. INTRODUCTION.....	11
Statement of the Problem.....	13
Research Questions.....	14
Significance of the Study.....	15
Definition of Terms .....	16
Delimitations .....	18
Limitations.....	18
Overview of the Study.....	18
2. REVIEW OF LITERATURE .....	20
Response to Intervention Framework.....	20
Tier I .....	24
Tier II Intervention.....	25
Tier III Intervention .....	26
Classifying Students as Nonresponders .....	30
Response to Intervention in Tennessee.....	32

A Two-Fold Approach .....	33
Tier II and Tier III Intervention .....	35
Special Education Referral Process.....	40
Response to Intervention in a Middle School and Secondary Settings.....	42
Teacher Perceptions of RTI .....	47
Perceived Promises of RTI.....	47
Perceived Issues of RTI .....	51
Response to Intervention Training for Preservice Teachers.....	56
Chapter Summary .....	62
3. RESEARCH METHODS.....	64
Research Questions and Null Hypotheses.....	64
Population and Sample.....	68
Instrumentation .....	69
Data Collection .....	70
Data Analysis .....	70
Chapter Summary.....	71
4. FINDINGS.....	72
Research Question 1 .....	72
Research Question 2 .....	77
Research Question 3 .....	82
Research Question 4.....	88
Research Question 5 .....	92
Chapter Summary.....	98

5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS .....	100
Summary of the Study.....	100
Conclusions.....	101
Recommendations for Practice.....	105
Recommendations for Future Research .....	107
Chapter Summary .....	109
REFERENCES .....	111
APPENDICES .....	116
Appendix A: Letter to Teachers .....	116
Appendix B: Teacher Consent Form .....	117
Appendix C: Response To Intervention Effectiveness Survey.....	118
VITA .....	123

LIST OF TABLES

Table	Page
1. Perceptions of RTI Overall Effectiveness.....	89
2. Perceptions of Effectiveness of the RTI Framework in Accurately Identifying Students with Learning Disabilities.....	90
3. Perceptions of Effectiveness of the RTI Framework in Closing Skills Gaps of Students....	91
4. Perceptions of Effectiveness of the RTI Framework in Early Identification of Students with Learning Difficulties. ....	92

TABLE OF FIGURES

Figure	Page
1. K-8 Regular Education Teachers’ Responses Regarding Perceptions of RTI Overall Effectiveness.....	73
2. K-8 Regular Education Teachers’ Responses Regarding Perceptions of Effectiveness of the RTI framework in Accurate Identification of Students with Learning Disabilities.....	74
3. K-8 Regular Education Teachers’ Responses Regarding Perceptions of Effectiveness of the RTI Framework in Closing Skills Gaps of Students.....	76
4. K-8 Regular Education Teachers’ Responses Regarding Perceptions of Effectiveness of the RTI Framework in Early Identification of Students with Learning Difficulties. ....	77
5. Scores for Those Teaching in a County School and Those Teaching in a City School Perceptions of Overall Effectiveness of the Response to Intervention Framework. ....	78
6. Scores for Those Teaching in a County School and Those Teaching in a City School Perceptions of the Response to Intervention Framework’s Effectiveness in Accurate Identification of Students with Learning Disabilities.....	79
7. Scores for Those Teaching in a County School and Those Teaching in a City School Perceptions of the Response to Intervention Framework’s Effectiveness in Closing Skills Gaps.....	81
8. Scores for Those Teaching in a County School and Those Teaching in a City School Perceptions of the Response to Intervention Framework’s Effectiveness in Early Identification of Students with Learning Difficulties.....	82
9. Scores for Those Teaching 5 or Fewer years and Those Teaching 6 or More Years Perceptions of Overall Effectiveness of the Response to Intervention framework.....	83
10. Scores for Those Teaching 5 or Fewer years and Those Teaching 6 or More Years Perceptions of the Response to Intervention Framework’s Effectiveness in Aiding in the Accurate Identification of Students with Learning Disabilities.....	85
11. Scores for Those Teaching 5 or Fewer years and Those Teaching 6 or More Years Perceptions of the Response to Intervention Framework’s Effectiveness in Closing Skills Gaps.....	86
12. Scores for Those Teaching 5 or Fewer years and Those Teaching 6 or More Years Perceptions of the Response to Intervention Framework’s Effectiveness in Aiding in the Early Identification of Students with Learning Difficulties.....	87

13. Scores for Those Whose Highest Degree was the Baccaureate level and Those Who Had Earned a Graduate Degree Perceptions of Overall Effectiveness of Response to Intervention..... 94

14. Scores for Those Whose Highest Degree was the Baccaureate level and Those Who Had Earned a Graduate Degree Perceptions of the Effectiveness of the Response to Intervention framework in Aiding in the Accurate Identification of Students with Learning Disabilities..... 95

15. Scores for Those Whose Highest Degree was the Baccaureate level and Those Who Had Earned a Graduate Degree Perceptions of the Effectiveness of the Response to Intervention framework in Closing Skills Gaps..... 96

16. Scores for Those Whose Highest Degree was the Baccaureate level and Those Who Had Earned a Graduate Degree Perceptions of the Effectiveness of the Response to Intervention framework in Aiding in the Early Identification of Students with Learning Disabilities..... 98

## CHAPTER 1

### INTRODUCTION

The 2004 reauthorization of the Individuals with Disabilities Education Act (IDEA) brought about changes to the process of determining eligibility for special education. The reauthorization allows schools to use the Response to Intervention (RTI) framework as a means of identifying students with learning disabilities (U.S. Department of Education, 2007). Previously schools used an IQ discrepancy model to determine the presence of a learning disability (LD). The discrepancy model was deemed a wait-to-fail model for students because the discrepancy between their IQ and achievement was often not notable until the third grade (Tennessee Department of Education, 2015). The use of the Response to Intervention framework gives schools the ability to identify learning disabilities without delay by measuring the responsiveness to an intervention as early as kindergarten. States have slowly begun to implement the RTI framework in schools as a means of addressing achievement gaps early and for identification of learning disabilities. A lack of national guidelines creates varied RTI systems across the nation, with notable differences being found even at the district level (Fuchs, Fuchs, & Stecker, 2010).

In 2013 the Tennessee State Board of Education approved the proposal to use the Response to Intervention framework as the sole way of identifying students with learning disabilities for placement in special education programs (Tennessee Department of Education, 2015). Subsequently a Reading RTI Leadership Team was assembled to develop implementation guidelines for the state of Tennessee to bring continuity to the process. Although there is not an explicit RTI model mandated by IDEA, “the core characteristics that underpin all RTI models are: (1) students receive high quality research-based

instruction in their general education setting; (2) continuous monitoring of student performance; (3) all students are screened for academic and behavioral problems; and (4) multiple levels (tiers) of instruction that are progressively more intense, based on the student's response to instruction" (U.S. Department of Education, 2007, para 25) The Reading RTI Leadership team developed an intervention framework for the state of Tennessee that satisfies the criteria set forth by IDEA to be deemed RTI.

The result of their efforts set state guidelines that delineate the required elements of RTI that must be implemented in all districts across the state. The guidelines however did not specify certain materials and programs that had to be used for the implementation of RTI. Instead, criteria were listed for the districts to reference for the selection of materials and programs to aid in implementation (Tennessee Department of Education, 2014). Implementation of the Response to Intervention framework across the state was effective for kindergarten through 12th grade July, 2014. However, districts could apply for extensions on the implementation date for RTI in grade 6-12. As a result, full implementation in all grades will not begin until the 2016-2017 school year.

The initial purpose for the development framework was to identify students with learning disabilities. However, throughout the development of the framework several other purposes emerged (Tennessee Department of Education, 2015). The framework was also developed to aid in advancement of all students, not just for those projected to have a learning disability. High quality, research-based core instruction is an essential component to ensuring the success of students and, in turn, the RTI framework. It requires intervention for students at the earliest sign of learning difficulties no matter special education eligibility. It also aids in the closure of skills gaps for already struggling students

(Tennessee Department of Education, 2015). The Response to Intervention framework developed by the Reading RTI Leadership Team has become the cornerstone on which the state of Tennessee is rebuilding its educational system (Tennessee Department of Education, 2015).

### Statement of the Problem

In July 2014 Response to Intervention became the sole way of identifying students with learning disabilities in the state of Tennessee (Tennessee Department of Education, 2015). The implementation of RTI had three primary goals. The first goal is a more accurate identification of students with learning disabilities. By going through the tiered framework with intensive, individualized instruction, students with learning difficulties can be distinguished from those with a true learning disability. The second goal of implementation is the ability to identify and help close skills gaps for all students. The framework gives all students the opportunity to receive intensive, individualized instruction for remediation that they otherwise might not get unless identified as in need of special education services. Third, the framework provided teachers with the ability to identify students earlier to receive the intensive, individualized instruction in an effort to prevent skills gaps in later grades. By beginning screening in kindergarten teachers can identify students who need more support in gaining essential early skills.

The changes required with the implementation of the Response to Intervention framework have brought an added responsibility to the regular education teacher. The role of the teacher can vary widely within the framework. Teachers can be the primary interventionist, providing intervention to students in all tiers for both reading and math.

Their role can also be limited to the facilitator of the services. After administering a universal screener the teacher indicates to the interventionist the need for services. (Tennessee Department of Education, 2015). Despite the role of the teacher, the outcomes of intervention can be noticed during the core instruction. Johnston (2010) noted that the most important assessment is one conducted by the teacher in identifying what a student understands and can do. Regular educators are considered the leaders of the Response to Intervention framework; therefore, it is important to understand the perception they have on the effectiveness of an initiative that has impacted many aspects of their daily teaching (Tennessee Department of Education, 2015; Werts & Carpenter, 2013). The overall purpose of this study is to identify whether teachers perceive Response to Intervention as an effective model for closing skills gaps for students, more accurately identifying students with a learning disability, and identifying students with reading difficulties at an earlier age.

### Research Questions

The following research questions were created to guide this study of K-8 regular education teachers' perceptions of the Response to Intervention framework.

1. Do teachers perceive Response to Intervention as effective to a significant extent?
2. Is there a significant difference in the perceptions of Response to Intervention between teachers in city districts and those in county districts?

3. Is there a significant difference in the perceptions of Response to Intervention between teachers who have taught 5 or fewer years and those who have taught more than 5 years?
4. Is there a significant difference in perceptions of Response to Intervention between teachers who teach elementary, intermediate, or middle school grades?
5. Is there a significant difference in perceptions of Response to Intervention between teachers whose highest degree is at the baccalaureate level and those who have earned graduate degrees?

#### Significance of the Study

There is a deficiency in the research over teachers' perspectives about the implementation and effects of Response to Intervention (Castro-Villarreal, Rodriguez, & Moore, 2014; Martinez & Young, 2011). Because of the heavy responsibility the framework has placed upon regular education teachers, it is important to investigate their perceptions on the effectiveness of the RTI framework (Castro-Villarreal et al., 2014). This study provides insight into teachers' perceptions of the effectiveness of Response to Intervention framework. It allowed for insight on perceptions of the ability of the Response to intervention framework to close achievement gaps for struggling students. It also examined how effective teachers perceived the framework in early identification of students with learning difficulties and accurate identification of students with learning disabilities. The successful implementation of an initiative is often related to teachers' perceptions (Martinez & Young, 2011; Werts, Carpenter, & Fewell, 2014). Through understanding the

perceptions of teachers regarding the Response to Intervention framework, administrators and policy makers can address professional development needs and support for implementation to increase effectiveness.

### Definition of Terms

For this research the following definitions were used:

1. *Accurate Identification of Learning Disabled*- The use of specified RTI practices that are thought to correctly identify students as learning disabled by eliminating other exclusionary factors and providing intensive remediation for students with learning difficulties.
2. *Differentiated Instruction*- “targeted instruction provided to meet the needs of students” (Tennessee Department of Education, 2015, p.72).
3. *Early Identification*- the identification of students at risk with an emphasis on those in kindergarten through third grade (RTI Action Network, 2016, para. 1).
4. *Fidelity*- “the extent to which the prescribed instruction or intervention plan is executed” (Tennessee Department of Education, 2015, p.73).
5. *Intervention* “support at the school level for students performing below grade-level expectations” (Tennessee Department of Education, 2015, p.75).
6. *Learning Disability*- “a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in the imperfect ability to listen, think speak, read, write, spell, or do mathematical calculations, and that adversely affects a child’s educational performance” (Tennessee Department of Education, 2015, p.78).

7. *Professional Development*- “ongoing learning opportunities available to teachers and other educational personnel through their schools and districts” (Tennessee Department of Education, 2015, p. 33).
8. *Progress Monitoring*- “a way for teachers to take a snapshot of how children are doing on a specific skill. It shows how well the intervention is working. It includes formal and informal assessments” (Tennessee Department of Education, 2015, p.77).
9. *Response to Intervention* (also referenced by the Tennessee Department of Education as Response to Intervention and Instruction, RTI<sup>2</sup>)- a multi-tier approach to the early identification and support of students with learning and behavior needs (RTI Action Network, 2016, para. 1)
10. *Tiered Instruction*- “increasing intensities of instruction offering specific, research-based interventions matched to student needs.” (RTI Action Network, 2016, para. 2)
11. *Universal Screener*- “determines whether students demonstrate the skills necessary to achieve grade-level standards. This must be on a nationally normed skill-based universal screener for grades K-8 that assesses six key skill areas: basic reading skills, reading fluency, reading comprehension, math calculation, math problem solving, and written expression” (Tennessee Department of Education, 2015, p.80).

### Delimitations

The following delimitations were set for the purpose of this study:

1. Research was limited to regular education teachers who taught in kindergarten through eighth grade.
2. Participants surveyed were limited to four East Tennessee school districts.

### Limitations

The following were limitations to this study:

1. The use of convenience sampling allows for self-selection in the participation of the survey that could potentially skew data based on the varied representation of specific groups. This limits the research of the study.
2. The research was limited to a specific geographical region, which could hinder the generalizability of the results of the study.
3. The implementation and guidelines of the Response to Intervention framework may be varied from district to district.
4. The results of this study do not necessarily apply to other settings due to limitations.

### Overview of the Study

The study is arranged into five chapters. Chapter 1 features the introductions, statement of the problem, significance of the study, definitions of terms, limitations, delimitations, and an overview of the study. Chapter 2 provides a review of the literature pertinent to the Response to Intervention framework. The literature review is focused on

the Response to Intervention framework in the primary and secondary settings, perspectives on the RTI framework, and the influence of RTI on the role of the special educator and regular educator. The methodology for the study is outlined in Chapter 3. The report of the data analyses are recorded in Chapter 4. Discussion and conclusions drawn from the findings, implications for practice, and future research are contained in Chapter 5.

## CHAPTER 2

### REVIEW OF LITERATURE

This literature review is focused on the general understanding of the composition of the Response to Intervention framework and on the role of special education within this framework. The review of literature also is an examination of the Response to Intervention framework in both primary and secondary settings as well as the impact the initiative has had upon the education of preservice teachers.

#### Response to Intervention Framework

In 2004 with the passing of the new Individuals with Disabilities Education Improvement Act (IDEA), a new way of identifying students with learning disabilities was approved (Decker & Englund, 2012; Fuchs & Fuchs, 2006). This new way of identification was called Response to Intervention (RTI) and has created questions and concerns along with slight optimism throughout the educational system. In previous years students were classified as learning disabled (LD) through an IQ-achievement discrepancy model in which students' academic achievements were compared to their IQs to determine if there was a significant discrepancy, signaling a disability. Response to Intervention differs from the previous way of identification by using a student's response to intervention as recorded by progress monitoring data instead of an IQ discrepancy. Although RTI has solved many of the issues that arose with the IQ-achievement discrepancy model, it has also brought about many of its own issues throughout implementation.

Considered a tiered service framework, RTI ranges from three tiers to six or seven tiers (Fuchs et al., 2012). Although possible to have several tiers, it is recommended that

districts implement a three-tiered framework to increase accuracy in identification of nonresponsive students (Fuchs & Fuchs, 2007). As students move through a determined number of tiers, the intervention within each of the tiers must intensify in order to meet students' needs. Increasing the number of tiers beyond three can begin to provide students with continually intensive services that become similar to special education, giving false optimism about the number of students who do not need special education services (Fuchs & Fuchs, 2007).

In addition to the tiered framework, there are other features of the Response to Intervention framework that makes it a preferred approach for identification of learning disabled students as opposed to the IQ-achievement discrepancy model. The IQ-achievement discrepancy model was deemed the wait-to-fail model due to the amount of time it took to identify students with a disability (Fuchs & Fuchs, 2006). In previous schools of thought it was considered reprehensible to label such young students as disabled, thus limiting the amount of aid students received in primary grades to improve learning (Gersten & Dimino, 2006). The IQ-achievement discrepancy model followed this school of thought with most students not being identified until after first grade, sometimes as late as fifth grade, when the deficit was considerable enough to demonstrate the determined discrepancy between school achievement and IQ (Fuchs & Fuchs, 2007; Gersten & Dimino, 2006). Gersten and Domino noted that research has shown that students who did not learn to read by the end of first grade were ones who remained problematic readers throughout the rest of their educational careers. Response to Intervention addresses this significant issue by providing early interventions for students at the first signs of reading problems,

therefore solving one of the primary issues with the IQ-achievement discrepancy model (Buffum, Mattos, & Webber, 2010; Fuchs & Fuchs, 2006; Gersten & Domino, 2006).

In addition to being a wait-to-fail model, several other issues emerged throughout the literature that demonstrated the need for replacement of the IQ-achievement discrepancy model. Fuchs and Fuchs (2006) described some of the issues with the model, most of which have been solved by the implementation of the Response to Intervention framework. At the early stages of using the IQ-achievement discrepancy model the number of students classified as learning disabled rose dramatically, causing a significant increase in costs and suggesting that students were being inappropriately classified. This particular model was also not founded in research to be a valid way of identification of reading disabilities (Fuchs & Fuchs, 2006; Gersten & Domino, 2006). The lack of research resulted in the IQ-achievement discrepancy model being implemented in various ways, creating diverse measures of qualification for special education services. Fuchs and Fuchs also concluded that this model does not distinguish properly the difference in students who are lower achievers and those with true learning disabilities. Therefore, students who do not need services can receive them and those who are learning disabled are not always identified to be recipients of special education services. Response to Intervention helps address this concern by providing support for all at-risk students and more intensive instruction for nonresponders (Fuchs & Fuchs, 2006).

The primary focus of Response to Intervention was initially on the proper identification of those with learning disabilities. However, as the RTI framework has evolved and been implemented, so has the purpose. Response to Intervention is described as having two overarching purposes, first, being a more appropriate means of identifying

students with a learning disability and second, increasing the amount of appropriate instruction given to those not eligible for special education services (Fuchs & Vaughn, 2012; Johnston, 2010). It places great emphasis on not only the intervention services at-risk students receive but also the core instruction that all students are receiving.

