High School Educators’ Beliefs and Perceptions of Skills for Response-to-Intervention (RTI) Implementation

by

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Approval Page

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Miriam N. Gayle  
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Acknowledgments

I would like to thank God who makes all things that seem impossible, possible.

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It is finished!
Abstract

High School Educators’ Beliefs and Perceptions of Skills for Response-to-Intervention (RTI) Implementation. Miriam Gayle, 2017: Applied Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education. Keywords: response to intervention, teacher beliefs, teacher perceptions, professional development, Individuals with Disabilities Education Act

The adoption of No Child Left Behind (NCLB) and the reauthorization of Individuals with Disabilities Education Act (IDEA) included the option to use RTI as an approach to address the needs of at-risk students in grades kindergarten through Grade 12. States and school districts were given the authority to implement RTI, however, similar to other education reforms, the decision to move forward with the implementation excluded the needs of individuals who would be leading the effort. Thus, the purpose of this applied dissertation was to (a) determine educators’ beliefs and skills related to RTI; and (b) explore systemic factors that impacted RTI program implementation efforts.

Using an exploratory mixed method design, this study explored the beliefs and perceptions of 51 high school educators currently implementing RTI in a large urban district within south Florida. The first phase, a quantitative research design, used two surveys developed by the Florida Problem Solving/RTI Project. The surveys assessed the RTI beliefs and perceptions of RTI skills for various educators at the study site. The second phase of the study utilized a qualitative research design that included 6 face-to-face interviews using a protocol developed by the researcher and vetted by a team of experts in the field of RTI. Research findings suggested that educators possess low beliefs about RTI and its impact on student outcomes. In addition, findings indicated that the educators have the skills to facilitate the process but need some level of support to implement them. Four major themes emerged from the interviews included the need for ongoing professional developments, for reorganization of urban secondary school support structure, for role clarity, and for improved knowledge of the RTI process.

The research questions for the study are:

1. What are high school educators’ beliefs related to RTI, as measured by the RTI Beliefs Survey–Part I? (Quantitative)
2. What are high school educators’ perceptions of skills related to RTI, as measured by the Perceptions of RTI Skills Survey–Part II? (Quantitative)
3. How do high school educators describe the factors that impact the implementation of RTI as indicated through collection of face-to-face interviews–Part III? (Qualitative)
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Chapter 1: Introduction

The nation’s previous education policy known as The No Child Left Behind Act (NCLB, 2001) and the reauthorization of the Individuals with Disabilities Education Act in 2004 (IDEA, 2004), were aligned to address academic needs of all students and have all students meet grade level proficiency (Sansosti & Noltemeyer, 2008). The nation’s previous education policy known as No Child Left Behind Act (2001) required schools to hire highly qualified educators, provide instruction, and intervention through evidence-based practices (Swindlehurst, Shepherd, Salembier, & Hurley, 2015). Likewise, the reauthorization of Individuals with Disabilities Education Improvement Act (2004) focuses on providing scientific, evidenced-based teaching practices and interventions to students in kindergarten through grade 12 (Mayworm & Sharkey, 2014). Individuals with Disabilities Education Act (2004) highlighted an amalgamated union of general education and special education teachers. General and special education teachers were required to collaborate and discuss instructional practices that would benefit all students (National Association of State Directors of Special Education, Incorporated & Council of Administrators of Special Education, 2006). However, the main intent of the alignment was to identify students with learning disabilities accurately using progress monitoring and multi-tiered instructional and intervention supports (Bartle, 2009).

The blending of both laws required school districts across the nation reassess how students are identified. Although not specifically mentioned in the previous policy NCLB (2001), principles of the RTI framework are mentioned several times, from providing high quality scientifically based instruction and intervention, to holding schools accountable for the progress of all students in regards to meeting grade level specific
standards (Klotz & Canter, 2006). Mandates of the Individuals with Disabilities Education Improvement Act (IDEA, 2004) address basic principles of RTI (Lesh, 2013). RTI is an effective method for helping struggling learners in the general education environment (Buffum, Mattos, & Weber, 2010; Klotz & Canter, 2006). The concept, presents a paradigm shift in instructional beliefs and practice (Bartle, 2009; Castillo et al., 2016; Fullan, 2007; Sansosti & Noltemeyer, 2008; Sulkowski, Joyce, & Storch, 2012). This shift would require school staff to change how they have customarily operated (Castillo et al., 2016). Implementing a RTI model would require educators to move from eligibility as the focus, to student outcomes (Bartle, 2009; Samuels, 2008; Sansosti & Noltemeyer, 2008). Therefore, the practice of waiting for a student to fail before providing help would no longer occur (Bartle, 2009). Early identification of students who are at-risk could provide direction to educators in delivering targeted and deliberate interventions to increase the number of high school graduates and improve student achievement.

The need for implementing RTI at the high school level raises many questions (Deschler & Ehren, 2010; Duffy, 2010; Fisher & Frey, 2011). One concern amongst researchers is secondary schools’ abilities to address academic needs for a large population of diverse students (Deschler & Ehren, 2010; Fisher & Frey, 2011; Sanger, Friedli, Brunken, Snow, & Ritzman, 2012; Swindlehurst et al., 2015). Castillo et al. (2016) posed the question whether schools have the capacity and infrastructure to handle such a task. With little to no research to guide implementation at the high school level it is imperative for district and school-based leaders to begin efforts by developing consensus amongst stakeholders responsible for utilizing practices (Castillo et al., 2016;
Cavendish, Harry, Espinosa, & Mahotiere, 2016; Johnson & Smith, 2008; National Center on RTI, 2010). Additionally, school personnel level of commitment to reform will likely impact implementation, therefore, it is necessary to investigate factors such as beliefs and perceptions that may impact buy-in from educators (Castillo et al., 2016; Fisher & Frey, 2011).

Professional journals contain articles about research and implementation data at the elementary and middle school level (Johnson & Smith, 2008). Without specific, research-based guidelines for implementation of an RTI program with older students, school districts are forced to develop their own, provide professional development to all stakeholders, and sustain efforts to ensure the process continues through adversaries (Johnson & Smith, 2008; National Center on Response to Intervention, 2010). Many school district administrators are working through the initiative in a trial and error model, which could affect student success.

**Statement of the Problem**

The problem addressed through the study is high school educators in a large urban school district do not feel they are adequately prepared to implement RTI effectively in their school. For the RTI program to be successful, the implementation must occur with fidelity and integrity by staff (Lesh, 2013). High school educators are more likely to work in their content in isolation and depend on colleagues to provide remediation to struggling students. Deschler and Ehren (2010) found this might be the result of educators’ perceptions of their skills and whether or not they believe remediation is a shared responsibility. An administrator at the study site identified RTI as a practical instructional approach for improving student achievement for all students. However, due
to skepticism expressed by educators at the study site, inconsistencies in practices have led to fewer students receiving prevention and intervention supports (A. Womack, personal communication, September 7, 2015). Bartle (2009) posited many secondary teachers do not feel they are prepared to step into the new role that requires them to facilitate differentiated instruction and intervention supports for a wide spectrum of learners. At the onset of the study, over 2 years had passed since educators at the study site were provided district-based professional development, yet no systematic effort had occurred for examining the educators’ knowledge and skills in implementing RTI practices. It was, therefore, a leadership priority to assess educators’ beliefs about RTI and perceptions of skills they possess to implement RTI practices (A. Womack, personal communication, September 7, 2015).

Response to Intervention (RTI) requires teachers provide high quality, evidenced-based instruction to all students, regardless of their learning abilities (Bartle, 2009). They are also required to provide varying levels of support services, or tiered supports (see Chapter 2 for more details). Despite 4 years of implementing the RTI approach to increase student achievement at the high school level, academic success has shown a decline in grade level reading proficiency. From 2011-2014, the FCAT 2.0 was used to measure student reading proficiency. In 2015, the FCAT 2.0 was replaced with the Florida Standards Assessments (Commissioner’s Decision for New Florida Standards Assessments, 2014). According to the FCAT 2.0 historical data students’ test scores in reading proficiency were low over a 4-year-period (i.e., 2010-2011; reading proficiency data, 28%; 2011-2012; reading proficiency data, 39%; 2012-2013; reading proficiency data, 38%; and 2013-2014: reading proficiency data, 40%). According to 2015 results of
the Florida Standards Assessments (FSA) for the high school, 60% of students scored at Level 1 for proficiency, which indicated students (a) read two to three grade levels below current grade placement, (b) were considered at risk of academic failure, and (c) were not on track to meet graduation requirements. Possible factors affecting the problem could be (a) teachers do not have confidence in the model, or lack clarity about the model (Fisher & Frey, 2011; Sanger et al., 2012); (b) educators perceive there was a lack in skills to implement the model (Castillo et al., 2016; Fisher & Frey, 2011; Sanger et al., 2012); (c) there was a lack of evidence-based instructional and intervention practices at the secondary level (Fisher & Frey, 2011; Sanger et al., 2012, Cavendish et al., 2016); or (d) there was a need for district-based support (Fisher & Frey, 2011; Sanger et al., 2012).

Addressing students’ ongoing low academic performances, despite implementation of the RTI model, was important to the school’s personnel because only 40% of the student population was reading at Level 3, which signified grade level reading proficiency.

In addition, district-wide educational reform efforts, such as the adoption of RTI, required all school personnel, from administrators to educators, to change how they traditionally operate (Sansosti & Noltemeyer, 2008). Reform decisions are often made at the state or district level, and teachers are seldom involved at the onset (Darling-Hammond, 2009). Fullan (2007) indicated change decisions made from the top-down do not work because they fail to garner the support of all involved in change. Sometimes, teachers involuntarily participate in school reform without materials, resources, or supports. RTI is a high interest topic in educational reform efforts (Zirkel, 2011). The process of implementing RTI garnered support from lawmakers and district leaders across the United States (Sansosti & Noltemeyer, 2008). However, research in secondary
schools is scarce in comparison to research at the elementary level (Bartle, 2009). Without specific, research-based guidelines for implementation of a RTI program with older students, school-districts are forced to develop their own, provide professional development to all stakeholders, and sustain efforts to ensure the process continues through adversaries (Johnson & Smith, 2008; National Center on RTI (NCRTI), 2010). In turn, many school districts are working in a trial and error model, which could impact student success.

According to the most recent NCRTI State report (2010), 45 out of 50 states are implementing a RTI model. Report data further indicated 30 out of 50 states require school districts to use RTI to identify students in need of special education. However, many states have not devised localized RTI frameworks for districts. Many local school district administrators must seek assistance from research conducted by national education centers. Research findings of Sansosti and Noltemeyer (2008) indicated even with legislative support, educational reform efforts have limited success. In an attempt to identify reasons for the lack of effective RTI practices at the high school an investigation into perceptions and beliefs of educators was explored.

**Background and Justification**

This section provides information about the background and significance for the proposed study. Demographics of the high school study site were presented. The remainder of the section reveals the phenomenon of interest for this study, deficiencies in the evidence, and the target audience.

**Setting.** The study site is located in the sixth largest school district nationally. According to the district’s first day enrollment memorandum (Broward County Public
the district is comprised of 334 schools: Elementary–136; Middle–38; High–33; Combination schools–7; Centers–19; and Charters–101. Student enrollment data for the district includes 271,105 students: Pre-kindergarten–5,731; Elementary (K-5) - 97,264; Middle (6-8)–47,147; High (9-12)–70,404; Centers–5,194; Charter Schools–45,365. There are 139,684 male students and 131,421 female students. Socioeconomic data are as follows: 33,378 English Language Learners, 34,051 Exceptional Student Education, and 171,752 Free-Reduced Lunch.

The study site is a high school is in a large urban school district in the southeastern part of the United States. According to recent census data for the target school, the total student population is 2,382 (Broward County Public Schools, 2016). School demographics include 1,244 males and 1,138 females. Socioeconomic demographics are as follows: 229 students who qualify for exceptional student education (ESE) services, 441 who qualify for the English for speakers of other languages program (ESOL), and 1,699 of free-reduced lunch (FRL). The high school consists of 133 employees with 93 instructional staff members. All instructional and administrator staff obtained state educator certificates. Staff at the school consists of one principal, four assistant principals assigned to coordinate the following programs in grades nine through 12: physical education and health, social studies, math, science, reading, English, world languages, fine arts, career technical education, and junior reserve officer training corps. One assistant principal is assigned to manage the RTI program at the high school. There is one guidance director, four guidance counselors, one athletic director, 15 athletic coaches, one reading coach, one district-appointed school psychologist, and one school social worker. A required component of RTI is schools establish a school-based
leadership team or collaborative problem-solving team (Castillo et al., 2016). This team at the study site meets several times throughout the year to review overall school progress, grade-level data, individual student data, academic or behavioral Tier 1 problems, and problem solve to determine intervention plans to address core, group, or individual student concerns. The collaborative problem-solving team (CPST) comprises titles (i.e., school-based administrators, school psychologist, school social worker, academic coaches) except the athletic director and coaches. The team also includes general and special education teachers due to their frequent interactions with individual students (Castillo et al., 2016).

**Phenomenon of interest.** RTI is somewhat a new phenomenon at the high school level. The previous policy named NCLB Act of 2001 and the reauthorization of the IDEA in 2004 proposed school districts adopt a new way to address how students are evaluated for special education services (Klotz & Canter, 2006). As required by the previous education policy NCLB (2001) and IDEA (2004), schools must implement processes and procedures for identifying at-risk students and providing supports required to ensure grade level or subject mastery as measured on statewide assessments such as the Florida Comprehensive Achievement Test (FCAT), Florida Standards Assessment (FSA), and End-of-Course (EOC) exams. As stated by Zirkel (2011), terms mentioned in both laws, such as “high quality, evidenced-based instructional practices, and accountability” provide a framework for RTI (p. 30). Response to Intervention means more than just a process to identify students as having a specific learning disability; it is a way of ensuring better achievement outcomes for all students (Castillo et al., 2016).
Central to this study is the influence of teacher beliefs and perceptions of RTI skills on the quality of instructional practices. The RTI framework is foundationally rooted and grounded in prevention of academic failure (Hoover, 2010). Implementation of RTI requires educators to provide high quality, evidence-based instruction to all students, despite their learning abilities (Bartle, 2009). Therefore, secondary educators need both knowledge and skill in delivering targeted and deliberate interventions to increase the number of high school graduates and improve student achievement (Spear-Swerling & Cheesman, 2012).

