

Texas Southern University

## Digital Scholarship @ Texas Southern University

---

Dissertations (2016-Present)

Dissertations

---

12-2022

### Teacher Perceptions of Tier 2 Reading Interventions

Marlena Robinson

Follow this and additional works at: <https://digitalscholarship.tsu.edu/dissertations>

---

#### Recommended Citation

Robinson, Marlena, "Teacher Perceptions of Tier 2 Reading Interventions" (2022). *Dissertations (2016-Present)*. 54.

<https://digitalscholarship.tsu.edu/dissertations/54>

This Dissertation is brought to you for free and open access by the Dissertations at Digital Scholarship @ Texas Southern University. It has been accepted for inclusion in Dissertations (2016-Present) by an authorized administrator of Digital Scholarship @ Texas Southern University. For more information, please contact [haiying.li@tsu.edu](mailto:haiying.li@tsu.edu).

**TEACHER PERCEPTIONS OF TIER 2 READING INTERVENTIONS**

**DISSERTATION**

Presented in partial Fulfillment of the Requirements for  
the Degree of Doctor of Education in the Graduate School  
of Texas Southern University

By

Marlena Leticia Robinson, B.S., M.Ed.

Texas Southern University

Fall 2022

Approved by

Reginald L. Todd, Ed.D.  
Chairperson, Dissertation Committee

Gregory H. Maddox, Ph.D.  
Dean, The Graduate School

Approved By

Reginald L. Todd, Ed.D.  
Chairperson, Dissertation Committee

10-20-2022  
Date

Delilah Gonzales, Ed.D.  
Committee Member

10-20-2022  
Date

Holim Song, Ed.D.  
Committee Member

10-20-2022  
Date

Ingrid Haynes, Ph.D.  
Committee Member

10-20-2022  
Date

J. Kenyatta Cavil, Ed.D.  
Committee Member

10-20-2022  
Date

© Copyright by Marlena Leticia Robinson

2022 All Rights Reserved

# **TEACHER PERCEPTIONS OF TIER 2 READING INTERVENTIONS**

By

Marlena Leticia Robinson, Ed.D.

Texas Southern University, 2022

Professor Reginald L. Todd, Advisor

Many students in schools in the United States today are considered at-risk in their reading ability. The disproportionate number of students making inadequate progress places the fate of students at stake. Response to Intervention (RTI) was created to support student growth in reading while reducing the number of students requiring testing for disabilities. This study aims to examine teacher perceptions of RTI reading interventions. Specifically, this study will be concerned with the effects of Tier 2 reading interventions by examining their perceptions of professional development, data and progress monitoring, resources, and support surrounding reading interventions. While an extensive body of research analyzes Response to Intervention and its effects on students' reading achievement, the amount of research on teacher perceptions of reading interventions is amiss.

A quantitative, descriptive research design was used in this study. Likert scale survey research was utilized and analyzed in this study. A total of thirty-six participants completed the survey. Two research questions framed the study. Research question 1 had a mean of 2.2641. Research question 2 had a mean of 2.3114. Open-ended question 1 yielded four themes: time-consuming, inadequate support, large numbers of students in

Tier 2, and resources. Open-ended question 2 yielded two themes: student grouping and ongoing, strategic training needed.

## TABLE OF CONTENTS

	Page
LIST OF TABLES .....	vi
VITA.....	vii
DEDICATION.....	viii
ACKNOWLEDGEMENTS.....	ix
CHAPTERS	
1. INTRODUCTION .....	1
Statement of the Problem.....	4
Statement of Purpose .....	5
Research Questions.....	6
Significance of the Study.....	6
Theoretical Framework.....	7
Assumptions.....	8
Limitations .....	8
Definitions of Terms .....	8
Organization of the Study .....	9
2. LITERATURE REVIEW .....	11
History of Literacy.....	12
Education Reform.....	17

	MTSS/RTI.....	18
	RTI and Student Outcomes .....	28
	RTI and Students with Disabilities .....	31
	Teacher Perceptions of Reading Interventions .....	33
	RTI and Minorities.....	37
	Summary .....	41
3.	METHODOLOGY .....	42
	Research Design.....	42
	Participants.....	43
	Sampling .....	43
	Instrumentation .....	44
	Pilot Study.....	45
	Validity of the Instrument.....	45
	Reliability of the Instrument .....	45
	Data Collection .....	46
	Data Analysis.....	47
	Limitations of the Methodology .....	47
	Summary .....	48
4.	RESULTS .....	49
	Descriptive Statistics.....	49
	Demographic Descriptive Statistics.....	50



Survey Descriptive Statistics .....	52
Open-Ended Question .....	56
Summary .....	59
5. DISCUSSION, IMPLICATIONS, RECOMMENDATIONS	
FOR FURTHER RESEARCH, AND CONCLUSIONS .....	60
Discussion .....	60
Implications.....	62
Limitations .....	64
Recommendations for Further Research.....	64
Conclusion .....	65
APPENDICES .....	66
A. SURVEY INSTRUMENT .....	67
B. IRB APPROVAL LETTER.....	74
C. DISTRICT APPROVAL LETTER.....	76
REFERENCES .....	78

## LIST OF TABLES

Table	Page
1. Grade Level Currently Teaching .....	50
2. Years of Teaching Experience .....	51
3. Highest Level of Education Attained.....	52
4. Teachers' Perceptions of Professional Development and Data/Progress Monitoring.....	53
5. Summary of Responses from Questions 1-11.....	54
6. Resources and Support.....	55
7. Summary of Responses from Questions 12-22.....	56

## VITA

2010.....	Bachelor of Arts University of Houston Houston, TX
2012-2015 .....	Elementary ELA Teacher Aldine ISD Houston, TX
2015.....	Master of Education University of St. Thomas Houston, TX
2015-2017 .....	Reading Specialist Aldine ISD Houston, TX
2017-2021 .....	Elementary ELA Teacher Aldine ISD Houston, TX
2021-Present .....	Reading Teacher Development Specialist Houston ISD Houston, TX
Major Field.....	Curriculum and Instruction

## **DEDICATION**

It is with a humble heart and genuine gratitude that I dedicate this dissertation to my loving parents, Robert and Marcella, who have instilled in me pivotal values that led me to and through this journey. You both have been my greatest teachers and I can only hope to make you proud. Dad, thank you for showing me the value of work ethic and to cherish family. Mom, thank you for teaching me to lean and depend on God. Thank you for always listening and encouraging me to keep going and staying on top of my studies.

I also dedicate this dissertation to my supportive sisters and nephews. My sisters, thank you for your continued support; for having my back through this process and in life. To my nephews, you both are strong, bright young men who I know will change the world. I hope I have made you both proud.

## ACKNOWLEDGEMENTS

I would first like to acknowledge my Lord and savior Jesus Christ for keeping me and giving me the strength to complete this program.

To my family and friends, thank you for your continuous efforts in checking on me throughout this journey. Your motivation did not go unnoticed and helped me to persevere.

To my dissertation chair, Dr. Todd, thank you for your consistent support and encouragement. Your guidance from the beginning is greatly appreciated and never unnoticed. Thank you for always being an email away! I would also like to thank my committee members for their assistance and support, Dr. Cavil, Dr. Gonzales, Dr. Haynes, and Dr. Song. Your knowledge and ideas truly helped. Dr. Saha, thank you for being such a strong leader and champion for students, may you continue to rest in peace.

To all the other faculty at Texas Southern University, I thank you for your support and commitment. It brings me great joy to say I am a graduate of such an illustrious institution.

Lastly, to Kimberly Burks, we did it!! We started this program together and I truly thank you for all our late-night study sessions, zoom writing days, and constant motivation to endure.

# **CHAPTER 1**

## **INTRODUCTION**

Literacy lays the foundation for students to become lifelong, successful learners. This critical education component opens doors for students to succeed in school, the workforce, and society. Many students enter grade school lacking the reading comprehension tools required to perform at or above grade level. If this issue is not addressed for students in school, it can worsen as students matriculate through the education system.

Despite numerous efforts to ensure students make sufficient reading progress at each grade level, there still lies a reading deficit in this country. The results of the National Assessment of Educational Progress (NAEP) (2020) fourth-grade reading assessment from 2019 revealed that students' reading scores decreased compared to the scores from the 2017 reading assessment (NCES, 2021). Additionally, the National Center for Education Statistics (NCES) (2021) reports that only 35 percent of fourth-grade students performed at or above proficient in reading, and only 34 percent of eighth-grade students performed at or above proficient in reading. Similarly, students' scores in grade 12 were two points lower than those of twelfth graders in 2015 (NCES, 2021). In the state of Texas, where this study is conducted, one school district reported having 67% of their students at or approaching grade level in grades 3-8 for their state reading assessment. In the past, low reading achievement, more than any other factor, has been a cause of low-performing schools (Moats, 2020).

Duff et al. (2015) suggested that the reading ability of fourth-graders is an indicator variable associated with reading-related activities that span through tenth grade. Moreover, there is a relationship between how students read at an early age to their literacy in their adolescent years. Consequently, a lack of reading ability and low scores on assessments can cause students to become unmotivated to read (Duff et al., 2015). As a result of failing to meet academic standards, students often develop negative thoughts toward reading and school. Students should feel confident in their reading abilities to be motivated to reach reading achievement. When students are motivated to read, it helps them stay engaged in reading and have better reading success (Barber & Klauda, 2020). If not addressed early on, this disparity has the potential to grow even more prominent and thus places students well below their peers academically even into adulthood. Long-term implications would mean many adults reading at a low rate and lacking literacy skills. This can lead to employers being less likely to hire unskilled workers causing higher rates of unemployment in the United States. Globally, illiteracy and low levels of reading and writing ability cost the economy over 900 billion annually (World Literacy Foundation, 2018). Lower literacy rates have also been linked to adverse health outcomes in individuals (DeWalt et al., 2004).

The United States has continually made provisions to ensure all students have an equal opportunity to receive high-quality instruction. In 1965, the United States passed the Elementary and Secondary Education Act (ESEA) under the leadership of President Lyndon Baines Johnson. This law was enacted to provide equal learning opportunities for all students. Accountability became a point of interest in education when then-President George W. Bush created the No Child Left Behind Act (U.S. Department of Education,

2003). This legislation focused on instruction and a proven method to ensure every child receives a quality education. President Barack Obama continued the push for education by signing the Every Student Succeeds Act (ESSA) in 2015. This education law reauthorized the Elementary and Secondary Education Act and required that U.S. schools provide students with an education that included high standards and supported students to become college and career-ready (U.S. Department of Education, n.d.). According to the U.S. Department of Education (2020), Congress reauthorized the Individuals with Disabilities Education Act (IDEA) in 2004 to provide free and appropriate education to children with disabilities. Under IDEA, local education agencies were now able to use Response to Intervention (RTI) frameworks to identify students who show signs of a learning disability and who may need to be tested for special education (Restori et al., 2009). IDEA laid the foundation to introduce RTI as it permitted RTI to become an option for schools and districts to use as an alternative to the IQ-discrepancy model (Fuchs & Fuchs, 2005; Fuchs & Fuchs, 2006; Savitz et al., 2018). The discrepancy model determines if there is a discrepancy between a child's intellectual ability and academic achievement level (Restori et al., 2009). Schools and school districts utilizing an RTI model have another option in identifying at-risk students early to help reduce the number of students labeled with a disability when they simply require high-quality instruction targeting their deficit skills. Researchers (Fuchs & Fuchs, 2006; Savitz et al., 2018) argued that because the term learning disability was recognized as its own category in the Education of All Handicapped Children Act of 1975, there was a significant increase in the number of students being labeled as learning disabled. In the 2019-2020 school year, 7.3 million, or 14 percent of public-school students aged 3-21 received special education



services under the IDEA. As a result of the newly passed policies, school-wide tiering models were created with Positive Behavior Interventions and Support (PBIS) being introduced in the 1980s and RTI being introduced in the 1990s (Choi et al., 2022). For years, the two models have been viewed separately, but now the two models have merged under a Multi-Tiered System of Support (MTSS) which includes a focus on both behavior and academics (Bailey, 2019; Eagle et al., 2015). Response to Intervention (RTI) has emerged as a potential remedy to the reading disparities among students. Most states in America have some form of RTI framework in place in schools (McInerney & Elledge, 2013). The National Center on Response to Intervention (NCRTI, 2010) defines RTI as:

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

### **Statement of the Problem**

Schools in the United States are more diverse than ever (Brozo, 2010). This diverse culture we live in creates a need to ensure all students receive access to a high-quality education. With this knowledge of diverse schools, there should be a desire from administrators and teachers to cater to the needs of all learners. Children in schools need tools readily available to support their learning needs and teachers need resources. Many

students in schools in the United States today are deemed to be labeled at-risk. The disproportionate number of students making inadequate progress in reading places the fate of students at stake. Students must develop the necessary reading skills to comprehend in school and life.

Teachers face increased classroom sizes, paperwork, and other schoolwide demands. Response to Intervention (RTI) is an added program that teachers are tasked with implementing and carrying out with fidelity for student improvement. While implementing new programs and frameworks, teachers often form their own opinions and perceptions regarding its implementation. Results of teacher perceptions can shape future implementation for other school-wide initiatives. Ciullo et al. (2016) insisted that there need to be more professional development opportunities to increase teacher knowledge to better support students in Tier 2 and Tier 3.

This research study sought to examine teacher perceptions of Tier 2 reading interventions. Specifically, this study sought to determine if teachers providing Tier 2 reading interventions have sufficient knowledge and support in the domains of professional development, data and progress monitoring, resources, and school-wide support. A study of this nature could help this problem by providing stakeholders, administrators, and teachers with evidence of research that can help make necessary changes to better equip practitioners with tools to further support student growth and success.

### **Statement of Purpose**

The purpose of this quantitative study is to examine teacher perceptions of Tier 2 RTI reading interventions of students in a large urban school district in Southeast Texas.

More specifically, this study is concerned with the impact of Tier 2 reading interventions by examining reading teachers' perceptions of professional development, data and progress monitoring, resources, and support for the reading interventions.

The researcher sought to understand the components of an effective RTI framework to understand better how policymakers and teachers can implement the model to bring about increased literacy capacity of students in today's schools.

### **Research Questions**

Answers to the following research questions were sought:

1. How do teachers perceive the impact of their school's established professional development on their ability to provide Tier 2 reading interventions?
2. How do teachers perceive the impact of their school's available resources and support on their ability to provide Tier 2 reading interventions?