Johnston (2010) described RTI as composed of two frames, one of identification and one of prevention, each having various benefits and shortcomings. In the identification frame of RTI the problem becomes one of measurement for the school and focuses on students' abilities. Response to Intervention framed as prevention exposes the problems of instruction and focuses on the quality of instruction that all students are receiving. Johnston (2010) sided with the notion that a primary frame for RTI should be one of prevention with a focus on instruction. He supported this position based on research demonstrating that with adequate instruction even the lowest students can begin to make improvements in their abilities. In order to improve instruction, Johnston provided an outline of four focus areas that need to be addressed in order to increase effectiveness of instruction. The areas are: access to professional development to increase the expertise of teachers; use of research and evidence based instruction within classrooms; making proper use of assessment data to inform instruction; reflection of instructional interactions (Johnston, 2010). After ensuring that each of these has been a priority and used in instruction, only then should a student be deemed eligible to be classified for special education services. The crucial instruction that Johnston (2010) described is found within the first tier of the RTI framework, where focus is on the core instruction that students receive.

## Tier I

For all Response to Intervention frameworks, Tier I is considered the core instruction (Fuchs & Fuchs, 2007). This is considered the first level of prevention due to the components that should be found within this tier such as differentiation, accommodations to make content accessible for all, and a focus on motivation and behavior of students (Fuchs & Fuchs, 2007, 2009; Fuchs, Fuchs, & Compton, 2012; Fuchs, Fuchs, & Vaughn, 2014). Instruction at this level uses key concepts from instructional research; however, validated instructional research is not commonly used due to the complexity of conducting such research (Fuchs & Fuchs, 2009; Fuchs et al., 2014).

In addition, Johnston (2010) and Fuchs and Vaughn (2012) discussed the imperative need for quality Tier I instruction as an aid in the prevention component of RTI. Students who received effective, high quality core instruction in primary grades were less likely to qualify for intervention services, demonstrating the need to ensure the quality Tier I instruction. This type of quality instruction is crucial for not only those students at-risk but also for those currently identified as learning disabled (Fuchs & Vaughn, 2012). Even though quality Tier I instruction has been proven to be imperative to the success of students, it is often a source of contention for educators due to the expertise needed to meet the demand of individual needs of the many and varied students within the classroom. The authors also discuss the need for high quality professional development and improved instructional practices that reach not just the regular and at-risk students but also those with disabilities. These are seen as keys to helping gain the effective instruction needed throughout school systems to aid in preventing unneeded, often costly intervention services (Fuchs & Vaughn, 2012).

## Tier II Intervention

Assessment of the responsiveness of core instruction is completed through a universal screener or data from a previous standardized test (Fuchs & Vaughn, 2012). The data from a universal screener or standardized testing are used to identify students falling below a predetermined cut score, which identifies the need for intensive intervention services. This more intensive intervention service is Tier II of the RTI model and is conducted in addition to the Tier I core instructional time. Tier II differs from Tier I in several key ways to create the more intensive instruction that at-risk students require. Tier II is conducted in small groups, unlike the whole group instruction of Tier I (Fuchs & Fuchs, 2009; Fuchs et al., 2012; Fuchs et al., 2014). Instruction that is empirically validated and can be provided by any trained personnel, not just a certified teacher, is another way in which Tier II differs from Tier I (Fuchs & Fuchs, 2009; Fuchs et al., 2012; Fuchs et al., 2014). Data collection also differs between the two tiers. Progress monitoring is used in Tier II of the Response to Intervention framework. Data collected from the progress monitoring tool are analyzed to determine whether students are responsive to the intensive intervention that they are receiving in addition to their core instruction (Fuchs et al., 2014). This type of monitoring is conducted weekly or monthly, depending upon the district's preference and occurs more frequently than universal screener (Fuchs et al., 2012; Fuchs et al., 2014). Ultimately the data collected from the progress monitoring tool aid in the determination of whether a student is moved back to Tier I, regular instruction, or to an even more individualized, intensive intervention provided within Tier III of the RTI framework (Fuchs & Fuchs, 2009; Fuchs et al., 2012; Fuchs et al., 2014).

Fuchs and Vaughn (2012) outline Tier II in similar ways but point out various issues associated with Tier II intensive interventions and the choices associated with how to determine what type of intervention will be provided in Tier II. The authors explain that instruction should be focused on the explicit skills where the students are showing a deficit. However, issues linger within districts in determining who should be responsible for providing the intervention, the duration and frequency of the intervention, and whether a standardized or individualized program should be set in place. Placing the responsibility of providing the intervention upon the classroom teacher beyond primary grades can become problematic due to constraints on scheduling. Thus, some suggest that using standardized programs within Tier II would be a better choice over a more individualized program of study. Reasons include: the ability to easily document what students have been taught; the capacity to monitor the fidelity in which the intervention has been implemented; and the increase availability to use more resources (Fuchs & Vaugh, 2012). Using a standardized approach also gives the opportunity for educators to rule out the lack of effective instruction as a cause for lack of academic growth because most students can respond to the standardized intervention (Fuchs & Fuchs, 2007). Because individualized interventions are personalized to that student's individual needs and deficits and does not actually fit the need of most students it is more difficult to determine the responsiveness of the student (Fuchs & Fuchs, 2007).

### Tier III Intervention

Determining the responsiveness of students is essential in the placement of students back to Tier I or forward to Tier III of the intervention framework. After showing adequate

progress in Tier II intervention, students can be moved back into the regular education setting. However, for some students the need for a more intensive intervention is crucial. Tier III is the next step for students who do not meet the required responsiveness to Tier II intervention. The purpose of the third tier can differ depending on the framework; it can be the most intensive intervention service that students receive before special education consideration or can be considered a special education service.

Fuchs and Fuchs (2009) found two essential differences between Tier II and Tier III instruction. Tier III instruction is constructed to meet the student's individualized needs in the specific areas in which there is a deficit. It also sets long-term goals to determine whether a student's instructional needs have been met, which means goals may be set off of grade level. Fuchs et al. (2014) suggested two ways of intensifying instruction to meet the needs of the students who fall in Tier III. The first was to intensify the Tier II instruction, which means providing it for a long time and more frequently. Also, creating a smaller group or one-to-one instruction during that time. Adjustments should also be made to the intervention curriculum to meet the individualized need of the student. The second suggestion was to provide data-based instruction (DBI) to meet the individualized needs of the students. Data-based instruction requires teachers or specialist to conduct a battery of testing and continue with progress monitoring. Through the results of the data, instruction is adjusted to help meet the deficit skills of the student. As data are gathered through progress monitoring the instruction is continually being adjusted until improvement is seen, unlike Tier II where progress monitoring is used to determine responsiveness. Buffum et al. (2010) suggest that Tier III be in addition to the regular instruction that the students receive. Interestingly, Fuchs et al. (2012) suggested to the contrary, students can

miss portions of the regular education instruction to gain instruction that meets their specific instructional needs through a Tier III service. They suggested that this only take place when the general education will not benefit the student.

Determining who should conduct this individualized intensive intervention is a controversial issue as well, but the literature presents some common criteria pertaining to who should be the implementer of Tier III. A highly skilled teacher, instructional expert, or specialist should conduct Tier III interventions due to the need for extensive individualization of the instruction (Fuchs et al., 2012; Fuchs et al., 2014). Although these are some of the most optimal choices for conducting Tier III intervention, it is also suggested that this is the point at which special education teachers should be used in the RTI framework.

Special education teachers are considered to be the best in completing data-based instruction for struggling students due to their historic efforts in teaching the most difficult students and the greater knowledge base of using data-based instruction (Fuchs et al., 2012; Fuchs et al., 2014). Special education teachers have the capacity to be more creative in instructional delivery to those who have extensive needs. Although it seems that special education teachers are the most preferred at this stage of the Response to Intervention framework, the implementer at this tier should be highly skilled and able to adjust instruction to meet the instructional needs of students based on the progress monitoring data. In addition to the specialist, Buffum et al. (2010) suggested a problem-solving team for each Tier III student. The purpose of this team would not be to identify the issues with the student, but a group to collaborate to determine specific needs of the student. They also

suggested that the deficit of the child be narrowed from the specific content area to identification of the specific skill deficit.

Tier III can be considered special education or can be the last tier attempt to meet students needs before a special education referral. Although Fuchs et al. (2012) suggested that Tier III should be a blurred line into special education and conducted by special education teachers, it is recognized that this is the tier in the RTI framework in which special education should be a part of the process and an Individualized Education Plan (IEP) can be used. Within this frame they discussed the idea that students should not be dropped back into regular education, but that they continue to receive the necessary intensive, individualized instruction. This is based on the frequent practice that after Tier III students are identified as needing special education, they are dropped from intervention and placed back into the regular education classroom with little modifications or individual instruction needed to enhance their learning (Fuch et al., 2012). Reschly (2014) explained that Tier III may or may not be connected with special education based on the students needs. Some students may need the intensive instruction but not the aid of special education. Gardenhour (2016) noted that on progress monitoring data students receiving both special education services and intervention still scored significantly less growth points than those receiving intervention only but out performed growth norms in comparison to other studies of special education students in RTI. Both schools of thought about where special education comes into play within Tier III in the Response to Intervention framework may differ but have the common goal of meeting the critical needs of students who cannot achieve goal within general education.

## Classifying Students as Nonresponders

It is after this intensive individualized instruction that students who do not respond by making adequate progress are then considered for referred to special education (Buffum et al., 2010; Hoover, 2010). The classification of a nonresponder has caused controversy within the literature. There is not a clear definition of what a nonresponder is and when a student should be identified as a nonresponder (Hughes & Dexter, 2011). Nonresponders are classically defined as students who are not making adequate progress with intensive instruction that has been considered effective, which is approximately 4%-6% of the population. (Catts, Nielsen, Bridges, Liu, & Bontempo, 2015; Lemons et al., 2010; McMaster et al., 2005; O'Connor & Klingner, 2010; Toste et al., 2014). The literature agrees on this definition but the meaning of adequacy is not as universal and controversial (McMaster et al., 2005; O'Connor & Klingner 2010; Toste et al., 2014). With the definition of inadequate being universally undefined an issue arises with various groups of students moving between tiers (Toste et al., 2014). A Tier III student in one district could potentially still be a Tier II student in another district. An inadequate response can be determined in several different ways; however, two main ways have emerged growth, also termed rate of progress, and achievement.

In most instances a response is considered inadequate when the student shows limited or no growth or he or she falls below the 50<sup>th</sup> percentile on achievement (McMaster et al., 2005). McMaster et al. conducted a study in which they investigated the use of a dual discrepancy model. This study conducted with first graders determined that using the dual discrepancy model, which is examining both the growth of a student and the performance level of a student, helped more accurately determine which students were nonresponders

and those who are at-risk but responsive (McMaster et al., 2005). Toste et al.'s (2014) later study of responsiveness to intervention in first graders also noted the composition of the groups of students when local norms were used as opposed to national norms. Using local norms tended to increase the number of students who were classified as unresponsive (Toste et al., 2014).

O'Conner and Klingner (2010) reviewed several studies over the identification of nonresponders and looked for correlations that help determine the difference between students who were nonresponders and students who were at-risk. They noted the use of performance cut scores had better agreement over the use of the dual discrepancy model. However, they cautioned its use because of the assumed difference between student's needs and abilities falling right above and right below the cut score are not entirely accurate (O'Conner & Klingner, 2010). O'Conner and Klingner did find that those identified in their kindergarten year as nonresponders were later labeled as learning disabled. Another difference for nonresponders was the loss of skills throughout the summer. They were unable to maintain gains between grade levels (O'Conner & Klingner, 2010). A previous study of kindergarten and first graders by Vellutino et al. (2006) also noted the difference in students who were termed less difficult to remediate and difficult to remediate was the ability to sustain the progress that they had made at the end of first grade. Least likely to correlate with unresponsiveness was demographic characteristics (O'Conner & Klingner, 2010). Gardenhour's 2016 research also noted that there was not a difference in growth scores of between male and female students as well as ELL and non-ELL students in intervention.

Lemons et al. (2010) also conducted a study to investigate whether using event-related potential (ERP) in reading-related task could predict the reading growth of student and identify those who are least likely to respond. The evaluation of ERP falls into the neuroscience field and measures brainwaves when performing a task. They found that ERP was somewhat reliable but only in early predictors, such as letter-sound matching. It was not reliable in every predictor but has investigated looking into why students are nonresponders in a different way.

Previous studies over the responsiveness of intervention dealt with investigating whether there were markers previous to providing any type of intervention that would aid in determining whether a student would be responsive. Catts et al. (2015) look at both the initial screening scores of kindergarten students and then their scores mid year to identify response to instruction. Concurrent with other studies, Catts et al. suggest that identification can take place in the early grades of first grade and even kindergarten. The results of their study indicated that in the assessments they conducted the responsiveness of a student to instruction aided in the ability to better predict outcomes than just an initial screening score. This supports the need to determine the responsiveness of students to instruction and intervention in order to further evaluate and determine future scores and best instructional practices.

### Response to Intervention in Tennessee

The few parameters given by the 2004 reauthorization of IDEA left room for states to determine their own guidelines for implementation of the Response to Intervention framework. Throughout the state of Tennessee RTI programs were implemented with a lack of consistency between districts as well as between schools. In 2012 it was determined

that the state needed guidelines that would help bring consistency to the implementation of the framework across the state. The following information was gleaned from the Response to Intervention Manual located on the Tennessee State Department of Education's website, as well as on the Tennessee State Personnel Development Grant webpage.

In 2013, almost 10 years after the reauthorization of IDEA, the Tennessee Department of Education approved RTI as the sole determiner for students with specific learning disabilities, eliminating the use of the achievement discrepancy model. The Reading RTI Leadership Team was assembled and began researching and writing the guidelines for the framework. In late 2013 the state-wide implementation guide was released to school systems to guide the Response to Intervention framework. The implementation guide provides educators with guidelines specific to the state of Tennessee about the requirements of the RTI framework that must be met before a student can be considered eligible for special education services. Tennessee developed a framework in which students move through three tiers of instruction and intervention before being considered eligible for special education services.

### A Two-Fold Approach

The state of Tennessee increased focus on not only intervention for at-risk students but also core instruction for all students. Johnston (2010) supports the focus of Response to Intervention being instructional more so than prevention and intervention. Prevention through quality Tier I instruction is a key aspect of the Response to Intervention framework in Tennessee. The initiative is not focused solely on the use of Response to

Intervention as a way to identify students with learning disabilities but as an entire revamp of the education system to ensure success of all students. Instructional practices used within the classroom during Tier I instruction should be high quality and researched-based. Flexible grouping is emphasized in Tier I in order to ensure that differentiation in instruction is occurring. The state also emphasizes professional development as a key to improving Tier I instruction. To be considered a well-run model, Tier I instruction should be meeting the needs 80%-85% of all students. Meeting these goals ensures that lack of instruction can be ruled out as a cause for a student's lack of ability. In order to assess both the effectiveness of Tier I instruction and determine eligibility for intervention, students are given a universal screener.

A universal screener is used throughout the year to determine students who qualify for intervention services; this screener must be skills-based and nationally normed. The universal screener is administered two or three times a year depending on grade level. Results of the screener are used to identify students in need of services as well as provide a baseline to identify improvement of students, groups, or classes. A cut score was determined by the state for identification purposes. Those students falling below the 25<sup>th</sup> percentile are considered in need of intervention. For schools that have a large population falling below the cut score, schools may use relative norms to identify students with the highest need of intervention. After the universal screener, students who are identified will also have a second layer of screening to determine more specific skills deficits. After universal screening and a second layer of assessment, the school level team will determine if a student is placed in either Tier II or Tier III intervention. Fuch et al. (2012) support the use of a second layer assessment to aid in filtering out any false positives given by the

universal screener. It is possible for students to be placed in Tier III services without going through Tier II services. Compton et al.'s (2012) study revealed that some students can be accurately identified as eligible for Tier III intervention by using universal screener data. These are students who have the greatest need for the most intensive intervention services. Students who are classified as English Language Learners (ELL) should have an ELL teacher on the school level team to determine best placement.

### Tier II and Tier III Intervention

After meeting the eligibility requirements students are placed in Tier II or Tier III to receive intervention services by the determination of the RTI team. In both tiers of intervention students receive intensive instruction in the identified skills deficit. Tennessee follows the recommendation of literature by differentiating between Tier II and Tier III interventions through different intensities and duration (Fuchs et al., 2014). Interventions are aligned to the skills deficit of the student, not the state standards. Interventions occur daily and are systematic and explicit. Tennessee also identifies students as scoring advanced eligible for Tier II intervention as well. These students are to receive enrichment activities to expand knowledge in ways that are not being met in Tier I instruction. Students are provided intervention by highly-trained professionals. It is preferable that interventions be taught by certified teachers because students have shown to make better growth with either a certified teacher or a RTI tutor as opposed to assistants. However, any individual trained to implement the intervention with fidelity is considered meeting the guidelines.

Tier II interventions times vary depending on the grade and subject area. Kindergarten has a required 20 minutes daily for both math and reading. First through 12th grades require 30 minutes in both math and reading with the exception of first grade math, which only requires 20 minutes. Students needing intervention in both subject areas may alternate days of intervention, with intervention in the weakest subject area 3 days a week. If possible, it is also suggested that students receive intervention for both subject areas within the school day. Decisions about intervention in both subject areas are to be determined by the RTI team and based on data. If data prove that the student is continuing to fail with the initial plan of action, it is important to reconvene and determine another action. Tennessee has determined that a 1:5 teacher to student ratio in kindergarten through fifth and a 1:6 ratio in 6th through 12th grade is optimal.

Tier III serves as an even more intensive intervention and a last step before a special education referral. Students may end up in Tier III intervention through two avenues. First after becoming a nonresponder to Tier II intervention as determined by data students are moved into a more intensive Tier III intervention. The second way in which students enter Tier III intervention is by falling below the 10<sup>th</sup> percentile on the universal screener or having a grade level equivalency 1.5 to 2 years behind grade level. These students are the most at-risk and require the most intensive intervention services. Time requirements are greater than that of Tier II. It is recommended that students in kindergarten receive 40-45 minutes for both reading and math. Students in first grade have a recommended time of 40-45 minutes for math and 45-60 minutes for reading. Second through 12th grade students have the recommended time of 45-60 minutes of intervention for both subject areas, with the exception of 6th through 12th graders on a traditional schedule. If on a traditional

schedule, the recommended time is 45-55 minutes. Although it is best that students receive these recommended time, it is understood that 9th through 12th grade students may have difficulty scheduling such time blocks; therefore, students should receive the 225-275 minutes on a traditional schedule and 225-300 minutes on a block schedule throughout the week.