**Deficiencies in the evidence.** A review of current literature revealed a deficiency in understanding beliefs and perceptions of secondary educators’ skills in implementing RTI. Many studies investigated RTI Beliefs of elementary staff and perceptions of practices, while only three studies investigated these concepts at the secondary level (Fisher & Frey, 2011; Sansosti, Noltemeyer, & Goss, 2010; National High School Center, National Center on RTI, & Center on Instruction, 2010). However, the literature is not current and does not focus on implementation school-wide (Fisher & Frey, 2011; National High School Center et al., 2010; Sanger et al., 2012). Due to their role in the implementation process, educators must understand their role and responsibilities. For implementation to be most effective, educators must believe in the process and feel individuals and groups of students can benefit successfully from the process (Castillo et al., 2016). The National Association of State Directors of Special Education (NASDSE) and Council of Administrators of Special Education (CASE) (2006) recommended educators’ attitudes and beliefs embrace the conception that all children can learn. Castillo et al. (2016) stated “the beliefs that educators possess about issues such as
student learning, styles of teaching, and instructional strategies impact their willingness to implement new strategies” (p.28). Gessler-Werts, Lambert, and Carpenter (2009) suggested school practitioners’ beliefs and perceptions of skills needed exploring to address the usefulness of their training and practices and examine the school site to ascertain the congruency between theory and practice as it relates to determining the time required for students to progress through tiers. Therefore, education leaders must understand and evaluate the impact of RTI at all school levels, but especially at the secondary level. By exploring beliefs and perceptions of educators, school leaders can utilize their resources to ensure educators are provided with necessary tools required to implement RTI effectively and efficiently. Reported measurements of educators’ beliefs and perceptions of RTI skills can serve as baseline data to inform the content and delivery of future professional development (A. Dixson, personal communication, August 22, 2015).

**Audience.** This study will benefit many stakeholders for different purposes. District-based leaders will gain valuable information on the level of support high school educators need in order to facilitate an RTI program. School leaders, faculty, and staff of the site will gain a better understanding of systematic factors that impede or facilitate implementation efforts. The implementation of RTI at the high school level will assist with catching students before they experience continued decline, or ultimately, dropout affects the number of qualified job candidates from whom local organizations and business leaders can choose.
Purpose of the Study

The purpose of this mixed methods study was to determine (a) educators’ beliefs and skills related to RTI; and (b) explore systemic factors that impact RTI program implementation efforts. The findings of the study identified commonly held beliefs among high school educators, as well as their perceptions of the skills necessary for the implementation of RTI. For change to occur in any educational setting, those involved in change efforts must want the change to occur, understand the need, and have skills and support to implement new practices (Curtis, Castillo, & Cohen, 2008; Castillo, Batsche, Stockslager, March, & Minch, 2010; Fullan, 2010; Hall & Hord, 2015). Knowledge obtained from the study will help schools understand whether educators are ready to undergo a significant process of change.

Definition of Terms

For this study, these terms are identified.

Beliefs. Pajares (as cited by Bai & Ertmer, 2008) defines belief as an affective outcome, based on an individual’s evaluation and judgement of facts. For this study, RTI beliefs scale is used to measure the beliefs educators possess regarding student outcomes, using data to inform decisions, and expectations for the effectiveness of instructional practices (Castillo et al., 2016).

Educator. For this study, educators include administrators, general education teachers, special education teachers, school psychologists, school social workers, and school counselors. This inclusion of the administration and specialists is to ensure the study gathers information from all individuals who are involved in providing instruction and intervention.
No Child Left Behind (NCLB) Act. (2001). This term refers to the nation’s previous education policy enacted by Congress containing requirements that states must use to evaluate adequate yearly progress (AYP). According to NCLB guidelines, states must develop challenging academic standards and assess student progress. States must also determine implementation.

Perceptions of RTI Skills. Perceptions are defined as the state of being or process of becoming aware of something. For this study, perceptions of RTI skills are defined as educators’ perceptions of skills they possess to implement RTI (Castillo et al., 2016).

Professional Development. This term describes how professional educators at many levels (e.g., school-based leaders, instructional personnel, support personnel, district leaders) gain or improve their knowledge, practices, skills, and beliefs to meet requirements of their profession (Castillo et al., 2016).

Response-to-Intervention (RTI). This term is described by Florida as a multi-tiered system of supports for providing high-quality instruction and intervention matched to student needs using learning rate over time and level of performance to inform instructional decisions (Castillo et al., 2016). The problem-solving model of RTI considers all aspects of the student to include the instruction the student receives, the curriculum, the learning environment, and other social factors that may apply. This term is also interchangeable with Multi-Tiered System of Supports (MTSS).

Organization of the Study

The study is organized into five chapters, a list of references, and appendixes. Chapter 1 is the introduction of the study. Chapter 2 includes information regarding
educational accountability and special education, the state’s RTI initiative, components of an RTI framework, and the district’s RTI model. This chapter will also include research of RTI at the high school level and educators’ perceptions of the framework. Chapter 3 details the research design and methodology of the study. Chapter 4 includes an analysis of data and findings of the study. Chapter 5 contains the summary, conclusions, and recommendations for practice, and future study.
Chapter 2: Literature Review

Educators will implement new practices when they understand the need for the new practice and perceive they have skills and/or support to implement the new practice (Castillo et al., 2016). Therefore, it is critical to investigate beliefs and abilities to implement evidenced based practices and skills with fidelity (Sansosti, Telzrow, & Noltemeyer, 2010) It is also critical to identify factors that may affect implementation efforts. With these two suggestions in mind, the researcher conducted an examination of literature related to implementing RTI.

Chapter 2 begins with information regarding educational accountability and special education. The next section is a description of the RTI three-stage systems change model and how the model might facilitate effective implementation of change in education. To support educational change, there must also be a change in educational practices (Fullan, 2007); therefore, literature on practices involving resources, instructional approaches, and educators’ beliefs are explored. Then, information about the state’s RTI initiative, components of the framework, and guided beliefs are presented. Followed by the district’s model for using the four steps of problem solving to address needs of all students. Finally, this chapter will conclude with research on RTI implementation at the high school level and educators’ perceptions of an RTI program.

Educational Accountability and Special Education

In 1983, the National Commission on Excellence in Education published a report titled, a Nation at Risk. The report called on local school districts, state education agencies, and the federal government to take a thorough and honest look at public schools regarding student achievement. The numbers of American students lacking basic reading
and writing skills were a significant concern. According to the report, about 13% of all 17-year olds were functionally illiterate and up to 40% among minority youth; it was estimated 23 million American adults were functionally illiterate (National Commission on Excellence in Education, 1983). Therefore, the nation’s public education system was failing to meet the national need for a globally competitive workforce (Scott, 2010). As implied by the title of the report, the future as a nation was at risk. The American people were no longer at the forefront of advances in industry, trade, science, and technology. Findings in the report exposed the unimaginable; other competitors throughout the world matched and surpassed the United States’ educational accomplishments. Because of the Nation at Risk report, states and school districts were challenged to integrate more rigor through standards-based curriculum. It was determined students would receive standardized achievement tests at different phases throughout their academic careers to gauge their academic progress (Casey, Bicard, Bicard, & Cooley-Nichols, 2008).

While a Nation at Risk was on track with its requests to use tests for baseline data, identification for student needing remediation or enrichment supports, and assistance for teachers, traditional standardized testing does not lend itself to these purposes (Casey et al., 2008). Much controversy and confusion has stemmed from standardized tests being the basis of whether a student will receive special services, especially their role in the IQ/achievement discrepancy model the federal government acknowledged as the sole method to describe a student as having a learning disability. The issue with using the discrepancy model is the student often continues to exhibit at-risk behaviors and the achievement gap widens for years without support or implementation of any intervention (McKenzie, 2010). A Nation at Risk was the catalyst to the surge in the number of
proposals for educational reform that increased educational accountability (Darling-Hammond, 2009).

When the former education policy NCLB was signed in 2002, it brought some of the most comprehensive changes the American educational system had seen in decades. The purpose of the mandate was to increase accountability of the nation’s schools to provide high-quality, equitable, education to all students (Hoover & Love, 2011). New requirements increased the quality and effectiveness of districts and schools providing academic standards-based programs for all students in reading, math, and science. The law primarily affected schools receiving Title I funding, which are supplemental government funds given to schools with large populations of students at the poverty level and most at-risk for low academic achievement (Scott, 2010). The former education policy NCLB (2001) sought to close the achievement gap between groups of students who historically performed low, and their higher performing peers. The former policy mandated schools provide high-quality education with research-based practices for all students. An essential component of No Child Left Behind Act is the documentation of statewide accountability requiring all schools and districts to make adequate yearly progress (AYP) within certain groups of students. The term adequate yearly progress is used to determine the achievement of schools and districts in reading and math (Florida Department of Education, 2012). Subcategories include race, special education, and English-language learners (Ross & Gibson, 2007). By 2014, all students in all subcategories were to be proficient in reading and math (Zirkel, 2007).

To meet adequate yearly progress (AYP), schools were to provide scientifically based academic programs by highly qualified teachers (Hoover & Love, 2011). Student
progress information was collected and analyzed by an outside agency to determine if students were responding to instructional services of the school and if adequate yearly progress was made. At the end of each academic year, states, districts, and schools were issued report cards based on student achievement, attendance, and graduation rates, which were reported on state websites for the public to review. If schools failed to make AYP in any subgroup for three consecutive years, the school was subject to sanctions including permitting students to relocate to another school resulting in loss of funding, corrective action, and provision of supplemental education services, reconstitution of teachers, or a total reorganization by the state. The pressure to perform on high-stakes tests was felt by all stakeholders (Scott, 2010). The Amherst Regional Public Schools stated the pressure of standardized testing started with the authorization of the former No Child Left Behind Act in 2002 in compelling schools to focus on a narrow curriculum and teaching to the test. Eliminating liberal art studies for the sake of closing an achievement gap was not in the best interest of the nation (Scott, 2010).

After No Child Left Behind passed in 2002, the United States fell from 18th in the world in math to 31st place in 2011, with a similar drop in science and no change in reading (National Assessment of Educational Progress, 2012). In 1983, a Nation at Risk pointed out there was approximately 23 million functionally illiterate adults. A functionally illiterate person, may be able to perform very basic reading and writing, but cannot do so at the level required for many societal activities and jobs. The nation’s illiteracy statistics reported there are 45 million functionally illiterate adults who could not read above the fifth grade level (Literacy Project Foundation, 2016). Even with the
push for using standardized tests to hold schools accountable for student achievement, there is still a population of students not making adequate progress.

Students needing special education services due to a learning disability were codified into law with Education for All Handicapped Children Act (EHCA) in 1975. The act mandated all public schools receiving federal funds to educate students with physical and mental disabilities. Schools had to evaluate students and create a plan with input from parents that addressed the needs of the student (Ikeda, 2013). Without funding, schools and districts could not offer services to students with special needs. The evaluation included administering a cognitive (IQ) ability test (Scull & Winkler, 2011). If results of the testing indicated a severe discrepancy between ability and achievement, then a specific disability was identified and services were offered to address the need. Discrepancy is a term used to describe the difference between the student’s ability and achievement. Severe refers to a formula designed by the state or school district for how much underachievement must determine eligibility (Van Der Heyden & Burns, 2010). A severe discrepancy exists when student achievement in academic areas such as reading, writing, and math falls below 50% students’ expected achievement level (Root et al., 2016). It was believed the discrepancy model was the only way to explain low achievement (McKenzie, 2010). There was much debate and concern with the discrepancy model (Fuchs & Fuchs, 2006a, 2006b, 2009).

Since the origin of EHCA in 1975, there was reported in 2002 to be a 300% increase of students with disabilities (Scull & Winkler, 2011). There was an overrepresentation in groups of students living in poverty, limited English homes, and African American males (Sanger et al., 2012). The overrepresentation revealed a flawed
process for identification with the discrepancy model (Fisher & Frey, 2011). Because of this trend, another method for identifying students with disabilities was explored (Hazelkorn, Bucholz, Goodman, Duffy, & Brady, 2011); thus, the creation of the reauthorization of the Individuals with Disabilities Education Act (IDEA) of 2004.

The reauthorization of IDEA (2004) stated it was no longer required to consider whether a child has a severe discrepancy as a basis for determining a learning disability. No longer would schools have to wait for the student to fail before intervening. Although IDEA (2004) did not eliminate the discrepancy model, it provided individual states with the opportunity to make this decision. IDEA (2004) mandated before a student is referred for special education services, the school must identify a process determining how the student responds to scientific, research-based interventions for a period of time. Amendments to IDEA 2004 supported the use of RTI as the process in determining a specific learning disability, connecting general education to social-emotional behaviors and other disabilities, and serving as a predicator for identifying at-risk students (Klotz & Canter, 2006). RTI is a general education initiative and is an encouraged part of the newest version of IDEA to support struggling students (Zirkel, 2007). Also, there was a major shift in how educational programs were provided with students with disabilities. Murawski and Hughes (2009) described RTI as an educational shift from a reactive approach to a proactive approach. This shift allowed students to receive supports prior, to prevent the problem from occurring. The basic tenet of RTI, therefore, is to encourage the use of intensive instruction and intervention to remediate small gaps in student achievement before they become so great as to require special education services. Further, Spear-Swerling and Cheesman (2012) postulated students with disabilities
performed better in general education classrooms, and lawmakers wanted these students to receive access to the general education curriculum. The assertion of this model required educators to consider educating children not only with disabilities in a general education classroom, but students with disabilities programs were held to the same achievement expectations with nondisabled students.

With the reauthorization of the IDEA of 2004 and the former No Child Left Behind Act of 2001, lawmakers, school leaders, and educators were faced with task of improving the performance for all students and closing the gap between disadvantaged students and their peers. School districts across the United States were forced to reassess how students were identified as learning disabled and at-risk (Johnson & Smith, 2008; Sansosti et al., 2010; Spear-Swerling & Cheesman, 2012). Both laws stress the importance of providing research-based instruction and interventions, while holding schools accountable for the achievement of all students in meeting grade-level expectations (Klotz & Canter, 2006). Individuals with Disabilities Education Improvement Act of 2004 provided a framework for the process of RTI. The RTI process requires the student to receive a high quality, effective education in which their progress is monitored prior to receiving a referral for special education services (Sansosti et al., 2010; Spear-Swerling & Cheesman, 2012).

Every Student Succeeds Act of 2015 (ESSA) hold states, districts, and schools responsible for the academic achievement of students for whom they are trusted to educate. Although ESSA (2015) provided more discretion to states than the former No Child Left Behind (2001), ESSA continued requirements to monitor student performance and address equity in outcomes that were cornerstones of No Child Left Behind (2001).
The law requires, for the first time, all students despite their academic or behavioral needs, receive high academic standards to prepare them to be career and college ready. The expectation of the law is there will be accountability and action to evoke positive change in schools with high numbers of students with at-risk academic or behavioral needs, are not making progress, and where graduation rates are low over extended periods of time (ESSA, 2015).