### **Significance of the Study**

It is important to understand how teachers feel about the district and schoolwide initiatives and programs as administrators seek to implement them. With insight into teacher perceptions of Tier 2 reading interventions, this study could provide researchers and school leaders with feedback to improve RTI programs. The feedback received could help administrators make decisions on resources, professional development, and instructional support needed to assist teachers. This study is significant to the literacy field as it may provide a context for understanding some of the issues reading intervention teachers face, therefore allowing administrators to make decisions about implementation in the future. Clarity of professional development opportunities, improving the reading abilities of students, and reducing the number of special education

referrals can be some benefits of this study. Finally, the results of this study could provide school administrators with necessary recommendations based on survey results to improve the future of education for students receiving interventions and prevent issues from arising within the RTI school-wide framework.

### **Theoretical Framework**

In the late 1900s, the Russian psychologist Lev Vygotsky created a groundbreaking theory of cognitive development. Within the theory of cognitive development, Vygotsky (1978) believed that learning is connected to development and that learning should correlate with a child's developmental level. A critical concept that emerged within Vygotsky's theory is that of the zone of proximal development (ZPD). According to Vygotsky (1978), ZPD is "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers" (p. 86). This theory aims to teach students a more challenging piece or pieces of information within their mental development as a more experienced teacher or peer assists. This theory will guide the study to highlight how the role of RTI acts within students' zone of proximal development as teachers and interventionists provide specific, targeted interventions to help build the capacity of students reading abilities.

Albert Bandura's (1977) self-efficacy theory is also used as part of the theoretical framework in this investigation. Self-efficacy can be described as an individual's belief in their abilities to produce actions and produce desired outcomes (Bandura, 1977). An individual's perceived self-efficacy can predict willingness to participate in activities and

their behavior toward them. For students, self-efficacy may mean having confidence in word recognition or their comprehension abilities (Barber, 2020). Teachers' perceptions of their self-efficacy can also affect their practices (Poulou et al., 2019). When students have a higher sense of self-efficacy, they tend to perform well in reading activities. When students and teachers have a higher awareness of self-efficacy, it helps in both their academic and professional lives. The self-efficacy theory will also assist the researcher in this investigation by analyzing the participant's perceptions of Tier 2 reading interventions from their responses based on their own perceived self-efficacy.

### **Assumptions**

There are several assumptions surrounding this study:

1. Students were engaged in an RTI intervention program.
2. The research participants completed the survey individually and honestly.
3. The research participants served students in the Tier 2 intervention schedule.

### **Limitations**

The following limitations were observed in this study:

1. The study was limited to reading interventionists as participants.
2. The study was limited to one school district in Southeast Texas.

### **Definition of Terms**

The following terms have been operationally defined to offer a better understanding of the current research.

***At-Risk.*** At-Risk refers to students who have a chance of continuing to fall behind their peers academically

***Renaissance Universal Screener.*** An assessment platform used to determine students' reading proficiency level

***Response to Intervention (RTI).*** A multi-tier approach to identifying students with academic difficulties and providing support to increase achievement

***Teacher Perceptions.*** Teacher's beliefs and opinions of the RTI intervention plan and process on their campus/department

***Tier 1 Reading Interventions.*** Quality, research-based supplemental instruction for students who need added support from classroom learning

***Tier 2 Reading Interventions.*** Quality, research-based targeted instruction for students not making progress on Tier 1 instruction. Students receive support in a small group setting

***Tier 3 Reading Interventions.*** Quality, research-based, individualized instruction for students not making progress in Tier 2 to target a student's deficit skills in reading

***Professional Development.*** Training provided to teachers that support Tier 2 reading interventions and increase knowledge to use data to progress monitor students

***Established Resources.*** Available materials on a school's campus to support Tier 2 reading interventions

***Established Support.*** School-wide personnel on a school's campus to support Tier 2 reading interventions

### **Organization of the Study**

This investigation is organized into five major chapters. Chapter 1 presents the purpose of the study and consists of the introduction, statement of the problem, research questions, significance of the study, theoretical framework, assumptions, limitations,

definitions of terms, and the organization of the study. Chapter 2 consists of a thorough review of the related literature. Chapter 3 discusses the research design and the methodological framework, such as the type of design, population, sampling procedures, instrumentation, validity of the instrument, reliability of the instrument, data-collection procedures, and data analysis. Chapter 4 presents the analysis of the data and includes a discussion of the results. Finally, Chapter 5 provides a discussion, implications, limitations, recommendations for further study, conclusion.

## **CHAPTER 2**

### **LITERATURE REVIEW**

This study examined the experiences of reading teachers as they provide Tier 2 reading interventions to students. In addition, it sought to explain the origin and policies encompassing Response to Intervention (RTI) within a Multi-Tiered System of Support (MTSS) framework, as well as past and present literature concerning literacy and reading education. As Torgesen (1998) shared, children who struggle with reading early on rarely catch up. RTI serves to provide intensive interventions for students who are deemed to be at risk of reading failure. This review will detail research that supports RTI in improving the academic outcomes of struggling readers and provide guidance that will support teachers while implementing an RTI framework. The literature and research reviewed in this chapter include the history of reading, reading education in the United States, RTI, identification of Elementary students, identification of adolescents, RTI and English Learners, RTI and students with disabilities, RTI and professional development, teacher perceptions of reading interventions, and challenges of RTI.

Studies showed there is a need for additional research on the implementation of RTI and in doing so, it may enhance existing intervention practices. Researchers (Preston et al., 2016; Reagan et al., 2015) believed there is little consensus among districts and school leaders on the proper identification of students and movement of students among the various tiers within RTI. For this reason, the researcher attempted to examine issues related to RTI implementation and focus on teachers' perceptions from previous studies that can help shape the future of RTI.



## History of Literacy

Researchers contended that reading and literacy play a crucial role in the future success of students (Chall, 1967; Flesch, 1955). According to Anderson et al. (1985), “reading is the process of constructing meaning from written text. It is a complex skill requiring the coordination of a number of interrelated sources of information” (p.7). Gough and Tunmer (1986) approached reading with a formula known as the simple view of reading. According to Gough and Tunmer (1986), “reading equals the *product* of decoding and comprehension” (p. 7). While some children may have varying degrees of exposure, reading begins at home when a child’s oral language is developed from experiences and knowledge about print and written language is fostered (Anderson et al., 1985). When a student enters school, much emphasis is placed on a child’s ability to learn to read in the primary levels and read to learn in fourth grade and above (Goldman et al., 2016). Chall (1983) classified these aspects as stages of reading development, noting that the process can vary depending on a child’s reading ability. Researchers (Allington, 2013; Mathes & Torgesen, 1998; Moats, 2020; Snow et al., 1998) believed reading failure is primarily preventable. Intervention models such as RTI have emerged to provide high-quality instruction in general education classrooms to remedy this issue.

To understand the role of RTI, it is essential to comprehend the history of literacy and reading development. There have been several developments and debates related to reading since the 1600s. These debates surrounding reading are often referred to as the reading wars and have dated back over two centuries and continue today (Castles et al., 2018; Pearson, 2004). In colonial America, reading instruction was done by the alphabet method and primarily for religious reasons (Sadoski, 2004). The primer books,

considered the earliest reading books, were called primers because they contained the primary scriptures deemed essential for salvation (Sadoski, 2004). The Common School movement of the 1800s, led by Horace Mann, established a free, public nonsectarian school system allowing more individuals the opportunity for an education (Rippa, 1997). Mann disputed the use of the alphabetic method and perceived synthetic phonics methods to be harmful (Sadoski, 2004). The 20th century brought in the first standardized tests in reading. These assessment results showed that many students struggled with reading (Sadoski, 2004). In the late 1900s, a notable shift in reading education came about after releasing a popular book by Flesch (1955) entitled “Why Johnny Can’t Read.” Flesch argued that American schools were not successfully teaching children to read. Flesch also shared that there should be a continued push to teach phonics regularly and opposed teaching the “Dick-and-Jane” series as it merely teaches the memorization of words. Chall (1967) also argued that reading programs should contain strong, systematic phonics components. This movement brought about a long-standing debate on the most effective approach to teaching reading.

Throughout the years, there have been several reading theories with which policy makers, instructional programs, and classroom practice has been centered around including whole language, balanced literacy, simple view of reading, active view of reading, and structured literacy (Thomas, 2022). During the 1980s, basal readers were prominent using analytic phonics and small group guided reading lessons (Morris, 2015). The 1990s introduced the whole language movement, which focused on whole group guided reading and placed less emphasis on phonics (Morris, 2015). With legislation passing the No Child Left Behind Act in 2000, phonics was again a priority in

kindergarten and first grade, and authentic texts were a priority. Some teachers take a "bottom-up" approach associated with behaviorism, which highlights teacher-directed instruction with phonics isolation skill development. A bottom-up approach focuses on beginning sounds and letters of language (Fisher et al., 2021). In contrast, others have taken the "top-down" approach, which is consistent with constructivism; this highlights student-centered, meaning-based instruction with texts based on students' interests (Fisher et al., 2021; Tracey, 2017). The two approaches were blended to meet in the middle and called "balanced literacy." Balanced literacy gained prominence during the mid-1990s following a critique of California's literacy framework and revealing low reading scores. This led to the state commissioner to call for a more balanced literacy approach (Fisher et al., 2021). Eventually, more states and districts adopted this model as well. In 2014, the argument for the preferred literacy method was highlighted with systematic phonics, balanced literacy, and individualized instruction being debated (Tracey, 2017). More recently, the active view of reading, structured literacy and the science of teaching reading has also been at the forefront of reading education (Thomas, 2022). To date, there is still no consensus on the best approach to teach reading.

The National Reading Panel reports five components of effective early reading instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension (NICHD, 2000). These components were incorporated into the No Child Left Behind Act and the Reading First initiative as essential components of reading instruction (Learning Point Associates, 2004). Learning Point Associates recommends that these components be taught systematically and explicitly so students learn these foundational skills. Because these components build off one another and are connected, it is hard to teach in

isolation. However, students should gradually progress and learn the components of reading. The five components of effective early reading instruction were included in this investigation because often, students who receive support in reading interventions under RTI, are likely to experience difficulty with one or more of these five components.

Phonemic awareness is a subset of phonological awareness and is an understanding that spoken words are made up of separate units of sound (Brown, 2014; Learning Point Associates, 2004). A significant focus of phonemic awareness is centered on oral language. Phonics instruction improves students' ability to identify words (Anderson et al., 1985). Phonics is also beneficial in teaching children the alphabetic principle (Tunmer & Hoover, 2019). Oral reading fluency (ORF) relates to the ability to read words correctly per minute (wcpm) on measures of accuracy and rate (Washburn, 2022). Moats (2020) recognized good readers as ones who do not skim through texts but process the letters of each word rapidly and unconsciously. She also shared that they are aware of speech sounds and have fast and accurate word identification skills, which helps them to decode. Gough and Tunmer (1986) acknowledged that a skilled decoder can read words quickly, accurately, and silently and has a sound knowledge of recognition skills.

Opportunities for repeated readings have also been found to improve fluency (Mathes & Torgesen, 1998). Results from a study by Rasinski et al. (2017) suggested that word recognition and accuracy, along with word recognition automaticity, are essential factors that help determine college readiness. This shows the continued need to foster oral reading fluency development for students. According to Beck et al. (2013), an expansive vocabulary is closely related to reading proficiency and school achievement. Several researchers (Beck et al., 2013; Biemiller, 2003; Moats, 2020) suggested that vocabulary

be taught explicitly to teach the structure and meaning of words. Other researchers add that vocabulary can also be learned through context clues, listening to texts read aloud, and reading independently (Moats, 2020). Research has also concluded that teaching solely from a list of 10-15 words a week does not yield the vocabulary development needed to richly improve reading comprehension (Brabham et al., 2012). Instead, the constant teaching of concept-related words and seeing the vocabulary in various contexts throughout the day resonates with students. Biemiller (2003) asserted that vocabulary instruction differs from phonics instruction in that vocabulary instruction must continue to be taught as students move up grade levels. Comprehension is making reasonable and accurate meaning by connecting what was read to what the reader already knows (Learning Point Associates, 2004). Comprehension is the final goal of reading instruction (Learning Point Associates, 2004). In fact, reading comprehension can be considered one of the most complex human activities (Kendeou et al., 2016). To improve students' comprehension skills, teachers can include activities that activate prior knowledge and generate questions (NICHD, 2000). Teachers understand the role that knowledge and background knowledge play but often fall short in relaying it to students. Wexler (2019) argues that simply providing students with a quick supply of background information before reading a text may seem like it is activating prior knowledge, however, it does little to reinforce knowledge and make it applicable to students. The more knowledge students have on a topic, the better they will comprehend it (Wexler, 2019). Hirsch (2003) claims essential elements to improve reading comprehension include a strong focus on fluency, vocabulary, and domain knowledge.

While the debate continues whether to teach whole-language, phonics, or balanced literacy, effective teaching and instruction should not be overlooked (Kim & Snow, 2021). Programs that effectively prevent reading failure contain quality instruction with the right intensity and duration delivered to children at the right time (Torgesen, 1998). Allington (2002) lists six elements of effective literacy instruction as (1) time, (2) texts, (3) direct, explicit instruction, (4) student talk time, (5) time on task, and (6) testing that evaluates student work based on effort and improvement. Wexler (2019) argues that schools should move away from a skills-based approach and move toward building students' knowledge to comprehend texts better. Despite the numerous methodologies available for school districts and campuses to use, deepening educators' understanding of the reading process will better equip them to facilitate students reading development (Tracey, 2017). Although educators may opt to use varied instructional practices, student achievement should be at the forefront of decision-making.

### **Education Reform**

There have been several mandates, laws, and initiatives to protect the educational rights of children. The Individuals with Disabilities Education Act (IDEA) is a law that makes available free, public education for children with disabilities in the United States (U.S. Department of Education, 2020). Although these students have unique needs, the law ensures policies are put in place to protect their rights. This law also ensures that states and public agencies provide early intervention, special education, and related services to children with disabilities (U.S. Department of Education, 2020). Response to Intervention (RTI) emerged under the Individuals with Disabilities Act (IDEA) of 2004 as an added system to identify and support students who may be struggling academically.

RTI helps shift the process in which students are identified and tested for special education services. Prior to the passing of IDEA, practitioners were recommended to give IQ-achievement tests to identify children with learning disabilities (LD); now, RTI can be used as a method of determining children who may be at risk for disabilities (Fuchs & Fuchs, 2006; Graves & Mitchell, 2011).

### **MTSS/RTI**

Although multi-tiered systems of support (MTSS) and response to intervention (RTI) are terms that are often used interchangeably to describe a framework for providing multiple levels or tiers of academic support for struggling learners (Fuchs et al., 2012), recently there has been more of a distinction between the two, with the term MTSS being used more frequently than RTI as MTSS encompasses academics, behavior and mental health awareness interventions (Bailey, 2019). Harlacher et al. (2014) describe MTSS as a schoolwide approach that establishes a seamless connection between three components: a standards-aligned and research-based curriculum, a comprehensive system, and the use of the problem-solving model. Today, MTSS is becoming the more commonly used term (Braun et al., 2018). At present, more than 40 states have adopted versions of MTSS and RTI (National Center for Learning Disabilities NCLD, 2022).