Group size is also a difference between Tier II and Tier II intervention. It provides the teacher the ability to individualize the intervention more so than Tier II. Teacher to student ratios vary depending on grade level. Kindergarten through fifth grade require a 1:3 ratio and sixth through eighth grade require a 1:6 ratio. 9th through 12th grade require a 1:12 ratio. Tier III at the high school level is considered a course; therefore, the ratio is higher than the elementary and middle school ratios. As with Tier II the intervention should be provided by highly-trained personnel. In the secondary setting interventions can also be delivered through computer-based programs in order to meet guidelines. For students who are considered nonresponders in Tier III the next step would be a special education referral. However, students who are placed directly in Tier III must have the same length of intervention that students would typically receive if they have been through Tier II first. Therefore, they will have to stay 20-30 weeks in Tier III without sufficient gains in order to be considered for special education services.

Movement between tiers is largely based on the data collected through progress monitoring in addition to other factors discussed between the RTI team members. Progress monitoring is different from universal screening in that it is usually skills based and drilled down to be done at the student's level, not grade level. These data help determine a student's rate of improvement and responsiveness or lack of to the intervention. Progress

monitoring can be done either weekly or bi-weekly, with a minimum of 8-10 data points (biweekly) or 10-15 data points (weekly) required before any decisions for movement within the tiers. Schools may choose from a variety of progress monitoring tools such as curriculum-based measurement probes, assessments from the intervention materials, and computer-based assessments. Each of these assessments must be sensitive to change, include national percentiles, allow for repeated measures, and specify the area of deficit, and results should be able to be used to calculate the rate of improvement (ROI) for the student. The ROI of students are used to determine whether they are improving at a greater rate than typical peers. Students must improve at a greater rate in order to close the skills gap and eventually achieve within the norms of the grade level.

The RTI team must meet about the student and survey all the data in order to determine the effectiveness of the intervention. When it is deemed that an intervention is not working, students do not automatically move to the next tier, instead they must have had at least one change in intervention in that tier in order to be determined nonresponsive. Some of the different ways to change an intervention include increasing frequency, changing the materials or provider of the intervention, and changing the time in which the intervention is administered. If after a change in intervention the student is still not making adequate gains to close skills gaps, it is then considered for the student to be moved into the next most intensive tier or receive further evaluation for special education services.

Fidelity plays a key role to ensuring that the intervention process is effective to closing the skills gaps for at-risk students. Fidelity is considered to occur when materials are used as intended by those who created them. Actions occur as intended so that

students have the best chance for responding to the intervention. Fidelity checks are essential to maintaining the integrity of the program and used to ensure that lack of instruction in the intervention is not a cause for an inadequate response. Fidelity checks are correlated with the improvement of student outcomes (Mckenna, Flower, & Ciullo, 2014; Nelson, Oliver, Hebert, & Bohaty, 2015). Gardenhour's (2016) study indicates that the fidelity score of the interventionist correlated to student growth out comes.

Fidelity checks can occur in two ways, a direct observation and an indirect observation. Direct observations are when a lead or appointed person observes the intervention taking place. It is up to the schools to determine who conducts the fidelity checks and the protocols to determine fidelity such as a checklist that associates with what should be occurring with the particular intervention. Indirect observations are reviews of the different aspects of the intervention process. Reviewing lesson plans, progress monitoring data, scheduling, and attendance all count as indirect observations. Both types of fidelity checks factor into the decisions that are made by the team members about the placement and type of intervention the student receives. Tier II students must receive minimum of three fidelity checks, two direct and one indirect, by the time 8-10 data points have been collected. Tier III must have a minimum of five fidelity checks, three direct and two indirect, within the same time frame.

The integrity should reach 80% for the intervention; if the intervention does not have 80% integrity, the interventionist should have additional training until 80% has been achieved. By maintaining the fidelity of the programs and using the progress monitoring data, it hoped that students will be able to move through tiers and eventually back to just Tier I core instruction.

## Special Education Referral Process

The purpose of using the Response to Intervention framework for the state of Tennessee was not solely to identify students with specific learning disabilities; it was hoped to be a revamp of both instruction as a preventative measure and intervention as a reactive measure in order to ensure that students received the best educational experience. Even though the state has reinforced that the sole reason for implementation of the Response to Intervention framework was not for special education referrals only, it is still a significant driving force in implementation. Tennessee developed a three-tiered model in which special education functions outside of the tiers not as a tier. In order to be a candidate for a special education referral the student must demonstrate a lack of responsiveness to the most intensive intervention, including at minimum one change of intervention within the most intensive tier. The gap analysis of the student should show that the rate of improvement will not close the gap for the student adequately. After the team has decided that this is the next step for the student, several more steps occur before the student can be considered eligible for special education services. The special education referral information must include the following: parent input, teacher input, documentation of the problem, a detailed description of the intervention process, and progress monitoring data. All of the information gathered will be considered when determining eligibility.

In order for the student to be determined as having a specific learning disability, the student must meet five standards that help exclude other factors that could impact achievement. The first standard that must be met is the ruling out of a lack of appropriate instruction. Data must be collected to determine whether the student was provided with

quality instruction throughout all tiers. After determining lack of instruction was not a factor, the student's data should be evaluated. Data collected must show that the student did not achieve on par with peers of the same age and meet grade-level standards. This deficiency must be shown in one or more of the following areas: basic reading skills, reading fluency skills, reading comprehension, written expression, mathematics calculation, and mathematics problem solving. An individual, standardized, and norm-referenced test must be provided to determine the student's achievement after gaining the initial consent for testing. Data that are evaluated for this standard should not be prior to the intervention. It must also be determined that the student did not make sufficient progress throughout the intervention to close the skills gap. Although the student could have had some response to the intervention, it must be determined whether the response to the intervention is enough to close gaps within a timely manner. This is determined by evaluating the student's rate of improvement. The student then must be observed by both the special education teacher and the school psychologist or equivalent specialist. The last step is for the team to determine eligibility. The team must consist of a parent, a regular and special education teacher, the person responsible for conducting the diagnostic evaluation, and other professional personnel who are needed. The team should meet and determine that the lack of achievement is not due to other factors, all previous standards have been met, and that the education of the child is being negatively affected due to the disability. If the team agrees, then the students can be deemed eligible for special education services because of having a specific learning disability.

The Response to Intervention framework guidelines developed by the state of Tennessee has aided in streamlining the process for all districts. Several choices have been

left up to the district to determine the best fit for the student and the district to ensure that the framework was one that would meet the needs of all students. Continued professional development that supports teachers throughout all tiers of the framework is an integral part of ensuring that intervention is done with fidelity. Guidelines put in place follow the recommendations of research that are believed to contribute to the most effective Response to Intervention framework.

### Response to Intervention in a Middle School and Secondary Settings

The current literature over the Response to Intervention framework has focused mainly on the use of the framework in primary classrooms, with little research focusing on middle school and secondary classrooms (Faggella-Luby & Wardwell, 2011; Prewett et al., 2012; Pyle & Vaughn, 2012). The use of RTI in the middle school setting comes with different challenges from those of a primary setting due to the natural differences in the way in which scheduling occurs within a middle and secondary school (Feuerborn, Sarin, & Tyre, 2011; Prewett et al., 2012; Pyle & Vaughn, 2012). Another perceived barrier is the lack of availability of evidence-based approaches for middle and secondary grades, as research has been limited with this group of students (Vaughn & Fletcher, 2012). Although there is still a need for more research, some studies have been conducted to determine whether the use of the RTI framework is beneficial to students past the primary years of education.

In order to accommodate for the time needed to provide intervention services some schools replaced electives with intervention time and in others time was cut from each core class to make an extra time period for intervention (Dulaney, 2012; Prewett et al., 2012).

Dulaney's study about barriers to implementation in the middle school setting revealed that the replacement of electives with intervention time was something that teachers felt impeded the educational experience of students. The study also noted that teachers felt the lack of processes and procedures for the secondary setting resulted in an almost chaotic program. Conducting universal screeners three times a year was a barrier found due to the impact it had on instructional time. Fuchs, Fuchs, and Compton (2010) recognize the need to eliminate universal screeners at the middle and secondary level as well. They support this with the thought that by the time students have reached middle school there is already an established data set indicating a student's need for intervention. They also advised two other differences that should be considered for middle and secondary RTI. Following the same reasoning for the removal of using universal screeners, they also suggest moving these students into a Tier III intervention, the most intensive intervention, instead of placing them in Tier II. Throughout the years of schooling students' deficits can become more severe; therefore, it is best to place them into the most intensive interventions first (Fuchs et al., 2010). They also caution that effective interventions may not be the same across all grade levels. This incites the need to ensure that interventions used with middle and secondary students are effective with that particular range of students (Fuchs et al., 2010).

Pyle and Vaughn (2012) provide conclusions drawn from a multiyear, large-scale implementation of intervention in a middle school setting. The results of this study are promising for states implementing Response to Intervention in middle and secondary grades. A difference between the focus of primary grades intervention and middle and secondary intervention was discussed within the literature. The authors explain that while

the primary grades focus on early intervention, prevention, and identification, the middle and secondary grades must focus on remediation, the recovery of content, passing of courses, and movement toward graduation (Feuerborn et al., 2011; Pyle & Vaughn, 2012). The shift in focus has brought forth the concern that intervention conducted in primary grades may not be helpful in the secondary setting. However, the study conducted provides data to refute this idea and has demonstrated that intensive and targeted interventions can still aid in helping students at the middle grades (Pyle & Vaughn, 2012). The growth in the students who received intervention services was slow but still forthcoming. With this in mind the researchers recommend that students be monitored less frequently than in primary grades as well as have longer periods of intervention before deciding a next step (Pyle & Vaughn, 2012).

Another noted difference in this study was the effect on the size of the groups. There was not a significant difference in those groups that had five students and those with 10 students in Tier II; therefore, there could be a larger grouping of students in upper grades, as opposed to the very small groupings of primary grades (Pyle & Vaughn, 2012). The overall results demonstrated growth for students who had received Tier III interventions in reading comprehension that helped them begin to close the achievement gap (Pyle & Vaughn, 2012). Even though they were still not on grade level, students had made advancements and were not declining as similar students who had not received interventions (Pyle & Vaughn, 2012).

Roberts et al. (2013) had similar findings within their study that supported the use of intervention in middle grades. The focus of remediating reading difficulties rather than a focus on prevention or special education identification was also presented (Roberts et al.,

2013). This study was conducted under similar circumstances as Pyle and Vaughn (2012) with students of similar level being split into a group that received interventions and another group that as they described received usual procedures. It was also noted in the study that although the students did not make it to grade level, they were in fact closing gaps (Roberts et al., 2013). Those students who received the standard protocol began to lose ground and achievement began to decline (Roberts et al., 2013). Concurring with the previous study of Pyle and Vaughn (2012), Roberts et al. also determined that intervention in middle and secondary grades may take more than a single school year to see results. Both studies, similar in nature, showed that intervention in the middle and secondary grades can make a difference in reading ability, meaning that it is not too late to begin intervening after the primary grades (Pyle & Vaughn, 2012; Roberts et al., 2013).

Another similar study was also conducted earlier by Graves, Brandon, Duesbery, McIntosh, and Pyle (2011) with Tier II sixth graders additionally supports the findings of the more current studies. Graves et al. conducted a study with sixth grade students who received intervention in comparison to a group of students that did not receive the intervention. Results of this study also demonstrated greater gains for students who had received the intervention than those who did not (Graves et al., 2011). The results of oral reading fluency and reading comprehension measures showed greater improvements for intervention students than those without (Graves et al., 2011). As with previous studies, it is suggested that goals be set for longer terms, as the intervention may need to last over more than one school year (Graves et al., 2011; Pyle & Vaughn, 2012; Roberts et al., 2013).

Throughout the literature put forth by both Pyle and Vaughn (2012) and Roberts et al. (2013) a common theme emerged that in order to be effective the intervention must be

targeted to skills and explicit. Fagella-Luby and Wardwell (2011) also noted a difference in middle school Tier II students who received the explicit and target intervention as opposed to extra practice opportunities. A group of similar students was divided into three groups to receive one of three types of intervention. Two of the interventions were explicit and required the students to be worked with by personnel and the third was an extra practice reading opportunity for the student to complete independently (Fagella-Luby & Wardwell, 2011). The results of the study exposed that there was not a statistically significant difference between the two interventions that were explicit in nature in both fifth and sixth grades. However, there was a statically significant difference in the explicit interventions and the extra practice opportunity in sixth grade, showing that the use of explicit intervention can be more beneficial to the students' remediation of skills (Fagella-Luby & Wardwell, 2011).

Vaughn and Fletcher (2012) provide several reasons as to why RTI has become associated more the primary grades than with middle and secondary grades. These reasons include: research has been focused mainly in kindergarten through third grade, federal money that was used to initiate programs that focused on kindergarten through third grade, and the emphasis on prevention rather than remediation (Vaughn & Fletcher, 2012). The focus of a middle and secondary RTI framework is remediation of skills, rather than prevention and early intervening (Prewett et al., 2012; Pyle & Vaught, 2012; Roberts et al., 2013).

## Teacher Perceptions of RTI

### Perceived Promises of RTI

Studies of the perceptions of teachers on the Response to Intervention framework are very limited but have provided insight that can be used to make the framework more effective and more effectively implemented. Studies, mostly qualitative in nature, have been conducted over the perception of special educators and general educators have on the RTI framework. Each brings to light some promises and issues that have been discovered throughout the implementation of the framework. Even though there is limited research on the perceptions of general and special educators, the literature reflects issues and benefits of RTI that parallel despite the variation in the respondent's roles within the framework. Perceptions of teachers are influential in how such a program is implemented and ultimately can have an effect on the success or failure of initiatives such as RTI (Werts et al., 2014).

There have been perceived benefits of the Response to Intervention framework for both students and teachers. Werts et al. (2014) noted that special education teachers felt as if the students were receiving a higher quality core instruction because of the implementation of RTI. This included more differentiation in the core instruction to meet the various needs of students. Swanson, Solis, Ciullo, and Mckenna (2012) and Werts et al. (2014) found that special educators felt that the use of data-driven instruction was a perceived benefit of the implementation. Teachers used data to meet students' needs by targeting the deficits demonstrated on assessments. This perception was supported by Cowan and Maxwell's (2015) study of regular education teachers' perceptions. Due to the monitoring of students' achievement, teachers asserted they could meet students' needs

and had a greater understanding of where students were academically. Regan, Berkeley, Hughes, and Brady (2015) described a difference that was identified between elementary and middle school teachers' perspectives on their change in instruction. Those teaching in elementary schools described the change in practice as shift to using more data-driven instruction, whereas middle school teachers began to use more evidence-based instruction. Greenfield, Rinaldi, Proctor, and Cardarelli (2010) also noted a difference in core instruction due to the progress monitoring data that teachers were using. The use of progress monitoring data was something that teachers felt confident in their ability to use correctly (Adams, 2013). Teachers commented that they had adjusted their current instruction or found new instructional practices to try to reach their lower performing students.

The difference in instructional practices presented in the literature over teachers' perceptions is a key piece to the Response to Intervention framework. The core instruction that students receive is thought to be a first level of prevention for reading difficulties (Fuchs & Fuchs, 2009). The differentiation and use of research-based teaching principles in the core instruction is an element that aids in the success of the Response to Intervention framework and helps eliminate lack of instruction as a factor in a student's inability to achieve (Fuchs & Fuchs, 2006; Fuchs et al., 2014; Johnston 2010).

A benefit noted by literature involving special education teachers was the ability for students who did not qualify for special education to receive intensive and individualized instruction (Swanson et al., 2012; Werts et al., 2014). Greenfield et al.'s (2010) research of regular education teachers' perceptions also found that it was beneficial to provide services for those students who normally fall through the cracks because they do not qualify for

special education services. Regular education teachers in other studies did not specifically state they felt as if it benefited students who did not actually qualify for special education services but did allude to it as a benefit. The literature relating to studies of regular education teachers found that they tracked student progress to ensure that students received the needed individualized instruction. It also notes that teachers perceive a benefit of RTI to be able to individualize instruction for struggling students. Even though regular education teachers did not explicitly discuss helping students who would otherwise not receive any form of remedial help a benefit, they found it helpful in improving their ability to work with students on their skills deficits.

Collaboration was another benefit mentioned in the literature regarding regular education and special education teachers' perspectives. Swanson et al.'s (2012) respondents attributed the ability to collaborate about a student as an aid to ensuring appropriate educational decisions. Werts et al. (2014) also noted collaboration and use of data increased when it came to making decisions about students' academic interventions and goals. Special education teachers in both studies mentioned discussions at meetings regarded not only reviewing of data and identifying of those in need of intervention but also progressed to identifying the most effective intervention to reach students based on their academic difficulties. In addition, teachers also began to collaborate on how to adjust and modify interventions with nonresponsive students. Stuart, Rinaldi, and Higgins-Averill (2011) noted that the increase in collaboration ensured that the processes of the framework were being followed, students' needs were being met. It also began to engage teachers in all parts of the referral process to special education (Stuart et al., 2011).

Swanson et al. (2012) and Werts et al. (2014) revealed that special education teachers felt more connected to regular education teachers because of the increased need to work together due to the structure of RTI. Greenfield et al.'s (2010) findings corroborated the increased connection that both special and general education teachers felt toward one another. There was not a variance in results between elementary and middle school teachers (Regan et al., 2015). Each mentioned an increase in collaboration as a result of RTI and attributed the increase to the meetings required by the framework to discuss students. Adams's (2013) study also noted that teachers felt they were given adequate time to collaborate with special education teachers. Wilcox et al.'s (2013) participants remarked that they had observed a shift in the preparedness of teachers when coming to meetings as well as the different professionals that attended meetings. With the implementation of RTI a well-rounded representation of professionals emerged, including principals and psychologists at meetings over student placement. Collaboration developed beyond teachers only working with teachers and evolved to multiple professionals attending meetings to aid in decision making. Teachers arrive more prepared and ready to develop a plan for the student, having prepared by studying data and identifying the students' specific area of need (Wilcox et al., 2013).

Response to Intervention has been perceived to increase the collaboration and communication about children and their learning. Although some perceived divisions within special and regular education remain, collaboration among teachers and other professionals has increased aiding in the development of optimal interventions for students (Wilcox et al., 2013). Collaboration is an essential component of the framework that supports teachers in determining the best way to intervene with difficult-to-teach

students (Johnston, 2010). The collaboration stimulated through the Response to Intervention framework has been perceived to help teachers become change agents in their school and has invoked an increased commitment to the process (Stuart et al., 2011).

### Perceived Issues of RTI

Promises of Response to Intervention also have perceived barriers or issues that hindered the effectiveness of the framework. As with the perceived benefits, commonalities exist between regular education and special education teachers on their perception of critical issues that hindered the most effective implementation of RTI. Time, paperwork, and professional development were the most cited issues with the Response to Intervention framework by both special education and regular education teachers (Castro-Villareal et al. 2014; Cowan et al., 2015; Greenfield et al., 2010; Regan et al., 2014; Werts et al., 2014; Wilcox et al., 2013).