Many problems identified in 1983 remain, and the question on how to address the needs of every student, to promote student achievement, remains unaddressed. This continues to be a challenge for districts, schools, and teachers; reform efforts are continually proposed to encourage and reemphasize the need to adopt more rigorous academic standards, and data-based decision-making and accountability models (Lesh, 2013). When policy makers fail to involve all stakeholders in decision-making, reform initiatives often fail. Therefore, to undertake a successful district-wide adoption of RTI, a model of educational change needs exploration (Sansosti et al., 2010).

**Leading the Process of Educational Change**

Response to Intervention (RTI) is a result of federal legislation that trickled down to state education departments and local school districts. Dissatisfied with eligibility criteria for special education services and the discrepancy model, policymakers required districts and school-based leaders to change the way they provide educational services both in general and special education, and to change their beliefs about educational practices (Brown-Chidsey, 2007). A change, or putting any idea into practice, is far more complex than stakeholders realize (Fullan, 2007). In addition, Fullan explained top-down approaches to education reform often lead to failed change attempts. Although principals
believe RTI to be of importance, the process of implementation requires a complex and significant change in practices and policies (Sansosti et al., 2010). Many models exist to guide implementation of change (Fullan, 2007; Hall & Hord, 2006). One model commonly accepted in the educational research community is Fullan’s (2007) three-phase model of education change (Sansosti & Noltemeyer, 2008). The framework consisted of three phases: (a) initiation, (b) implementation, and (c) institutionalization, with various factors affecting each phase (Fullan, 2007). Phases are not looked at in isolation or procedural; however, they are recurrent in manner. Sometimes, repetition in a phase is common.

For any change process, it is important to consider the timeframe in which a full change should occur. For a moderate change to occur the process from Phase 1 to Phase 3 could take between 3 to 5 years. Additionally, the process for a large-scale educational change could last from 5 to 10 years (Sansosti et al., 2010). Considering facts, change does not take place overnight. Rather, change is a gradual process whereby people within an organization come to a shared understanding and become experienced in using an idea, program, or set of activities (Fullan, 2007; Hall & Hord, 2006). The time a decision is made to make change is the initiation phase, or Phase 1 (Fullan, 2007). Many outside factors, such as legislative or policy changes, community pressure, administration, and teacher advocacy can influence the decision for change. Sometimes, the decision is made at the federal, state, or school level. In other cases, the decision is made from the bottom up, in which school level employees initiate the change. While many researchers indicated top-down change is not effective, bottom up proposals for change do not work either (Fullan, 2007; Hall & Hord, 2006; Sansosti & Noltemeyer, 2008). According to
Guskey (2002) in 1984, two researchers conducted a case study of one school district’s efforts to implement a reading program initiative. Researchers found that in 11 out of 12 opportunities to alter practices, beliefs, and understanding of the reform, administrators were key decision makers. In six out of 12 opportunities, teachers were involved in the decision-making process. Decisions at the school level can prompt teachers to accept and absorb the reform hurriedly without fully understanding the need for change (Hall & Hord, 2006). When teachers are involved in the planning process there is a stronger commitment from teachers (Guskey, 2002).

To combat the difficulty of implementing RTI in districts, staff buy-in and engagement in implementation is needed (Fullan, 2007). A reform that starts without enough time and support for implementers to comprehend the change, commit to a shared vision, and become stakeholders themselves can impede or destruct the effort (Hall & Hord, 2006; Sansosti & Noltemeyer, 2008). A strong relationship between administrators and staff, with the capacity to encourage teachers to take possession of a change is a good place to begin. Curtis, Castillo, and Cohen (2008) explained a school reform is more likely to succeed if there is a shared effort and support among all stakeholders. The more involved teachers are, the more likely they are to buy-in to the change. Fullan (2007) indicated to battle resistance from teachers, administrators must have an attitude of acceptance and understanding. He also noted leaders and school administrators must work collaboratively to develop shared beliefs on the process of change and provide teachers with time for professional development to familiarize themselves with beliefs and practices.
Grief is a key part of change (Hall & Hord, 2006). If administrators are pressed for change too quickly, it does not allow time for teachers to process the change. Any change requires giving up what was once familiar or sometimes what one believes was done well. This creates a sense of sadness (Hall & Hord, 2006). In change, people must find their own meaning in these changes before they can live with them (Fullan, 2010). Therefore, providing time for all involved in change to become accustomed to new practices and processes is essential. Phase 2 of Fullan’s (2007) model is implementation. Phase 2 is the process by which people who attempted or expected to change, put an idea, program, or set of activities and structures into practice (Fullan, 2007; Hall & Hord, 2006). Need, clarity, complexity, and quality or practicalities are all critical characteristics of change identified by Fullan (2007). A sense of urgency and the desire for implementation increases once there is a need for change (Sansosti et al., 2010).

However, the need is often met with complications.

The National Assessment of Educational Progress (2016) reported nearly 66% of ninth graders are reading below grade level when entering high school. It was estimated that of those same ninth graders, 60% or less are promoted to senior year on time (Alliance for Excellent Education, 2016). With this in mind, there is a need for a change in instructional delivery and practices at district, school, and classroom levels. In RTI, all stakeholders must experience this desire before realizing the need for change. A RTI initiative is currently implemented in 15 states of which five are also on the list of largest school districts in the United States (Berkeley, Bender, Peaster, & Saunders, 2009). In large districts with competing needs, initiatives were abandoned in favor of another, as other needs arose. Prioritizing needs becomes a struggle, and if not done right, can have
lasting results. Collaborating with many stakeholders, such as teachers, community leaders, and parents is critical to the success of any change effort and gaining buy-in from all stakeholders is equally effective. This is especially important for addressing needs of struggling students. Communities and families working together to support school intervention efforts will have a positive impact on overall student academic success (Fullan, 2007). Explicitly stating needs, clear goals, and detailed implementation procedures clears up confusion and leads to a smooth change process (Bartle, 2009; Fullan, 2007; Sansosti et al., 2010).

The final phase of Fullan’s (2007) change model is institutionalization. This is when the process of change becomes part of the culture of the organization and implementation efforts are sustained (Fullan, 2007). Few educational reforms make it to this stage (Sansosti et al., 2010). According to Fullan, a longitudinal study conducted on 13 schools by Dalnow and Stringfield found by the 6th year, less than half of the schools continued to implement the change initiated. Bartle (2009) explained that because change does not come immediately, people lose interest or motivation. Sometimes, educators lose sight of their original goals, and implementation procedures. Facilitating successful change requires key stakeholders to develop plans to address variables that may affect sustainability efforts including, but not limited to educators’ knowledge and skills, professional development opportunities, district-level support, administrative support, funding streams, federal and state policies, and infrastructure supports.

**Leading the Change in Practice**

Fullan (2007) suggested if organizations want to succeed in change efforts, it is imperative systems change ideologies applied to assist implementation of new practices.
Similarly, Castillo et al. (2016) posited schools create the necessary infrastructure required to implement and support a service delivery model such as RTI. A successful change cannot occur without a structure that supports it. Both Fullan (2007) and Castillo et al. (2016), suggested schools consider resources, instructional approaches, and beliefs. Large-scaled reforms like RTI that depend on educators’ knowledge, skills, beliefs, and resources, are not duplicated in schools with limited or no skilled educators or schools that have fewer or lesser resources (Darling-Hammond, 2009). Therefore, the three multidimensional aspects schools and educators must consider when undergoing any major change are (a) resources, (b) instructional approaches, and (c) educators’ beliefs.

**Resources.** Resources are necessary for educational reform; however, in many schools they are finite. Schools must survey all resources, such as time, technology, curriculum, funding, and human capital (Castillo et al., 2016). To enhance the probability of change, school leaders must examine schedules and if needed, rearrange schedules to allow reoccurring high-quality professional development opportunities, modeling, and coaching. If teachers feel they were not given enough time to develop knowledge and skills for implementation, they will either resist or doubt it (Schechter & Ganon-Shilon, 2015). Providing time to explore research-based instructional practices, content-based curriculum, materials, and opportunities to practice, is crucial to performance. Exploring the adopted data collection system and explaining its functionality could save time and prevent professionals from making misinformed decisions.

Educators who perceive they have the skills they need to implement an initiative, or will receive the support required to develop the skill, are more likely to utilize resources for educational reform (Castillo et al., 2016). Likewise, providing teachers time
to collaborate with other teachers is equally beneficial for moral support. A key element in organizational change is providing a comfortable environment where educators can engage in open and honest dialogue. Schecter and Ganon-Shilon (2015) further explained when teachers are given time to ask questions, share their reasons for resistance or doubt, listen, think, and reflect, they will develop a deeper understanding of the reform. The more informed teachers are, the more likely they are to buy-in to the change.

**Instructional approaches.** Educator practices play a pivotal role in student learning (Castillo et al., 2016). As federal and state policy accountability demands increase, the spotlight turns toward educator practices. How students learn combined with the way an educator teaches, results in how a student performs (Nunn, Jantz, & Butikofer, 2009). It is, therefore, worthwhile for educators to change instructional practices and adopt new approaches and behaviors. Educators must understand the reason behind reform and ways the lack of implementation could adversely affect success. Incorrect implementation of a program could result in students not receiving instruction or intervention to close an achievement gap. Likewise, only implementing certain aspects of a program could impede student achievement (Castillo et al., 2016). Educators’ commitment to any reform is an integral part of implementation and success. If teachers resist or fail to adopt new practices, the fidelity of program is compromised.

Ongoing, structured, purposeful, professional development provides an opportunity to change adult behavior. Given more opportunities to collaborate and share evidence of success will likely decrease resistance and increase positive peer pressure (Fullan, 2010). In addition, rewarding and recognizing teachers who embrace change and share the information with others could inhibit resistance and incite progress.
(Zimmerman, 2006). Furthermore, with increased shared opportunities the prospect of building silos of highly effective teachers is reduced. Knudson (2013) found if stakeholders were not moving in the same direction, skilled teachers would form effective silos. Thus, the knowledge and skills possessed by individuals will remain with the individual and possibly deteriorate (Pearson, 2015). Conversely, if a resistant teacher is surrounded by a team who embraced the change, the pressure will likely lead the teacher to try a new approach (Zimmerman, 2006). Research conducted by Louis and Wahlstrom (2011) found organizations that took a collective approach to change efforts demonstrated a greater level of achievement, which positively affected professional satisfaction. Developing consensus among key stakeholders in an organization regarding implementing a new program or initiative improves sustainability (Castillo et al., 2016; Fisher & Frey, 2011; Sanger et al., 2012).

**Educator’s beliefs.** While resources and instructional approaches are concrete and can affect the degree to which a change initiative is implemented, educators’ beliefs of the initiative or program, need exploring due to their effect on implementation efforts. Fullan (2007) regarded a change in beliefs as the most important, but also the most difficult, aspect of any change. The term beliefs were explored throughout literature and accurately defining the term and its effects on actions is somewhat difficult to explain (Snider & Roehl, 2007). Beliefs are used to understand educators’ actions, attitudes, and their influence to change the course of educational reform (Bai & Ertmer, 2008). Beliefs are untouchable, nor can they be seen. Therefore, they are often overlooked as a critical component of change. According to Pajares (as cited by Bai & Ertmer, 2008) educational beliefs are defined as, “Beliefs about confidence to affect student performance, about the
nature of knowledge, about causes of teachers’ or students’ performance, about perceptions of self and feelings of self-worth, and about confidence to perform specific tasks” (p. 316). Educators’ beliefs are unwavering and resilient (Kagan, 1992). Richardson (2003) and Kagan (1992) noted educators’ beliefs rely on their own personal experiences, student-learning abilities, knowledge of content, and perceived skills, when making instructional decisions.

Despite research on effective practices, many educators will hold on to familiar beliefs and practices. Information is processed and absorbed through their belief systems, and uniquely transformed into their own pedagogy (Kagan, 1992). Bai and Ertmer (2008) related this action to Piaget’s model of assimilation and accommodation to describe how new knowledge is translated within one’s own belief system. Assimilation refers to the act of modifying existing information to fit into preexisting beliefs. An accommodation involves using new information to change how one has always practiced. For a change to occur, presenting knowledge that contradicts preexisting beliefs is not enough to ignite change (Fullan, 2010). Fullan (2007) accentuated knowledge and beliefs are the base of sustainable change. Therefore, it is imperative educators have a clear understanding for the need of change and believe in the need for change.

Castillo et al. (2016) stated educators would not resist change efforts if teachers possessed skills to implement reform or could gain skills through professional development. Therefore, if these conditions do not exist, educators will resist and revert to traditional beliefs and practices. Sansosti and Noltemeyer (2008) stated a lack of time and support could lead to resistance. Making changes without enough time and support for implementers to comprehend the change can decrease the level of educator buy-in.
Hall and Hord (2006) found in addition to offering time and patience, school administrators could help to decrease resistance by communicating a clear vision for implementation. Additionally, a reform that begins without a lack of commitment to a shared vision can impede or destruct the effort (Sansosti & Noltemeyer, 2008). If educators resist or do not accept the change, the intended outcome is unlikely to ensue. The greatest safeguard to a successful implementation is the ability to gain buy-in from those implementing change efforts (Sansosti & Noltemeyer, 2008). Castillo et al. (2016) suggested key stakeholders evaluate factors that may affect buy-in because the level of commitment from instructional personnel will likely impede or accelerate progress.

Pressures of federal legislation, statewide testing accountability, district initiatives, and student demographics are mounting and the number of teachers leaving the field is increasingly growing. Evaluation of beliefs should occur throughout the process of change and should not be a one-time event (Castillo et al., 2016).

**Florida’s Response-to-Intervention Initiative**

The use of evidence-based practices, data-based decision-making, and accountability are all embedded in federal legislation impacting student achievement (Florida’s PS/RTI, 2011). Federal legislation requires each state administer assessments to all students and results would determine academic proficiency. According to the most recent National Center on Response to Intervention report (2010), 45 out of 50 states have a state RTI framework. The report data further indicated 30 out of 50 states require school districts to use RTI to identify students in need of special education. However, many states have not devised localized RTI frameworks for districts. Many local school districts were left seeking assistance from research conducted by national education
centers. Sometimes, school districts that showed success with implementation efforts were sought after for directions on how to replicate a successful framework. School districts in Iowa, Minnesota, and Pennsylvania implemented successful RTI frameworks for years. However, the state of Florida wanted to devise a plan that would align with already established school improvement plans and would encompass other state initiatives such as Positive Behavior Intervention Support, Florida Continuous Improvement Model, Just Read Florida (Florida Department of Education, 2008).