Researchers (Fuchs & Fuchs, 2005; Fuchs & Fuchs, 2006; Harlacher et al., 2014; Savitz et al., 2018; Swanson, et al., 2012) defined RTI as a tiered model of providing intervention to students who are at-risk of reading failure with the aim of reducing the number of students in special education. Response to Intervention (RTI) is a model intended to increase students' learning outcomes. RTI can be viewed as a form of differentiation (Lipson & Wixson, 2012). Tomlinson (2014) shared that in a

differentiated classroom, teaching is not based on what the curriculum states, but instead the teacher meets the student where he or she is academically. As Bandura (1977) shared, the zone of proximal development is an area in which a child can grow and mature with the help of a more capable adult or peer. The goal is that what a child can do now with the help of a more capable adult or peer will be attainable for the same child independently in the future. Students receiving support within RTI work within the zone of proximal development to master their goals. When students facing reading difficulties are provided with differentiated instruction that addresses their specific content needs, they are more likely to make improvements (Denton, 2012). When RTI is implemented with fidelity, it can improve instructional quality and increase students' chances of school success (McInerney & Elledge, 2013).

There are four essential components of RTI which include, (1) universal screening, (2) progress monitoring, (3) data-based decision-making for instruction, and (4) movement within the multi-level system. (McInerney & Elledge, 2013; NCRTI, 2010). It is also necessary for these components to include evidence-based practices and be culturally responsive for maximum results.

### ***Universal Screening***

RTI serves as a two-stage assessment screening feature (NCRTI, 2010). The first stage in this process is universal screening. Universal screening is one of the first steps in identifying students at risk for learning difficulties (Hughes & Dexter, 2011; Wallace, 2018). Universal screening is typically conducted three times a year during the fall, winter, and spring semesters. The goal of universal screening is to improve a child's current developmental trajectory and lessen the effects of long-term disabilities. All



students are screened at these times to determine their eligibility for RTI. Based on screening results, administrators may consider the student's score below the 25<sup>th</sup> percentile to deem the student to be at-risk (Fuchs & Fuchs, 2006). Based on their screening assessments, students who are determined to be at-risk will then be provided supplemental support in Tier 2 or Tier 3 instruction (Harlacher et al., 2014). This screening process helps access those students needing extra support through interventions or testing. In advance of RTI being implemented in schools across the United States, when students struggled in school, the primary approach was to wait and see if students began to show progress over time (Wanzek & Vaughn, 2010). RTI helps decrease this wait time by screening students often and as early as Kindergarten (Wanzek & Vaughn, 2010). Universal screening is an essential step in identifying students who are at-risk for academic difficulties.

### ***Progress Monitoring***

The second stage in the two-stage assessment screening process of RTI is progress monitoring. Students who score below a specific cut point after an assessment will be continuously progress monitored (NCRTI, 2010). NCRTI (2010) refers to a cut point as a score used on the scale of a progress monitoring tool or a screening tool and is used to determine if students are making adequate progress or need additional intervention support. One premise surrounding IDEA is that there be preventative measures put in place to target students who struggle ahead of time. Progress monitoring allows for the consistent assessment of students to determine the degree of academic support needed. RTI allows students to be accessed frequently and informally in the classroom to identify students who are not making adequate progress to provide them

with timely interventions (Wanzek & Vaughn, 2010). Through consistent progress monitoring, students can be identified as needing continued support. Conducting frequent progress monitoring assessments helps support students before they fall further behind. Progress monitoring is an integral stage as it supports the need to identify students early who may need additional assistance through RTI.

**Early Intervention.** According to Hughes and Dexter (2011), early identification aims to increase the chances of at-risk students developing sufficient academic competence. Progress monitoring can be part of a formative evaluation in early intervention while providing diagnostic information to make placement decisions on various tiers (Fuchs & Fuchs, 2006). Several studies have been conducted to examine the effectiveness of early identification and reading interventions on struggling readers (Austin et al., 2017; Denton, 2012; Simmons et al., 2008; & Wanzek et al., 2018). The results from one longitudinal study found that over a four-year period, students who were at risk for reading at the beginning of kindergarten responded favorably to early reading interventions and many students maintained adequate proficiency levels by third grade (Simmons et al., 2008). Results from another study revealed that students who receive interventions to support word reading showed that word reading is a crucial predictor of response to intervention for students who have significant comprehension problems in the upper elementary grades (Vaughn et al., 2020). In their meta-analysis, Wanzek et al. (2018) investigated 25 reading intervention studies to determine the effects of intensive early reading interventions, relationships between interventions, and student characteristics related to outcomes. Expanding and extending upon earlier research, the researchers sought to examine research surrounding the duration of the intervention,

instructional group size, grade level, individualization of the intervention, and initial reading achievement. Overall, the researchers found effect size results suggested that intensive early interventions showed positive outcomes for early struggling readers in K-3<sup>rd</sup> grade (Wanzek et al., 2018). Wanzek et al. (2018) also found that commonalities such as a high level of standardization, instructional content that addresses phonological awareness, and school staff and community members implementing the interventions may have driven the positive effects more than group size or duration.

### ***Data-based Decision Making***

Data-based decision-making is at the heart of sound RTI practice and is necessary for the other components to thrive (NCRTI, 2010). Understanding where students place academically is vital in determining the specific level of intervention to provide to students. Data helps determine the degree of intervention support. Students who respond well and meet expectations are referred to as responders or high responders while students not responding well and making inadequate progress are referred to as non-responders (Wanzek & Vaughn, 2010).

One issue within RTI is when to exit students or move them among the tiers. Van Norman et al. (2020) analyzed data from 3<sup>rd</sup>-grade students who met specific criteria to exit Tier 2 reading fluency interventions. Data was collected from 554 students in 234 schools in the Midwest, Northeast, and mountain west regions of the United States. Students participated in a Tier 2 intervention program with trained AmeriCorps members who conducted the interventions at the schools. Students qualified based on their curriculum-based measures of oral reading (CBM-R). Students who earned a median score below 100 WRCM on these passages were eligible to participate. Students had 1:1

reading sessions with the interventionist for 20 minutes in each session. The authors noted that all the students in the study met exit criteria during the first semester.

Understanding data received from interventions help teachers and administrators make informed decisions about students' movement between tiers.

### ***Multi-level Instructional System***

Although some RTI models consist of four levels, most often, RTI is categorized into three tiers of support or prevention with the level of intensity increasing as students move up in the tiering system.

**Tier 1/Primary.** Tier 1 instruction occurs in the general education classroom. Most students will fall into the Tier 1 category. It is imperative that instruction in the general education classroom set the tone for high-quality learning and intervention. Tier 1 instruction aims to provide every child with practical, research-based instruction in the general education classroom. Classroom instruction is essential in preventing reading problems (Moats, 2020). Researchers contend that there should be high-quality instruction in the Tier 1 classroom to further support students experiencing failure and help target their specific needs (Brozo, 2010; Hebbeler & Spiker 2016; Jones et al., 2016). However, researchers explain that students can sometimes be misdiagnosed due to ineffective, inconsistent instruction (Toste et al., 2014). This can cause students to receive inadequate instruction that is not needed and not beneficial to the student. A schoolwide consistent model can help reduce the misidentification of students and ensure better identification of students into their respective tiering levels. In addition, Hebbeler & Spiker (2016) acknowledge poor teaching as a factor in learning problems, thus continuing to stress the need for high-quality instruction within the general education

classroom. This gives a need for high-quality teaching to avoid students being misdiagnosed and placed into Tiers when they simply need higher-quality teaching. Providing high-quality instruction to students at risk of reading failure should be supported by knowledgeable teachers in the classrooms (Brozo, 2010). Jones et al. (2016) asserted that effective Tier 1 instruction should include systemic word study instruction, shared reading to build fluency in elementary, high-quality read-alouds provided daily, and teacher modeling. Preston et al. (2016) contended that Tier 1 instruction should be differentiated to meet the needs of all learners and that differentiation should also be based on assessment results. Allington (2002) shared that to improve students' reading proficiency, classroom teachers should have an expert, exemplary capacity for teaching reading instruction.

**Tier 2/Secondary.** Wanzek and Vaughn (2010) maintained that most students needing interventions make progress from Tier 2 interventions and will not require the need for Tier 3 interventions. The researchers defined extensive interventions as occurring daily for 100 sessions or more for approximately 20 weeks or more. Students receiving Tier 2 instruction are typically provided with 30 minutes of instruction, 3-5 days a week, in groups of 5-8 students (Harlacher et al., 2014). Students are also progress monitored bi-weekly (Harlacher et al., 2014). After providing Tier 2 interventions, interventionists will evaluate students' responsiveness and determine if they have responded well (adequate responders) or have not responded well (inadequate responders) to the interventions (Toste et al., 2014). There is variability and little consensus about who is considered responsive and inadequate responders to interventions (Toste et al., 2014).

It is important to identify students making progress while receiving Tier 2 interventions. Thus, Milburn et al. (2017) studied 181 preschool children making inadequate progress in one or more early literacy domains. These students began receiving Tier 2 reading interventions. The students were classified as responsive or not in Tier 1 instruction. A group of 12 interventionists met with the students four times a week for 11 weeks. Students who scored above the 25<sup>th</sup> percentile at time two were classified as responsive while students who scored below this threshold were classified as nonresponsive. Results showed that there were higher numbers of students labeled as responsive after the intervention than those in the control groups. However, there were differences in the agreement between the methods of classifying responsiveness and non-responsiveness among the three early literacy domains.

**Tier 3/Tertiary.** Students who do not respond to Tier 2 reading interventions are then provided more extensive reading interventions in Tier 3. This Tier also comes with the possibility of further testing and identification as having reading disabilities. Students who move to Tier 3 reading interventions are most likely students with a reading disability or will be identified as having a reading disability (Toste et al., 2014). Wanzek and Vaughn (2010) revealed that Tier 3 is distinct from other interventions in that students in this tier demonstrate severe difficulties and are provided with more extensive interventions. Students receiving Tier 3 instruction are typically provided with 45-120 minutes of instruction, 5 days a week with 1-3 students in a group (Harlacher et al., 2014). Students are progress monitored weekly (Harlacher et al., 2014). Denton (2012) suggests that Tier 3 students be provided interventions in a quiet location outside of the classroom due to the academic challenges faced by these students.

Wanzek and Vaughn (2010) gave an overview of research outlining Tier 3 interventions in their synthesis. Their synthesis determined that reading outcomes of students participating in Tier 3 extensive, intensive interventions displayed positive outcomes compared to students who did not receive an intervention or were provided interventions from their school. Wanzek and Vaughn (2010) also suggest that early intervention, intensifying instruction using smaller group sizes and including multicomponent instruction gives promise for planning and executing Tier 3 instruction. In a more recent review of 12 Tier 3 intervention studies, Austin et al. (2017) revealed that 3 out of 4 studies that utilized a control group of inadequate responders showed results in which the treatment group outperformed the control group (Austin et al., 2017). The results yielded positive effects supporting the notion that non-responders in Tier 2 interventions can make reading progress if provided with an intensive Tier 3 intervention. This is consistent with results from a study by Sharp et al. (2016) which found that Tier 3 implementation significantly predicted reading test performance when controlling for specific demographic factors. The results of this study suggest that RTI implemented at high levels is associated with better reading scores.

When students do not show improvements in their high-quality interventions from Tier 3 support, the child may be referred for testing to receive special education services (Sharp et al., 2016). Vaughn et al. (2020) found that while students who are at the lowest level in their reading comprehension do make improvements, these students would still need intensive and individualized instruction to lessen their deficits. Researchers explain that while providing a combination of research-based intervention methods, prevention will still be inadequate for about 5% of students (Austin et al., 2017).

### ***Critical Elements of Response to Intervention and Multitiered Systems of Support***

Researchers described key elements that make intervention models more successful. One key element to increase the success of interventions is the size of intervention groups. While Wanzek et al. (2018) shared that there is limited evidence to suggest that students may respond favorably to interventions provided in a 1:1 setting versus groups of 2-8 students, Denton (2012) advocated for the use of group sizes during interventions that are small enough to increase student involvement and teachers can effectively monitor students. The benefits of one-on-one instruction can allow students to receive more frequent feedback and helps give a data-based decision that may not have been possible in larger group settings (Wanzek et al., 2018). Denton (2012) also expressed that the group size of students in Tier 3 should be on a case-by-case basis given students' individual needs.

Lipson and Wixson (2012) revealed attributes of successful early interventions as having a system of support within a district, school, and classrooms, aligned and connected to classroom instruction, and responsive instruction. The researchers likewise share successful interventions for older readers include interventions that address multiple components, give numerous opportunities to practice and retain the skills, and that address comprehension. In addition, the 2001, No Child Left Behind Act stated that schools should implement evidence-based teaching practices in K-12 schools (Swanson et al., 2012).

### ***Administrators' Role in Intervention***

An RTI team may consist of administrators, teachers, and support staff who work closely with students in interventions. It is crucial to have a team of members when



implementing RTI to add cohesiveness and school-wide support to the initiative. RTI team members meet regularly in professional learning communities (PLCs) to make data-based decisions, monitor student progress and implement the interventions (Mundschenk & Fuchs, 2016). McInerney and Elledge (2013) gave considerations for leaders to use when implementing RTI as a turnaround strategy, including having strong leadership that articulates the vision of RTI and the impact, creating a consistent focus on improving instruction, and having a committed staff to make the implementation successful.

### **RTI and Student Outcomes**

Gersten et al. (2017) conducted an extensive, comprehensive review of research over 12 years examining reading interventions in grades 1-3. In sum, results indicated that 19 out of 20 reading interventions had positive effects on at least one area of reading. Weighted mean effects were most substantial in word and pseudoword reading (0.452 for grade 1, and 0.456 for grade 2 and 3 interventions).

Donegan et al. (2020) examined the effects of a reading intervention implemented at two different intensities with two separate randomized control trials with fourth-grade students. These students scored below the 15<sup>th</sup> percentile, placing them at-risk for disabilities. The study was a part of a larger study that examined the efficacy of multicompartiment reading. It took place over four years using two cohorts of fourth-grade students. Students in study 1 received a treatment of 30-minute daily reading lessons in groups of 4-7 students. Students in study 2 received intensive treatments that included 45-minute daily reading lessons in groups of 2-3 students. The results revealed that students in study 1 showed no significant treatment effects on any outcomes and performed similarly to those in the comparison group in measures of word reading,

fluency, and comprehension. Students in study 2 had significant effects on word reading and word reading fluency when compared to the comparison group. These findings suggest that increasing intervention intensity may improve student outcomes. It also shows that students who are struggling readers and at risk for disability may not respond adequately to general intervention treatments.