Relatedly, time and paperwork were a perceived barrier. The inability to have enough time throughout the day to complete all documentation associated with the RTI process was a general concern. “Lengthy”, “duplicative”, and “complicated” were all descriptors of the paperwork process by teachers (Castro-Villarreal et al., 2014). The documentation process for those students receiving intervention was perceived as taking up a large portion of teachers’ time and inconsistencies in requirement made it confusing to complete (Cowan et al., 2015). Teachers expressed concern that the amount of paperwork was an obstacle to successful implementation of Response to Intervention framework (Castro-Villarreal et al., 2014; Cowan et al., 2015). Teachers were unsure of the requirements and felt that the paperwork needed to be streamlined to reduce time spent in

completing it. Cowan et al. (2015) also noted an expressed concern that paperwork was becoming a barrier in the process of meeting a child's academic needs due to the lack of attention given to the student until completion of paperwork. Teachers could also avoid completing referrals because of the time and commitment it took to fill out such lengthy and confusing documents, therefore depriving students of needed services (Cowan et al., 2015; Werts et al., 2014).

The amount of time that the Response to Intervention framework took out of the regular classroom instruction was another perceived barrier. Both special education and regular education teachers were overwhelmed with the added responsibility of RTI (Cowan et al. 2015; Werts et al., 2014). Although the collaboration aspect created through the necessity of meetings was perceived as beneficial, Werts et al. (2014) noted that some special educators felt the meetings were lengthy and consumed a majority of their day. Swanson et al. (2012) detailed that a strained schedule was a concern for those in special education because there was not enough time for students to receive intervention without losing too much instructional time, especially if intervention was needed for more than one subject. Regular education teachers identified with the feeling that there was not enough time for students to receive intervention in more than one subject area due to the time constraints in the schedule (Regan et al., 2014). Regular education teachers also felt as if they did not have enough time to get intervention and its requirements completed in addition to teaching core instruction within the school day. Although in some cases scheduling was structured so that a specific time was allotted for intervention, there was still the perceived barrier of not enough time to complete the documentation, plan, and attend meetings (Regan et al., 2014).

The instructional time taken to provide intervention to Tier II and Tier III students by the classroom teacher resulted in instructional time taken away from Tier I students (Cowan et al., 2015). The constraint of having to provide intervention instruction while still having other students in the classroom presented another barrier. Determining the best method to use the time of Tier I students in the classroom while intervention was taking place was a concern for teachers (Cowan et al., 2015). Even though teachers acknowledge the academic benefits of interventions, the time it took out of core instruction to implement was a perceived drawback (Cowan et al., 2015; Regan et al., 2014; Swanson et al., 2012; Werts et al., 2014). Time was taken away from the core instruction for conducting the intervention services, and time was also taken away from the intervention for conducting assessments (Castro-Villarreal et al., 2014; Cowan et al., 2015; Regan et al., 2014; Werts et al., 2014). Time was eliminated from each of the tiers which hindered implementation and increased frustrations of teachers.

Resonating throughout the literature was the idea that the need for professional development was greater for general educators as opposed to special educators (Swanson et al. 2012; Werts et al., 2014). Werts et al.'s (2014) responses from special educators cited general educators needing the most professional support and training throughout the process, with less emphasis on the need for professional development for themselves. Swanson et al.'s study of special education teachers' perceptions did not mention any need for themselves to obtain more professional development for understanding or implementing the RTI framework. The literature suggests that special educators may find further professional development excessive due to the nature of their position. Special

education teachers have always taught hard-to-teach students, therefore having a greater expertise in providing interventions to students (Fuchs et al., 2012).

Other literature corroborated the thought that there is more professional development needed for general education teachers. Professional development is considered a key piece to the success of implementation (Kratochwill, Vopiansky, Clements, & Ball, 2007). Castro-Villarreal et al.'s (2014) research exposed that teachers felt the number one barrier to implementation was a lack of training they received before and during implementation of Response to Intervention. Teachers expressed a concern for needing more professional development in understanding the framework as a whole. In addition, there was also a need for more professional development on specific aspects of the framework. Research across grade levels supported the idea that training was deficient (Regan et al., 2015). It noted that across all grade levels teachers felt as if they lacked training and guidance on Response to Intervention and its implementation. Teachers felt that their lack of training impeded the successful implementation of RTI.

Specific areas within the framework in need of professional development became apparent. Two topics throughout the literature for which teachers felt they needed additional training were assessment and implementation practices. Teachers cited wanting more professional development on the assessment aspect of RTI. This included how to conduct assessments and use the data gleaned from them (Castro-Villarreal et al., 2014; Regan et al., 2015; Werts et al., 2014; Wilcox et al., 2013). Teachers felt deficient in their understanding about how to properly conduct assessments and how to use the information that was gained from the assessments (Regan et al., 2015). Although teachers felt as if they

had a surface level understanding of how to interpret data, they were less competent in actually analyzing data to inform their interventions (Wilcox et al., 2013).

Lack of resources was also cited in several pieces of the literature as a barrier in the implementation process. In Werts et al. (2014) and Swanson et al. (2012) the respondents found that a need for more personnel to assist in implementation was necessary. Current staffing was not sufficient in being able to conduct the number of intervention needed as well as keep up with the data that were required. In addition to the issues found within both studies, Werts et al. (2014) listed other barriers found within the research. Respondents felt that they lacked the necessary training to fully understand the Response to Intervention process, proper collection of progress monitoring data, and how to use the assessments to maximize benefits. Resistance of some to change and being inadequately prepared for implementation caused negative attitudes; these attitudes were found to be a hindrance in the implementation of the framework.

Within the literature both special education and regular education teachers provided insight into what is working and what needs improvement in the Response to Intervention framework. Barriers listed seem to be more technical in nature, with no issues revealed that related to the purpose of the framework. Adam's (2013) research revealed that teachers felt barriers had not negatively affected their ability to implement the framework. Although the perceptions seemed to be mixed, there is evidence that teachers feel more aware of the how the changes in their instruction are helping close skills gaps for students. This seems to outweigh the negative attitudes toward implementation of the framework.

## Response to Intervention Training for Preservice Teachers

Professional development has been cited as a key element in ensuring that the Response to Intervention framework is effective (Swanson et al., 2012; Werts et al., 2014). However, there has been little written about the need for a change in teacher training programs (Barrio & Combes, 2015). Teachers often noted that they felt unprepared and lacked understanding of how to fully implement the Response to Intervention framework (Barrio & Combes, 2015; Prasse et al., 2012). These same uncertainties lie with preservice teachers (Barrio & Combes, 2015). Literature concerning preservice teachers have focused on two different aspects, the preservice teachers' perceptions of ability to implement the Response to Intervention framework based on training and an institutions perceptions and abilities of understanding Response to Intervention and implementing that in curriculum (Barrio & Combes, 2015; Harvey, Yssel, & Jones, 2014; Prasse et al., 2012).

Harvey et al. (2015) conducted an exploratory investigation on the preparation of preservice teachers. They expressed that there is a need for basic training of RTI in all teacher preparation programs (Harvey et al., 2015). Although the Response to Intervention framework varies from state to state, certain qualities are found in every framework; therefore, these qualities need to be a part of preparation programs at all institutions (Harvey et al., 2015). The added responsibilities that come with the implementation of the RTI framework fall both on regular education teachers and special education teacher (Barrio & Combes, 2015; Harvey et al., 2015). These extra responsibilities include collecting data on students and making decisions based on the variety of data as well as being able to differentiate instruction for all students to meet their needs (Harvey et al., 2015).

When exploring the perceptions of faculty, it was noted that there was a difference between those in the special education department and those in the secondary and curriculum and instruction faculty (Harvey et al., 2015). Special education faculty had a higher degree of agreement that they were teaching multiple components such as core concepts, collaboration, and use as disability identification associated with the Response to Intervention framework as opposed to those in other departments (Harvey et al., 2015). Overall, faculty indicated that they had a comprehensive knowledge of RTI, with secondary and curriculum and instruction faculty citing less confidence (Harvey et al., 2015). The results varied in the degree in which RTI was taught throughout the coursework, with no department teaching a class specifically on the framework (Harvey et al., 2015). The only consistent group was those in the department of special education. They were teaching the Response to Intervention framework as an embedded component throughout the coursework regularly (Harvey et al., 2015). This exploration showed that although departments felt they had an understanding of the RTI framework, there were inconsistencies in the training of teachers in the different aspects.

Prasse et al. (2012) reviewed surveys from beginning teachers and segregated information into those who had taught less than 1 year and those who had taught between 1 and 4 years. They used information on beliefs and perceptions of RTI skills to determine a set of skills that should be taught throughout preservice teacher preparation programs in order to increase teachers' knowledge and abilities to implement RTI effectively (Prasse et al., 2012). Based on this information and other literature, Prasse et al. developed seven essential domains that teacher preparation programs must focus on in order to enable

teachers to enter classrooms and be well equipped to implement the Response to Intervention framework effectively.

The essential domains were: tiered model, data-based decision making, problem solving process, curriculum and instruction, classroom environment, collaboration, and professional attitudes and beliefs (Prasse et al., 2012). In the domain of tiered model teachers must understand the meaning of each tier and the type of instruction they are required to provide (Prasse et al., 2012). They must use ongoing assessments to determine the type of differentiation needed for each of their students (Prasse et al., 2012). This falls within the second domain of data-based decision making. It is important that preservice teachers understand the use of data to guide curriculum and instructional choices for students (Prasse et al., 2012). They must also be able to interpret various types of data that demonstrate where a student or class is performing (Prasse et al., 2012). In the third domain, problem solving process, it is important for preservice teachers to understand the cycle of reviewing data and comparing it with other state and national norms to determine progress (Prasse et al., 2012). Part of the problem solving process is also to meet with both students and other teachers to determine best course of action based on data provided (Prasse et al., 2012).

Domains four and five, curriculum and instruction and classroom environment, work together to ensure effective instruction. Preservice teachers must understand the different facets of selecting curriculum and providing instruction (Prasse et al., 2012). They need to have a skills set that allows them the ability to differentiate the level of instruction and the type of instructional practices used (Prasse et al., 2012). However, without a positive classroom environment, the effectiveness of the instruction is lessened. Preservice

teachers must also understand how to create a positive learning environment that holds students to high behavioral expectations as well as academic expectations (Prasse et al., 2012).

Domain six, collaboration, is focused on the ability of the preservice teacher to work and communicate with other coworkers and stakeholders (Prasse et al., 2012). It is important for the preservice teacher to understand the importance that collaboration plays in helping ensure that the best decisions are made for students (Prasse et al., 2012). This also reverts to domain three, the problem solving process, in which it is encouraged to work with others to determine the best solution (Prasse et al., 2012). The final domain, professional attitudes and beliefs, is centered on the idea that everyone should demonstrate the belief that all students can learn (Prasse et al., 2012). Throughout the review of surveys, it was noted that almost 40% of teachers did not believe that all student could learn (Prasse et al., 2012). Citing research about the effects of self-efficacy, Prasse et al. (2012) believe that the idea that all students can learn must be at the forefront of the teacher's beliefs in order for them to believe that they can make a difference (Prasse et al., 2012). Barrio and Combes (2015) support this idea citing that the philosophies and skills obtained throughout the preparation program connected with student outcomes.

Although the domains have been set forth with the intention of aiding in preparation of preservice teachers to implement an RTI framework, several of the domains are already in place in teacher preparation programs (Prasse et al., 2012). Prasse et al. explain that although several of the domains are found, it is not about adding to the curriculum, but restructuring the information to embed practices of RTI throughout coursework. By addressing the issues with teacher preparation programs, it is hoped that

the implementation of RTI will be more successful (Prasse et al., 2012). Harvey et al. (2015) agrees by expressing the sentiment that successful Response to Intervention programs must begin with proper preparation for preservice teachers.

Although studies have been focused on the faculty of the teacher preparation programs at universities as well as beginning teachers, Barrio and Combes (2015) focused on the concerns of preservice teachers about RTI. Other literature has been written over the concerns of teachers when it comes to the implementation of the Response to Intervention framework, but little has been focused on the perspectives of preservice teachers. When reviewing data preservice teachers viewed the Response to Intervention framework as an integral part of their career. Preservice teachers had two overarching themes about the concern that they had with the RTI framework (Barrio & Combes, 2015). The first overarching theme was the ability to implement RTI and the understanding about associated methods. The second overarching theme was concerns that stemmed from their experiences within a public school (Barrio & Combes, 2015).

Preservice teachers voiced concerns about their ability to effectively implement the RTI framework. However, they expressed that they felt confident in understanding the framework, the role that they would play in the framework, and what support they felt they would need from administration in that role (Barrio & Combes, 2015). They were less confident about the ability to implement correctly when it comes to their actual classroom and moving students through the tiers properly. A lack of understanding about how to meet the various student levels within the tiered framework was also a concern. They also voiced concerns about management of all the technical components of RTI such as time, scheduling, and documentation. There were also misunderstandings noted within the

study. Preservice teachers had misunderstandings in relation to the purpose of RTI; they believed that it was evaluation of students that had already been determined to have a disability. They saw Response to Intervention not as an early prevention measure but more of a remedial program.

Experiences also prompted concerns about the Response to Intervention framework from preservice teachers. These concerns included the following: collaboration between both coworkers and parents, interaction with students with diverse needs, and the identification of students for need of special education services (Barrio & Combes, 2015). Preservice teachers voiced concerns that they had about the implementation of RTI at schools in which they had been placed. They felt as if the behavior of teachers was reflective of their understanding, or lack, of the framework, or their attitude about the framework. They also noted that the teachers they observed also lacked skills in meeting the needs of students.

This study over preservice teacher perceptions and concerns about the implementation of the Response to Intervention framework found that preservice teachers in general were concerned with the actual implementation of Response to Intervention once they began teaching (Barrio & Combes, 2015). They had concerns over their ability to implement the framework effectively and meet the needs of the diverse learners found within their classroom walls. Based on these findings, Barrio and Combes suggest that the current teacher preparation programs be adapted to provide some practical experiences implementing RTI for preservice teachers. As Prasse et al. (2012) suggested as well, there does not need to be a complete replacement of teacher preparation programs, there does

need to be an increased emphasis and restructuring of information relating to the implementation of the Response to Intervention framework.

The various points of view in which the studies have been conducted over the teacher preparation program have an overarching theme that preservice teachers need more knowledge about the Response to Intervention framework and effectively implement it (Barrio & Combes, 2015; Harvey et al., 2014; Prasse et al., 2012). Information gleaned from the study about faculty implementation of the RTI framework correlated with a later study about the concerns of preservice teachers. Harvey et al.'s (2014) research on faculty in teacher preparation programs noted that concepts associated with RTI were not a focused part of the program, although faculty cited that they felt they had a good grasp on the concepts of the framework. In Barrio and Combes's (2015) later study preservice teachers noted this absence in their particular teacher preparation coursework and felt unprepared to implement the framework. Bringing forth components that are essential to effective implementation of RTI in teacher preparation programs can aid in helping preservice teachers have a better self efficacy of their ability to implement, without completely renovating the coursework of most programs (Barrio & Combes, 2015; Harvey et al., 2014; Prasse et al., 2012).

### Chapter Summary

Many facets of the Response to Intervention framework have been examined. Little research has been conducted over the RTI model in the middle school setting but has shown that the framework must be adjusted to fit the needs of students in upper grades (Faggella-Luby & Wardwell, 2011; Feuerborn et al., 2011; Prewett et al., 2012; Pyle &

Vaughn, 2012). Research supports the use of the Response to Intervention framework; however, it does not come without perceived barriers (Castro-Villarreal et al., 2014; Regan et al., 2015; Werts et al., 2014; Wilcox et al., 2013). The barriers seem more technical in nature and have been shown not to hinder the improvement of student's academic success (Adams, 2013). Through professional development and effective teacher preparation programs some of the barriers cited can be lifted.

## CHAPTER 3

### RESEARCH METHODS

The purpose of this study was to investigate K-8 teachers' perceptions on the Response to Intervention (RTI) framework. Research was conducted to determine whether teachers perceived the RTI framework to be effective in closing skills gaps for students, aiding in accurate identification of students with learning disabilities, and aiding in the early identification of students with learning difficulties. The research also investigated whether teachers perceived the framework to be effective overall. A nonexperimental quantitative design was used to investigate the research questions. A survey was used in this study to investigate K-8 teachers' perceptions on the effectiveness of the RTI framework. This chapter contains the following information about the research design: Research Questions, Population, Instrumentation, Data Collection, and Data Analysis.

#### Research Questions and Null Hypotheses

The nonexperimental quantitative design guided the following research questions and null hypotheses:

Research Question 1: Do teachers perceive Response to Intervention as effective to a significant extent?

Ho<sub>1</sub><sub>1</sub>: Teachers do not perceive Response to Intervention to be effective overall to a significant extent.

Ho<sub>1</sub><sub>2</sub>: Teachers do not perceive Response to Intervention as effective in aiding in the accurate identification of students with learning disabilities to a significant extent.

Ho1<sub>3</sub>: Teachers do not perceive Response to Intervention as helping close skills gaps for students as effective to a significant extent.

Ho1<sub>4</sub>: Teachers do not perceive Response to Intervention as aiding in the early identification of students with learning difficulties to a significant extent.

Research Question 2: Is there a significant difference in the perceptions of Response to Intervention between teachers in city districts and those in county districts?

Ho2<sub>1</sub>: There is not a significant difference in the overall perceptions of Response to Intervention between teachers teaching in city districts and those teaching in county districts.

Ho2<sub>2</sub>: There is not a significant difference in the perceptions of Response to Intervention as aiding in the accurate identification of students with learning disabilities between teachers in city districts and those county districts.

Ho2<sub>3</sub>: There is not a significant difference in the perceptions of Response to Intervention in helping close skills gaps for students between teachers in city districts and those county districts.

Ho2<sub>4</sub>: There is not a significance difference in the perceptions of Response to Intervention in aiding in the early identification of students with learning difficulties between between teachers in city districts and those county districts.

Research Question 3: Is there a significant difference in the perceptions of Response to Intervention between teachers who have taught 5 or fewer years and those who have taught more than 5 years?

Ho3<sub>1</sub>: There is not a significant difference in overall perceptions of Response to Intervention between teachers who have taught 5 or fewer years and those who have taught more than 5 years.

Ho3<sub>2</sub>: There is not a significant difference in the perceptions of Response to Intervention as aiding in the accurate identification of students with learning disabilities between teachers who have taught 5 or fewer years and those who have taught more than 5 years.

Ho3<sub>3</sub>: There is not a significant difference in the perceptions of Response to Intervention in helping close skills gaps for students between teachers who have taught five or 5 years and those who have taught more than 5 years.

Ho3<sub>4</sub>: There is not a significance difference in the perceptions of Response to Intervention in aiding in the early identification of students with learning difficulties between teachers who have taught five or 5 years and those who have taught more than 5 years.

Research Question 4: Is there a significant difference in perceptions of Response to Intervention between teachers who teach elementary, intermediate, or middle school grades?

Ho4<sub>1</sub>: There is not a significant difference in overall perceptions of Response to Intervention between teachers who teach elementary, intermediate, or middle school grades.