The Florida Department of Education with the University of South Florida Problem Solving/Response to Intervention Project led one of the first statewide initiatives (Florida’s Problem Solving/Response to Intervention Project [PS/RTI], 2011). The joint venture tried to facilitate and evaluate statewide RTI infrastructure (Castillo et al., 2010). To do this the Florida Problem Solving/Response to Intervention Project staff provided training opportunities across Florida and to specific school districts (Batsche, Curtis, Dorman, Castillo, & Porter, 2007). To assist other school districts, Florida Department of Education provided professional development courses on topics related to RTI (Florida’s PS/RTI, 2011). The Florida Department of Education revised state regulations and policies to include the new process for evaluation of students with learning disabilities, speech impairment, emotional, and behavioral disorders. Districts were advised implementation effectiveness was evaluated through permanent product reviews and the percentage of students who demonstrated academic proficiency on state assessments achievement outcomes (Florida Department of Education, 2008).

The RTI framework is the practice of providing high-quality instruction and intervention matched to student needs. Educational professionals contribute to the
framework by using research-based practices and skills that improve the performance of minority students, students living below poverty level, and non-English speaking students (McKenzie, 2010; Sanger et al., 2012). Teachers demonstrate their ability to support the framework by analyzing data from assessments to adjust instructional practices supported with interventions to improve student achievement for all learners (Bender & Shores, 2007). The logic of the framework is positing on research-based practices, providing high-quality instruction and intervention that is matched to student needs, and using data over time to decide on which support services. RTI framework supports federal legislature requirements and is the catalyst for student achievement by supporting the implementation of providing instruction and intervention for all students. This practice along with a set of core beliefs and a problem-solving process introduced Problem Solving Response to Intervention (PSRTI) framework. The state of Florida supports the three-tier problem-solving model for providing supports to all students.

**Guiding beliefs.** According to Florida’s Multi-Tiered System of Supports Guiding Tools for Instructional Problem Solving-Revised (2015), for districts to maximize student achievement, these beliefs are shared among educators:

1. Research and evidence-based instruction and practices are delivered by highly qualified instructional personnel with the philosophy that all children can learn when provided with this instruction.

2. Combining scientific, core curriculum, and differentiated instruction and approaches will increase the number of students who met proficiency criteria.

3. To determine effectiveness of instruction and intervention, reliable, valid, and instructionally relevant assessments must be used. Multiple sources of assessment tools
should guide instructional decisions, determine effectiveness of programs, identify students in need of specific interventions, and identify skills needing improvement.

4. The problem-solving process and student data are needed to make meaningful decisions for students in Pre-K through 12th grade.

5. School-based administrators should provide professional developments, coaching, and modeling for all instructional personnel on skills to facilitate the problem-solving process with fidelity. Teachers need resources, to be open to new approaches for instructional delivery, and to believe there is a need for the program.

6. Leadership buy-in is a critical component, school-based administrators’ leadership and involvement in the data-based decision-making directly affects school culture. Leadership who expect and support data-based decision-making, team functioning, and coaching supports are necessary to ensure sustainability.

7. Open and transparent communication and collaboration between stakeholders based upon mutual respect and shared responsibility is vital. Stakeholders must believe all students can and will learn. Regular communication about parent involvement in the process from the initial phase through ongoing progress is vital.

The National Center for Response to Intervention (2010) identified the same beliefs and added the belief that a Collaborative Problem Solving Team (CPST) is constructed of general and special education educators with knowledge of the student, instructional support personnel (e.g., school psychologist, school guidance counselor, school social worker, school behavior specialist), administrators, parents, and the student. This team of professionals collects the progress monitoring data and reviews the data monthly (Burns & Gibbons, 2008). The team also uses this data to make
recommendations to provide support for the student, to determine effectiveness of instruction, or to determine if student data indicates a need to proceed with a request for evaluation. Fuchs and Fuchs (2007) cautioned professionals not to rush into making a determination based on individual beliefs or assumptions. The National Center for Response to Intervention (2010) instead suggested a visionary leader who supports data-based decision-making through a problem-solving process supports teams. The leader must help all educators acknowledge the need for change and embrace a shared purpose of ensuring students learn at high levels and take a collective approach to achieving this shared purpose (Batsche et al., 2007).

**Components of a RTI Framework**

Response to Intervention (RTI) is a multi-tiered model for instruction and intervention. More often, services provided within an RTI model are based on a three-tiered model (Sugai & Horner, 2006). Support services are provided for all students in varying levels of intensities. The Florida Department of Education describes the RTI model as a systematic method for identifying needs of all students and providing specific, research-based interventions to meet diverse needs of K-12 students across the state (Florida Department of Education, 2011). The model is used to make eligibility decisions for students who are need of special services, particularly for students with learning, or emotional/behavior disabilities (Burdette & Etemad, 2009). The evaluation process for those students requires systematic problem solving. The state’s intent was to ensure expressed difficulties were not because of poor instruction, inadequate curriculum, or a disruptive learning environment.
Additionally, intentions of RTI efforts were to decrease overrepresentation of minorities in special education, combine general and special education, and close the achievement gap promoting achievement for all students (McKenzie, 2010; Sanger et al., 2012). To implement RTI, all stakeholders should have a common understanding of critical components that support the framework. The National Center for Response to Intervention (2010) identified these components as high quality, standards-based instruction, and intervention curriculum, a universal assessment used to inform intervention, a multi-tiered instruction and intervention model, and data-based problem-solving process for decision-making. Florida’s RTI framework is a three-tiered model providing academic and behavior/social-emotional support for all general education students. The model uses the problem-solving approach that supports the practice of providing high-quality instruction matched to individual student needs. As a student moves through the tiers instruction and intervention is more intense and explicit (Hazelkorn et al., 2011; Monetti, Breneiser, & McAuley, 2013). Progress monitoring at each tier will determine the intervention effectiveness (Hazelkorn et al., 2011).

Tier 1 is frequently termed as core instruction and includes scientifically research-based curriculum aligned to state standards, ongoing universal screening, and progress monitoring (Batsche, 2014; Monetti et al., 2013). The goal of Tier 1 is to promote positive skill development, prevent problems from emerging, allow for student growth, and reduce the need for supports at subsequent tiers. Differentiated instruction is used at this level to meet diverse needs of individual students (Burns & Gibbons, 2008). In Tier 1, the integrity of instruction is based on the degree to which core instruction is delivered in the way it was developed. Federal mandates such as the former No Child Left Behind
(2001) and IDEA (2004) require schools to use research-based practices and interventions for all students (Canter, Klotz, & Cowan, 2008). Administrators should monitor that high quality, research-based practices are provided for all students, not just those at-risk for failure (Batsche, 2014; Hoover, 2010).

To assess the effectiveness of the instruction, a universal screener is conducted at least three times throughout the year. Typically, a universal screener is used to gather baseline data for students. Universal screeners or benchmark assessment data is used to determine core program effectiveness and identify students who may need additional support services (Brozo, 2010). The core instructional program succeeds when 80% of students meet the expected level of performance (Batsche, 2008; Sugai & Horner, 2006). Therefore, if 80% of students in the general education classroom fail to meet the expected level of performance, it is suggested improvements are made to the core instructional program to improve overall performance (Batsche, 2008). Monetti, Brneiser, and McAuley (2013) stated often, with effective core instruction and intervention supports, some students will need targeted interventions and support. Low performance outcome data on a universal screener may indicate the student may need Tier 2 support (Brozo, 2010). The decision to provide Tier 2 support services is made through a collaborative problem-solving process with administrators, instructional personnel, and student parents (Monetti et al., 2013).

Tier 2 is what some students receive in addition to Tier 1, core instruction. Tier 2 focuses on specific skills that prevent a student from meeting grade level or subject area performance expectations (Batsche, 2014). Based on RTI framework, about 20% of students receiving core instruction will not make progress in relation to academic
expectations and, therefore, will need an intensive intervention as a supplement to the core curriculum in Tier 2 (Batsche, 2008; Hazelkorn et al., 2011; Sugai & Horner, 2006). Supplemental supports at this level are provided to students in a general education setting with the same skill deficit by a teacher, or other instructional support personnel (Monetti et al., 2013). Data collection at Tier 2 is used to determine the effectiveness of the intervention (Hazelkorn et al., 2011). Fuchs and Fuchs (2007) recommended schools monitor the progress of students for at least 5 weeks. Monitoring ensures students are making adequate progress toward grade level or content-area proficiency (Batsche, 2014). After the recommended time, if interventions are successful, students are returned to core instruction, or Tier 1. When Tier 2 interventions fail to improve a student’s academic progress, they are moved to Tier 3 (Monetti et al., 2013).

Similar to Tier 1, the decision to provide Tier 3 support services is made through a collaborative process with administrators, instructional personnel, and the student’s parents (Monetti et al., 2013). Based on the RTI framework, about 5% of the student population will need an intensive, specialized intervention plan (Batsche, 2008; Hazelkorn et al., 2011; Sugai & Horner, 2006). In Tier 3, core instruction and supplemental supports will continue (Fuchs & Fuchs, 2007). Tier 3 services entail additional time and a more specific focus of instruction and intervention than Tier 2 services. Progress monitoring of implementation fidelity occurs more frequently than in Tier 2 (Monetti et al., 2013). Communication, collaboration, and coordination are essential to this level of support when providing services to the student. The collaborative problem solving team meets frequently to discuss student progress and make a determination whether to adjust the intervention or refer the student for an evaluation.
(Monetti et al., 2013). However, the goal of providing Tier 3 services, combined with Tiers 1 and 2, is the student will achieve Tier 1 proficiency levels established by the district (Castillo et al., 2010). Students receiving Tier 3 supports may or may not be eligible for special education services as described in IDEA (2004) (Fuchs & Fuchs, 2006b).

**Problem Solving/Response-to-Intervention (RTI) Model**

With the establishment of the IDEA of 2004, Public Law 108-446, and the elimination of the federal requirement to use the ability-achievement discrepancy formula to identify students with specific learning disabilities (IDEA Regulations 2006), states and school districts were required to change the process in which students were identified for special education services (Sansosti et al., 2010). To address problems with the discrepancy model, the state advocated for an approach that would provide high quality, research-based instruction and intervention based on individual student needs (Castillo et al., 2016). Implementing a sound RTI program can help catch students at the beginning stages of difficulty and get them back on track quickly.

The problem-solving model was utilized in medicine for decades and many researchers believed although the model was originally designed for those in the health field it would also be suitable for use in education (Van Der Heyden, 2010). Bergan and Kratochwill (1990) devised the consultative model to assist behavioral practitioners as they sought to address behavioral needs of students, to devise and implement intervention plans, and to evaluate the effectiveness of the intervention plan. There are four stages in the problem-solving model: (a) problem identification, (b) problem analysis, (c) intervention design, and (d) evaluation. These stages are necessary to move from initial
suspension of problems through development of the plan to implementation of the plan (Bergan & Kratochwill, 1990). Over a decade later, Tilly (2002) described the stages in four thematic questions: (a) Is there a problem and what is the problem? (b) Why is the problem happening? (c) What can be done about the problem? d) Did the intervention work? Combined together, the questions are referred to as the problem-solving method. Problem solving is a practical process individuals use every day to make decisions (Tilly, 2002).

In education, decisions are not made based on the expertise of one person. The problem solving response to intervention model involves working with a school-based team of professionals to consider student assessment data to identify and analyze learning problems, to develop, implement, and monitor the extent to which students respond to the intervention or instruction (Batsche et al., 2007). The school team or collaborative problem solving team would comprise of a school administrator, a school psychologist, a school social worker, instructional and behavior support personnel, RTI coach, general education teachers, and/or special education teachers, parents of the student, and the student, if age appropriate (Castillo et al., 2016). One responsibility of the collaborative problem solving team is collecting progress-monitoring data from teachers to determine the student’s response to instruction and intervention (Burns & Gibbons, 2008). The collaborative problem solving team also makes intervention recommendations through a multi-tiered model based on progress monitoring data.

**Problem identification.** When the collaborative problem solving team notices a significant discrepancy between a student’s performance and expected performance, the process begins by identifying the student’s level of performance, the expected level of
performance, and the average of the class’s performance (Ninni, 2010). The difference between the student’s level of performance and the expected level of performance represents the problem (Tilly, 2008). This information will help to indicate if the concern applies to how instruction is delivered to the whole class or if the student is in need of additional support. If peer performance is closer to the student’s performance, it indicates there is a concern with the general instruction, whereas if the class performance is close to the expected level it indicates the student needs additional support. This method is also known as gap analysis (Castillo et al., 2010; Hoover & Love, 2011). Graphing performance levels over multiple time points helps to determine if the student is headed in the right direction.

**Problem analysis.** After the problem is identified, the team develops a hypothesis as to why there is a difference between expected and current performance (Castillo et al., 2010; Hoover & Love, 2011). After hypotheses are generated, data are collected to identify the most plausible hypothesis. Ensuring the fidelity of the core instructional program and practices could yield data that could confirm or reject hypotheses (Tilly, 2008). Reviewing student work samples, interviewing the teacher and/or student, and observing the learner during Tier 1 could reveal why a problem is occurring. This process will build a comprehensive picture to facilitate identification of the most plausible explanation of the problem (Florida’s PS/RTI, 2011; Tilly, 2008).

**Intervention design/implementation.** Based on the reasons the problem is occurring and variables that might solve the problem, the problem solving team collaborates to develop a plan of support (Tilly, 2008). Several components are considered when designing and implementing an intervention. An intervention is defined
as a modification of the environment to change the severity of a skill deficit or specific behavior (Tilly, 2008). The plan should include a specific goal and inform the selection of the intervention. Interventions are evidence-based, delivered with integrity, scaled to need, implemented for enough time, evaluated frequently, and integrated across tiers (Florida’s PS/RTI, 2011). Interventions should consider whether the problem is a skill deficit (cannot do it), or a performance deficit (will not do it), and should adjust what is taught and/or how it is taught (Tilly, 2008; Van Der Heyden & Witt, 2007). The intervention plan includes a plan for supporting, assessing, and monitoring the intervention and outcomes. The collaborative problem solving team’s responsibility is to ensure the intervention plan is implemented with fidelity (Florida’s PS/RTI, 2011).