In a study of upper elementary students, Ritchey et al. (2017) investigated the effectiveness of short-term informational text reading comprehension interventions. Students participated in interventions consisting of explicit instruction, practice using authentic texts, and peer interaction. After 20 hours were completed, the authors found statistically significant differences between the intervention and control conditions on two proximal measures with moderate effect sizes.

As students grow and matriculate through school, it is increasingly necessary to acquire comprehension, vocabulary, and fluency skills. Kim et al. (2017) emphasize that adolescent readers need an effective intervention that exposes them to texts and complex reading tasks that will foster sophisticated reasoning. Ciullo et al. (2016) suggest more research is needed to gain insight into RTI among students and educators at the secondary level. Based on the limited research surrounding RTI in adolescents, there should be a push to further intervene and support educators and students within the RTI framework.

Faggella-Luby and Wardwell (2011) conducted an empirical study comprised of middle school students receiving Tier 2 interventions and reported findings that it is not too late to provide interventions to struggling readers in middle grades. The students, who were at-risk readers in fifth and sixth grade, were placed into one of three intervention groups: story structure, typical intervention performed by a reading specialist and

sustained silent reading. Although the results after 18 weeks were mixed, the authors report the benefits of explicit Tier 2 instruction within the three outcome measures. Findings also showed that Tier 2 interventions likely require increased explicit intensity to improve the reading outcomes of struggling students.

Ciullo et al. (2016) observed middle school educators in a systematic study of Tier 2 and Tier 3 interventions. Findings suggested minimal evidence of explicit instruction in comprehension, main idea, summarization, and independent reading. Moreover, the researchers observed more than 12% of the time was devoted to logistical and non-academic activities. These findings related to previous studies indicate that there should be more professional development and preparation to increase Tier 2 and Tier 3 students' reading performance.

It is imperative to identify and target students who need interventions. Tunmer and Hoover (2019) caution that waiting too long to provide needs-based interventions results in the possibility that the reading problems will be more challenging to rectify. While it is not too late to provide interventions to older students, there should be a shift in the intensity and degree to which interventions are provided due to the prolonged gap students could face in their academic journey.

While there are many benefits of RTI, there remain some challenges to implementing and sustaining such programs in schools and districts over the years. Fidelity of implementation can pose a challenge since RTI will only be as effective as the implementation of the intervention (Haager, 2007). While federal legislation allowed for RTI to be used in schools, this legislation gave many different interpretations of implementation (Preston et al., 2016). For this reason, it resulted in a lack of consensus

and schools and districts using several different approaches when implementing RTI. Researchers also share that the initial implementation of RTI can be expensive and difficult to execute (Denton, 2012; Fuchs et al., 2012). Regan et al. (2015) revealed that it is challenging to implement RTI during the first few years regardless of schoolwide support from the administration. The researchers also share that these initiatives often do not consider the viewpoints and feelings of teachers or those who will be implementing the new frameworks.

Other challenges of RTI stem from the additional paperwork, training, and resources needed and the overall academic achievement of students. Results from a study revealed the challenges of RTI as scheduling, the increased amount of paperwork, the increasing number of students, and the need for additional staff to support (Regan et al., 2015). It can also be particularly challenging to find appropriate material for high school struggling readers (Gonzalez, 2019). Often, students who need additional support from RTI services get support from paraprofessionals. Allington (2013) suggested this practice is not beneficial because many paraprofessionals lack the expertise that is needed to increase the academic capacity of struggling readers. Graves and Mitchell (2011) assert that minimal evidence exists to show that RTI methods improve the disproportionality rates of students with specific learning disabilities. Despite these challenges, RTI has proven to increase student outcomes when administered with fidelity and the support of administrators and teachers.

### **RTI and Students with Disabilities**

Many students in America's schools struggle with learning delays and disabilities. RTI can serve as a process among many measures to evaluate students with a learning

disability (LD). When it is determined that students are not making adequate progress with Tier 3 interventions, a committee will meet to determine eligibility. To be eligible to receive special education services, a child must exhibit 1 of 13 disabilities and an educational need that would benefit from special education (Hebbeler & Spiker, 2016). The reauthorization of IDEA in 2004, specified that to identify a student with a learning disability, there should be evidence-based instruction and interventions should be documented before the special education referral to ensure that an absence of quality instruction was not a reason for the academic delay (Swanson et al., 2012). Each eligible child must have an Individualized Education Program (IEP). Components of an IEP include annual goals and a statement of the special education and related services the child will receive (Hebbeler & Spiker, 2016). Students who are determined to have a learning disability are required to receive specialized instruction according to their Individualized Education Program (IEP) (Swanson et al., 2012).

Students who have reading disabilities can still benefit from interventions. However, Williams and Vaughn (2020) disclosed that an RIA (Reading Intervention for Adolescents) only made a significant impact on the outcome measure of vocabulary ( $g=0.41$ ), the other five measures had no significant effects. The authors noted that this could be attributed to the fact that English Learners (ELs) with LD initially had below-average reading and vocabulary skills which could have affected their comprehension and response to intervention. Nevertheless, students in the treatment group did perform stronger than students not receiving a treatment intervention. Because of this, the researchers suggested that LD students may need continued, an intensive reading intervention that supports word reading, oral language, vocabulary, and comprehension

across several school years to improve reading. Scammacca et al. (2016) reviewed changes that have been made in the approach to reading disabilities over the last 100 years. Through their analyses, they found that there has been an increased focus on reading comprehension over the past century. Scammacca et al. (2016) believed this is due in part to the beginning of the 20<sup>th</sup> century to improve struggling readers' word recognition and oral reading fluency, while later in the 1970s making meaning from text took precedence.

### **Teacher Perceptions of Reading Interventions**

Several researchers (Braun et al., 2018; Greenfield et al., 2010; Regan et al., 2015; Rinaldi et al., 2011; Swanson et al., 2012; Werts et al., 2014) have analyzed teacher perceptions of RTI over several years. Results of these studies revealed four main themes related to professional development, data/progress monitoring, resources, and support. This insight can provide a first-hand account of the effects of implementation. As Bandura (1977) noted, self-efficacy describes one's beliefs about their proficiency toward an activity or duty. Lawrent (2022) also explained that teachers with a high self-efficacy approach work more enthusiastically because they have the confidence to reach the desired goal or outcome. The researcher also shared that when new reform efforts such as implementing MTSS and RTI, those with higher self-efficacy take on the effort more positively than those with lower self-efficacy because of the commitment and consistency required. Understanding teachers' perceptions of self-efficacy in the domains of professional development, data/progress monitoring, resources, and support can lead future researchers and stakeholders to better equip educators with pertinent information to implement MTSS/RTI.

### ***Level of Professional Development***

Effective RTI measures require the support of teachers, administrators, and stakeholders. As Bandura (1977) noted, efficacy expectation deals with a teacher's conviction that their ability to successfully execute behaviors and performance contributes to their ability to produce desired outcomes. Teachers' higher self-efficacy perceptions of their abilities, positively reflect their teaching practices. Providing teachers with professional development is essential to improve teacher effectiveness in schools today. Professional development is required in almost every teacher contract in the United States, and teachers engage in professional development each contracted year (Kennedy, 2016). The need for professional development is also evident in educational policies. For example, under ESSA's guidelines, schools should enact high-quality, professional development focused on improving teaching, student learning, and achievement. Desimone (2011) revealed core features of effective professional development, including a content focus, active learning, coherence, duration, and collective participation. Kennedy (2016) reviewed several studies regarding professional development. These studies revealed the importance of imparting content knowledge as a rationale for their professional development programs. Professional development can take several forms in schools and districts, such as workshops, conferences, mentoring, group discussions, book clubs, designing a new curriculum, or assisting with the school improvement plan (Desimone, 2011). Desimone (2011) shared that it is crucial to understand what makes professional development effective as it is vital to understanding successful school reform. Increased professional development opportunities can also increase teachers' knowledge of interventions within the RTI framework. After analyzing

the study results, Reagan et al. (2015) proposed that professional development be strategic and give practical guidance for RTI teachers to continue implementation. Research on professional development is included in this study because it is a crucial component in fostering growth in teachers. Insight into professional development related to RTI can help gauge what additional training is needed to improve the field. In another study of teacher practitioner perceptions of RTI, results showed that while many teachers understood the simple concepts of RTI, several teachers in the study lacked the knowledge and or training to implement RTI and had insufficient time during the day to do so (Reagan et al., 2015). Findings from this study suggested that teachers were unclear about how to decipher among tiers, how to understand what tiers students belonged to and what constituted a tier. Recommendations from these results showed that there should be an increase in professional development that gives practical guidance and training on how to use RTI models effectively.

### ***Knowledge/ability to Use Data to Progress Monitor***

In earlier studies, Rinaldi et al. (2011) analyzed the perceptions of eight teachers on the adoption and effectiveness of an RTI model in the participants' schools. The study found that while the participants were hesitant at first, voicing concerns about adequate planning time, division of responsibility, and assessment and progress monitoring, they grew to embrace the model and eventually engaged in the development and growth of the model by the end of the study's three-year period. A key theme that emerged from the study was data and collaboration to improve practice. Participants in this study utilized planning time to collaborate about assessments used to progress monitor, which helped improve their ability to collect data. By the third year of implementation, teachers felt



more confident in their ability to use data to drive their instruction. This collaboration and knowledge of data to progress monitor led to fewer inappropriate referrals to special education. An investigation of special education teachers conducted by researchers Werts et al. (2014) revealed a large percentage of positive feedback (72%) on RTI as students benefit from a higher level of instruction. Students benefited because teachers were better able to make professional decisions regarding students due to their increased knowledge of data collection.

### ***Resources***

In a qualitative study examining teacher perceptions of an MTSS framework, Braun et al. (2018) concluded that while teachers believe tier 2 interventions effectively support students who require moderate assistance, they note frustration with limited resources and material to provide interventions to students. In contrast, Woodward and Talbert-Johnson's (2009) study of teacher perceptions listed a benefit of RTI as having ample material available to use. Participants also cited that having the reading specialist in class during interventions helped serve as an added resource.

### ***Support***

Swanson et al. (2012) gathered data on special education teachers' perceptions and instructional practices who had been implementing an RTI framework for students in grades 3-5. This two-year study included focus groups and interviews which investigated three aspects, the perceptions of special education teachers and the RTI framework, the extent to which they teach components of reading and math to students in grades 3-5, and their use of evidence-based instructional practices to teach reading and math. Swanson et al. (2012) concluded that teachers cited the benefits of RTI as being able to meet

students' unique needs, collaborating with other teachers, and having access to early interventions. The participants also stressed the challenges of RTI as scheduling changes, an increase in paperwork, the increasing number of students, and the need for additional staff support. Werts et al. (2014) collected responses from educators regarding the benefits and barriers to RTI. The highest cluster of respondents (45%) shared that time was a barrier to successfully implementing RTI (Werts et al., 2014). Teachers cited additional meetings, paperwork, and allotted time to identify at-risk students. Braun et al. (2018) claimed that many teachers were confused about the MTSS process due to frequent school-wide changes.

Understanding teachers' perceptions were the purpose of Greenfield et al. (2010) when they interviewed eight teachers after a first-year school-wide RTI reform effort. The interviews revealed five major themes: assessment and progress monitoring, the link between intervention and instruction, the impact on teacher practice, the culture of reform, and the special education referral process for ELL students (Greenfield et al., 2010). The researchers concluded with two essential ideas when implementing RTI from the study. Greenfield et al. (2010) shared that it is essential to review the purpose and intent of RTI while adhering to federal recommendations and to consider the RTI reform effort as a change that will happen over time.

### **RTI and Minorities**

African American and Hispanic students are at a greater risk of reading difficulties compared to their European-American counterparts (Snow et al., 1998). Snow et al. (1998) explain that a characteristic of these minority populations that can attribute to the more prevalent risk of reading difficulties is limited proficiency in English and the

use of nonstandard use of English. There is a disproportionate number of minority students receiving services within the Special Education sector. Often, minority students also make up a significant number of those receiving RTI interventions. An area of contention is that culturally and linguistically diverse students are overrepresented in special education programs (Klingner et al., 2005). Klingner et al. (2005) asserted that culturally responsive interventions should be in place to aid in students' connection to the academic material. In addition, Voulgarides et al. (2017) recommend that because Black male students are often the targets of zero tolerance policies, they receive culturally responsive interventions. Poor students and students of color receive less challenging classroom curricula with teachers focusing on the lower-level skills in Bloom's Taxonomy (Hammond, 2015). Many culturally diverse students do not receive the same opportunities to develop strong cognitive capacities because of educational inequity (Hammond, 2015). This can contribute to the mislabeling of students in special education programs. For example, Graves and Mitchell (2011) revealed that African American students are overrepresented in special education categories based on clinical criteria such as intelligence tests.

Similarly, Proctor et al. (2012) revealed that African American students make fewer gains academically than their white counterparts. Due to this issue, they are then tested and placed into special education programs. It is imperative to prioritize African American students' needs within an RTI framework given the historical and current overrepresentation of African American students in special education programs in the United States. Researchers suggested RTI can help address this issue and lessen the

overrepresentation and occurrences of mislabeled students in schools (Proctor et al., 2012).

RTI is likely to impact English Language Learners (ELLs) in varying ways. ELLs are entering the U.S. at varying degrees in their academic and socioemotional development stages, placing them at different levels in their exposure to the English language (Ruiz, 2020). If schools and educators fail to understand their ELLs and their language development, this can often lead to RTI teams overlooking essential factors that influence an ELL's learning (Ruiz, 2020). This can also lead to a delayed response in critical interventions providing inappropriate interventions, or not putting ELLs through the RTI process at all.

The population in the U.S. has dramatically changed over the last century. In fact, in the fall of 2018, more than 5 million English Language Learners (ELLs) were enrolled in public elementary and secondary schools, representing 10% of the total student enrollment (Migration Policy Institute, 2020a). It can be challenging to learn a new language while also moving to a new country and assimilating to new customs, and many students in U.S. schools face this issue daily. The Every Student Succeeds Act included several new requirements for the education of ELL students, including standardized criteria for identifying ELL students and the inclusion of English proficiency as a measurement of school quality (Migration Policy Institute, 2020b). The Every Student Succeeds Act also allows states to make critical decisions on how quickly schools must improve and how states can intervene with struggling school districts, this helps give a variation in how states determine if an ELL is making progress (Migration Policy

Institute, 2020b). This also gives new opportunities for community involvement in how important ELL decisions are made.