Ho4<sub>2</sub>: There is not a significant difference in the perceptions of Response to Intervention as aiding in the accurate identification of students with learning

disabilities between teachers who teach elementary, intermediate, or middle school grades.

Ho4<sub>3</sub>: There is not a significant difference in the perceptions of Response to Intervention in helping close skills gaps for students between teachers who teach elementary, intermediate, or middle school grades.

Ho4<sub>4</sub>: There is not a significance difference in the perceptions of Response to Intervention in aiding in the early identification of students with learning difficulties between teachers who teach elementary, intermediate, or middle school grades.

Research Question 5: Is there a significant difference in perceptions of Response to Intervention between teachers whose highest degree is at the baccalaureate level and those who have earned graduate degrees?

Ho5<sub>1</sub>: There is not a significant difference in overall perceptions of Response to Intervention between teachers whose highest degree is at the baccalaureate level and those who have earned graduate degrees.

Ho5<sub>2</sub>: There is not a significant difference in the perceptions of Response to Intervention as aiding in the accurate identification of students with learning disabilities between teachers whose highest degree is at the baccalaureate level and those who have earned graduate degrees.

Ho5<sub>3</sub>: There is not a significant difference in the perceptions of Response to Intervention in helping close skills gaps for students between teachers whose highest degree is at the baccalaureate level and those who have earned graduate degrees.

Ho5<sub>4</sub>: There is not a significance difference in the perceptions of Response to Intervention in aiding in the early identification of students with learning difficulties between teachers whose highest degree is at the baccalaureate level and those who have earned graduate degrees.

### Population and Sample

The participants of this study were a sample of kindergarten through eighth grade regular education teachers who taught in four East Tennessee school districts. Regular education teachers were selected due to their role in the implementation of the RTI framework. Regular education teachers are considered the primary agents in the implementation of the framework (Castro-Villarreal et al., 2014). Teachers are also the primary group that can recognize the effects of the framework in all students being served, whether they have provided the intervention or facilitated the intervention. McMillan and Shumaker (2010) explained that although convenience sampling makes it difficult to generalize research, it does not make the findings invaluable. Data from the district report card showed a total population of teachers in the following districts in the 2014-2015 school year: Kingsport City Schools ( $N = 468$ ), Maryville City Schools ( $N = 329$ ), Sevier County Schools ( $N=967$ ), and Carter County Schools ( $N = 407$ ) (Tennessee Department of Education, 2016). The teachers the survey was distributed to varied in years teaching experience, highest degree earned, and grade level taught. For this study, primary teachers included those teaching kindergarten through second grade, intermediate teachers included those teaching third through fifth grade, and middle school teachers included those teaching sixth through eighth grade. Each school district selected implements the

Response to Intervention program as directed by Tennessee's Department of Education guidelines. The sample is comprised of those who returned the survey. Those completing the survey also varied in their roles within the RTI framework. Teachers ranged from being the interventionist for all students identified within their classrooms in both math and reading to being the facilitator for the intervention services. Professional development and support staff also varied for each district.

### Instrumentation

A survey was created by the researcher based on the review of literature. The survey was developed using a 5-point Likert scale calling for participants to respond with *strongly disagree, disagree, neutral, agree, and strongly agree*. McMillan and Schumacher (2010) note that in most cases it is better to leave the neutral choice to help avoid frustration of respondents. A pilot study was conducted to ensure clarity of statements; the pilot group suggested no modifications to the survey. The survey included five demographic items: grade level taught, highest degree earned, the number of years taught, role in intervention, and district in which the participant taught. Participants were then asked to select a degree of agreement on 23 statements about specific details of the RTI framework. The end of the survey contained two open-ended items for participants to describe the materials and programs used to implement RTI, as well as room for any additional comments. The web-based survey was structure to allow participants to skip any items that they felt uncomfortable answering. The estimated completion time for the survey was 10 minutes and a 3-week window was given to participants for completion of the survey.

### Data Collection

Approval by the Institutional Review Board (IRB), the researcher's committee, and the Director of Schools for each of the participating districts was obtained prior to conducting the research. The survey was distributed through the web-based program, Survey Monkey, to all regular education teachers in kindergarten through eighth grade in Carter County, Kingsport City, Maryville City, and Sevier County schools. This platform was used so that no identifiable data would be connected to the response of the participants. For each district the proper representative was contacted and provided with an email to distribute to participants. Participants were then contacted by the district representative via email to participate in the study. A statement of confidentiality and an assurance of anonymity was provided to each participant. Participation in the research was voluntary; participants also had the option of skipping items that they felt uncomfortable answering. The use of Survey Monkey ensured that no identifiable data would be connected with responses of participants.

### Data Analysis

Data from this quantitative study were analyzed using the Statistical Package for Social Sciences (SPSS). Each research question had four related null hypotheses. Research Question 1 was analyzed using a directional single sample, upper end critical t test, with a test value of 3.0, the mid-point of the scale which represents neutrality. Research Questions 2, 3, and 5 were analyzed using a series of independent t tests. Research Question 4 was analyzed using an analysis of variance (ANOVA) because of its multiple population means. Data were segregated based on the information collected in the demographics portion of

the survey to answer Research Questions 2 through 5. All data were analyzed at the .05 level of significance and 95% confidence intervals are reported. Witte and Witte (2007) noted that, “when the level of confidence equals 95 percent or more, we can be *reasonably confident* that the one observed confidence interval includes the true population mean” (p.258).

### Chapter Summary

The information presented in Chapter 3 provides a detailed description of the methodology and procedures for conducting this study. An introduction, research questions, population, instrumentation, data collection, and data analysis are explained. The findings of the data analyses are reported in Chapter 4, and a summary of the findings, conclusions, and recommendations for future research are reports in Chapter 5.

## CHAPTER 4

### FINDINGS

The purpose of this study was to investigate teachers' perceptions of the effectiveness of the Response to Intervention framework. Participants of this study included 1,036 Kindergarten through eighth grade regular education teachers in four districts in East Tennessee.

In this chapter data were presented and analyzed to address five research questions and 20 null hypotheses. Data were gleaned from a 30-item survey with items measured on a 5-point Likert-type scale. Data were retrieved via a survey through an online survey system, Survey Monkey. The survey was distributed twice with a return rate of 28% for a total of 277 participants.

#### Research Question 1

Research Question 1: Do teachers perceive Response to Intervention as effective to a significant extent?

Ho<sub>1</sub>: Teachers do not perceive Response to Intervention to be effective overall to a significant extent.

A directional, upper tail critical, single sample t test was conducted on teachers' perceptions of the Response to Intervention framework's overall effectiveness to evaluate whether the mean score was significantly different from the test value 3.0, the value which represents neutrality. The sample mean of 3.19 ( $SD = .69$ ) was significantly higher than 3.0,  $t(196) = 3.78, p < .001$ . Therefore, the null hypothesis Ho<sub>1</sub> was rejected. The 95% confidence interval for the difference in means was .09 to .28. The strength of the

relationships between K-8 teachers' perceptions and the mean score effect size  $d$  of .27 indicates a small to medium effect. The results indicate the respondents perceived the Response to Intervention framework to be effective overall to a significant extent. Figure 1 shows the distribution of participants' responses. The frequency reported within each graph represents the number of participants who designated a 1, 2, 3, 4, or 5 on the online survey.

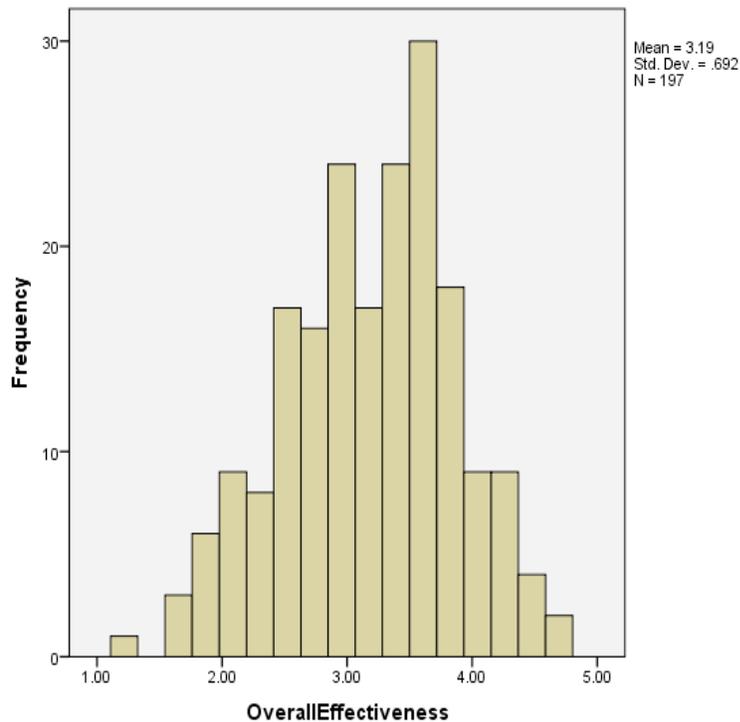
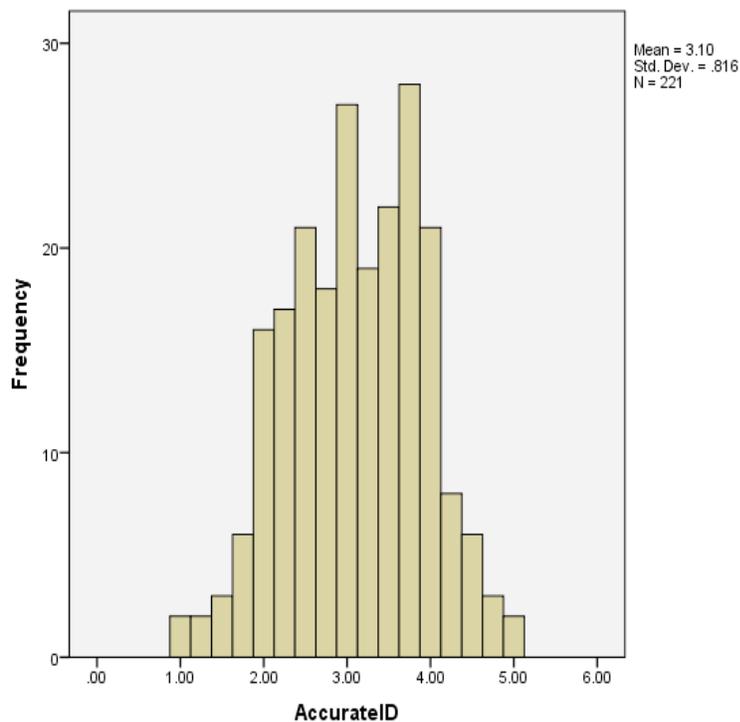


Figure 1. K-8 Regular Education Teachers' Responses Regarding Perceptions of RTI Overall Effectiveness.

Ho<sub>12</sub>: Teachers do not perceive Response to Intervention as aiding in the accurate identification of students with learning disabilities as effective to a significant extent.

A directional, upper tail critical, single sample t test was conducted on teachers' perceptions of the Response to Intervention framework's effectiveness in aiding in accurate

identification of students with learning disabilities to evaluate whether the mean score was significantly different from 3.0, the value representing neutrality. The sample mean of 3.10 ( $SD = .86$ ) was not significantly higher than 3.0,  $t(220) = 1.88, p = .062$ . Therefore, the null hypothesis  $H_{012}$  was retained. The 95% confidence interval for the difference in means was  $-.005$  to  $.21$ . The strength of the relationships between K-8 teachers' perceptions and the mean score effect size  $d$  of  $.13$  indicates a small effect. The results indicate the respondents perceived the Response to Intervention framework in aiding in accurate identification of learning disabled students not effective to a significant extent. Figure 2 shows the distribution of participants' responses. The frequency reported within each graph represents the number of participants who designated a 1, 2, 3, 4, or 5 on the online survey.



*Figure 2.* K-8 Regular Education Teachers' Responses Regarding Perceptions of Effectiveness of the RTI framework in Accurate Identification of Students with Learning Disabilities.

Ho<sub>13</sub>: Teachers do not perceive Response to Intervention as helping close skills gaps for students as effective to a significant extent.

A directional, upper tail critical, single sample t test was conducted on teachers' perceptions of the Response to Intervention framework's effectiveness in helping close skills gaps to evaluate whether the mean score was significantly different from 3.0, the value representing neutrality. The sample mean of 3.29 ( $SD = .89$ ) was significantly higher than 3.0,  $t(214) = 4.75, p < .001$ . Therefore, the null hypothesis Ho<sub>13</sub> was rejected. The 95% confidence interval for the difference in means was .17 to .41. The strength of the relationships between K-8 teachers' perceptions and the mean score effect size  $d$  of .32 indicates a small to medium effect. The results indicate the respondents perceived the Response to Intervention framework to be effective in helping close skills gaps to a significant extent. Figure 3 shows the distribution of participants' responses. The frequency reported within each graph represents the number of participants who designated a 1, 2, 3, 4, or 5 on the online survey.

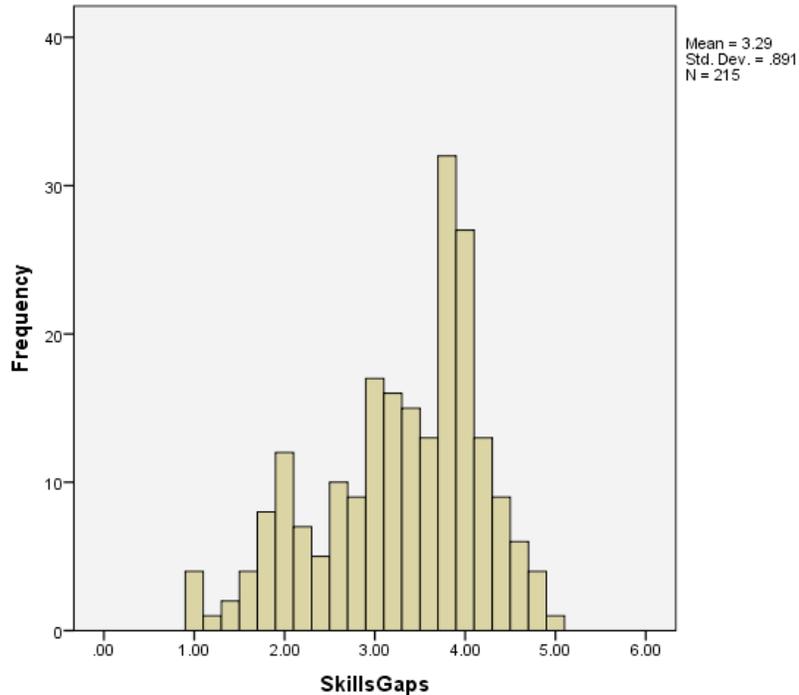
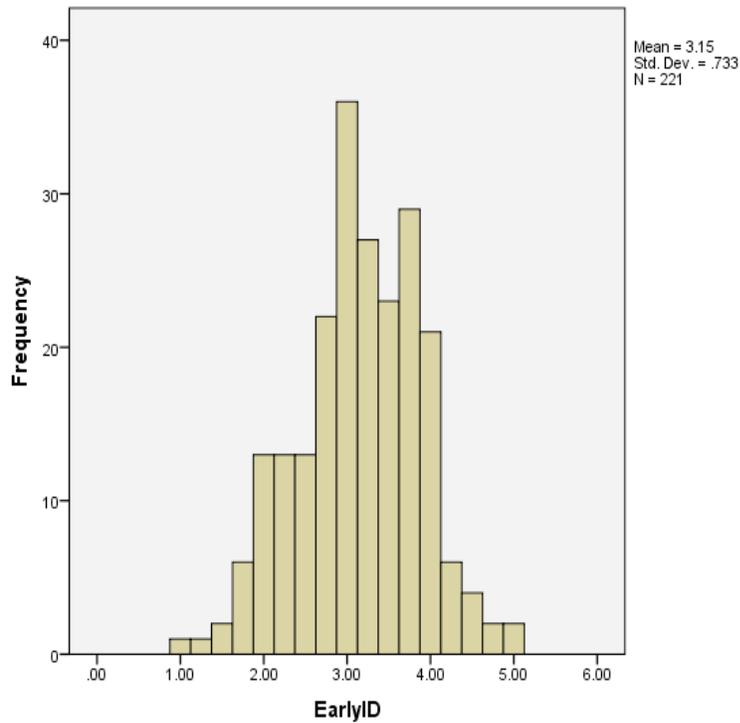


Figure 3. K-8 Regular Education Teachers’ Responses Regarding Perceptions of Effectiveness of the RTI Framework in Closing Skills Gaps of Students.

Ho1<sub>4</sub>: Teachers do not perceive Response to Intervention as aiding in the early identification of students with learning difficulties to a significant extent.

A directional, upper tail critical, single sample t test was conducted on teachers’ perceptions of the Response to Intervention framework’s effectiveness in aiding in early identification of students with learning difficulties to evaluate whether the mean score was significantly different from 3.0, the value representing neutrality. The sample mean of 3.15 ( $SD = .73$ ) was significantly higher than 3.0,  $t(220) = 3.03, p = .003$ . Therefore, the null hypothesis Ho1<sub>4</sub> was rejected. The 95% confidence interval for the difference in means was .05 to .25. The strength of the relationships between K-8 teachers’ perceptions and the mean score effect size  $d$  of .2 indicates a small effect. The results indicate the respondents perceived the Response to Intervention framework to be effective in aiding in early

identification of students with learning difficulties to a significant extent. Figure 4 shows the distribution of participants' responses. The frequency reported within each graph represents the number of participants who designated a 1, 2, 3, 4, or 5 on the online survey.



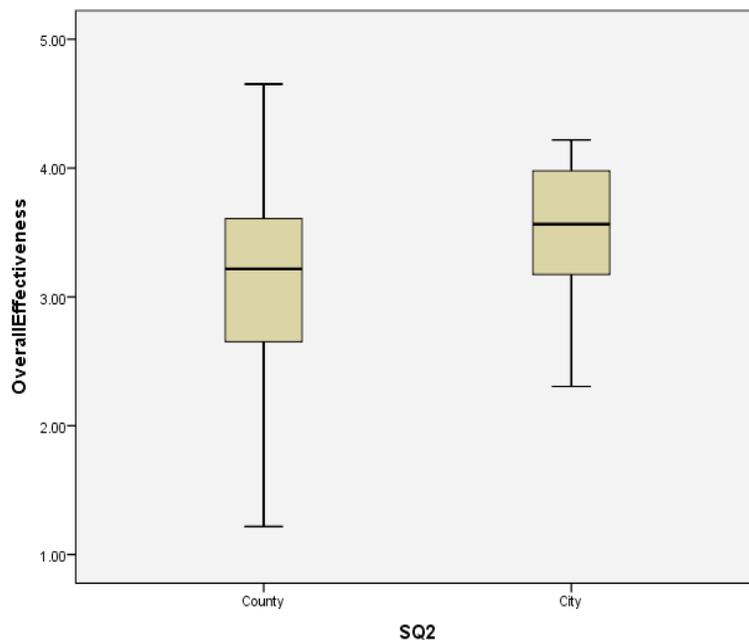
*Figure 4.* K-8 Regular Education Teachers' Responses Regarding Perceptions of Effectiveness of the RTI Framework in Early Identification of Students with Learning Difficulties.