**Progress monitoring.** During this phase, the collaborative problem solving team will evaluate the effectiveness of the intervention plan. The student’s baseline data collected during the implementation plan is compared to problem identification data (Florida’s PS/RTI, 2011). Formative and summative assessment data for the student and the class are graphed along with the level of expected performance to determine if the gap is closing between the student and the class at a rate that will allow him/her to catch up in a reasonable amount of time (Fuchs & Fuchs, 2006b). If the goal is not met, the collaborative problem solving team will decide to return to the problem analysis phase, increase the time and intensity of the intervention, and develop and implement another plan (Florida’s PS/RTI, 2011).

The problem-solving model addresses students’ skill deficits by providing interventions that match the student’s instructional levels. Supporters of the problem-solving process believe the model has a higher chance of increasing student achievement
outcomes because intervention plans are specifically designed for individual students (Deschler & Ehren, 2010; Fuchs & Fuchs, 2006a, 2007). An advantage to using the model is the opportunity to collaborate with a team of education professionals, or a collaborative problem solving team. However, advantages of the model can also be a disadvantage (Fuchs & Fuchs, 2006a). For example, Tilly (2008) suggested schools provide enough time for a team of professionals to meet to design an intervention plan for individual students. According to Batsche (2008), to use the model, at least 80% of students in the school must be at or above grade-level proficiency. If less than 80% are proficient, more time is required to design individualized intervention plans. Therefore, schools must allocate more instructional staff to provide instruction and intervention. Schools could face the possibility of reevaluating its Tier 1, core instructional program, to determine if changes are necessary.

**RTI Research in High Schools**

Duffy (2010) speculated it is imperative for secondary schools to implement RTI. When students enter high school without basic skills, they are at higher risk for academic difficulties (Johnson & Smith, 2008). The National Center for Education Statistics (2016) report indicated 76% of eighth graders are reading below grade level. Meeting the needs of struggling students may be the most arduous challenge faced by high schools (Fisher & Frey, 2011). Despite an intense interest, the potential of RTI at the high school level is evident in limited literature (Fisher & Frey, 2011; Sanger et al., 2012). Most of this research focuses on interventions in literacy (Bender & Shores, 2007; Deschler & Ehren, 2010; Sansosti et al., 2010) rather than on implementation of the RTI framework as a school-wide approach (Fisher & Frey, 2011). However, as IDEA (2004) opened the door
for RTI implementation within grades K-12, there is growing interest within the research community, specifically in implementation of RTI in the secondary setting. Two current studies involving the implementation of RTI among high school students were noted in the review of the literature.

Fisher and Frey (2011) conducted a 2-year study to determine how RTI was implemented in an urban high school and the impact the framework had on student achievement. A qualitative methodology was used to document implementation efforts and outcomes in one high school through a case study approach. According to Fisher and Frey (2011), the high school had no formalized RTI program, nor did it have a history of failed initiatives. The high school operated as a career-focused institution with 444 students in grades nine through 12. Over half of the student population received free or reduced-price lunch. Demographics of students were 44% Latino or Hispanic, 22% Black, 16% Asian, and 18% White. Instructional staff included 23 teachers, and all agreed to participate in the study. At the onset of the study, school leaders and instructional staff were invited to discuss their level of participation, current condition of the school, and identify resources to create an environment where all students could experience academic achievement.

Over the 2 years of the study, teacher and student data were collected and analyzed. Observations data including field notes detailing classroom observations, staff development, faculty meetings, and special education meetings were compiled and analyzed. During the second year of the study, interviews were held with 100% of teachers employed at the school. A semi-structured interview guide covered teaching experience and perception of RTI at the school, and experiences with dealing with
struggling students. The interview format allowed teachers to describe and reflect on their own experiences with intervention and the larger social context of the school. Fisher and Frey (2011) explored teachers’ interpretations of RTI and their classroom practices reinforced their meaning. As a part of decision-making and discussion points, student achievement data, grade point averages, and attendance records were also collected. At the conclusion of the study, 87 pages of field notes, 134 pages of transcript notes, and 2 years of student achievement data were analyzed for themes, analyzed for observational data, and reviewed interview recordings for themes.

Researchers found several positive changes in practices at the high school. The three tiers of RTI were used with a focus on quality core instruction and systematic interventions. Staff developed an understanding of how to use assessment data to identify areas needing improvement and how to use interventions to close the achievement gap. Teachers shifted their focus from working in isolation to improve achievement of students assigned to them, to a school-wide collaborative effort of increasing achievement through quality core instruction. With school-wide effort, they found ongoing, meaningful professional development, and coaching influenced the success of RTI implementation at a school-wide level. During both years, 82% of the professional development teachers engaged in was designed to strengthened Tier 1, or core instruction. Also, there was an increase in teacher modeling, collaborative work, and guided instruction. Less time was spent on lecturing students (Fisher & Frey, 2011).

Fisher and Frey (2011) noted besides changes observed in core instruction, progress monitoring changed significantly. Prior to the study, teachers routinely passed out assignments, collected completed work, and graded assignments. However, few
students completed the work outside of the classroom. Fifty-five percent of students at the study had at least one grade of F on their progress report. Unsatisfied with data, teachers proposed a new system of progress monitoring and grading. Students were no longer graded based on completion, but assessed and graded based on mastery of state standards. Content-area teachers worked collaboratively to identify grade-level competencies and methods of assessment. Fisher and Frey (2011) found during collaborative sessions, teachers moved away from traditional, multiple-choice tests to having students show their understanding by creating projects. The new system provided teachers with accurate information about students’ current levels of understanding, and areas of weakness. By the end of the study, the number of students with at least one F decreased by 43%.

Prior to the Fisher and Frey’s (2011) study, supplemental support, or Tier 2 was an after-school program offered by the school to “keep the kids off the street” (p. 105). Researchers noted supports offered during the program ranged from tutoring to various recreational activities. Here, students were given supplemental interventions based on whether they passed the competency or not. The progress monitoring system designed at the school was critical to improvements made to the school’s Tier 2 program. For example, teachers were working with small groups of students identified as needing additional instruction and intervention to succeed. Office hours were scheduled for students to meet with any content teacher to receive supplemental interventions. Students found this to be valuable because instead of attending supplemental support from their assigned teacher they could attend a session to hear the content explained in another way from a different teacher.
Fisher and Frey (2011) discovered having personnel assigned to coordinating all supplemental and intensive intervention supports provided teachers with the support they needed to further the implementation of RTI at the high school. Teachers were no longer required to keep track of students who needed supplemental interventions. Instead, the coordinator would streamline the process by setting up the schedule, verifying attendance, and monitoring the progress of those in attendance. Besides adding a coordinator, the school hired tutors who facilitated after-school instruction and intervention. Observational data was collected by working independently on assignments. Adults were not standing in front of the classroom lecturing students. Students understood what they were to focus on and teachers escorted students who needed an extra push to after-school sessions.

According to Fisher and Frey (2011) in the first year of the study, intensive intervention, or Tier 3, was an online program student could use at school or at home. The resource was shared with parents, yet students rarely used the program. Upon reviewing usage data, the school changed how the program was used. The intervention coordinator worked with English teachers at the school to create a schedule for students to complete assignments. The school purchased a research-based intervention curriculum that provided additional practice and reinforcement of reading skills. The school saw progress and the number of students who needed Tier 3 interventions decreased. By the end of the study, students needing intensive support were scheduled to receive supports three times per week. Once students met their individual goals, they were transferred back to their teachers for continued direct teaching. By the end of the study, only one student was referred for special education services.
Overall, Fisher and Frey (2011) found student achievement accelerated in completion of assignments, grade point averages, and attendance rates. The high school increased by 4% on state achievement measures and outperformed state-identified similar schools by 11%. Overall GPAs increased from 2.89 to 3.36, with the largest gain coming from students living in poverty and those with disabilities. By the end of the study, attendance increased from 90.4% to 95.6%. Fisher and Frey (2011) believed the increase in attendance rate resulted from intervention efforts. Teachers agreed and noted because classes were more interesting now and they accomplished more in one day than prior, students did not want to miss. The high school also saw a decrease in the number of students referred for special education services.

Researchers of the study suggested RTI was implemented in a high school setting and led to positive outcomes. However, several factors must be in place to facilitate the success of the effort. The whole school was involved in the process and buy-in was embedded throughout all professional developments. Ongoing, meaningful professional developments that include collaborative work, discussions, modeling, and feedback are critical to ensure RTI efforts succeed. Assessments are needed to provide a meaningful intervention that is critical to operating a RTI framework. If screening tools are not used, or unavailable, interventions that are unfocused and unsuccessful will likely occur. Monitoring the progress of students can be difficult because of lack of resources at the secondary level. Therefore, designing a system of progress monitoring that aligns with standards is suggested (Fisher & Frey, 2011).

Fisher and Frey (2011) supported implementing RTI at the secondary level; they noted it may be a way to reduce the number of referrals for special education, and
increase student achievement for all students. One recommendation of Fisher and Frey (2011) suggested schools allocate funding to provide oversight of intervention efforts. The person should possess skills to work with adults and students and be able to coordinate and organize interventions. Another recommendation suggested intervention efforts should supplement core instruction, not replace. Both researchers thought the idea of bringing teachers’ attentions to the core through professional development and coaching was valuable. Therefore, opportunities for tiered interventions should appear if teachers are provided time to examine their expected outcomes and core instructional practices.

Sanger, Friedli, Brunken, Snow, and Ritzman (2012) conducted a study to explore effects of implementing a RTI framework at the secondary level. A mixed method methodology was used to document educators’ experiences and perspectives over a 9-month period. To explore participants’ reactions to RTI, Sanger et al. (2012) conducted five focus groups with interviews, 20 observations, and an open-ended question survey. Administrators of schools who had backgrounds in academic achievement in one midwestern school district selected participants for the study. According to Sanger et al. (2012), schools had no RTI model for instruction, but all possessed the willingness to implement a model and were interested in gaining skills to implement the model. Ten low or middle-income level schools agreed to participate in the study and 18 participants were identified. Of the 18 participants, six were classroom teachers, four were school psychologists, seven were speech language pathologists, and one was a paraprofessional.

At the onset of the study, each participant completed an initial survey to determine individual skill levels. Results of the survey indicated none of the participants
received professional preparation on a RTI framework. Results indicated 67% of participants learned about the model from district-wide trainings, or conferences. Only 30% of participants had any experience implementing an RTI framework. Sanger et al.’s (2012) qualitative methodology included five focus group discussions that were held throughout the 9-month study. Participants were given the platform to share experiences with implementation efforts. During focus group discussions, participants discussed barriers and facilitators of the process. Observations were conducted twice in each participant’s classroom. Observations were not scheduled prior because an authentic snapshot for understanding how the model was implemented was needed. Sanger et al. (2012) observed specifics of how each participant conducted RTI. They found particularly interesting instructional practices and interventions utilized, progress monitoring for measuring students’ learning, methods for providing individualized feedback, and how assessment data were used to guide instruction. Likewise, observations of the level of student engagement and teachers’ motivating strategies were explored. Following observations, participants were given a survey in which they could provide primary comments or concerns regarding services for struggling students. Other questions were related to their reactions about outcomes and challenges experienced during planning and implementation of the model.

Sanger et al. (2012) collected and qualitatively analyzed data from focus groups and interviews, observations, and surveys. Participants’ responses were transcribed and coded based on similarity. Researchers revealed several challenges that were addressed before implementation of a RTI model. First, participants identified the need for training, specifically, the need for training on all components of RTI. Most expressed all team
members and paraprofessionals are included in professional development. Second, participants indicated commitment to the model is discussed prior to implementation. Providing individuals involved in implementation efforts with evidence-based practices would build confidence among staff. Participants were optimistic about the approach because they believed RTI was an avenue for students to improve academically. As noted in the literature, participants indicated implementing RTI provided an opportunity for students to experience success; therefore, building their confidence which may not have happened regularly. Additionally, participants realized if special education resources could support general education instruction, then more students would have the opportunity to achieve their optimum potential (Sanger et al., 2012).

Sanger et al. (2012) identified another factor requiring consideration was the need to involve all educators in the process. Participants found it was important to discuss RTI in a school-wide approach instead of through individualized procedures. Though professionals have various training backgrounds, participants found it valuable to collaborate and discuss screening, progress monitoring, instruction, and interventions. The model will not work if educators are working in isolation or not conducting the model as it is intended. Recognizing needs of struggling students in high schools is critical. Participants indicated that, as students make their way through school, it is more challenging to recognize which students to identify for potential RTI interventions. Therefore, the need for experts to collaborate with all educators to identify individuals needing additional supports accurately is a very important consideration when implementing the model in a high school setting.
Sanger et al. (2012) found educators must acknowledge students possess their own unique way of learning, and modifications to instruction are necessary. Participants found it is important that those implementing the RTI must be sensitive to subtle and discrete changes in student performance. Voices of participants echoed the value of implementing a multi-tiered approach for increasing student achievement. Participants recognized the importance of working together to achieve best evidence-based practices. If implementation of the model occurs with older learners, it is important for educators to recognize the value of the RTI model and receive extensive training to support the model. Sanger et al. (2012) found extended training might help educators and school leaders to understand RTI, which students can benefit from the model, and how the framework is modified to meet diverse needs of many students.

One of the most formidable challenges educators faced was the attempt to address academic needs of older students with a history of low academic achievement (Fisher & Frey, 2011; Sanger et al., 2012). However, the willingness to stay on track displayed by educators ultimately led to improved student outcomes in both studies. Findings from Fisher and Frey (2011) and Sanger et al. (2012) assisted-schools with how to structure and implement RTI in the secondary school setting. In addition, these studies provided meaningful information about educators’ understanding and reactions to implementing a RTI model. However, both studies neglected the role teachers’ perceptions can have on implementation efforts.

**Educators Perceptions of an RTI Model**

Little data exists that provides empirical information on teachers’ perceptions of an intervention framework. Further, there is little to no information available of high
School teachers’ perceptions of RTI and their impact on student achievement. This information is critical because teachers play a vital role in education reform initiatives. It is of utmost importance to understand their beliefs and perceptions of skills they possess regarding RTI implementation. Cavendish, Harry, Espinosa, and Mahotiere (2016) conducted a study to examine the RTI implementation process in two culturally diverse, urban elementary schools. The purpose of the study was to examine school personnel’s perceptions of a RTI system and issues related to implementation efforts. The study was conducted in a large urban school district in Florida mandated to use RTI as the sole method for learning disability identification. However, the mandate occurred simultaneously when education budget cuts were made. In addition, at the time of the study, the district was designing a plan for training and large-scale RTI implementation with a new assessment with fewer resources.