Students classified as ELLs and are under consideration for eligibility for Special education services may have additional factors to consider in determining eligibility, including the nature and quality of the general education reading program, the assessments used to determine a student's responsiveness to instruction, and the content and procedures of follow-up intervention (Haager, 2007). Barrera and Liu (2010) indicated that educators may often mistakenly conclude that a student has a disability because the student does not behave like other children from similar backgrounds. Researchers (Barrera & Liu, 2010; Rinaldi & Samson, 2008) also contended that there exists an accurate and current language acquisition assessment and that cross-cultural probing is a critical factor in an ELLs referral or referral assessment.

Culturally and linguistically diverse students make up a disproportionate number of students in special education (Counts et al., 2018). Often students arriving in the U.S. from other countries need additional time to learn English. Because of this, many educators may wait to refer an ELL student for special education services to provide the student with enough time to learn English (Rinaldi & Samson, 2008). This strategy has its advantages and disadvantages because if ELL students do have a disability, they are missing critical time that could have been spent on identification and interventions. Harris and Sullivan (2017) recommended bringing in bilingual consultants to help impart their knowledge in language development and acquisition to ensure universal prevention efforts benefit all students and not only those from English-proficient backgrounds. When administering assessments to test for special education, a student's cultural and racial

background should be considered. For example, Rinaldi and Samson (2008) suggested that when assessing ELL students who may have a low level of English proficiency, test administrators should consider if an assessment tool that uses a significant amount of verbal response is most appropriate.

### **Summary**

This review of literature related to reading indicates that reading has been and continues to be a vital aspect that shapes students' learning and their future. In decades past, there have been debates on the most appropriate method to teach reading. Students need direct, explicit instruction to increase their reading ability when learning word recognition and decoding skills. Acquiring comprehension skills sets students up for academic success.

The literature surrounding RTI revealed educational policy that has been enacted to identify and target students who need additional support through Multitiered Systems of Support (MTSS) also called Response to Intervention (RTI). The research also highlighted recent studies of RTI to determine best practices for implementation and identification. To ensure the success of an RTI framework, there should be schoolwide buy-in including fidelity of implementation and support from administrators.

Teacher perception studies provided insight into the perceived benefits and barriers of implementing an RTI framework. Findings from several studies identified the need for continued professional development to ensure teachers are prepared to execute schoolwide RTI initiatives. These studies help add validity to the case for RTI implementation and the need to include teachers' opinions and feedback on RTI frameworks put in place.

## **CHAPTER 3**

### **METHODOLOGY**

This study utilized a quantitative, descriptive methodology to accomplish its purpose of examining teacher perceptions of Tier 2 reading interventions. More closely, this study examined the impact of Tier 2 reading interventions by investigating reading teachers' perceptions of their school's established professional development and available resources and support. This study was directed by the following research questions: (a) How do teachers perceive the impact of their school's established professional development on their ability to provide Tier 2 reading interventions? and (b) How do teachers perceive the impact of their school's available resources and support on their ability to provide Tier 2 reading interventions?

#### **Research Design**

To meet the needs of this study adequately, the researcher employed a quantitative, descriptive research design. Since teacher perceptions were measured on a Likert Scale and the scores were summed and averaged, it was necessary to incorporate a quantitative, descriptive research design (Kerlinger & Lee, 2000). The purpose of this study was to analyze teacher perceptions of students receiving Tier 2 reading interventions. Specifically, the study explicated teachers' responses to statements regarding their professional development, data progress monitoring, resources, and support of Tier 2 reading interventions. For this reason, the researcher chose to conduct survey research. According to Mills and Gay (2019), survey research is a process of collecting data to answer questions regarding an individual's opinion on a problem or an issue. This method was chosen over

other research methods due to its ability to answer questions about participants' opinions and the ability to reveal potential remedies relating to common issues surrounding RTI. The survey research applied in this study was a scaled-item questionnaire Likert Survey. Mills and Gay (2019) share that a weakness of survey research is that it can yield a low response rate. However, despite this weakness, survey research has several advantages. These advantages according to Kerlinger and Lee (2000) include: (1) the ability to obtain a considerable amount of information about the characteristics of a population, (2) surveys can be conducted less expensively, and (3) survey results can be drawn back to the population.

### **Participants**

The population in this study included reading teachers in a large urban school district in Southeast Texas. A total of thirty-six teachers were included as participants in this study. There are a total of 43 schools in this district with a population of 33,537 students. The student body in this district is multicultural, reflecting the diverse ethnic groups in the Southeast region. More specifically, the district includes an ethnic breakdown that is as follows: 49.6% Hispanic/Latino, 38.6% Black/African American, 6% White, and 2.3% Asian (U.S. News and World Report, 2022).

### **Sampling**

Non-random, purposive sampling was used to select the sample population for this study. Purposive sampling uses the researcher's judgment to obtain a sample that is believed to be representative of a specific population (Kerlinger & Lee, 2000; Mills & Gay, 2019). For this study, the researcher was interested in reading teachers who provide Tier 2 reading interventions. The researcher chose a sample population by randomly selecting 10



schools from the district using a random generator. The district reading interventionist was then contacted and asked to provide contact information for teachers who teach Tier 2 reading interventions. From the list of purposive sampling, the researcher randomly contacted teachers who teach reading and request to obtain their participation in the survey.

### **Instrumentation**

The researcher created a five-point Likert Scale survey instrument entitled, *Perceptions of Tier 2 Reading Interventions* (See Appendix A). The survey included 22 statements using a Likert scale with: 1. Strongly Agree (SA), 2. Agree (A), 3. No Opinion (N), 4. Disagree (D), 5. Strongly Disagree (SD), as well as demographic questions and two open-ended response questions. The survey sought to gain insight into teacher perceptions of the effects of the tier 2 interventions provided to students. No personal information was revealed or disclosed to ensure the participants' privacy in this study. The Likert Scale items were classified into four categories: professional development, data/progress monitoring, resources, and support. The professional development items focus on the professional development opportunities provided by the district and school and the knowledge received to implement Tier 2 interventions. The data/progress monitoring items centered on teachers' capacity to use data to make informed decisions regarding students on Tier 2 and effectively progress monitoring as a result of the knowledge gained from professional development sessions. The items focusing on resources aimed to determine if teachers had sufficient resources to teach interventions and in-class support to manage students during these interventions. The support items centered on school-wide and administrators' views and help to carry out interventions. Moreover, the researcher included demographic items to offer background information on the participants. The

survey instrument also included two additional open-ended questions to gauge additional feedback regarding RTI implementation from the respondents.

### **Pilot Study**

Prior to administering the survey instrument, the researcher tested the instrument's effectiveness by conducting a pilot study of the survey instrument. A pilot study can help assess, refine, or change any plans in a study (Mills & Gay, 2019). The pilot study was conducted in the fall of 2021. A group of six teachers who administer Tier 2 and Tier 3 reading interventions completed the survey. The researcher determined that no additional changes needed to be made to the survey questions from the pilot test. The average time spent completing the survey was 15-20 minutes. Survey participants were provided with this average time before completing the survey. The pilot test allowed the researcher to simulate the process before officially initiating the survey to prospective educators. The pilot study results revealed the instrument to be reliable.

### **Validity of the Instrument**

Content validity was used to determine the validity of the instrument. The survey instrument, *Perceptions of Tier 2 Reading Interventions*, was carefully reviewed item by item. Results of the researcher's judgment deemed the instrument's items to represent and measure the intended purpose. The researcher concluded that the survey was a valid instrument for use in this study, and a pilot test was conducted.

### **Reliability of the Instrument**

Cronbach's alpha technique was used to determine internal consistency reliability. Internal consistency measures the reliability of one test to determine its consistency over time (Mills & Gay, 2019). The Cronbach's alpha method was utilized to ensure reliability

based on the survey items having more than two response options. The reliability measure produced a Cronbach's alpha level of .97. According to Mills and Gay (2019), a correlation coefficient of .60 or better is deemed to have sufficient reliability.

### **Data Collection**

Once the Institutional Review Board (IRB) approval was met (See Appendix B), the researcher followed the proper protocols for conducting the research. The study was conducted during 2021 and 2022, and the survey was administered during the fall semester. The researcher contacted the research department at a school district in Southeast Texas. Once, the required documents and application were completed, the researcher was approved to conduct survey research in the district (See Appendix C). The investigation began with the researcher sending the survey instrument to participating teachers in a school district in Southeast Texas. The researcher sent the instrument as an electronic survey using SurveyMonkey to selected reading teachers to measure their perceptions. The researcher provided the online survey to reading intervention teachers and teachers who serve students in Tier 2 reading intervention programs. A consent form was attached to the beginning of the electronic survey instrument. When a teacher agreed to participate, they then continued with the survey. The participants completed the survey independently and submitted it when it was finalized. The surveys were inspected for completeness. Any incomplete surveys were excluded from the sample. The remaining surveys were then coded and entered into the Statistical Package for Social Sciences (SPSS) to be further analyzed. Information from the survey will be anonymously reported in the results section.

## **Data Analysis**

In a quantitative approach to survey research, the researcher describes current conditions, and results are presented as percentages (Mills & Gay, 2019). This study employed descriptive data. Descriptive data was most advantageous in this study due to the use of a survey instrument. In particular, frequency tables were applied to determine the scores of the demographic data set. Additionally, measures of central tendency were also used to determine specific means and standard deviations of respondents' answers to the statement items. The data were analyzed using an SPSS software package.

## **Limitations of the Methodology**

This study's limitations are associated with the breadth and depth of this survey method. Kerlinger and Lee (2000) asserted that survey research information neglects to penetrate below the surface level. While survey instruments can provide useful information about participants' views and opinions, they can also yield a lower response rate.

Another limitation of this study is the use of non-random sampling. Although it is preferred to use random sampling, this method is not always practical. Despite the use of nonrandom sampling, the researcher sought this method to ensure the population under study was representative of the general population. Purposive sampling is a form of non-random sampling, but for this study, the researcher required participants that have experience with reading interventions.

A final limitation of this study is that a study of this nature could have been conducted using a mixed methods study, hence, the researcher's decision to include two open-ended questions to add a qualitative component to the study.

**Summary**

This chapter presented the methodology for the research investigation including the research design, participants, instrumentation, described data collection methods, data analysis procedures, and limitations. The procedures and data collection methods were chosen to obtain accurate, valid, and reliable results for analyzing the data.

## **Chapter 4**

### **RESULTS**

The purpose of this study was to examine teacher perceptions of Tier 2 reading interventions in a large school district in Southeast Texas. More specifically, this study focused on teachers' level of professional development, ability to use data to monitor student progress, available resources, and support surrounding RTI. This chapter presents the research results from analyzing the data obtained from participants from the online survey. SPSS was used to analyze the data.

The following research questions guided this study: (a) How do teachers perceive the impact of their school's established professional development on their ability to provide Tier 2 reading interventions? and (b) How do teachers perceive the impact of their school's available resources and support on their ability to provide Tier 2 reading interventions?

#### **Descriptive Statistics**

The participants consisted of 36 certified reading intervention teachers in grades K-12. This chapter is arranged into two major sections. The first section describes demographic information about the participants, including information on the current grade level of participants, years of teaching experience, and the highest level of education attained. The second section gives survey descriptive statistics from the survey results. The survey statistics section was divided into four subsections to describe participants' perceptions of their level of professional development, ability to use data to progress monitor students, availability of resources, and campus/district support.

## Demographic Descriptive Statistics

The demographic data included grade level currently teaching, years of experience, and the highest level of education.

Grade level currently teaching included a range of K-12. Some teachers work in intervention classes and serve more than one grade level. Table 1 shows that most participants were represented in the elementary grades.

**Table 1**

### *Grade Level Currently Teaching*

Grade Level	Frequency	Percent
K	14	35.0
1	15	37.5
2	12	30.0
3	14	35.0
4	13	32.5
5	11	27.5
6	5	12.5
7	7	17.5
8	5	12.5
9	2	5.0
10	1	2.5
11	1	2.5
12	1	2.5

Table 2 reports the participants' years of teaching experience. Years of teaching experience consisted of data in the following categories: 0-5 years of experience, 6-10 years of experience, 11-15 years of experience, 16-20 years of experience, and 20+ years of experience. The majority of participants had over 20 years of teaching experience, representing 27.5% of the sample. Participants with 6-10 years of teaching experience represented the second largest group with 25%. Participants with 16-20 years of teaching experience made up 15%. Participants with 11-15 years of teaching experience made up 12.5%. The smallest group had 0-5 years of teaching experience, representing 10%.

**Table 2**

*Years of Teaching Experience*

Years of Experience	Frequency	Percent
0-5	4	10.0
6-10	10	25.0
11-15	5	12.5
16-20	6	15.0
20+	11	27.5

Table 3 represents the highest level of education attained. The four categories included bachelor's degree, master's degree, Educational Specialist, and doctorate degree. Participants with a master's degree represented the highest category, which consisted of 60%. Participants with a bachelor's degree made up the second largest group consisting of 25%. The smallest group included those with an educational specialist and doctorate degree consisting of 2.5%.



**Table 3***Highest Level of Education Attained*

Level of Education	Frequency	Percent
Bachelor	10	25.0
Master	24	60.0
Educational Specialist	1	2.5
Doctorate	1	2.5

**Survey Descriptive Statistics**

In addition to the demographic information, the survey included 22 statements and two open-ended questions. The survey results were analyzed using descriptive statistics with means and standard deviation. A five-point Likert scale was utilized to quantify teacher perceptions. The five values used to quantify the results were: 1. Strongly Agree (SA); 2. Agree (A); 3. No Opinion (N); 4 Disagree (D); and 5. Strongly Disagree (SD). The two questions that guided the study were: (a) How do teachers perceive the impact of their school's established professional development on their ability to provide Tier 2 reading interventions? and (b) How do teachers perceive the impact of their school's available resources and support on their ability to provide Tier 2 reading interventions?

**Research Question 1.** Survey questions 1-11 focused on participants' level of professional development and their ability to effectively take the information learned from professional development sessions and use data to progress monitor Tier 2 students. As shown in Table 4, the statements addressed teachers' perceptions of their level of

professional development and ability to use data to progress monitor students. The means obtained from research question 1 ranged from 2.0556 to 2.6111. Survey statement 4 had the highest standard deviation, 1.27491, which shows the most variability among responses.