### Research Question 2

Research Question 2: Is there a significant difference in the perceptions of Response to Intervention between teachers in city districts and those in county districts?

Ho2<sub>1</sub>: There is not a significant difference in the overall perceptions of Response to Intervention between teachers teaching in city districts and those teaching in county districts.

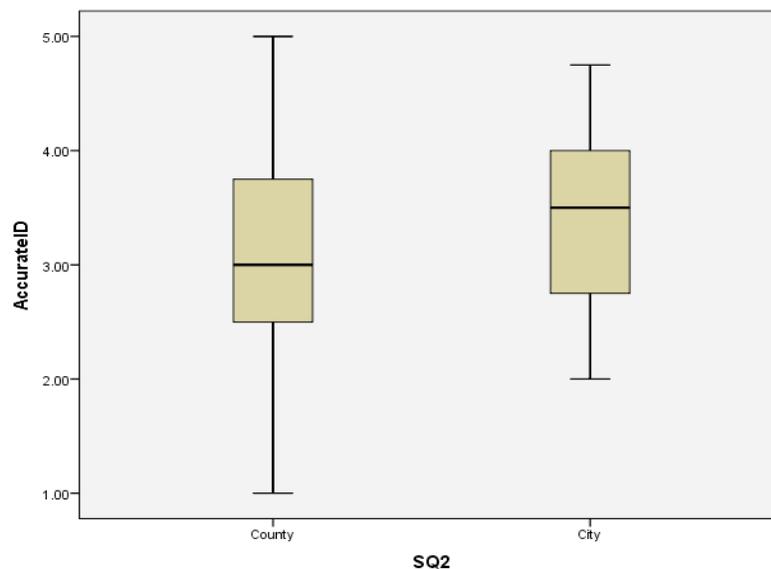
An independent-samples t test was conducted to evaluate whether the mean of the perceptions of the Response to Intervention framework's overall effectiveness differs to a significant extent between K-8 teachers in city schools and those in county schools. The overall effectiveness was the dependent variable and the grouping variable was whether one taught in a city school or a county school. The test was not significant,  $t(194) = 2.41$ ,  $p = .263$ . Therefore, the null hypothesis was retained. The  $\eta^2$  index was .03, which indicated a small effect size. Teachers in city schools ( $M = 3.48$ ,  $SD = .58$ ) had a similar mean to those in county schools ( $M = 3.14$ ,  $SD = .70$ ). The 95% confidence interval for the difference in means was -.62 to -.06. Figure 5 shows the distributions for the two groups.



*Figure 5.* Scores for Those Teaching in a County School and Those Teaching in a City School Perceptions of Overall Effectiveness of the Response to Intervention Framework.

Ho<sub>2</sub>: There is not a significant difference in the perceptions of Response to Intervention as aiding in the accurate identification of students with learning disabilities between teachers in city districts and those county districts.

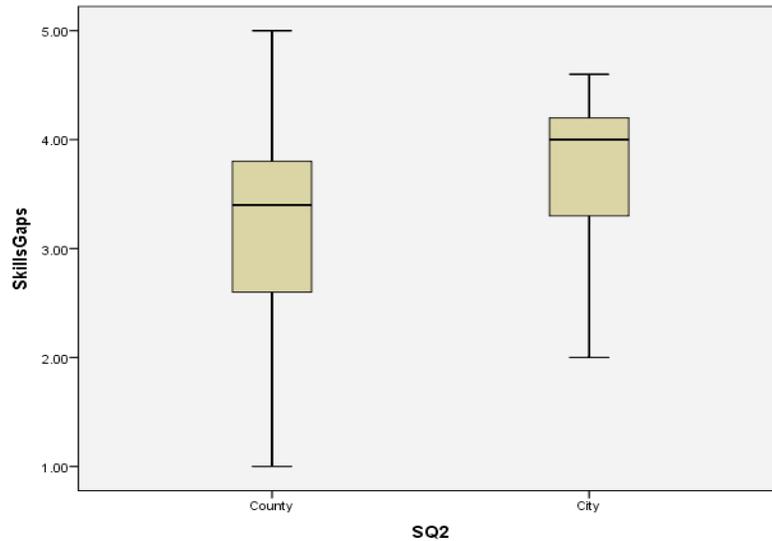
An independent-samples t test was conducted to evaluate whether the mean of the perceptions of the Response to Intervention framework's effectiveness in aiding in accurate identification of students with learning disabilities differs to a significant extent between K-8 teachers in city schools and those in county schools. The effectiveness of aiding in accurate identification of students with learning disabilities was the dependent variable and the grouping variable was whether one taught in a city school or a county school. The test was not significant,  $t(218) = 1.99$ ,  $p = .853$ . Therefore, the null hypothesis was retained. The  $\eta^2$  index was .02, which indicated a small effect size. Teachers in city schools ( $M = 3.37$ ,  $SD = .79$ ) had a similar mean to those in county schools ( $M = 3.06$ ,  $SD = .82$ ). The 95% confidence interval for the difference in means was -.62 to .003. Figure 6 shows the distributions for the two groups.



*Figure 6.* Scores for Those Teaching in a County School and Those Teaching in a City School Perceptions of the Response to Intervention Framework's Effectiveness in Accurate Identification of Students with Learning Disabilities.

Ho2<sub>3</sub>: There is not a significant difference in the perceptions of Response to Intervention in helping close skills gaps for students between teachers in city districts and those county districts.

An independent-samples t test was conducted to evaluate whether the mean of the perceptions of the Response to Intervention framework's effectiveness in closing skills gaps differs to a significant extent between K-8 teachers in city schools and those in county schools. The effectiveness of closing skills gaps was the dependent variable and the grouping variable was whether one taught in a city school or a county school. The test was not significant,  $t(212) = 3.02$ ,  $p = .187$ . Therefore, the null hypothesis was retained. The  $\eta^2$  index was .04, which indicated a small effect size. Teachers in city schools ( $M = 3.72$ ,  $SD = .76$ ) had a similar mean to those in county schools ( $M = 3.21$ ,  $SD = .89$ ). The 95% confidence interval for the difference in means was -.84 to -.18. Figure 7 shows the distributions for the two groups.

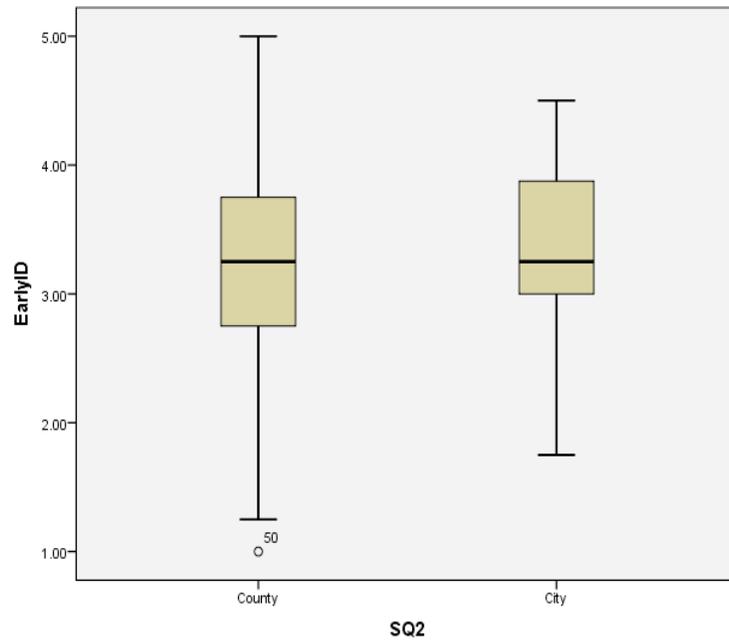


*Figure 7. Scores for Those Teaching in a County School and Those Teaching in a City School Perceptions of the Response to Intervention Framework’s Effectiveness in Closing Skills Gaps.*

Ho2<sub>4</sub>: There is not a significance difference in the perceptions of Response to Intervention in aiding in the early identification of students with learning difficulties between between teachers in city districts and those county districts.

An independent-samples t test was conducted to evaluate whether the mean of the perceptions of the Response to Intervention framework’s effectiveness in aiding in early identification of students with learning difficulties differs to a significant extent between K-8 teachers in city schools and those in county schools. The effectiveness of aiding in early identification of students with learning difficulties was the dependent variable and the grouping variable was whether one taught in a city school or a county school. The test was not significant,  $t(218) = .883, p = .973$ . Therefore, the null hypothesis was retained. The  $\eta^2$  index was .004, which indicated a small effect size. Teachers in city schools ( $M = 3.26, SD = .74$ ) had a similar mean to those in county schools ( $M = 3.13, SD = .73$ ). The 95% confidence

interval for the difference in means was  $-.41$  to  $.15$ . Figure 8 shows the distributions for the two groups.



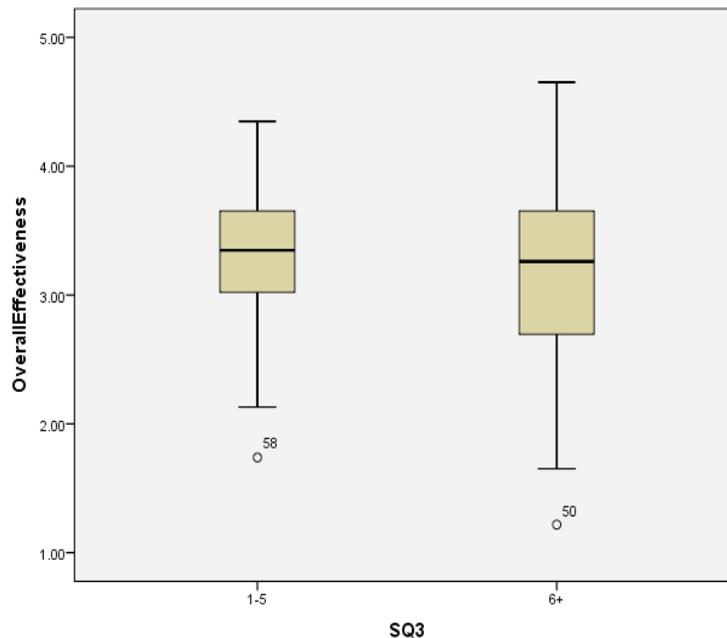
*Figure 8.* Scores for Those Teaching in a County School and Those Teaching in a City School Perceptions of the Response to Intervention Framework’s Effectiveness in Early Identification of Students with Learning Difficulties.

### Research Question 3

Research Question 3: Is there a significant difference in the perceptions of Response to Intervention between teachers who have taught 5 or fewer years and those who have taught more than 5 years?

Ho3<sub>1</sub>: There is not a significant difference in overall perceptions of Response to Intervention between teachers who have taught 5 or fewer years and those who have taught more than 5 years.

An independent-samples t test was conducted to evaluate whether the mean of the perceptions of the Response to Intervention framework's overall effectiveness differs to a significant extent between K-8 teachers who have taught 5 or fewer years and those who have taught 6 or more years. The overall effectiveness was the dependent variable and the grouping variable was whether one had taught 5 or fewer years or 6 or more years. The test was significant,  $t(194) = 1.03$ ,  $p = .029$ . Therefore, the null hypothesis was rejected. The  $\eta^2$  index was .01, which indicated a small effect size. Teachers who had taught 5 or fewer years ( $M = 3.28$ ,  $SD = .57$ ) found the Response to Intervention framework to be significantly more effective overall than those teaching 6 or more years ( $M = 3.16$ ,  $SD = .72$ ). The 95% confidence interval for the difference in means was -.11 to .36. Figure 9 shows the distributions for the two groups.



*Figure 9.* Scores for Those Teaching 5 or Fewer years and Those Teaching 6 or More Years Perceptions of Overall Effectiveness of the Response to Intervention framework.

Ho3<sub>2</sub>: There is not a significant difference in the perceptions of Response to Intervention as aiding in the accurate identification of students with learning disabilities between teachers who have taught 5 or fewer years and those who have taught more than 5 years.

An independent-samples *t* test was conducted to evaluate whether the mean of the perceptions of the Response to Intervention framework's effectiveness in aiding in accurate identification of students with learning disabilities differs to a significant extent between K-8 teachers who have taught 5 or fewer years and those who have taught 6 or more years. The effectiveness of aiding in accurate identification of students with learning disabilities was the test variable and the grouping variable was teachers who had taught 5 or fewer years or 6 or more years. The test was not significant,  $t(218) = .81$ ,  $p = .243$ . Therefore, the null hypothesis was retained. The  $\eta^2$  index was .002, which indicated a small effect size. Teachers who had taught 5 or fewer years ( $M = 3.19$ ,  $SD = .74$ ) had a similar mean to those who had taught 6 or more years ( $M = 3.08$ ,  $SD = .84$ ). The 95% confidence interval for the difference in means was -.16 to .37. Figure 10 shows the distributions for the two groups.

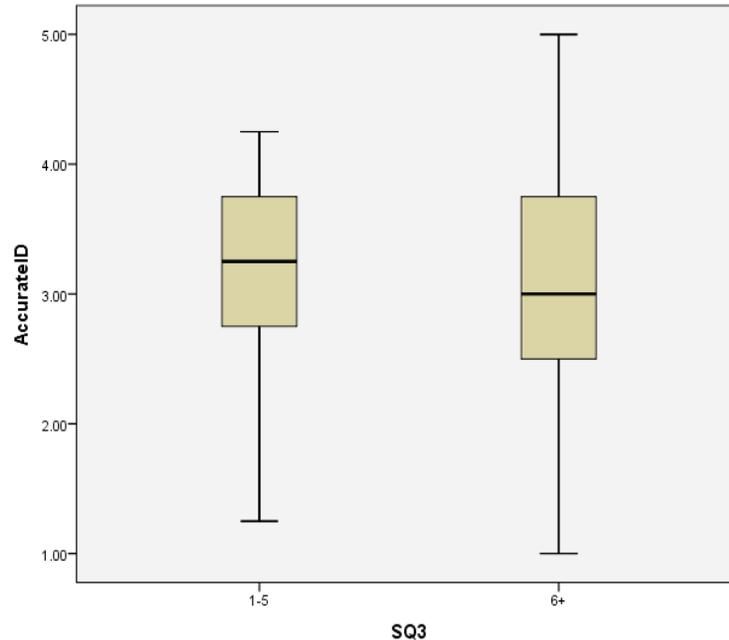
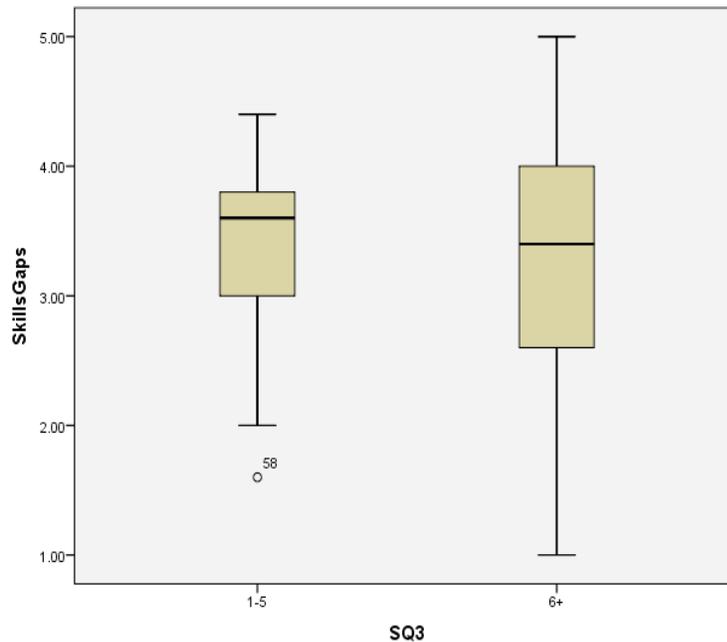


Figure 10. Scores for Those Teaching 5 or Fewer years and Those Teaching 6 or More Years Perceptions of the Response to Intervention Framework’s Effectiveness in Aiding in the Accurate Identification of Students with Learning Disabilities.

Ho3<sub>3</sub>: There is not a significant difference in the perceptions of Response to Intervention in helping close skills gaps for students between teachers who have taught 5 or fewer years and those who have taught more than 5 years.

An independent-samples t test was conducted to evaluate whether the mean of the perceptions of the Response to Intervention framework’s effectiveness in closing skills gaps differs to a significant extent between K-8 teachers who have taught 5 or fewer years and those who have taught 6 or more years. The effectiveness of closing skills gaps was the dependent variable and the grouping variable was teachers who had taught 5 or fewer years and those who have taught 6 or more years. The test was significant,  $t(212) = .96$ ,  $p = .002$ . Therefore, the null hypothesis was rejected. The  $\eta^2$  index was .004, which indicated a small effect size. Teachers who had taught 5 or fewer years ( $M = 3.40$ ,  $SD = .67$ ) found the

Response to Intervention framework to be significantly more effective at closing skills gaps than those who taught 6 or more years ( $M = 3.26, SD = .95$ ). The 95% confidence interval for the difference in means was  $-.15$  to  $.43$ . Figure 11 shows the distributions for the two groups.

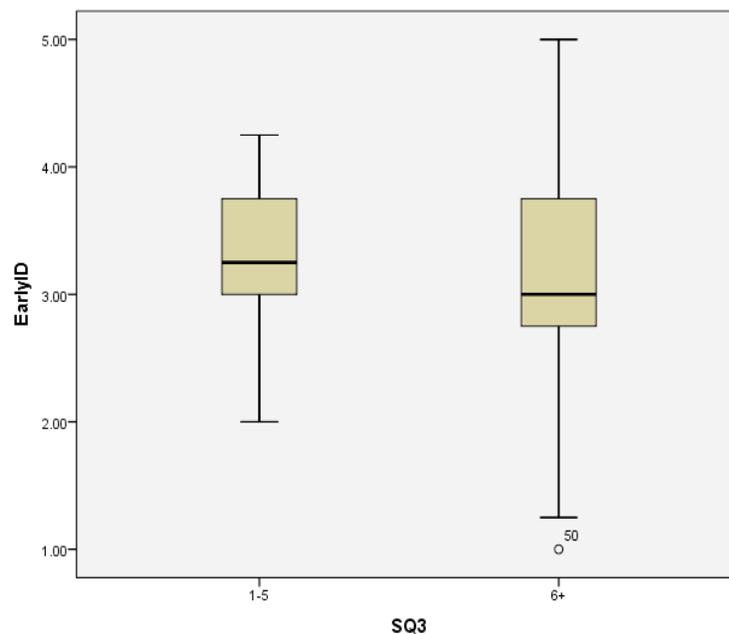


*Figure 11.* Scores for Those Teaching 5 or Fewer years and Those Teaching 6 or More Years Perceptions of the Response to Intervention Framework’s Effectiveness in Closing Skills Gaps.