The district Response to Intervention framework comprised a multi-tiered model where all students’ needs were addressed through core instruction, supplemental support, or intensive intervention supports. The two schools selected had similar demographics and both received district RTI support 2 years before the study. The study included 30 participants: three district administrators, five school psychologists, five school-based administrators, four reading coaches, three interventionists, two school counselors, and eight teachers. Cavendish et al. (2016) used a qualitative methodology to conduct the study. Data were collected from semi-structured interviews, special education meeting observations, and classroom observations. By the end of the study, 100% of participants were interviewed and 54 observations were detailed and recorded. All field notes and
interview transcripts were analyzed and coded. Coded data were examined and themes emerged from findings.

Cavendish et al. (2016) found participants lacked clarity about the purpose of RTI and their roles and responsibilities with an RTI framework. Fullan’s (2007) first principle of system change required individuals affected by the change understand the need. If staff is engaged at the onset of a major change, there is likely to be little to no confusion. Participants noted too much responsibility was placed on educators with experience in utilizing a RTI framework. For example, school psychologists and school-based administrators who were a part of the study struggled with time to do their jobs and overseeing RTI implementation. In addition, there were significant gaps of knowledge about interventions and instructional practices from participants. Prior to the study, the only professional development participants received was an online RTI module. Participants also complained about the lack of clarity in the RTI process with no district guidance for aligning resources across all tiers. The need for ongoing training to understand the RTI process was expressed from all participants. Participants also noted the struggle of how to measure the responsiveness of students. Varied messages were provided for participants regarding students’ progress. Initially, participants indicated if students showed growth, there was not a disability. Then they were told if students showed growth, but they were reading below grade level they needed a referral for support services through the RTI process.

Cavendish et al. (2016) asked participants to share their perceptions of students and their roles and responsibilities in implementing RTI. Some participants expressed beliefs that RTI was a just another barrier to getting students tested. Their views were
intensified by the lack of clarity regarding the meaning of each tier of instruction and intervention. The overall perception was if students did not respond to Tier 3, or intensive interventions, they would automatically receive testing for a learning disability. Many participants noted those student needs were outside the scope of a general education classroom and were addressed in a smaller, more specialized classroom. Teachers and administrators believed students with limited English speaking skills and students with parents who lacked education deserved special assistance. Conversely, researchers found this attitude did not necessarily extend to African American families. Some perceptions regarding African American students’ parents indicated parents were more concerned with how they looked than their child’s education. One administrator believed the parent’s cognitive ability was an indicator of the student’s ability. Instead of focusing efforts on problems that can change, participants were spending time trying to control factors out of their control. For example, school officials cannot change the fact that a student lives in the projects. However, using assessment data of that student to make instructional decisions would be more beneficial. Further, much discord was observed in placement meetings in relation to student placement. Administrators sometimes interpreted RTI data as indicating the student needed placement in an alternative location, while other personnel perceived the purpose of RTI as indicating a need to provide increasingly intensive instructional supports onsite.

Cavendish et al. (2016) indicated there were examples of excellent attempts at data-based decision-making, but even the best attempts were sometimes undermined either by a perceived need to stick to the prescribed protocol or by the overarching influence of high-stakes statewide testing. Many assessments used by the district did not
lend themselves to progress monitoring. Therefore, schools were forced to create their own assessments to correlate with students’ instructional needs. Mounting pressures from district accountability systems pushed administrators further away from providing supports to students onsite, to looking for loopholes to remove low-performing students by having them transfer to schools with programs that were not available at their home school. Throughout the study, Cavendish et al. (2016) noted several instances where school administrators suggested placement outside of the school; these efforts caused disagreements among members of the collaborative problem solving team. Teachers felt administrators were inaccurately trying to label students. To circumvent the process, schools created shortcuts related to parental consent for movement between tiers. Although, protocol requires parents to receive notification prior to initiating supports, schools were simply allowing teachers to proceed with interventions. Prior to testing, parents were notified of the child’s progress and asked to sign consent for testing.

Findings included confusion over components for practice in RTI and a lack of understanding related to the purpose of RTI to potentially improve outcomes and reduce the number of students referred for special education services. Cavendish et al. (2016) reported the success or lack thereof, depends on attitudes and beliefs, instructional and intervention practices, resources, and professional development. However, each of these features was lacking in research sites. Challenges associated with RTI implementation in the two schools and the inadequate training provided in the first 2 years of implementation were seemingly associated with the district’s limited funding, multiple changes to assessments, and the lack of clarity among stakeholders, specifically from a top-down system change initiative.
Cavendish et al. (2016) made two recommendations for schools who seek to implement a RTI model. First, the school should begin implementation efforts by engaging all educators and providing a clear understanding of the need for change. The need for RTI implementation is targeted in two ways. For example, involving all stakeholders in discussions that focus on challenging common beliefs regarding issues such as the nature of student learning, and roles data-based decision making and instructional practices play in student achievement outcomes. Another way involved sharing and discussing assessment data from the educators’ schools in increasing accountability demands from federal and state sources. Second, Cavendish et al. (2016) suggested schools create structures required to facilitate and support implementation of a RTI model. To do this, a school must examine and align resources to enhance their capacity to implement a RTI model. In addition, schools must provide professional development and coaching to enhance the capacity of educators to implement an RTI model successfully.

Issues that emerged from reviews of the Fisher and Frey (2011), Sanger et al. (2012), and Cavendish et al. (2016) studies are not viewed as barriers to implementation, but serve as systemic change factors needed to support any large-scale RTI implementation effort. With deficits in academic and behavior progress, educators are pressured to create an environment conducive for learning for all. As state and district accountability increases, secondary leaders also seek to use RTI to increase student achievement. Prior to implementing RTI in any school system, it would be imperative to examine the context of teaching and learning (Cavendish et al., 2016). Challenges of urban school systems have both structural and cultural components. Structural challenges
are specific school policies and practices that impede student achievement or fail to address students’ needs (Fisher & Frey, 2011; Sanger et al., 2012). Whereas, cultural challenges are those policies and practices, and belief systems that contribute to negative perceptions of students who may be at risk, due to educators’ beliefs it may be too late to intervene (Cavendish et al., 2012).

Summary

The process of change dynamic is not viewed as a single step event (Sansosti & Noltemeyer, 2008). Existing research suggests when change starts first at the individual level, the organization will follow (Hall & Hord, 2006). However, many school reform initiatives have been unsuccessful due to the inability of lawmakers to involve educators in decision-making (Lesh, 2013). Large-scale school reforms like RTI that depend on educators’ perceptions of skills, understanding of the need, underlying beliefs, resources, and professional understanding are not implemented without carefully considering these multi-dimensions (Burns & Gibbons, 2008). For RTI to be a successful school reform initiative, it is critical principles of systems change are applied to facilitate implementation of new beliefs and skills to all educators involved in the process (Curtis et al., 2008). As indicated by Fullan (2010) there is no formula or shortcut for the process. According to Castillo et al. (2016) educators will typically embrace new beliefs and practices when they understand the need for change, possess the skills to implement change, or know they will receive the necessary professional development to implement a new program (Curtis et al., 2008).

With the reauthorization of the IDEA of 2004 and former No Child Left Behind Act (2001) lawmakers, school leaders and educators are faced with the task of improving
performances of all students and closing the gap between disadvantaged students and their peers. Additionally, school districts across the United States are forced to reassess how students are identified as learning disabled and at-risk (Johnson & Smith, 2008; 2011; Sansosti et al., 2010; Spear-Swerling & Cheesman, 2012). Both IDEA (2004) and NCLB (2001) stress the importance of providing research-based instruction and interventions, while holding schools accountable for the achievement of all students in terms of meeting grade-level expectations (Klotz & Canter, 2006). Specifically, for secondary schools this would be a challenge due to age and number of years the student experienced academic failure (Sanger et al., 2012). The Individuals with Disabilities Education Improvement Act of 2004 provides a framework for the process of RTI. This process known as RTI requires the student to receive a high quality, effective education in which their progress is monitored prior to referral for special education services (Sansosti et al., 2010; Spear-Swerling & Cheesman, 2012).

RTI is the alternative method for support services; yet, few studies at the secondary level have analyzed a school’s initial implementation steps and continued development toward the successful implementation of a RTI model. Fisher and Frey (2011) and Sanger et al. (2012) have conducted studies at secondary schools and studies could potentially be guides for those wishing to implement RTI. Fisher and Frey (2011) recognized the difficulty of change in a large school system. Researchers stressed the importance of having buy-in, or trust of those who are affected by changes. Changes implemented were not as successful without a partnership between all stakeholders (Fisher & Frey, 2011).
Sanger et al. (2012) concurred RTI at the high school level is difficult to implement. According to Sanger et al. (2012), study participants recognized the need for change, believed in the model; yet they did not have skills needed to implement the change. Providing sufficient training for all educators and school leaders to support the model is imperative. Researchers noted if educators understood how RTI instruction is implemented they might be more likely to support progress monitoring, the three-tiered model, and the need for some students to receive support that is more intensive. Findings of Cavendish et al. (2016) supported Fullan’s (2010) to understand the need for change and also the need for engagement of educators in the purpose of the reform. It was evident to researchers, without educators understanding the purpose of RTI, it is unlikely to produce the desired outcome, or an increase in student improvement. Cavendish et al.’s (2016) findings suggested a need for professional development to build a consensus and infrastructure to facilitate meaningful change. Researchers also stated exploring perceptions of stakeholders and beliefs provides insight for states that are mandated to implement RTI without building a consensus and resources.

While RTI has garnered support as a framework that brings about systematic change within education (Fuchs & Deschler, 2007); much debate centers around change factors needed to support large-scale RTI implementation (Cavendish et al., 2016). Fullan (2010) found a change in beliefs is difficult and important. RTI requires all stakeholders believe that all students can learn, and waiting for a child to fail is unacceptable. Educators are expected to implement interventions with fidelity (Darling-Hammond, 2009). The RTI model uses assessment data and the problem-solving process to increase the number of students who meet grade-level proficiency as determined by statewide
assessments. The Florida Department of Education expected districts throughout the state would increase the number of students who demonstrate proficiency on statewide assessments (Batsche, 2014). The likelihood of such an increase is based on the quality of the instruction and interventions students receive. Schools should not only monitor their student assessment data, but also how their instructional practices, data-based decision making, interventions, and problem-solving skills enhance their capacity to implement RTI practices. The problem solving RTI model is continually recognized for its effect on student achievement outcomes (Castillo et al., 2016).

**Research Questions**

The following questions guided this study:

1. What are high school educators’ beliefs related to RTI, as measured by the RTI Beliefs Survey–Part I? (Quantitative)

2. What are high school educators’ perceptions of skills related to RTI, as measured by the Perceptions of RTI Skills Survey–Part II? (Quantitative)

3. How do high school educators describe the factors that impact the implementation of RTI as indicated through collection of face-to-face interviews–Part III? (Qualitative)
Chapter 3: Methodology

This chapter describes the research methodology that was used in the collection and the data analysis for the study. Additional information regarding the population, setting, and process for procedures for this study is detailed. To conduct the proposed study, a letter was sent to the high school’s principal and assistant principal in charge of the Response to Intervention (RTI) program requesting time to discuss the proposed study and its benefits (see Appendix A). Consent from the PSRTI Project granting permission to use the survey instruments was attained (see Appendix B). Additionally, this chapter provides a thorough discussion of participants of this study, instruments that were used to collect data, and procedures for data collection and the data analysis. The purpose of this mixed methods study was to (a) determine educators’ beliefs and skills related to RTI; and (b) explore systemic factors impacting RTI program implementation efforts. An explanatory mixed method design was used to collect and analyze this data. The reason for conducting this study was to address the following research questions:

1. What are high school educators’ beliefs related to RTI, as measured by the RTI Beliefs Survey–Part I? (Quantitative)

2. What are high school educators’ perceptions of skills related to RTI, as measured by the Perceptions of RTI Skills Survey–Part II? (Quantitative)

3. How do high school educators describe the factors that impact the implementation of RTI as indicated through collection of face-to-face interviews–Part III? (Qualitative)

Setting of the Study

Response to Intervention (RTI) is not implemented in all school districts in the United States (Samuels, 2008). The federal government left the decision up to each state
to determine how they would determine eligibility (Zirkel & Thomas, 2010). In the state of Florida, RTI was an established initiative since 2004. In 2008, the Florida Department of Education and the University of South Florida Problem Solving RTI Project organized one of the first to scale up its statewide initiative efforts by publishing a plan to assist schools with school-wide implementation of RTI (Florida Department of Education, 2011). The partnership between the two entities was developed to facilitate the implementation effort and build a common language related to the initiative (Lesh, 2013). The study site was selected based on the knowledge RTI was used at the school and monitored for the past 3 years. This study was conducted in a school within the sixth largest school district in the United States.

**Mixed Methods Design**

The selected research approach for this study is mixed methods; that is, using both quantitative and qualitative methods of inquiry to help answer proposed research questions. Creswell (2012) indicated combining quantitative and qualitative data collection methods in a single study provides a clearer picture of the problem. According to Creswell (2012), mixed methods research is a good design to build upon the strength of both types of data. To address the research question, this study used an explanatory, mixed methods design to collect and analyze data. According to Creswell and Plano Clark (2011), the explanatory mixed method design occurs in two separate, sequential phases. The explanatory mixed method design consists of first collecting quantitative data and then collection of qualitative data in efforts to expand on quantitative results (Creswell & Plano Clark, 2011). The first phase, a quantitative research design, used two surveys devised by the Florida Statewide Problem Solving RTI Project to survey
educators on their beliefs and perceptions of skills toward RTI. Quantitative studies are done when numbers and statistics are reported. The quantitative method in this study collected and reported descriptive data (e.g., beliefs and perceptions of participants). Thus, as quantitative research method was used to answer RQ1 and RQ2.

The next phase of the study involved the qualitative method, which was designed from results of quantitative data. The qualitative design method provides many perspectives and words from participants to help clarify the situation (Creswell, 2012). This approach is used when more than one perspective may exist. Qualitative seeks to identify and explain patterns of behavior (Draper, 2004). Findings of the qualitative phase helped explain the quantitative data. Tashakkori and Teddlie (2008) supported the design not only for its usefulness in identifying trends and relationships, but also for explaining reasons for the quantitative data. The explanatory mixed methods design was suitable for this study, because it allowed for triangulation of data from multiple sources (Creswell, 2012). Hence, the usage of the quantitative survey and the qualitative interview provided a complete understanding of the phenomenon.

According to Creswell (2008), several factors are taken into consideration when conducting qualitative research. The author believed for participants to feel comfortable with providing feedback on the phenomenon they must first make a personal connection (Creswell, 2008). The researcher is not employed by the selected high school, which eliminated bias and increased participants’ experiences. Individual, face-to-face interviews were used to collect shared understanding from individual participants as well as to acquire views from specific people. The researcher did not share any opinions about the phenomenon with participants. In the second phase, qualitative data were collected in
efforts to explain survey findings further. To answer RQ 3, a qualitative data collection method was used.