**Table 4**

*Teachers' Perceptions of Professional Development and Data/Progress Monitoring*

(N=36)

Statement Number	Survey Statement	Mean	Std. Deviation
1	I received professional development prior to my implementation of Tier 2 reading interventions.	2.0857	1.06747
2	I received sufficient professional development related to the RTI process.	2.3611	1.12511
3	I have received sufficient professional development to analyze Tier 2 student data.	2.4444	1.18187
4	RTI professional development is ongoing and consistent in my district/campus.	2.5556	1.27491
5	The available times for professional development relating to interventions correlate with my schedule.	2.6111	1.22539

6	I know how to access data relating to Tier 2 reading interventions.	2.1944	1.09073
7	I know how to analyze data relating to Tier 2 reading interventions.	2.2222	1.07201
8	Data received from Tier 2 intervention results help me determine important focus skills to teach.	2.0833	.99642
9	I have the tools needed to consistently monitor student progress.	2.1667	1.13389
10	Tier 2 reading interventions have improved my students' reading abilities.	2.0556	.984000
11	I have a plan to target students who are not making progress in Tier 2 interventions.	2.0857	1.01087

Table 5 reports the overall mean and standard deviation of research question 1. The mean was 2.2641 and the standard deviation was .90122.

### **Table 5**

*Summary of Responses from Questions 1-11 (N=36)*

Statement Number	Mean	Std. Deviation
1-11	2.2641	.90122

**Research Question 2.** Table 6 consists of eleven perception statements, representing survey statements 12-22. These statements addressed the available resources

and support for teachers' ability to provide Tier 2 reading interventions. The means obtained from research question 2 ranged from 1.8611 to 2.8056. Survey statement 22 had the highest standard deviation, 1.32707, which shows the most variability among responses.

**Table 6**

*Resources and Support (N=36)*

Statement Number	Survey Statement	Mean	Std. Deviation
12	My campus has RTI resources to implement RTI interventions.	1.9444	.82616
13	I need more resources to effectively provide Tier 2 reading interventions.	2.7500	1.10518
14	The resources on my campus support student progress in Tier 2 reading interventions.	2.2222	.92924
15	I have been trained on how to implement the resources on my campus.	2.0556	.89265
16	I have in class support during my RTI time to assist with reading interventions.	2.7778	1.28976
17	My campus has a schoolwide RTI implementation plan.	2.0286	.92309
18	My administration team supports and are proponents of the RTI process.	1.8611	.68255

19	My campus holds regular PLC meetings to address RTI and student progress.	2.4444	1.27491
20	My campus holds regular PLC meetings to address RTI.	2.4722	1.31987
21	My campus/district has a specialist who is available to assist teachers with issues concerning Tier 2 reading interventions.	2.0556	1.06756
22	I have sufficient time to plan for Tier 2 small group and individual student reading interventions.	2.8056	1.32707

Table 7 shows the overall mean and standard deviation for research question 2.

The mean was 2.3114 and the standard deviation was .66956.

### **Table 7**

*Summary of Responses from Questions 12-22 (N=36)*

Statement Number	Mean	Std. Deviation
12-22	2.3114	.66956

### **Open-Ended Question**

The last section of the survey included two open-ended questions. The researcher was interested in additional feedback from participants that would yield a more comprehensive view of the study. The open-ended questions specifically asked: What are

the current challenges you experience with implementing Tier 2 reading interventions? What additional resources/training are needed to ensure the success of Tier 2 reading intervention implementation? Of the 34 participants that completed the survey, 31 responded to the open-ended questions. The researcher analyzed each response to determine recurring themes.

Question 1 asked, “What are the current challenges you experience with implementing Tier 2 reading interventions?” This question yielded four significant themes: time-consuming, inadequate support, large numbers of students in Tier 2, and resources.

**Time-consuming.** More than half of the responses related to the lack of time to provide interventions, plan for interventions, or time to incorporate interventions into daily schedules due to the vast number of other obligations. For example, one participant stated, “With all of the COVID complications and lack of substitutes, we do not have time for anything but the bare basics.” Another participant said, “I would say time management trying to successfully give each student what they individually need in a short period of time.”

**Inadequate support.** The second theme from question one pertained to inadequate support and assistance when providing interventions. One participant stated, “We do not have enough experienced and certified teachers to adequately execute the interventions.” Another participant shared, “There is not enough support when grouping students.”

**Large numbers of students in Tier 2.** This theme highlighted the substantial number of students represented on the Tier 2 level. Participants shared, “The number of

students on Tier 2 makes it hard to target them when there are so many students on tiers.” Another participant commented, “There are too many students and not enough support when grouping students.”

**Resources.** This theme addressed the lack of material and training around it. One participant responded, “Not enough resources.” Another participant shared, “There is a delay in receiving the curriculum.” While many said there were not enough resources, another participant commented, “New resources are added almost daily, and it’s overwhelming.”

Question 2 asked, “What additional resources/training are needed to ensure the success of Tier 2 reading intervention implementation?” This question yielded two significant themes: grouping and ongoing, strategic training.

**Grouping.** Many participants expressed an additional need for training to support them with grouping students who are making inadequate progress. One participant commented, “How to group students and keep track of who is/is not progressing.” Another participant said, “Training to give techniques for strategy groups.”

**Ongoing, Strategic Training.** The second theme stemming from question 2 addressed a need for continued training that will build teachers’ capacity around reading interventions. One participant said, “There should have been more implementation training, especially with the program that is used. Instead of receiving professional development over the Tier 2 intervention program, new hires, and teachers new to the MTSS department simply received the same streamlined new hire training. Training was not implemented with fidelity, which left a slew of questions.”

## **Summary**

The purpose of this chapter was to present the results of the study. Thirty-six teachers participated in this study. Demographic information on grade level, teaching experience, and highest level of education were analyzed and presented. Descriptive statistics were utilized to analyze the means and standard deviation of responses to the survey statements. The two open-ended questions were essential in determining similarities shared among participants. The emergent themes from question 1 were time consuming, inadequate support, large numbers of students in Tier 2, and resources. The emergent themes from question 2 were grouping, and ongoing, strategic training.



## **CHAPTER 5**

### **DISCUSSION, IMPLICATIONS, RECOMMENDATIONS FOR FURTHER STUDY, AND CONCLUSION**

This chapter provides a summary of the findings, discussion, conclusion, and recommendations for future research. The purpose of this study was to examine teachers' perceptions of Tier 2 reading interventions in a large school district in Southeast Texas. The study employed two research questions: (a) How do teachers perceive the impact of their school's established professional development on their ability to provide Tier 2 reading interventions? and (b) How do teachers perceive the impact of their school's available resources and support on their ability to provide Tier 2 reading interventions?

#### **Discussion**

Survey research was used to collect data from thirty-six teachers in a large school district in Southeast Texas. The survey instrument, *Perceptions of Tier 2 Reading Interventions* (Appendix A), consisted of a demographic section, 22 Likert scale questions, and two open-ended questions. After data collection, the researcher utilized descriptive statistics to analyze the means and standard deviations in SPSS.

Demographic data included grade level currently teaching, years of experience, and highest level of education. Participants in the elementary grades made up most of the responses. The group with the most extensive years of teaching experience were participants with over 20 years of experience, 27%. Participants who have between 6-10 years of experience made up the second largest group, with 25%. 60% of the participants had a master's degree.

The first research question was, “How do teachers perceive the impact of their school’s established professional development on their ability to provide Tier 2 reading interventions?” The results of this study (Table 4) showed overall positive perceptions regarding teachers’ level of professional development of Tier 2 reading interventions ( $M=2.2641$ ,  $SD=.90122$ ). The means obtained from research question 1 ranged from 2.0556 to 2.6111 on a five-point Likert scale.

A notable finding was that many teachers agreed or strongly agreed that they had received professional development prior to implementing Tier 2 reading interventions (82%); however, only 60% of respondents agreed or strongly agreed that RTI professional development is ongoing and consistent. This supports the review of literature that suggests if a collaborative effort that includes ongoing professional development and shared leadership exists in schools, there is increased teacher self-efficacy and buy-in (Rinaldi et al., 2011).

The second research question was, “How do teachers perceive the impact of their school’s available resources and support on their ability to provide Tier 2 reading interventions?” The results of this question (Table 7) showed the mean, which ranged from 1.8611 to 2.8056.

One notable finding from the results was that while respondents shared that they had training on resources and material, many lack the in-class support to give students. This finding was consistent with a study by Swanson et al. (2012) in which teachers expressed frustration with the lack of teachers or specialists to assist with the large numbers of students receiving reading interventions.

Another notable finding was the responses on statement number 22 which stated, I have sufficient time to plan for Tier 2 small group and individual student reading interventions. Only 58% of respondents agreed or strongly agreed with this statement. Findings were consistent with Werts et al. (2014), which shared inadequate time as a barrier to effectively implementing reading interventions.

The open-ended questions allowed the researcher to gain insight into additional feedback and challenges teachers face when providing reading interventions. Four themes emerged from open-ended question 1: time-consuming, inadequate support, large numbers of students in Tier 2, and resources. Two themes emerged from open-ended question 2: additional support for grouping, and ongoing, strategic training. The most notable finding was that more than half of the respondents mentioned RTI as being a time-consuming process. This finding was consistent with a study by Werts et al. (2014) in which time being a problem or barrier was listed in a quarter of the statement responses.

### **Implications**

The findings from this research study indicate that teacher perceptions surrounding Tier 2 reading interventions are essential in understanding what is working effectively for teachers and provides possible RTI reform efforts needed to better assist reading intervention teachers. The findings also reveal that teachers have the desire to see students succeed but may be overwhelmed with the time and number of students to service. This may indicate a need for ongoing, consistent professional development focused on Tier 2 reading interventions. As a result, the following implications for teachers and administrators should be considered.

**Implications for Teachers.** Several teachers expressed a need for additional training that goes beyond describing reading interventions but can equip teachers with the data and tools to monitor student regression and progression appropriately. As a result, the delivery of Tier 2 reading interventions can be more effective if teachers receive professional development that supports teachers not just at the beginning of the year but that is ongoing and specific to assist Tier 2 reading interventions. The school district can ensure there are professional development opportunities that extend the understanding of reading intervention implementation. Several respondents expressed that they received training in the beginning of the year, but there should be training throughout the year to support reading intervention teachers with the knowledge to better analyze data and use the data results to provide lessons to support a student's current level during interventions.

The results of the open-ended question revealed that teachers also need support with grouping their students and tracking students' growth or regression. Teachers can attend professional development sessions that allow time for the hands-on practice of using data to make informed decisions based on student's individual needs.

**Implications for Administrators.** Administrators should work to ensure interventions are streamlined. A consistent effort to make Tier 2 reading interventions a priority from administration can show staff and students that interventions are important. Many respondents in the study shared that there were large numbers of students in Tier 2 groups and not enough time to accommodate each student's individual needs properly. Administrators should create a yearlong professional development plan and seek to address the limited time available to adequately plan and execute interventions.

**Limitations**

There were several limitations to consider in this study. The study had a small sample size. One hundred reading intervention teachers were asked to participate; only 36 completed the survey. There was a 36% return rate. The study was limited to one school district in Southeast Texas. The study was also limited to only reading intervention teachers.

**Recommendations for Future Research**

The insight and information gained from this study revealed teacher perceptions of Tier 2 reading interventions. Future research can expand on this study and help strengthen the fidelity of Tier 2 reading interventions.

A follow-up study could examine teacher perceptions of Tier 2 math interventions. A study of this nature could determine if math teachers experience similar concerns when implementing Tier 2 interventions in math.

Future studies on training and implementation of Tier 2 reading interventions can also be conducted. This study revealed that many teachers need more training on the resources and how to group and monitor students. A study could be conducted to provide teachers with ongoing training to determine the impact of Tier 2 reading interventions.

A true mixed methods study could also be beneficial in future studies. A study of this nature can include survey research and interviews to present additional information on this topic.

Minority students represent an overwhelming number of students receiving reading interventions. As Snow et al. (1998) share, African American and Hispanic students have a greater risk of reading difficulty as compared to their White counterparts.

A study can also be conducted to determine the effectiveness of Tier 2 reading interventions on students of color.

### **Conclusion**

This chapter presented a summary and discussion of the findings. The theoretical framework of self-efficacy is supported by the findings of this study, when an individual believes in their abilities, they can produce desired outcomes (Bandura, 1977). A strong belief in abilities can be implemented by providing Tier 2 reading teachers with training and support. In addition, the second theory, cognitive development is supported by the findings in the study. Reading intervention teachers meet students at their academic level, provide targeted interventions at their deficit level, and work to close the gaps.

Recommendations for future research were made. In conclusion, the findings in this study are substantial and suggest the need for the continued support of reading interventions within a Multi-Tiered System of Support.

## **APPENDICES**

**APPENDIX A**  
**SURVEY INSTRUMENT**



## Perceptions of Tier 2 Reading Interventions

### Part I-Demographics

*Directions:* Mark an answer for each item that best describes you.

Select all of the grade levels you are currently teaching.

- |                            |                            |                             |
|----------------------------|----------------------------|-----------------------------|
| <input type="checkbox"/> K | <input type="checkbox"/> 5 | <input type="checkbox"/> 10 |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 6 | <input type="checkbox"/> 11 |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 7 | <input type="checkbox"/> 12 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 8 |                             |
| <input type="checkbox"/> 4 | <input type="checkbox"/> 9 |                             |

What range describes your years of teaching experience?

- 0-5
- 6-10
- 11-15
- 16-20
- 21+

Which of the following describes your highest level of education attained?

- Bachelor of Arts/Science
- Master of Arts/Science
- Educational Specialist
- Doctor of Philosophy/Education

What range describes the hours of RTI professional development you have received?

- 1-5
- 6-10
- 11-15
- 16-20
- 21+

## Part II-Perceptions Survey

*Directions:* Read each statement and choose the statement that most closely matches your perception of Tier 2 reading interventions (Mark one answer per statement).

### Professional Development:

1. I received professional development prior to my implementation of Tier 2 reading interventions.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
2. I received sufficient professional development related to the RTI process.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
3. I have received sufficient professional development to analyze Tier 2 student data.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
4. RTI professional development is ongoing and consistent in my district/campus.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
5. The available times for professional development relating to interventions correlate with my schedule.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree

### Data/Progress Monitoring:

1. I know how to access data relating	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
---------------------------------------	----------------	-------	------------	----------	-------------------

to Tier 2 reading interventions.					
2. I know how to analyze data relating to Tier 2 reading interventions.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
3. Data received from Tier 2 intervention results help me determine important focus skills to teach.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
4. I have the tools needed to consistently monitor student progress.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
5. Tier 2 reading interventions have improved my students' reading abilities.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
6. I have a plan to target students who are not making progress in Tier 2 interventions.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree

**Resources:**

1. My campus has RTI	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
----------------------	----------------	-------	------------	----------	-------------------

resources to implement RTI interventions.					
2. I need more resources to effectively provide Tier 2 reading interventions.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
3. The resources on my campus support student progress in Tier 2 reading interventions.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
4. I have been trained on how to implement the resources on my campus.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
5. I have in class support during my RTI time to assist with reading interventions.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree

**Support:**

1. My campus has a school-wide RTI implementation plan.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
2. My administration team supports and are proponents of	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree

the RTI process.					
3. My campus holds regular PLC meetings to address RTI and student progress.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
4. My campus holds regular PLC meetings to address RTI.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
5. My campus/district has a specialist who is available to assist teachers with issues concerning Tier 2 reading interventions.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
6. I have sufficient time to plan for Tier 2 small group and individual student reading interventions.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree

**Open-Ended Response:**

1. What are the current challenges you experience with implementing Tier 2 reading interventions?


2. What additional resources/trainings are needed to ensure the success of Tier 2 reading intervention implementation?


**APPENDIX B**  
**IRB APPROVAL LETTER**



TEXAS SOUTHERN UNIVERSITY  
Office of Research

**March 1, 2022**

Good day, Marlena Robinson!