Ho34: There is not a significance difference in the perceptions of Response to Intervention in aiding in the early identification of students with learning difficulties between teachers who have taught 5 or fewer years and those who have taught more than 5 years.

An independent-samples t test was conducted to evaluate whether the mean of the perceptions of the Response to Intervention framework’s effectiveness in aiding in early identification of students with learning difficulties differs to a significant extent between K-

8 teachers who have taught 5 or fewer years and those who have taught 6 or more years. The effectiveness of aiding in early identification of students with learning difficulties was the dependent variable and the grouping variable was teachers who had taught 5 or fewer years or 6 or more years. The test was significant,  $t(218) = 1.07$ ,  $p = .015$ . Therefore, the null hypothesis was rejected. The  $\eta^2$  index was .01, which indicated a small effect size. Teachers who had taught 5 or fewer years ( $M = 3.25$ ,  $SD = .55$ ) found Response to Intervention to be significantly more effective at early identification of students with learning difficulties than those teaching 6 or more years ( $M = 3.12$ ,  $SD = .77$ ). The 95% confidence interval for the difference in means was -.11 to .36. Figure 12 shows the distributions for the two groups.



*Figure 12.* Scores for Those Teaching 5 or Fewer years and Those Teaching 6 or More Years Perceptions of the Response to Intervention Framework’s Effectiveness in Aiding in the Early Identification of Students with Learning Difficulties.

#### Research Question 4

Research Question 4: Is there a significant difference in perceptions of Response to Intervention between teachers who teach elementary, intermediate, or middle school grades?

Ho<sub>4</sub><sub>1</sub>: There is not a significant difference in overall perceptions of Response to Intervention between teachers who teach elementary, intermediate, or middle school grades.

A one-way analysis of variance was conducted to evaluate the relationship between grade level taught and the perceptions of overall effectiveness of the Response to Intervention framework. The grouping variable, grade level taught, included three levels: kindergarten through second grade, third grade through fifth grade, and sixth grade through eighth grade. The dependent variable was the overall effectiveness score of the Response to Intervention framework. The ANOVA was significant,  $F(2, 192) = 3.14$ ,  $p = .045$ . Therefore, the null hypothesis was rejected. The strength of the relationship between perceptions of overall effectiveness of the Response to Intervention framework, as assessed by  $\eta^2$ , was small to medium (.03).

Because the overall  $F$  test was significant, post hoc multiple comparisons were conducted to evaluate pairwise difference among the means of the three groups. A Tukey procedure was selected for the multiple comparisons because equal variances were assumed. There was significant difference between the means of those who taught kindergarten through second grade and those who taught sixth through eighth grade ( $p = .036$ ). However, there was not a significant difference between those who taught kindergarten through second grade and those who taught third through fifth grade

( $p = .304$ ), as well as between those who taught third through fifth grade and those who taught sixth through eighth grade ( $p = .425$ ). It appears that there is a difference in perceptions of overall effectiveness of the Response to Intervention framework between those teaching in kindergarten through second grade and those teaching sixth through eighth grade, kindergarten through second grade teachers viewing it significantly more effective than those teaching in sixth through eighth grade. The 95% confidence intervals for the pairwise differences, as well as, the means and standard deviations for the three grade level groups, are reported in Table 1.

Table 1

*Perceptions of RTI Overall Effectiveness*

Grade Level	N	M	SD	K-2	3-5
K-2	62	3.34	.09		
3-5	82	3.17	.08	-.10 to .44	
6-8	51	3.19	.10	.02 to .63	-1.36-.44

Ho4<sub>2</sub>: There is not a significant difference in the perceptions of Response to Intervention as aiding in the accurate identification of students with learning disabilities between teachers who teach elementary, intermediate, or middle school grades.

A one-way analysis of variance was conducted to evaluate the relationship between grade level taught and perceptions of the Response to Intervention framework effectively aiding in the accurate identification of students with learning disabilities. The grouping variable, grade level taught, included three levels: kindergarten through second grade,

third grade through fifth grade, and sixth grade through eighth grade. The dependent variable was the effectiveness score of Response to Intervention in aiding in the accurate identification of students with learning disabilities. The ANOVA was not significant,  $F(2, 216) = .23, p = .792$ . Therefore, the null hypothesis was retained. The strength of the relationship between perceptions of the Response to Intervention framework aiding in the accurate identification of students with learning disabilities, as assessed by  $\eta^2$ , was small (.002). The results indicate that the effectiveness score of the Response to Intervention framework accurately identifying students with learning disabilities was not significantly affected by grade level taught. The means and standard deviations for the three grade level groups are reported in Table 2.

Table 2

*Perceptions of Effectiveness of the RTI Framework in Accurately Identifying Students with Learning Disabilities*

Grade Level	N	M	SD
K-2	72	3.13	.73
3-5	90	3.11	.84
6-8	57	3.04	.88

Ho<sub>43</sub>: There is not a significant difference in the perceptions of Response to Intervention in helping close skills gaps for students between teachers who teach elementary, intermediate, or middle school grades.

A one-way analysis of variance was conducted to evaluate the relationship between grade level taught and perceptions of the Response to Intervention framework effectively

closing skills gaps for students. The grouping variable, grade level taught, included three levels: kindergarten through second grade, third grade through fifth grade, and sixth grade through eighth grade. The dependent variable was the effectiveness score of the Response to Intervention framework closing skills gaps for students. The ANOVA was not significant,  $F(2, 210) = 1.37, p = .256$ . Therefore, the null hypothesis was retained. The strength of the relationship between perceptions of the Response to Intervention framework closing skills gaps for students, as assessed by  $\eta^2$ , was small (.01). The results indicate that the effectiveness score of Response to Intervention closing skills gaps was not significantly affected by grade level taught. The means and standard deviations for the three grade level groups are reported in Table 3.

Table 3

*Perceptions of Effectiveness of the RTI Framework in Closing Skills Gaps of Students*

Grade Level	N	M	SD
K-2	68	3.43	.83
3-5	90	3.23	.92
6-8	55	3.20	.89

Ho4<sub>4</sub>: There is not a significance difference in the perceptions of Response to Intervention in aiding in the early identification of students with learning difficulties between teachers who teach elementary, intermediate, or middle school grades.

A one-way analysis of variance was conducted to evaluate the relationship between grade level taught and perceptions of the Response to Intervention framework effectively aiding in the early identification of students with learning difficulties. The grouping

variable, grade level taught, included three levels: kindergarten through second grade, third grade through fifth grade, and sixth grade through eighth grade. The dependent variable was the effectiveness score of the Response to Intervention framework aiding in the early identification of students with learning difficulties. The ANOVA was not significant,  $F(2, 216) = .47, p = .628$ . Therefore, the null hypothesis was retained. The strength of the relationship between perceptions of Response to Intervention aiding in the early identification of students with learning difficulties, as assessed by  $\eta^2$ , was small (.004). The results indicate that the effectiveness score of the Response to Intervention framework effectively aiding in the early identification of students with learning difficulties was not significantly affected by grade level taught. The means and standard deviations for the three grade level groups are reported in Table 4.

Table 4

*Perceptions of Effectiveness of the RTI Framework in Early Identification of Students with Learning Difficulties*

Grade Level	N	M	SD
K-2	71	3.21	.71
3-5	89	3.14	.77
6-8	59	3.09	.72

Research Question 5

Research Question 5: Is there a significant difference in perceptions of Response to Intervention between teachers whose highest degree is at the baccalaureate level and those who have earned graduate degrees?

Ho5<sub>1</sub>: There is not a significant difference in overall perceptions of Response to Intervention between teachers whose highest degree is at the baccalaureate level and those who have earned graduate degrees.

An independent-samples t test was conducted to evaluate whether the mean of the perceptions of the Response to Intervention framework's overall effectiveness differs to a significant extent between K-8 teachers whose highest degree is at the baccalaureate level and those who have earned graduate degrees. The overall effectiveness was the dependent variable and the grouping variable was whether one's highest degree was at the baccalaureate level or a graduate degree. The test was not significant,  $t(193) = .74$ ,  $p = .871$ . Therefore, the null hypothesis was retained. The  $\eta^2$  index was .002, which indicated a small effect size. Teachers whose highest degree was at the baccalaureate level ( $M = 3.24$ ,  $SD = .72$ ) had similar means to those whose highest degree were graduate degrees ( $M = 3.16$ ,  $SD = .69$ ). The 95% confidence interval for the difference in means was -.14 to .30. Figure 13 shows the distributions for the two groups.

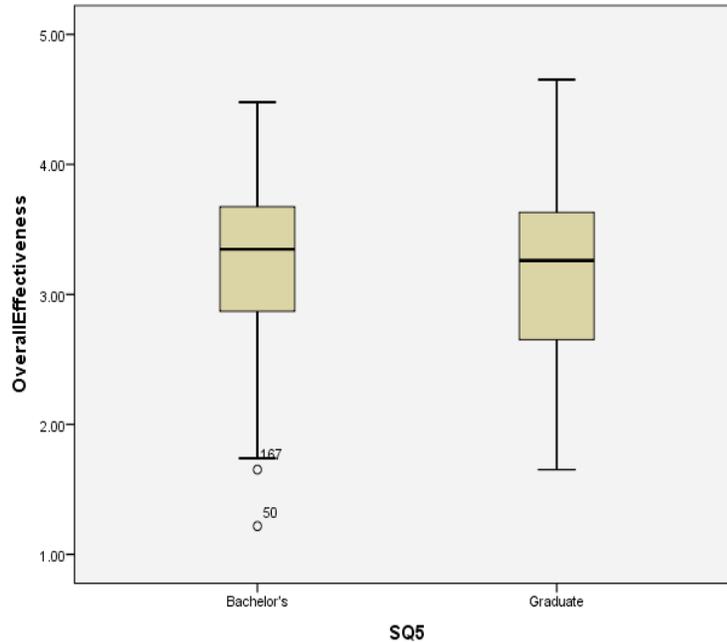
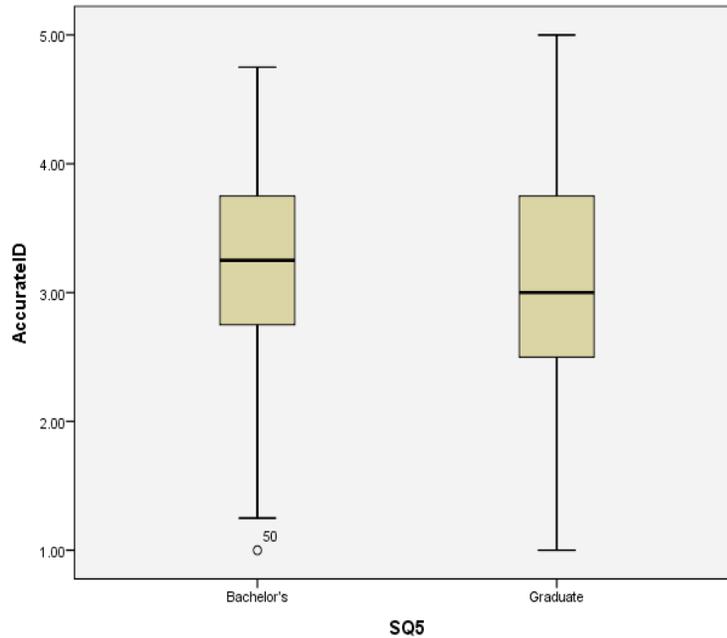


Figure 13. Scores for Those Whose Highest Degree was the Baccalaureate level and Those Who Had Earned a Graduate Degree Perceptions of Overall Effectiveness of Response to Intervention.

Ho5<sub>2</sub>: There is not a significant difference in the perceptions of Response to Intervention as aiding in the accurate identification of students with learning disabilities between teachers whose highest degree is at the baccalaureate level and those who have earned graduate degrees.

An independent-samples t test was conducted to evaluate whether the mean of the perceptions of the Response to Intervention framework's effectiveness in aiding in accurate identification of students with learning disabilities differs to a significant extent between K-8 teachers whose highest degree is at the baccalaureate level and those who have earned graduate degrees. The effectiveness of aiding in accurate identification of students with learning disabilities was the dependent variable and the grouping variable was whether one's highest degree was at the baccalaureate level or a graduate degree The test was not

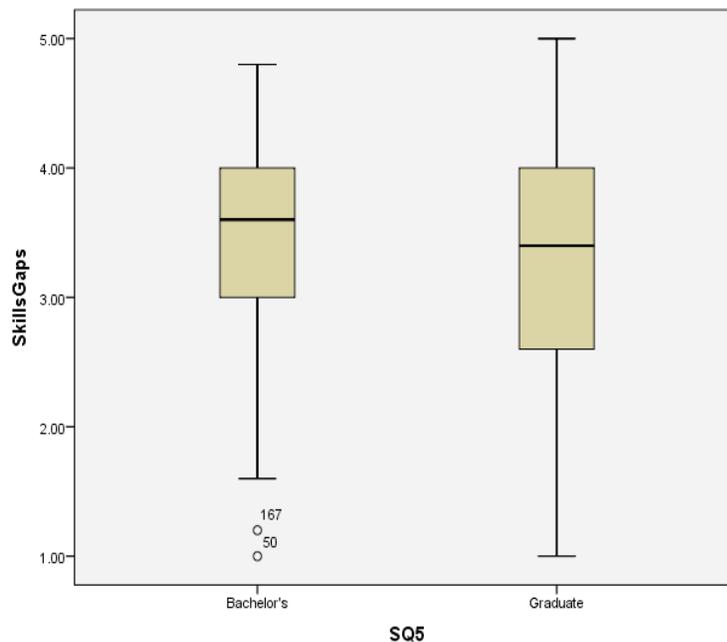
significant,  $t(217) = 1.04$ ,  $p = .188$ . Therefore, the null hypothesis was retained. The  $\eta^2$  index was .01, which indicated a small effect size. Teachers whose highest degree was at the baccalaureate level ( $M = 3.19$ ,  $SD = .80$ ) had similar means to those whose highest degrees were graduate degrees ( $M = 3.07$ ,  $SD = .83$ ). The 95% confidence interval for the difference in means was  $-.11$  to  $.37$ . Figure 14 shows the distributions for the two groups.



*Figure 14.* Scores for Those Whose Highest Degree was the Baccalaureate level and Those Who Had Earned a Graduate Degree Perceptions of the Effectiveness of the Response to Intervention framework in Aiding in the Accurate Identification of Students with Learning Disabilities.

Ho5<sub>3</sub>: There is not a significant difference in the perceptions of Response to Intervention in helping close skills gaps for students between teachers whose highest degree is at the baccalaureate level and those who have earned graduate degrees.

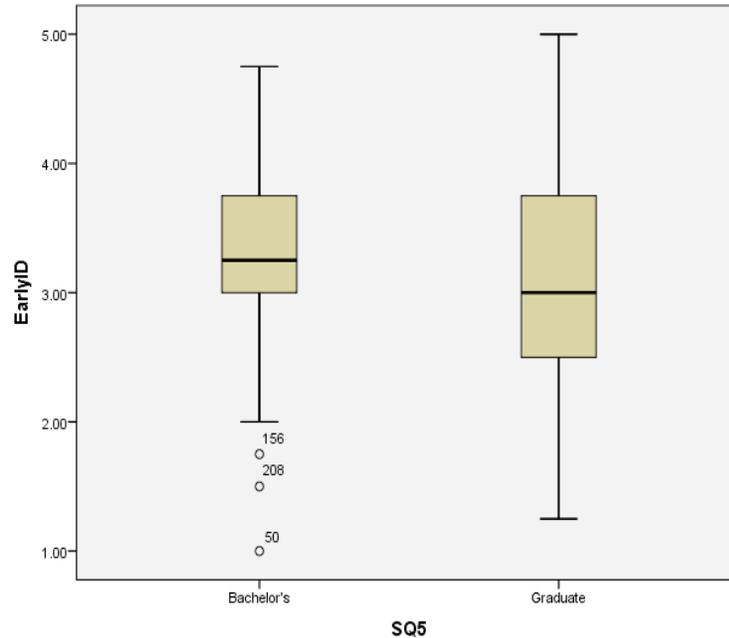
An independent-samples t test was conducted to evaluate whether the mean of the perceptions of the Response to Intervention framework’s effectiveness in closing skills gaps differs to a significant extent between K-8 teachers whose highest degree is at the baccalaureate level and those who have earned graduate degrees. The effectiveness of closing skills gaps was the dependent variable and the grouping variable was whether one’s highest degree was at the baccalaureate level or a graduate degree. The test was not significant,  $t(211) = .81$ ,  $p = .420$ . Therefore, the null hypothesis was retained. The  $\eta^2$  index was .003, which indicated a small effect size. Teachers whose highest degree was at the baccalaureate level ( $M = 3.36$ ,  $SD = .86$ ) had similar means to those whose highest degrees were graduate degrees ( $M = 3.25$ ,  $SD = .91$ ). The 95% confidence interval for the difference in means was  $-.16$  to  $.38$ . Figure 15 shows the distributions for the two groups.



*Figure 15. Scores for Those Whose Highest Degree was the Baccalaureate level and Those Who Had Earned a Graduate Degree Perceptions of the Effectiveness of the Response to Intervention framework in Closing Skills Gaps.*

Ho5<sub>4</sub>: There is not a significance difference in the perceptions of Response to Intervention in aiding in the early identification of students with learning difficulties between teachers whose highest degree is at the baccalaureate level and those who have earned graduate degrees.

An independent-samples t test was conducted to evaluate whether the mean of the perceptions of the Response to Intervention framework's effectiveness in aiding in early identification of students with learning disabilities differs to a significant extent between K-8 teachers whose highest degree is at the baccalaureate level and those who have earned graduate degrees. The effectiveness of aiding in early identification of students with learning disabilities was the dependent variable and the grouping variable was whether one's highest degree was at the baccalaureate level or a graduate degree. The test was not significant,  $t(217) = 1.72$ ,  $p = .653$ . Therefore, the null hypothesis was retained. The  $\eta^2$  index was .01, which indicated a small effect size. Teachers whose highest degree was at the baccalaureate level ( $M = 3.29$ ,  $SD = .72$ ) had similar means to those whose highest degree were graduate degrees ( $M = 3.10$ ,  $SD = .74$ ). The 95% confidence interval for the difference in means was -.03 to .41. Figure 16 shows the distributions for the two groups.



*Figure 16.* Scores for Those Whose Highest Degree was the Baccalaureate level and Those Who Had Earned a Graduate Degree Perceptions of the Effectiveness of the Response to Intervention framework in Aiding in the Early Identification of Students with Learning Disabilities.