Participants

The target population for this study included a convenience sampling of educators at a high school in south Florida. For this study, educators included administrators, general education teachers, special education teachers, the school psychologist, school social workers, and school counselors. This inclusion of the administration and specialists was to ensure the study gathered information from all individuals who were involved in providing instruction and intervention. This study site had 93 certified educators and all were invited to participate in an internet-based survey. Participation in the survey was strictly voluntary and anonymous. A subset of educators were selected to participate in the qualitative interview portion of this study. Selected educators were based upon a targeted sample who agreed to expound on their RTI beliefs and skills they possess to implement RTI practices. Additionally, this group of educators were selected based upon their individual scores on the survey presented as a part of the quantitative portion of the study. A purposeful sampling method was used to target this group of educators. Creswell and Plano Clark (2011) explained a purposive sampling involves individuals aware of the phenomenon of interest.

Quantitative. There are 93 certified educators at the study site and all were solicited to participate in the quantitative phase of the study. No random sampling was used for the RTI Beliefs Survey–Part I and the Perceptions of RTI Skills Survey–Part II. Instead, the researcher used convenience samplings. Since all certified educators were solicited for participation, factors such as race, gender, socioeconomic status, and
ethnicity were not considered. Educators were solicited through a scheduled meeting. The meeting was held at the study site, where the researcher was introduced to the educators. During this meeting, the researcher provided educators with an overview of the study. Information regarding the purpose of the study, proposed outcome of the study, how much time was needed, risks, and benefits of the study were covered during the presentation. While all educators were invited to participate in the study, their participation was voluntary, and having an option not to participate was explained. A flyer was sent to all educators requesting their participation in the study (see Appendix C) and both consent forms (Appendix D and Appendix E). The researcher followed-up by resending the flyer through email 7 days prior to the survey date and 3 days prior to the survey due date. Additionally, the consent forms and confidentiality statement were provided on the first page of the SurveyMonkey™. After 3 years, educators’ responses will be destroyed. Time to ask questions was offered. Creswell (2012) stated 50% is the typical response rate for surveys. Therefore, the targeted participation number was 46. Additionally, the researcher was available at the study site to answer questions and gain participant trust and confidence.

**Qualitative.** During this phase of the study, participants were selected for face-to-face interviews based on their average survey score on the RTI Beliefs Survey–Part I and the Perceptions of RTI Skills Survey–Part II. The average score for both sections was determined by adding values corresponding with participant responses. The first four questions on the survey were not included in the number. The total value from Part I was divided by 14, which is the number of items in that section. *Low* beliefs are average scores of 1-3.5 and *High* beliefs are average scores of 3.6-5.0. The total value from Part II
were divided by 50, which is the number of items in that section. Low skill level equals average scores of 1-3.5 and High skill level equals average scores of 3.6-5.0. The face-to-face interviews allowed educators to describe factors that may impact the implementation of RTI practices. The qualitative sampling was a smaller sample with various faculties and staff positions. The qualitative sampling was self-identified by the contact information provided by educators in the quantitative portion of this study. The researcher selected educators based on their mean survey score from the following categories: Category 1–Low Beliefs/High Perceptions, Category 2–High Beliefs/Low Perceptions, Category 3–High Beliefs/Hill Skills, and Category 4–Low Beliefs/Low Skills.

To serve as a backup, a list, in mean order of educators not selected to interview was created for use in the event data saturation was not achieved with original interviewees. Participants’ job descriptions (i.e., principal, assistant principal, general education teacher) highest degree earned were documented for each educator. Additionally, years of education experience, years in current position, and participants’ self-ratings of their beliefs and perceptions of RTI skills as measured by the RTI Beliefs and Perceptions of Skills Survey were documented. These demographic variables were reviewed in data analysis. These factors did not impact one’s selection as part of the interview process. Selecting the best, unbiased sample for this study was the ultimate goal. The only two deciding factors for consideration in the qualitative phrase of this study were two predefining categories of Low and High outliers. These are further explained in detail in the procedure section of this chapter.
Instruments

Mixed methods research includes both quantitative and qualitative methods. According to Edmonds and Kennedy (2013), to conduct an effective mixed methods study, an individual must be able to distinguish between the two methods. Two instruments were used in this study, including the RTI Beliefs Survey and Perceptions of Skills Survey to quantify levels of beliefs and perceptions of skills. Both surveys were combined and noted as Part I and Part II of the survey; however, joining the two instruments did not affect the validity of the instruments. The survey began with four demographic information questions that included participants’ job descriptions, years of experience in education, number of years in position, and highest degree earned. The entire survey included four demographic questions and 64 Likert-type scaled items that took only 20 minutes to complete. Additionally, an Interview Protocol–Part III, developed by the researcher, for face-to-face interviews was used in this study. The four interview questions were formulated to ascertain perceptions of participants’ understandings of RTI, their individual roles within the process, trainings they received to implement the process, and supports used or needed to implement the process.

Quantitative Instruments

RTI beliefs scale. The RTI Beliefs Survey–Part I (see Appendix F), is a self-report measure that evaluated educators’ beliefs about RTI. According to the University of South Florida Problem Solving/RTI Project (RTI Technical Assistance Manual, 2016), the purpose of the RTI Beliefs Scale Survey was to identify commonly held beliefs educators may have that can impact RTI implementation efforts. The survey began with four demographic questions that asked participants to indicate their job description, years
of experience in education, number of years in current position, and their highest degree earned. Followed by the four demographic questions were 14 Likert-type scaled items that take the form of belief statements to which participants were asked to rate their extent of agreement or disagreement using the following scale: 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree. The RTI Beliefs Survey–Part I consisted of 14 statements divided into three domains. The domains with belief statement numbers were as follows:

1. Academic ability performance of student with disabilities (3-5)
2. Data-based decision making (6-13)
3. Function of core and supplemental instruction (1, 2, 14).

The University of South Florida Problem Solving/RTI Project (Project Staff Manual) (2010) reviewed related literature, instruments, and evaluation projects to develop an instrument representative of beliefs pertinent to RTI. The RTI Beliefs Scale Survey went through validity checks by an Educator Expert Panel Validation Panel (EEVP). The panel provided feedback and revisions were made to the instrument to improve the quality of the tool (Castillo et al., 2015). The Promax Oblique Factor Solution of Statements from the RTI Beliefs Survey measured 72% of common variance. The RTI Beliefs Survey subscales of academic ability and performance of students with disabilities yielded internal consistency reliability estimates of $\alpha=.87$ as measured by Cronbach’s alpha; for data-based decision-making ($\alpha=.79$); and for functions of core and supplemental instruction ($\alpha=.85$).

**Perceptions of skills survey.** Perceptions of RTI Skills Survey- Part II (see Appendix F), was a self-report that measured how educators felt about the support
available, and skills required, for a successful implementation of RTI. According to the University of South Florida Problem Solving/RTI Project (RTI Technical Assistance Manual, 2016), the purpose of the Perceptions of RTI Skills Survey was to identify educators’ levels of comfort with RTI practices so professional development needs are developed. This section included 50 Likert-type scaled items organized within 17 stems that assessed educators’ perceptions of skills in applying RTI practices to academic and behavior content, and data display skills (Castillo et al., 2016). The perception of skills instrument measured the level of support educators perceive is required for participants to implement RTI Practices; the Likert-type scale values were: 1 = I do not have this skill at all (NS); 2 = I have minimal skills in this area; need substantial support to use it (MnS); 3 = I have the skills, but still need some support to use it (SS); 4 = I can use this skill with little support (HS); 5 = I am highly skilled and could teach others this skill (VHS).

Content and construct validity were both conducted on this instrument with a pilot group of 14 educators from varying disciplines with experience in RTI practices. The panel provided feedback and revisions were made to instruments to improve the quality of the tool (Castillo et al., 2015). Three factors accounted for 80% of the common variance for the Perceptions of RTI Skills Survey: Factor 1 (Perceptions of RTI skills applied to academic content): $\alpha=.97$; Factor 2 (Perceptions of RTI skills applied to behavior content): $\alpha=.97$; and Factor 3 (Perceptions of data manipulation and technology use skills): $\alpha=.94$. School level reliability estimates for each factor yielded internal consistency reliability estimates for academic ability and performance of students with disabilities ($\alpha=.78$); for the data-based decision-making ($\alpha=.73$); and for functions of core and supplemental instruction ($\alpha=.60$), as measured by Cronbach’s alpha.
Qualitative Instrument

Interview Protocol. Castillo-Montoya (2016) stated interviews provide researchers with detailed qualitative data for understanding experiences, a description of the experience, and meanings they make of those experiences. Therefore, the researcher designed four open-ended interview questions—Part III to answer RQ 3: How do educators describe the factors that impact the implementation of RTI? (see Appendix G) and to explain the studied phenomenon. Questions provided a way of detailing perceived barriers and identified contributing factors for a successful RTI program implementation.

Since questions were not taken from a research-based assessment, field testing was completed to determine the validity and word choice (Merriam, 2009). The draft of the Interview Protocol was field tested by a panel of three instructional facilitators from the district, one RTI specialist, and two experts in special education. Field testing of the interview questions was conducted after IRB approval. Feedback on the instrument was considered and revisions were made with consideration of feedback received.

Procedures

After obtaining permission to conduct the study from Nova Southeastern University Institutional Review Board the researcher obtained written permission from the study site administrator to proceed with the proposed study. An explanatory research design was applied to this study to answer the three proposed research questions. The study began with collecting quantitative data, analyzing data, and using results to inform follow-up qualitative data (Creswell & Plano Clark, 2011).
**Quantitative procedures.** After receiving approval from the University Institutional Review Board and the school district, the researcher contacted the administrator of the study site to set up a date to introduce the study to educators. At a scheduled meeting, the researcher explained the purpose of the study and described how it was conducted. Educators were provided with a flyer asking for participants. The flyer explained the scope of the study, who was needed to participate, what would occur if they agreed to be a part of the study, benefits, and risks of being a part of the study, and instructions on how to access the RTI Beliefs and Perceptions of Skills Survey. The participant flyer did not need a signature and was not collected. Additionally, high school educators received a paper copy of the consent to participate in the study. The informed consent form provided participants with the following information:

- Explanation of the purpose of the study
- Procedures if they agree to be part of the study
- How the information would be used?
- Explanation of risks associated with being a part of the study
- Explanation of benefits associated with being a part of the study
- Would there be any compensation for participating in the study?
- How the information collected will be kept private?
- How to contact the researcher or dissertation chairperson?
- Statement of content to participate in survey and interview

The researcher answered questions during the initial meeting with participants. Paper copies of the informed consent form were collected for those wishing to return a paper copy. Following the presentation, the participant flyer and consent forms were sent via
email to educators at the study site. Procedures for accessing the survey online were also included.

**Qualitative procedures.** Educators who were identified based on the low or high mean score derived from the RTI Beliefs and Perceptions of RTI Skills Survey, were sent an email. The email included two letters of consent, one to sign and return, and one to keep for their records, and interview specifics: date, time, and location of interview questions. The email also included a copy of four of the interview questions. Finally, the email included an assigned pseudonym to protect participants’ identities. The pseudonym was used to record their feedback in Chapter 4 of this proposed study. In the event there was a low number of participants, all available participants were interviewed. Before each interview was conducted, participants acknowledged they received and signed the consent forms. Educators were informed an audiotape recorder and a journal would detail their responses for accuracy. Educators knew if at any point during the interview they were not comfortable, the interview would stop and none of their quotes would be used. Furthermore, they were informed all consent forms and transcriptions were stored in a locked cabinet and are destroyed after 3 years. Time was allotted for educators to ask questions related to the interview process and only after each educator felt comfortable with the situation did the interview proceed. The entire meeting was audiotaped including the consent to interview.

**Data Collection**

Data collection was conducted in two distinct phases for this proposed study. Phase one included the RTI Beliefs Survey–Part I and Perceptions of RTI Skills Survey–Part II. Phase two of the study included face-to-face interviews using an Interview
Protocol–Phase III. The researcher used quantitative data results to look for outliers to follow up in face-to-face interviews. By collecting data from a variety of individuals, different perceptions and experiences were conveyed. To collect data to answer RQ 1 and RQ 2, the researcher used a survey made available on SurveyMonkey™. Data were also collected through face-to-face interviews to answer RQ 3.

**Quantitative data collection.** To gather the quantitative data, the researcher used SurveyMonkey™, which is an online survey development, and data analysis software. The RTI Beliefs and Perceptions of Skills Survey is a 64-item Likert-type scaled survey. The survey was available on SurveyMonkey™ for 7 days and took approximately 20 minutes to complete. To solicit for the highest completion rate, the researcher sent reminder emails to participants on day 3, and day 1 before the close of the survey. Reminders included the SurveyMonkey™ link for easy access. A Microsoft Excel Spreadsheet was created to keep track of participant contact information, scores, and other important data to the study.

Survey settings were adjusted only to allow submission of completed surveys. At the start of the survey, the consent statement and privacy policy were provided to participants. To proceed to the survey, participants had to select next page at the top of the consent statement and privacy policy. Castillo et al. (2016) recommended administrators of the survey should try to promote the survey to obtain information reflective of the school. The site allows educators to complete the survey at their own convenience. At the conclusion of the survey, the educators were offered a note of gratitude for completing the survey and the opportunity to provide their name, phone number, and an email address if they wanted to receive communication about the second
phase of the study. The contact information was added to the Microsoft Excel Spreadsheet for an easy reference if they are needed to participate in the qualitative phase of the study.

During the second phase of the study, educators were selected for face-to-face interviews based on their average survey score on the RTI Beliefs Survey–Part I and Perceptions of RTI Skills Survey–Part II. The average score for both sections was determined by adding values corresponding with participant responses. The total value from Part II was divided by 14, which was the number of items in that section. Low beliefs are average scores of 1-3.5 and High beliefs are average scores of 3.6-5.0. The total value from Part II was divided by 50, which was the number of items in that section. Low skill level equals average scores of 1-3.5 and High skill level equals average scores of 3.6-5.0.

**Qualitative data collection.** After completing the quantitative data analysis, the study proceeded to the next phase to include one-on-one interviews. The most common methods of data collection in qualitative research are observations, interviews, and focus groups (Jackson, Drummond, & Camara, 2007). The benefit of conducting a qualitative interview is a deeper understanding of the study will occur (Ary, Jacobs, Razavieh, & Sorensen, 2006). Random sampling was used to select participants in the interview process. Educators for interviews were selected based on their mean scores on both parts of the survey and if they provided their contact information. Field notes were recorded during the interview. The researcher described educators’ reactions to questions and personal thoughts the researcher had relating to themes that emerged during interviews. Probing questions were used to gain a complete answer to each question. Responses and
reactions to probing questions were also documented and responses were used in the study.