This is to inform you that your protocol #ES067, "Teacher Perceptions of Tier 2 Reading Interventions", is exempt from Texas Southern University's Institutional Review Board (IRB) full committee review. Based on the information provided in the research summary and other information submitted, your research procedures meet the exemption category set forth by the federal regulation 45CFR 46.104(d)(2):

*Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording)*

The Federal Wide Assurance (FWA) number assigned to Texas Southern University is FWA00003570.

If you have questions, you may contact the Research Compliance Administrator for the Office of Research at 713-313-4301.

*PLEASE NOTE: (1) All subjects must receive a copy of the informed consent document, if applicable. If you are using a consent document that requires participants' signatures, signed copies can be retained for a minimum of 3 years of 5 years for external supported projects. Signed consents from student projects will be retained by the faculty advisor. Faculty is responsible for retaining signed consents for their own projects, however, if the faculty leaves the university, access must be made available to TSU CPHS in the event of an agency audit. (2) Documents submitted to the Office of Research indicate that information obtained is recorded in such a manner that human subjects cannot be identified directly or through identifiers linked to the subject; and the identities of the subjects will not be obtained or published; and any disclosures of the human subjects' responses outside the research will not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation. The exempt status is based on this information. If any part of this understanding is incorrect, the PI is obligated to submit the protocol for review by the CPHS before beginning the respective research project. (3) Research investigators will promptly report to the CPHS any injuries or other unanticipated problems involving risks to subjects and others.*

**This protocol will expire March 1, 2025**

Sincerely,



**APPENDIX C**  
**DISTRICT APPROVAL LETTER**



16717 ELLA BLVD.  
HOUSTON, TEXAS 77090

281-891-6005

www.springisd.org

Date: April 25, 2022  
Marlena Robinson  
6363 San Felipe Street #451  
Houston, Texas 77057  
281-948-6525

Dear Ms. Robinson,

The Spring Independent School District is pleased to approve your study, "Teacher Perceptions of Tier Reading Interventions." The purpose of this study is to examine teacher perceptions regarding professional development and resources provided for Tier 2 reading interventions. The researcher will attempt to recruit approximately 30 elementary, middle, and high school reading intervention teachers to take part in a survey. Data collection will take place in the fall of 2022.

Approval to conduct the study in Spring ISD is contingent on meeting the following conditions:

- The researcher will recruit participants via email, and participants will include elementary, middle, and high school reading intervention teachers.
- The total time for each of the thirty staff members to complete the survey will be approximately thirty minutes.
- No archival data will be requested from the district.
- It is at the discretion of campus principal(s) to participate in the research study. **Permission from the principal must be obtained prior to recruiting or collecting any data.**
- Collection of staff email addresses will be the sole responsibility of the researcher.
- All Spring ISD staff participating in this study must provide active informed consent before taking part in the study.
- District, schools, and staff are not identified in the study, and data remain confidential.
- The study does not infringe upon designated instructional time on a campus.
- Approval to conduct the study is granted for fulfillment of a doctoral program at Texas Southern University.
- The district receives copies of the completed final report within 30 days after its completion.

Any changes or modifications to the current proposal must be submitted for approval to the Spring ISD Department of Research, Assessment, and Accountability. The district reserves the right to forego its participation in the study at any time without reason. Should you need additional information or have any questions concerning the process, please contact Kendall McCarley at (281) 891-6351.

Sincerely,

## References

- Allington, R. L. (2002). What I've learned about effective reading instruction from a decade of studying exemplary elementary classroom teachers. *Phi Delta Kappan*, 83(10), 740-747. <http://www.jstor.org/stable/20440246>
- Allington, R. L. (2013). What really matters when working with struggling readers. *The Reading Teacher*, 66(7), 520-530. <https://doi.org/10.1002/trtr.1154>
- Anderson, R. C., Hiebert, E. H., Scott, J. A., Wilkinson, I. A. G., Becker, W., & Becker, W. C. (1985). *Becoming a nation of readers: The report of the commission on reading*. 1-155.
- Austin, C. R., Vaughn, S., & McClelland, A. M. (2017). Intensive reading interventions for inadequate responders in grades k-3. *Learning Disability Quarterly*, 40(4), 191-210. <https://doi.org/10.1177/0731948717714446>
- Bailey, T. R. (2019). *Is MTSS the new RTI? Depends on where you live*. Center on Multi-Tiered Systems of Support at the American Institute for Research. <https://www.mtss4success.org/blog/mtss-new-rti-depends-where-you-live>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. self-efficacy toward a unifying theory of behavioral change.pdf
- Barber, A. T., & Klauda, S. L. (2020). How reading motivation and engagement enable reading achievement: Policy implications. *Policy Insights from the Behavioral and Brain Sciences*, 7(1), 27-34. <https://doi.org/10.1177/2372732219893385>

- Barrera, M., & Liu, K. K. (2010). Challenges of general outcomes measurement in the rti progress monitoring of linguistically diverse exceptional learners. *Theory into Practice, 49*, 273-280. <https://doi.org/10.1080/00405841.2010.510713>
- Beck, I.L., McKeown, M.G., & Kucan, L. (2013). *Bringing words to life: Robust vocabulary instruction* (2<sup>nd</sup> ed). The Guilford Press
- Biemiller, A. (2003). Vocabulary: Needed is more children are to read well. *Reading Psychology, 24*(3/4), 323-335. <https://doi.org/10.1080/02702710390227297>
- Brabham, E., Buskist, C., Henderson, S.C., Paleologos, T., & Baugh, N. (2012). Flooding vocabulary gaps to accelerate word learning. *The Reading Teacher, 65*(8), 523-533. <https://doi.org/10.1002/trtr.01078>
- Braun, G., Kumm, S., Brown, C., Walte, S., Hughes, M.T., & Maggin, D.M. (2018). Living in tier 2: educators' perceptions of mtss in urban schools. *International Journal of Inclusive Education*. Doi:10.1080/13603116.2018.1511758
- Brown, C. S. (2014). Language and literacy development in the early years: Foundational skills that support emergent readers. *The Language and Literacy Spectrum, 24*, 35-49. <https://files.eric.ed.gov/fulltext/EJ1034914.pdf>
- Brozo, W. G. (2010). The role of content literacy in an effective rti program. *The Reading Teacher, 64*(2), 147-150. <https://doi.org/10.1598/RT.64.2.11>
- Castles, A., Rastle, K., & Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in Public Interest, 19*(1), 5-51. Doi:10.1177/1529100618772271
- Chall, J. S. (1967). *Learning to read: The great debate*. McGraw Hill.
- Chall, J.S. (1983). *Stages of reading development*. McGraw-Hill Book Company.

- Choi, J.H., McCart, A.B., Miller, D.H., & Sailor, W. (2022). Issues in statewide scale up of a multi-tiered system of support. *Journal of School Leadership*, 32(5), 514-536. <https://doi:10.1177/10526846211067650>
- Ciullo, S., Lembke, E. S., Carlisle, A., Thomas, C. N., Goodwin, M., & Judd, L. (2016). Implementation of evidence-based literacy practices in middle school response to intervention: An observation study. *Learning Disability Quarterly*, 39(1), 44-57. <https://doi.org/10.1177/0731948714566120>
- Counts, J., Katsiyannis, A., & Whitford, D. K. (2018). Culturally and linguistically diverse learners in special education: English learners. *NASSP Bulletin*, 102(1), 5-21. <https://doi.org/10.1177/0192636518755945>
- Desimone, L. M. (2011). A primer on effective professional development. *Phi Delta Kappa International*, 92(6), 68-71. <https://www.jstor.org/stable/25822820>
- Denton, C. A. (2012). Response to intervention for reading difficulties in the primary grades: Some answers and lingering questions. *Journal of Learning Disabilities*, 45(3), 232-243. <https://doi-org.tsu.idm.oclc.org.10.1177/0022219412442155>
- DeWalt, D. A., Berkman, N. D., Sheridan, S., Lohr, K. N., & Pignone, M. P. (2004). Literacy and health outcomes: A systematic review of literature. *Journal of General Internal Medicine*, 19(12), 1228-1239. <https://doi.org/10.1111/j.1525-1497.2004.40153.x>
- Donegan, R. E, Wanzek, J., Al Otaiba, S. (2020). Effects of a reading intervention implemented at differing intensities for upper elementary students. *Learning Disabilities Research and Practice*, 35(2), 62-71. <https://doi.org/10.1111/ldrp.12218>

- Duff, D., Tomblin, J. B., & Catts, H. (2015). The influence of reading on vocabulary growth: A case for a matthew effect. *Journal of Speech, Language, and Hearing Research, 58*, 853-864. [https://doi.org/10.1044/2015\\_JSLHR-L-13-0310](https://doi.org/10.1044/2015_JSLHR-L-13-0310)
- Eagle, J.W., Dowd-Eagle, S.E., Snyder, A., & Holtzman, E.G. (2015). Implementing a multi-tiered system of support (mtss): Collaboration between school psychologists and administrators to promote systems-level change. *Journal of Educational and Psychological Consultation, 25*(2-3), 160-177. <https://doi.org/10.1080/10474412.2014.929960>
- Faggella-Luby, M., & Wardwell, M. (2011). Rti in middle school: Findings and practical implications of a tier 2 reading comprehension study. *Learning Disability Quarterly, 34*(1), 35-49. <https://www.jstor.org/stable/23053295>
- Fisher, D., Frey, N., & Lapp, D. (2021). Veteran teachers' understanding of "balanced literacy." *Journal of Education*. <https://doi-org.tsu.idm.oclc.org/10.1177/0022/574211025980>
- Flesch, R. F. (1955). *Why johnny can't read—and what you can do about it*. [eBook]. New York Harper. <https://www.perlego.com/book/591144/why-johnny-cant-read-pdf>
- Fuchs D., Fuchs, L. S., & Compton, D. L. (2012). Smart RTI: A next-generation approach to multilevel prevention. *Exceptional Children, 78*(3), 263-279. <https://doi.org/1177/001440291207800301>
- Fuchs, D., & Fuchs, L. S. (2005). Responsiveness-to-intervention: A blueprint for practitioners, policymakers, and parents. *Teaching Exceptional Children, 38*(1), 57-61.

- Fuchs, D., & Fuchs, L. S. (2006). Introduction to response to intervention: What, why, and how valid is it? *Reading Research Quarterly, 41*(1), 93-99.  
<https://doi.org/10.1598/RRQ.41.1.4>
- Gersten, R., Newman-Gonchar, R., Haymond, K. S., & Dimino, J. (2017). What is the evidence base to support reading interventions for improving student outcomes in grades 1-3? (REL 2017-271). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast. Retrieved from <http://ies.ed.gov/ncee/edlabs>.  
<http://www.schoolcommunitynetwork.org/SCJ.aspx>
- Goldman, S. R., Snow, C., & Vaughn, S. (2016). Common themes in teaching reading for understanding: Lessons from three projects. *Journal of Adolescent and Adult Literacy, 6*(3), 255-264. <https://doi.org/10.1002/jaal.586>
- Gonzalez, N. (2019). When evidence-based literacy programs fail. *The Phi Delta Kappan, 100*(4), 54-58. <https://www.jstor.org/stable/26552487>
- Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education, 7*(6), 6-10.  
<https://doi.org/10.1177/074193258600700104>
- Graves, S. & Mitchell, A. (2011). Is the moratorium over? African American psychology professional's views on intelligence testing in response to changes to federal policy. *Journal of Black Psychology, 37*(4), 407-425.  
<https://doi.org/10.1177/0095798410394177>

- Greenfield, R., Rinaldi, C., Proctor, C. P., & Cardarelli, A. (2010). Teachers' perceptions of a response to intervention (RTI) reform effort in an urban elementary school: A consensual qualitative analysis. *Journal of Disability Policy Studies, 21*(1), 47-63.
- Haager, D. (2007). Promises and cautions regarding using response to intervention with English language learners. *Learning Disability Quarterly, 30*, 213-218.
- Hammond, Z. (2015). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Thousand Oaks, CA: Corwin.
- Harlacher, J. E., Sanford, A. K., & Walker, N. N. (2014). *Distinguishing between tier 2 and tier 3 instruction in order to support implementation of RTI*. Education Faculty Publications and Presentations.  
<http://www.rtinetwork.org/essential/tieredinstruction/tier3/distinguishing-between-tier-2-and-tier-3-instruction-in-order-to-support-implementation-of-rti>
- Harris, B., & Sullivan A. L. (2017). A framework for bilingual school consultation to facilitate multitier systems of support for English language learners. *Journal of Educational and Psychological Consultation, 27*(3), 367-392.  
<http://dx.doi.org/10.1080.10474412.2017.1307758>
- Hebbeler, K., & Spiker, D. (2016). Supporting young children with disabilities. *The Future of Children, 26*(2), 185-205. <https://www.jstor.org/stable/43940587>
- Hirsch, E.D. (2003). Reading comprehension requires knowledge-of words and the world: Scientific insights into the fourth grade slump and the nation's stagnant comprehension scores. *American educator, 11*-45



- Hughes, C. A., & Dexter, D. D. (2011). Response to intervention: A research-based summary. *Theory Into Practice, 50*(1), 4-11.  
<https://doi.org/10.1080/00405841.2011.534909>.
- Jones, J. S., Conradi, K. & Amendum, S. J. (2016). Matching interventions to reading needs: A case for differentiation. *The Reading Teacher, 70*(3), 307-316.  
<https://www.jstor.org/stable/44001441>
- Kendeou, P., McMaster, K. L., & Christ, T. J. (2016). Reading comprehension: Core components and processes. *Behavioral and Brain Sciences, 3*(1), 62-69.  
<https://doi.org/10.1177/2372732215624707>
- Kennedy, M. M. (2016). How does professional development improve teaching? *Review of Educational Research, 86*(4), 945-980.  
<https://doi.org/10.3102/0034654315626800>
- Kerlinger, F. N., & Lee, H. B. (2000). *Foundations of Behavioral Research* (4th ed.).  
Harcourt College Publishers.
- Kim, J. S., Hemphill, L., Troyer, M., Thomson, J. M., Jones, S. M., LaRusso, M. D., & Donovan, S. (2017). Engaging struggling adolescent readers to improve reading skills. *Reading Research Quarterly, 52*(3), 357-382.  
<https://doi.org/10.1002/rrq.171>
- Kim, Y.-S., & Snow, C. (2021). The science of reading is incomplete without the science of teaching reading. *The Reading League Journal, 5*-13.
- Klingner, J. K., Artiles, A. J., Kozleski, E., Harry, B., Zion, S., Tate, W. Duran, G. Z., & Riley, D. (2005). Addressing the disproportionate representation of culturally and linguistically diverse students in special education through culturally responsive

educational systems. *Education Policy Analysis Archives*, 13(38), 1-44.