### Chapter Summary

In this chapter data obtained from K-8 Regular education teacher participants were analyzed. There were five research questions and 20 null hypotheses. All data were collected through an online survey distributed to 1,036 K-8 regular education teachers working four East Tennessee school districts resulting in a 28% return rate with 277 participant responses. Research question 1's results indicated that teachers perceived the Response to Intervention framework to be significantly effective in the following three areas: as an overall framework, in closing skills gaps for student, and aiding in the early identification of students with learning difficulties. However, teachers did not perceive it to

be significantly effective in aiding in the accurate identification of students with learning disabilities. Research question 2's results indicated that those who taught in city schools and those who taught in county schools did not perceive the effectiveness of the Response to Intervention framework differently to a significant extent. Research question 3's results indicated that teachers who have taught 5 years or less and those who have taught 6 or more years perceived the effectiveness of Response to Intervention differently to a significant extent in overall effectiveness, closing of skills gaps, and early identification of students with learning difficulties; those teaching 5 years or less viewed it as being significantly effective. There was not a significant difference in perceptions of effectiveness of Response to Intervention aiding in the accurate identification of students with learning disabilities between those teaching 5 years or less and those who have taught 6 or more years. Research question 4 indicated there were no significant differences in perceptions of Response to Intervention effectiveness between grade levels Kindergarten through second grade, third grade through fifth grade, and sixth grade through eighth grade in all areas except overall effectiveness. Results indicated a significant difference in the perception of overall effectiveness of Response to Intervention between those teaching kindergarten through second grade and those teaching sixth through eighth grade; those teaching in kindergarten through second grade found it to be significantly more effective. Research question 5's results indicated that there was not a significant difference in perceptions regarding Response to Intervention effectiveness between those whose highest degree is at the baccalaureate level and those with graduate degrees.

## CHAPTER 5

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter contains the findings, conclusions, and recommendations for readers who may use the results as a resource when beginning to implement or revising Response to Intervention frameworks. The purpose of this study was to investigate K-8 regular education teachers' perceptions over the effectiveness of the Response to Intervention framework. The study was conducted using data collect through an online survey of K-8 teachers in four East Tennessee school districts.

#### Summary of the Study

The statistical analysis reported in the study was based on five research questions and 20 null hypotheses presented in Chapters 1 and 3. Research question 1 was analyzed using a single-sample t test. Research questions 2, 3, and 5 were analyzed using an independent t test. Research question 4 was analyzed using an ANOVA. Two hundred seventy-seven K-8 regular education teachers participated in the online survey. The level of significance used in each test was set at the .05 level. Findings indicated that teachers perceived the framework to be effective overall, in closing skills gaps for students, and in aiding in the early identification of student with learning difficulties. There were no significant differences between the perceptions of those who have earned baccalaureate degrees and those who have earned graduate degrees as well as between those who taught in city schools versus county schools.

## Conclusions

The purpose of this study was to investigate K-8 regular education teachers' perceptions of the effectiveness of the Response to Intervention framework. Specifically, this study was an examination of K-8 teachers' perceptions on effectiveness of RTI to accurately identify students with learning disabilities, close skills gaps for students, and aid in early identification of students with learning difficulties. This study included five research questions and 20 null hypotheses. The questions and findings are presented below.

### *Research Question 1:*

The results indicate that teachers perceived the Response to Intervention framework to be effective overall to a significant extent. They also found it to be effective to a significant extent in closing skills gaps for students and aiding in early identification of students with learning difficulties. It was not found to be effective to a significant extent in aiding in the accurate identification of students with learning disabilities.

This finding is congruent with other research where teachers perceived that their use of the Response to Intervention framework aided in their students' academic growth (Adams, 2013). The literature also noted that the use of the Response to Intervention framework could help in identifying students with learning difficulties earlier in their educational careers (Buffum et al., 2010; Fuchs & Fuchs, 2006; Gersten & Domino, 2006). Teachers in this study perceived that the RTI framework was effective in helping with early identification which supports previous findings

The correlation between closing skills gaps and the RTI framework was also reported throughout the literature. Teachers indicated that they felt they were able to effectively collect and use progress monitoring data associated with the RTI program (Adams, 2013). Teachers were also found to be using data associated with the RTI process to aid in identifying skills and adjusting practices to meet the needs of students (Cowan & Maxwell, 2015; Swanson et al., 2012; Werts et al., 2014). This study corroborated these findings; teachers indicated that they perceive the RTI framework as effectively helping close skills gaps.

Although the primary focus of Response to Intervention was the accurate identification of students, the literature suggested that the framework has evolved to ensuring that all students are receiving appropriate instruction (Fuchs & Vaughn, 2012; Johnston, 2010). The state of Tennessee's guidelines (2015) also stated that the framework is not solely focused on the identification of students with learning disabilities. This focus could be evident in the lack of effectiveness perceived in the RTI framework within this study.

*Research Question 2:*

The results indicated that there was no significant difference found in the perceptions of those teaching in city schools and those teaching in county schools. It is however notable that city school teachers perceived RTI to be more effective in all areas, even though the perceived difference was not significant.

Previous research was not indicative that there was a difference in the implementation of the Response to Intervention program between those teaching in city schools and county

schools. Throughout the literature it was indicated that a lack of resources was a significant barrier to implementation process (Swanson et al., 2012; Werts et al., 2014). The city school districts in this study have more financial resources than those in county. The findings of this study indicate that the resources allocated have not impacted perceptions of effectiveness to a significant extent.

*Research Question 3:*

The results indicated there was not a significant difference found in those teaching five years or less and those teaching six years or more in the perceptions of effectiveness of the RTI framework in accurately identifying students with learning disabilities. There were significant differences found in those who have taught 5 or fewer years and those who have taught 6 or more years in effectiveness overall, in closing skills gaps, and early identification of students with reading difficulties. Teachers who had taught 5 years or fewer perceived Response to Intervention as being more effective than those teaching 6 or more years.

The literature suggested that current teacher preparation programs are implementing practices associated with the Response to Intervention framework (Harvey et al., 2010). Although not taught explicitly, most preservice teachers have had some exposure to the process and framework (Barrio & Combes, 2015; Harvey et al., 2010; Prasse et al., 2012). Previous research suggested that a major barrier to implementation for educators is a lack of professional development they received in understanding the framework and its processes (Castro-Villarreal et al., 2014; Regan et al., 2015; Werts et al., 2014; Wilcox et al., 2013). This study indicated that those who have recently graduate from

these teacher preparation programs, teaching 5 or fewer years, find it more effective than those teaching 6 or more years. This difference could be attributed to the lack of exposure a veteran teacher has had to the processes associated with the framework.

#### *Research Questions 4:*

The results indicated there were no significant differences found in the perception of the effectiveness of RTI in aiding in the accurate identification of students with disabilities, closing skills gaps, and aiding in the early identification of students with learning difficulties in primary, intermediate, and middle grades teachers. There was also not a significant difference in the perception of the RTI framework's overall effectiveness between primary grades teachers and intermediate grades teachers as well as those teaching in intermediate grades and those teaching in middle grades. A statistically significant difference was revealed between those teaching in the primary grades and those teaching in the middle grades. There has been a lack of research in the area of RTI in the middle grades (Fagella-Luby & Wardwell, 2011; Prewett et al., 2012; Pyle & Vaughn, 2012). Research suggests that RTI will look different in the upper grades as opposed to primary and intermediate grades (Prewett et al., 2012; Pyle & Vaughn, 2012). Tennessee's guidelines have very few differences between guidelines for primary, intermediate, and middle grade students (Tennessee Department of Education, 2015). Findings from this study indicate that when following the implementation process currently in place those teaching middle grades do not feel as if it is as effective as those teaching in primary grades. This supports research that middle grades Response to Intervention framework should look different than that being implemented in the primary grades setting.

*Research Question 5:*

The results indicated that there were no significant differences in those whose highest degree was at the baccalaureate level and those who had earned a graduate degree perceptions of the effectiveness of RTI overall, in accurate identification of students with learning disabilities, closing skills gaps, and early identification of student with learning difficulties. This indicated that the level of education does not effect the perception of effectiveness of the Response to Intervention program.

Recommendations for Practice

The findings and conclusions of this study have identified the following recommendations for practice regarding the Response to Intervention framework.

1. The significant difference in the perceived effectiveness between teachers teaching in primary grades and those teaching in middle grades indicated that there should be further analysis of programs in the primary setting and those in the middle grades setting. District and state leaders should determine factors that may affect the perceptions that teachers have of the program. Professional development that is specifically geared to RTI in the middle school setting is also recommended.
2. The significant difference perceived between those teaching in primary grades and those teaching in middle grades indicate that there is also a need of review of guidelines for middle and secondary grades RTI. State and district leaders should determine if guidelines in place are following best practices for implantation of the Response to Intervention framework in the middle and secondary school settings.

3. District leaders should inquire as to why teachers do not feel as if RTI is effective in the accurate identification of students with disabilities. Determining whether it is the particular processes of the framework that they feel is impeding the success of that particular facet of the program or whether teachers feel as if the framework itself is not effective in accurate identification of students with disabilities can help determine next steps. If it is found that teachers feel the processes associated with RTI are impeding the success revisions may need to be made to increase effectiveness.
4. Due to the significant difference found between those who have taught 5 or fewer years and those who have taught 6 or more years in perceptions of the RTI framework in three of the four areas, district leaders may want to inquire about the perceptions that veteran teachers have about the RTI framework. Professional development for veteran teachers may be necessary to aid them in understanding the instructional shift and proper implementation if it is found that that is a hindrance in effectiveness.
5. The significant difference found between those who have taught 5 or fewer years and those who have taught 6 or more years also prompts an inquiry into whether implementation of RTI is different between the groups. Determining the use of resources as well as the ability to use resources given effectively may provide understanding to difference in perceptions.
6. Although there was not a significant difference in perceptions, those teaching in city schools did perceive the RTI framework to be more effective than those teaching in

county schools. District leaders should investigate practices and resources being used within the city districts that could increase effectiveness of the RTI program.

7. Because of the varied learning styles of teachers, it would be recommended to provide multiple types of professional development over the Response to Intervention framework. This could include providing training that is web-based as well as provided face-to-face.
8. Professional development could be more beneficial if broken down into specific topics dealing with the Response to Intervention framework. By breaking down the specific areas of Response to Intervention, teachers could select the areas they felt least prepared to implement for training which would provide more time for in depth coverage of the area.

#### Recommendations for Future Research

The results of this study indicate that K-8 regular education teachers perceived the Response to Intervention framework to be effective overall. They also perceive it to be effective in closing skills gaps and aiding in the early identification of students with learning difficulties. The following are recommendations for future research.

1. Teachers did not perceive RTI effective to a significant extent in aiding in the accurate identification of students with learning disabilities. Studies to further investigate the perception of a lack of effectiveness in accurate identification of students with learning disabilities is recommended.
2. Conducting a mixed methods study to determine if there is a correlation between a teachers' perceptions of the program and the growth outcomes of his students. This

would help gain insight to whether perceptions, negative or positive, affected student outcomes in the same direction.

3. An investigation to determine if there is difference in the practices and resources of those with a positive perception of RTI and those with a negative perception of RTI would be beneficial. Understanding the differences would help determine if there are any patterns related to positive perceptions and negative perceptions. A study such as this may provide insight when deciding best practices and resources.
4. Expand the sample to include various districts across Tennessee that are at different stages of the implementation process as well as those with varying demographics to determine if the perception of effectiveness is affected. This would aid in determining the need for support in areas with a specific demographic and parts of implementation if a difference is found.
5. Future research should also include investigating whether the average number of students placed in special education services has declined or increased due to the use of RTI. This would help in determine whether RTI is increasing or decreasing identification of students with learning disabilities.
6. A comparison of the average age of students placed in special education before and after implementation of RTI would also be beneficial research. This research would potentially indicate whether students were receiving special education services earlier in their career due to the RTI framework.
7. Further comparisons of perceptions of special education teachers and regular education teachers could be beneficial to understanding where differences exist

between the two. This may also provide insight as to how the implementation of RTI has affected both areas of education.

8. There is more research needed over the Response to Intervention framework in middle and secondary school settings. There is relatively little research over how implementation at the middle school level is most effective as well as the effectiveness of RTI in the middle school setting. This information would be potentially beneficial in aiding in the creation of guidelines for students in grades 6-12.
9. There is a need for more research on teacher preparation programs. It would be beneficial to know if preservice teachers perceive their programs to adequately prepare them for implementation of the framework. Additionally, it may be valuable to investigate if there are any similarities in preparation programs among those who feel prepared for implementation.

### Chapter Summary

The purpose of this qualitative study was to identify the perceptions that K-8 teachers had on the Response to Intervention framework. More specifically the study investigated perceptions of effectiveness of the framework overall, in aiding in the accurate identification of students as learning disabled, closing skills gaps for students, and aiding in early identification of students with learning difficulties. This study found that teachers perceived the Response to Intervention framework as significantly effective overall, in closing skills gaps, and aiding in the early identification of student with learning difficulties. Teachers did not perceive the framework to be effective to a significant extent in aiding in

the accurate identification of students with disabilities. Conclusions of this study were reported with connections to previous literature as well as recommendations for practice and future research.

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## APPENDICES

### Appendix A

#### Letter to Teachers

Dear Teacher,

My name is Whitney Bruner and I am a doctoral candidate in the Educational Leadership and Policy Analysis (ELPA) program at East Tennessee State University (ETSU). I am currently conducting research for my dissertation. The purpose of this study is to identify the perceptions of K-8 regular education teachers over the effectiveness of the Response to Intervention (RTI) framework.

Your school system has agreed to participate in this study. As a regular education teacher in Kindergarten through eighth grade, I invite you to complete a survey regarding your perceptions of the effectiveness of the Response to Intervention framework in place at your school. The survey will take approximately ten minutes of your time.

Participation in the study is completely voluntary. Responses will not be linked to any identifiable information. You will have the ability to skip any question throughout the survey.

I hope you consider taking part in this survey as the results may help area schools systems improve the RTI framework.

Please complete the survey by May 27<sup>th</sup>.

Thank you for your time and consideration of this request. If you have any questions, please feel free to contact me at [bruner@goldmail.etsu.edu](mailto:bruner@goldmail.etsu.edu).

Sincerely,

Whitney Bruner  
Ed.D Candidate, ETSU

## Appendix B

### Teacher Consent Form

Dear Participant,

My name is Whitney Bruner and I am a doctoral candidate in the Educational Leadership and Policy Analysis (ELPA) program at East Tennessee State University (ETSU). I am currently conducting research for my dissertation. The title of my dissertation is Response to Intervention: K-8 Regular Education Teachers' Perspectives.

The purpose of this study is to identify whether teachers perceive the Response to Intervention framework as effective. In addition to determining whether teachers perceive the framework effective overall, it will also identify whether teachers perceive the framework to be effective in the following ways: 1) more accurately identifying students with learning disabilities, 2) closing skills gaps for students, 3) early identification of students with learning difficulties. I would like to give teachers a brief survey using Survey Monkey. It should only take 5-10 minutes to complete. You will select your degree of agreement to statements about the Response to Intervention (RTI) framework. Since this study deals with perceptions, no risk to participants is expected. However, this study can be beneficial by adding to the current literature about the RTI framework.

Your confidentiality will be maintained to the degree permitted by the technology used. Specifically, no guarantees can be made regarding the interception of data sent via the Internet by any third parties, as is the case with emails. Every effort will be made to ensure that names are not attached to any responses. Survey Monkey has security features that will be enabled, such as SSL encryption software, to reduce this risk. There will also not be collection of IP addresses. Although your rights and privacy will be maintained, the ETSU IRB and personnel particular to this study (myself and faculty adviser Dr. Virginia Foley) will have access to the study records.

Participation is completely voluntary and the decision to decline participation will not effect you negatively. You will have the option to skip any questions you feel uncomfortable answering, as well as quit at any time without submitting responses.

If you have any research related questions or problems, you may contact me, Whitney Bruner, at bruner@goldmail.etsu.edu. You may also contact the Institutional Review Board (IRB) at ETSU at (423) 439-0054 if you have any questions about your right as a research subject.

Sincerely,

Whitney Bruner  
Ed. D Candidate, ETSU

Appendix C

Response to Intervention Effectiveness Survey

Demographic Information

1. What is the area in which you provide intervention or the area in which you teach?

- Reading
- Math
- Both

2. What is the county/district in which you teach?

- Sevier County
- Carter County
- Kingsport City
- Maryville City

3. How many years have you taught?

- 1-5 years
- 6-10 years
- 11-15 years
- 16+ years

4. What grade level do you teach?

- K-2
- 3-5
- 6-8

5. What is the highest degree you have earned?

- Bachelor's Degree
- Master's Degree
- Educational Specialist
- Doctor of Education

Please indicate the concentration of your graduate degree. \_\_\_\_\_

Response to Intervention (RTI) Effectiveness

6. RTI is a valuable use of my time as a teacher.

- |                      |          |         |       |                   |
|----------------------|----------|---------|-------|-------------------|
| 1                    | 2        | 3       | 4     | 5                 |
| Strongly<br>Disagree | Disagree | Neutral | Agree | Strongly<br>Agree |

7. RTI is beneficial to my students' academic growth.

- |   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

8. RTI has helped correctly identify students needing special education services.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

9. RTI has helped to prevent students from being misidentified as learning disabled.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

10. The number of students who have been identified as learning disabled has decreased.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

11. My ability to differentiate between students with a learning disability and those with reading difficulties has improved.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

12. Assessments from RTI have encouraged me to utilize student data for meeting the needs of students in Tier II and III.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

13. Through RTI procedures, I have gained better insight that has enabled me to become a more effective teacher.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

14. RTI should be continued due to its beneficial factors on students' educations.

1                      2                      3                      4                      5

Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

15. Time allotted to Tier II students is reasonable to help achieve expected growth.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

16. Time allotted to Tier III students is reasonable to help achieve expected growth.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

17. Too much time is focused on Tier II students.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

18. Too much time is focused on Tier III students.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

19. Tier I students are not scoring as well due to focus on Tier II and III students.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

20. RTI has helped identify students who have reading difficulties at an earlier age in order to prevent skills gaps.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

21. There has been an increase in the percentage of students meeting benchmark goals after receiving intervention.

1                      2                      3                      4                      5

Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

22. I feel adequately prepared to provide intervention for Tier II students.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

23. I feel adequately prepared to provide intervention for Tier III students.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

24. I have been provided with support materials to aid in providing intervention for Tier II and Tier III students.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

25. I have been provided with support materials to aid in providing intervention for Tier III students.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

26. Students are not being identified as having learning difficulties earlier as a result of using the RTI framework.

1                      2                      3                      4                      5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

27. I am able to help students at the first signs of learning difficulties.

1                      2                      3                      4                      5

Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

28. As a result of each student taking a universal screener I am able to identify students with learning difficulties earlier.

1                                  2                                  3                                  4                                  5  
Strongly Disagree      Disagree      Neutral      Agree      Strongly Agree

29. Please list any materials or programs that are used for Response to Intervention implementation.

30. Please add any optional, additional comments.

VITA

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