<http://epaa.asu.edu/epaa/v13n38>

Lawrent, G. (2022). Sources of teacher efficacy related attributes alongside bandura's perspectives. *Journal of Education*, 1-10. DOI:10.1177/00220574221094238

Learning Point Associates. (2004). A closer look at the five essential components of reading instruction: A review of scientifically based reading research for teachers.

<https://files.eric.ed.gov/fulltext/ED512569.pdf>

Lipson, M. Y., & Wixson, K. K. (2012). To what interventions are students responding?

*The Reading Teacher*, 66(2), 111-115. <https://www.jstor.org/stable/23322719>

Mathes, P. G., & Torgesen, J. K. (1998). All children can learn to read: Critical care for the prevention of reading failure. *Peabody Journal of Education*, 73(3/4), 317-

340. <https://www.jstor.org/stable/1493210>

McInerney, M., & Elledge, A. (2013). *Using a response to intervention framework: A pocket guide for state and district leaders*. American Institute for Research.

[https://www.air.org/sites/default/files/downloads/report/Response\\_to\\_Intervention\\_Pocket\\_Guide\\_2\\_0.pdf](https://www.air.org/sites/default/files/downloads/report/Response_to_Intervention_Pocket_Guide_2_0.pdf)

Migration Policy Institute. (2020a). *ELL information center*. Retrieved from,

<http://www.migrationpolicy.org/programs/ell-information-center>.

Migration Policy Institute. (2020b). *English language learners and the every student succeeds act (ESSA)*. Retrieved from,

<http://www.migrationpolicy.org/programs/nciip-english-learners-and-every-student-succeeds-act-essa>.

- Milburn, T. F., Lonigan, C.J., & Phillips, B. M. (2017). Determining responsiveness to Tier 2 interventions in response to intervention: Level of performance, growth, or both. *The Elementary School Journal, 118*(2), 310-334.  
<https://doi.org/10.1086/694271>
- Mills, G. E., & Gay, L. R. (2019). *Educational research: Competencies for analysis and applications* (12th ed). Pearson.
- Moats, L. C. (2020). Teaching reading is rocket science: What expert teachers of reading should know and be able to do. *American Educator, 1-35*.  
<https://www.aft.org/sites/default/files/moats.pdf>
- Morris, D. (2015). Preventing reading failure: An argument. *The Reading Teacher, 68*(7), 502-509. <https://doi.org/10.1002/trtr.1346>
- Mundschenk, N. A., & Fuchs, W. W. (2016). Professional learning communities: An effective mechanism for the successful implementation and sustainability of response to intervention. *SRATE Journal, 25*(2), 55-64.  
<http://www.sratejournal.org>
- National Center for Education Statistics. (2020). *The nation's report card: Reading results from 2019 reading assessments*. National Center for Education Statistics. Washington, D.C.: Institute of Education Sciences, U.S. Department of Education.
- National Center for Education Statistics. (2021). *The nation's report card: Reading results from 2019 reading assessments*. National Center for Education Statistics. Washington, D.C.: Institute of Education Sciences, U.S. Department of Education. <https://www.nationsreportcard.gov/reading?grade=4>

- National Center for Learning Disabilities. (2022). Understand the issues. Issue Brief: Multi-tier system of support/response to intervention. [Nclld.org/get-involved/understand-the-issues/multi-tier-system-of-supports-response-to-intervention](https://www.nclld.org/get-involved/understand-the-issues/multi-tier-system-of-supports-response-to-intervention)
- National Center on Response to Intervention. (2010). Essential components of rti-A closer look at response to intervention. Washington, D.C.: U.S. Department of Education. 1-13. <https://www.files.eric.ed.gov/fulltext/EDS26858.pdf>
- National Institute of Child Health and Human Development (NICHD). (2000). Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction. [chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.nichd.nih.gov/sites/default/files/publications/pubs/nrp/Documents/report.pdf](https://www.nichd.nih.gov/sites/default/files/publications/pubs/nrp/Documents/report.pdf)
- Pearson, D.P. (2004). The reading wars. *Educational Policy*, 18(1), 216-252. DOI:10.1177/0895904803260041
- Poulou M. S., Reddy, L. A., & Dudek, C. M. (2019). Relation of teacher self-efficacy and classroom practices: A preliminary investigation. *School Psychology International*, 40(1), 25-48. <https://doi.org/10.1177/0143034318798045>
- Preston, A. J., Wood, C. L., & Stecker, P. M. (2016). Response to intervention: Where it came from and where it's going. *Preventing School Failure*, 60(3), 173-182. <https://doi.org/10.1080/1045988X.2015.1065399>
- Proctor, S. L., Graves, S. L., & Esch, R. C. (2012). Assessing african american students for specific learning disabilities: The promises and perils of response to

intervention. *The Journal of Negro Education*, 81(3), 268-282.

<https://doi.org/10.7709/jnegroeducation.81.3.0268>

Rasinski, T. V., Chang, S.-C., Edmondson, E., Nageldinger, J., Nigh, J., Remark, L.,

Kenney, K. S., Walsh-Moorman, E., Yildirim, K., Nichols, W. D., Paige, D. D., &

Rupley, W. H. (2017). Reading fluency and college readiness. *Journal of*

*Adolescent & Adult Literacy*, 60(4), 453-460. <https://doi.org/10.1002/jaal.559>

Reagan, K. S., Berkeley, S. L., Hughes, M., & Brady, K. K. (2015). Understanding

practitioner perceptions of responsiveness to intervention. *Learning Disability*

*Quarterly*, 38(4), 234-247. <https://doi.org/10.1177.0731948715580437>

Restori, A.F., Katz, G.S., & Lee, H.B. (2009). A critique of the IQ/achievement

discrepancy model for identifying specific learning disabilities. *Europe's Journal*

*of Psychology*, 128-145. <https://doi.org/10.5964/ejop.v5i4.244>

Rinaldi, C., & Samson, J. (2008). English language learners and response to intervention:

Referral considerations. *Teaching Exceptional Children*, 40(5), 6-14.

[https://journals-sagepub-](https://journals-sagepub-com.tsu.idm.oclc.org/doi/pdf/10.1177/004005990804000501)

[com.tsu.idm.oclc.org/doi/pdf/10.1177/004005990804000501](https://journals-sagepub-com.tsu.idm.oclc.org/doi/pdf/10.1177/004005990804000501)

Rinaldi, C., Higgins Averill, O., & Stuart, S. (2011). Response to intervention:

Educators' perceptions of a three-year rti collaborative reform effort in an urban

elementary school. *Journal of Education*, 191(2), 43-53.

<https://doi.org/10.1177/00220574119100207>

Rippa, S. A. (1997). *Education in a free society: An American history*. Longman.

Ritchey, K. D., Palombo, K., Silverman, R. D., & Speece, D. L. (2017). Effects of an

informational text reading comprehension intervention for fifth-grade students.

*Learning Disability Quarterly*, 40(2), 68-80.

<https://doi.org/10.1177/0731948716682689>

Ruiz, M. I. (2020). Beyond traditional response to intervention: Helping rural educators understand English learners' needs. *Rural and Special Education Quarterly*, 39(1), 35-53. <https://doi.org/10.1177/8756870519894661>

Sadoski, M. (2004). *Conceptual foundations of teaching reading*. The Guilford Press.

Savitz, R. S., Allington, R. L., & Wilkins, J. (2018). Response to intervention: A summary of the guidance state departments of education provide to schools and school districts. *The Clearing House*, 91(6), 243-249.

<https://doi.org/10.1080/00098655.2018.1536641>

Scammacca, N. K., Roberts, G. J., Cho, E., Williams, K. J., Roberts, G., Vaughn, S. R., & Carroll, M. (2016). A century of progress: Reading interventions for students in grades 4-12, 1914-2014. *Review of Educational Research*, 86(3), 756-800.

<https://doi.org/10.3102/0034654316652942>

Sharp, K., Sanders, K., Noltemeyer, A., Hoffman, J. L., & Boone, W. J. (2016). The relationship between rti implementation and reading achievement: A school-level analysis. *Preventing School Failure*, 60(2), 152-160.

<https://doi.org/10.1080/1045988X.2015.1063038>

Simmons, D. C., Coyne, M. D., Kwok, D., McDonagh, S., Harn, B. A., & Kame'enui, E. J. (2008). Indexing response to intervention: A longitudinal study of reading risk from kindergarten through third grade. *Journal of Learning Disabilities*, 41(2),

158-173. <https://doi.org/10.1177/0022219407313587>

- Snow, C.E., Burns, S.M., & Griffin, P. (1998). Preventing reading difficulties in young children. National Academy Press.
- Swanson, E., Solis, M., Ciullo, S., & McKenna, J. W. (2012). Special education teacher's perceptions and instructional practices in response to intervention implementation. *Learning Disability Quarterly*, 35(2), 115-126.  
<https://doi.org/10.1177/0731948711432510>
- Thomas, P. (2022). The science of reading movement: The never-ending debate and the need for a different approach to reading instruction. *National Education Policy Center*.  
<https://www.jstor.org/stable/resrep43761>
- Tomlinson, C. A. (2014). *The differentiated classroom: Responding to the needs of all learners* (2nd ed.). ASCD.
- Torgesen, J. K. (1998). Catch them before they fall: Identification and assessment to prevent reading failure in young children. *American Educator/American Federation of Teachers*, 1-8.
- Toste, J. R., Compton, D. L., Fuchs, D., Fuchs, L. S., Gilbert, J. K., Cho, E., Barquero, L. A., & Bouton, B. D. (2014). Understanding unresponsiveness to tier 2 reading intervention: Exploring the classification and profiles of adequate and inadequate responders in first grade. *Learning Disability Quarterly*, 37(4), 192-203.  
<http://www.jstor.org/stable/24570099>.
- Tracey, D. H. (2017). Understanding the reading process: One path to strengthening classroom instruction. *Education and Urban Society*, 49(9), 814-831.  
<https://doi.org/10.1177/0013124516659526>

- Tunmer, W., & Hoover, W. A. (2019). The cognitive framework of learning to read: A framework for preventing and remediating reading difficulties. *Australian Journal of Learning Difficulties*, 24(1), 75-93.  
<https://doi.org/10.1080/19404158.2019.1614081>
- U.S. Department of Education. (n.d.). *Every student succeeds act (ESSA)*.  
<https://www.ed.gov/essa?src=rn>
- U.S. Department of Education. (2020, November 24). *About IDEA*. Individuals with Disabilities Act. <https://sites.ed.gov/idea/about-idea/#IDEA-Purpose>
- U.S. Department of Education (2003). *No child left behind: A parent's guide*.  
<https://www2.ed.gov/parents/academic/involve/nclbguide/parentsguide.html>
- U.S. News and World Report (2022). Spring independent school district.  
<https://www.usnews.com/education/k12/texas/districts/spring-isd-109014#:~:text=Overview%20of%20Spring%20Independent%20School%20District&text=The%20district's%20minority%20enrollment%20is,of%20students%20are%20economically%20disadvantaged.>
- Van Norman, E. R., Nelson, P. M., & Klingbeil, D. A. (2020). Profiles of reading performance after exiting tier 2 intervention. *Psychology in the Schools*, 57(5), 757-767.
- Vaughn, S., Capin, P., Scammacca, N., Roberts, G., Cirino, P., Fletcher, J. M. (2020). The critical role of word reading as a predictor of response to intervention. *Journal of Learning Disabilities*, 53(6), 415-427. <https://doi-org.tsu.idm.oclc.org/10.1177/0022219419891412>



- Voulgarides, C.K., Fergus, E. & Thorius, K.A.K. (2017). Pursuing equity: Disproportionality in special education and the reframing of technical solutions to address systemic inequalities. *Review of Research in Education*, 41, 61-87.  
<http://www.jstor.org/stable/44668687>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wallace, I. F. (2018). *Universal screening of young children for developmental disorders: Unpacking the controversies*. RTI Press Publication No. OP-0048-1802. Research Triangle Park, NC: RTI Press  
<https://doi.org/10.3768/rtipress.2018.op.0048.1802>.
- Wanzek, J. & Vaughn, S. (2010). Tier 3 interventions for students with significant reading problems. *Theory into Practice*, 49(4), 305-314.  
<https://doi.org/10.1080/00405841>
- Wanzek, J., Stevens, E. A., Williams, K. J., Scammacca, N., Vaughn, S., & Sargent, K. (2018). Current evidence on the effects of intensive early reading interventions. *Journal of Learning Disabilities*, 51(6), 612-624.  
<https://doi.org/10.1177/0022219418775110>
- Washburn, J. (2022). Reviewing evidence on the relations between oral reading fluency and reading comprehension for adolescents. *Journal of Learning Disabilities*, 55(1), 22-42. <https://doi.org/10.1177/00222194211045122>
- Werts, M. G., Carpenter, E. S., & Fewell, C. (2014). Barriers and benefits to response to intervention: Perceptions of special education teachers. *Rural Special Education Quarterly*, 33(2), 3-11. <https://doi.org/10.1177/875687051403300202>

- Wexler, N. (2019). *The knowledge gap: The hidden cause of America's broken education system-and how to fix it*. Random House.
- Williams, K. J., & Vaughn, S. (2020). Effects of an intensive reading intervention for ninth grade English learners with learning disabilities. *Learning Disability Quarterly*, 43(3), 154-166. <https://doi.org/10.1177/0731948719851745>
- Woodward, M.M., and Talbert-Johnson, C. (2009). Reading intervention models: Challenges of classroom support and separated instruction. *The Reading Teacher*, 63(3), 190-200. DOI:10.1598/RT.63.3.2
- World Literacy Foundation. (2018). The economic & social cost of illiteracy: A white paper by the world literacy foundation. 1-9.  
<https://worldliteracyfoundation.org/wp-content/uploads/2021/07/TheEconomicSocialCostofIlliteracy-2.pdf>