A standardized open-ended interview structure involving asking all educators the same interview questions was used (Turner, 2010). As described by the author, this type of interview was highly structured, asking all participants the same questions, identical open-ended questions. The interview questions were provided beforehand to allow ample time to think about questions, extract references, and provide informed responses. Therefore, a predetermined time limit of 30 minutes was provided to conduct interviews. To begin, each educator was asked demographic questions to include pseudonym, number of years at high school, number of years teaching experience, and title. Each educator was asked four open-ended questions to answer RQ 3. Questions provide a way of detailing factors affecting implementation of RTI at the study site.

Data Analysis

To analyze data to address RQ 1 and RQ 2, the researcher used descriptive statistics. According to Creswell (2012), descriptive statistics help researchers summarize overall tendencies in data, provide an understanding of how varied scores may be, and provide insight into where one score stands in comparison to another. Quantitative data for RQ 1 and RQ 2 were analyzed using SurveyMonkey™. To analyze data to address RQ 3, the researcher organized data, coded data, and identified themes. Themes were used to develop factors impacting the implementation of RTI. Qualitative data were transcribed using Dragon Dictation and analyzed using NVivo 11 Plus.

Quantitative data analysis. To begin the quantitative analysis, the response rate and results for research questions were completed. The response rate was calculated by
dividing the number of participants who submitted a completed survey by the number of participants who received the survey link. The RTI Beliefs Scale Survey–Part I included 14 Likert-type items related to educators’ beliefs about RTI. Likert-type statements 5 through 18 relate to RQ 1: What are high school educators’ beliefs related to RTI, as measured by the RTI Beliefs Survey–Part I? Authors of the survey categorized educators’ beliefs into three separate domains (a) beliefs about the academic performance of students with disabilities, (b) beliefs addressing data based decision making, and (c) beliefs related to the function of core and supplemental instruction. The first domain was comprised of 3 Likert-type statements (3, 4, 5). The second domain included 8 Likert-type statements (6, 7, 8, 9, 10, 11, 12, 13) and the final domain was comprised of 3 Likert-type statements (1, 2, 14). The 14 Likert-type statements focused on examining commonly held beliefs among educators that create a climate supportive of implementing RTI practices. Each question was answered with one of the following responses $5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, \text{ and } 1 = strongly disagree$.

Three techniques were utilized for analyzing scale responses. First, a descriptive analysis of survey data by domain was performed. The descriptive analysis included a summary of frequency, percentage, mean, mode, and standard deviation for each statement. The researcher counted the number of participants who selected each scale response for each statement to obtain frequencies. Frequencies were then divided by the total number of responses to statements to compute percentages. The mode of each Likert-type statement was calculated to determine the most answered response. To create more meaningful categories, the researcher combined the agree and strongly agree categories to obtain the percentage of agreement and the disagree and strongly disagree categories to obtain the percentage of disagreement.
categories to obtain the percentage of disagreement. Finally, the mean score for each participant was calculated to determine overall level of RTI beliefs. The mean score was calculated by assigning a numbered value to each of the 14 Likert-type statements. The highest sum was 70 and the lowest sum was 14. Each participant’s sum was divided by 14. Results determined average beliefs for each participant. Low beliefs are average scores of 1-3.5 and High beliefs are average scores of 3.6-5.0.

The Perceptions of RTI Skills Survey–Part II included 50 Likert-type statements to assess educators’ perceptions of skills they possess to implement RTI practices. Likert-type statements 19 through 39 related to RQ 2: What are high school educators’ perceptions of skills related to RTI, as measured by the Perceptions of RTI Skills Survey–Part II? Authors of the survey categorized educators’ skills into three separate domains (a) RTI skills relating to academic content, (b) RTI skills relating to behavior content, and (c) general skills in manipulating data while using technology to assist in data-based decision making. The first domain was comprised of 23 Likert-type statements (19a-35a, 37, 38a, 38b, and 38c). The second domain included 20 Likert-type statements (19b-35b, 38d) and the final domain was comprised of 7 Likert-type statements (36a, b, c, d, e, 39a and b). The 50 Likert-type statements focused on identifying educators' skill levels with RTI practices and examining current educator perceptions regarding skills they possess. Each question was answered with one of the following responses: 1 = I do not have the skill at all (NS); 2 = I have minimal skills in this area; need substantial support to use it (MnS); 3 = I have the skills, but still need some support to use it (SS); 4 = I can use this skill with little support (HS); and 5 = I am highly skilled in this area and could teach others this skill (VHS).
Two techniques were utilized for analyzing scale responses. First, a descriptive analysis of survey data by domain was performed. The descriptive analysis included a summary of frequency, percentage, mean, mode, and standard deviation for each statement. The researcher counted the number of participants who selected each scale response for each statement to obtain frequencies. Frequencies were then divided by the total number of responses to statements to compute percentages. The mode of each Likert-type statement was calculated to determine the most answered response. In addition, the mean score for each participant was calculated to determine overall level of skills needed to implement RTI practices. The mean score was calculated by assigning a numbered value to each of the 50 Likert-type statements. The highest sum was 250 and the lowest sum was 50. Each participant’s sum was divided by 50. Results determined the average skill level for each participant. *Low skill level* equals average scores of 1-3.5 and *High skill level* equal average scores of 3.6-5.0.

**Qualitative data analysis.** Results of the four face-to-face interview questions provided data to answer RQ3: How do high school educators describe the factors that impact the implementation of RTI as indicated through collection of face-to-face interviews—Part III? The first interview question asked educators how they perceive their role in implementing RTI. Interview question two asked educators to describe what RTI program fidelity means. Interview questions three and four gathered information regarding barriers and factors affecting their school’s RTI program implementation. Educators’ audiotaped responses were transcribed using Dragon Dictation. To ensure accuracy, the researcher read transcriptions to detect errors. The researcher reviewed transcribed copies three times independently to ensure accuracy. This included recorded
interviews in their entirety and completed transcriptions. Creswell (2012) recommended researchers conducting a qualitative study check their findings with participants in the study to determine if findings are accurate. Member checking is described as collecting summaries of findings back to participants and asking them to check summaries for accuracy (Creswell, 2012). To ensure the completeness and validity of data, the researcher provided a transcribed copy of responses to educators to review for accuracy. Any feedback provided or requested changes were reviewed against the original recording and corrections were made if warranted. Educators were given 5 days to review for accuracy, if the researcher did not receive an email with corrections; the transcript was considered accurate and was used in its original state. The researcher also transcribed field notes taken during interviews, but did not provide to educators for review.

After data were organized and transcribed, the data analysis began. This consisted of exploring data and developing codes as first steps in analysis. According to Creswell (2012), coding is the process of segmenting and labeling text to form descriptions and broad themes in data. The author further stated the coding process is to “make sense out of the text data, divide it into text or image segments, label the segments with codes, examine codes for overlap and redundancy, and collapse the codes into broad themes” (p. 243). The researcher used NVivo 11 Plus to analyze transcribed data. NVivo software helps to identify themes, patterns, provide coding, and sentiments in qualitative and mixed methods studies (QSR International, 2016). Data were coded during analysis into NVivo codes. NVivo codes were stated in participants’ actual words, phrased in standard educational terms, or expressed in the researcher’s own language (Creswell, 2012). These codes, descriptions, and themes were all reviewed and analyzed from
common themes, common descriptions, and common themes among participants’ answers.

Creswell (2012) defined themes as categories that are combined to form a major idea in data. Themes were formed by results of the NVivo™ software. Like codes, themes have labels that typically consist of no more than two to four words. The researcher analyzed data for multiple perspectives based on the predetermined Low and High outliers. Multiple perspectives provided several viewpoints from different individuals. The researcher combined responses from all educators in each category. Similar responses were categorized to identify common factors that affect RTI program implementation efforts. Responses for each educator in each group were reported using a comparison table. The comparison table identified the theme and statements made from each category. The purpose for displaying responses in this manner was to show similarities and differences on factors affecting implementation efforts. This data analysis provided a clear picture of needs of high school educators to improve RTI program implementation and define what educators deem important as factors that may affect RTI program implementation. Results of interviews provided data to answer RQ 3. The researcher provided a copy of the final report to the leadership team at the study site. The final report included report findings and an interpretation of findings.

**Ethical Considerations**

Marshall and Rossman (2014) stated the importance of ethical considerations when completing any research. Remembering this, to protect the identity of participants a pseudonym was used instead of any other identifiable information. Each participant completed a consent form providing an explanation of the purpose of the study, asking
for agreement to participate in the study voluntarily, agreeing to audiotape recording
during the study, and assuring the right to withdraw from the study at any time. Consent
forms and data from both instruments were stored and locked in a cabinet to which only
the researcher had access. Information is stored for 3 years then destroyed by proper and
secure data destruction and shredding.

Summary

The selected process for conducting this study was to use an explanatory mixed
methods approach (Creswell & Plano Clark, 2011) to determine educators’ beliefs on
RTI and their perceptions of skills they possess to implement an RTI program.
Additionally, the proposed study sought to identify factors affecting RTI implementation
at the study site. One type of evidence may not paint the entire picture. When researchers
study a few individuals qualitatively, the ability to generalize results to many is lost.
When researchers quantitatively examine many individuals, the understanding of any one
individual is diminished. Therefore, a mixed method design was appropriate to conduct
the proposed study. The first phase of the study comprised a 64-item Likert-type scale
survey. Based on results of the quantitative phase, survey participants were identified.
Educators who expressed an interest in expounding upon the phenomenon were contacted
to participate in the second phase of the study. Incorporating both methods provided a
clear understanding of the research problem than either methods single-handily (Creswell
& Plano Clark, 2011).
Chapter 4: Findings

Overview

Chapter 4 describes data collected and analyzed in order to investigate research questions, and presents results of both the survey and one-on-one interview analyses. The selected research approach for this study was a mixed method design that included using both quantitative and qualitative methods of inquiry. The purpose of the study was to (a) determine educators’ beliefs and skills related to RTI; and (b) explore systemic factors impacting RTI program implementation efforts. To address the research question, the study used an explanatory, mixed methods design to collect and analyze data. According to Creswell and Plano Clark (2011), the explanatory mixed method design occurs in two separate, sequential phases.

Phase one of the study followed a quantitative research design. Educators were solicited for participation during a scheduled meeting. During the quantitative phase, the researcher used the RTI Beliefs Survey–Part I and Perceptions of Skills Survey–Part II to quantify levels of beliefs and perceptions of skills regarding Response to Intervention. Data collected during this phase were analyzed to provide an answer for Research Questions 1 and 2. Phase two of the study followed a qualitative research design. During the qualitative phase, the researcher used an interview protocol to interview educators. The semi-structured interviews included four questions to gain a deeper understanding of factors affecting RTI program implementation efforts. Through face-to-face interviews, educators were able to discuss factors impacting Response-to-Intervention efforts. Data collected during this phase were analyzed to provide an answer for Research Question 3. The following are the three research questions:
1. What are high school educators’ beliefs related to RTI, as measured by the RTI Beliefs Survey—Part I? (Quantitative)

2. What are high school educators’ perceptions of skills related to RTI, as measured by the Perceptions of RTI Skills Survey—Part II? (Quantitative)

3. How do high school educators describe the factors that impact the implementation of RTI as indicated through collection of face-to-face interviews—Part III? (Qualitative)

This chapter summarizes survey data collected during a 2-week period. The results are organized into the following sections: (a) response rate, (b) demographic information of participants, (c) educators’ beliefs about RTI, (d) educators’ perceptions of their skills related to RTI, and (e) systemic factors that impact implementation.

Response Rate

Quantitative. The potential population for the mixed-methods research study consisted of 93 participants. The survey was sent to all 93 potential participants during the second week of the new school year. Participants had 7 days to complete the survey. After the initial contact, 18 educators completed the survey for a 20% return rate. A follow-up email was sent to all participants thanking those who participated and asking those who had not participated to please do so within the next 4 days. By day 7 of the study, the survey was completed by an additional 33 participants. The response rate was 51 of 93, which equates to 55% of participants at the high school.

Qualitative. At the end of the online survey, participants were presented with a thank you page. Following the thank you page, participants were asked to partake in a 30-minute interview to discuss their experience with implementing RTI. Participants who were interested in providing additional feedback provided their contact information (i.e.
name, and/or phone number, and/or email). A large number of participants only provided their name. Therefore, the researcher requested a faculty contact list to gain access to their extensions and email addresses. A total of 20 of 51 participants offered to provide additional feedback. An email included two letters of consent, one to sign and return, and one to keep for their records was sent to each participant. In addition, the email contained an assigned pseudonym to protect their identities and a copy of the four interview questions. Of the 20 participants, six participants responded and were able to schedule an interview. While it was originally indicated that between 10-12 participants were employed, saturation was reached at four responses. Participants were selected based on their mean survey scores and placed into one of the following categories: Category 1: Low Beliefs/High Perceptions, Category 2: High Beliefs/Low Perceptions, Category 3: High Beliefs/Hill Skills, and Category 4–Low Beliefs/Low Skills. Low beliefs and Low skills mean scores fall between the ranges of 1-3.5. While High beliefs and High skills were mean scores were 3.6-5.0. For this study, 17% of educators interviewed were in Category 1, 17% were in Category 2, and 66% were in Category 3. There were no educators interviewed in Category 4–Low Beliefs/Low Skills.

**Demographic Information of Participants**

To obtain background information of participants, the survey began with four demographic questions. Table 1 explains the actual number of participants for the quantitative portion of the study, and categorizes them by descriptors (i.e. job description, years in education, years in current position, and highest degree earned). Fifty-one educators responded to the survey and all answered the four demographic questions.
**Job description.** The first question asked participants to indicate their current job title. There were eight options: (a) principal, (b) assistant principal, (c) school counselor, (d) school psychologist, (e) school social worker, (f) teacher–general education, (g) teacher–special education, and (h) other instructional support (academic coaches & specialists). Reported job titles were as follows: assistant principal \( n = 2, 4\% \), school counselor \( n = 1, 2\% \), school psychologist \( n = 1, 2\% \), teacher–general education \( n = 40, 78\% \), teacher - special education \( n = 2, 4\% \), and other instructional support \( n = 5, 10\% \). No participants chose any other job titles.

**Years in education.** The second question asked participants to identify how many years they had in education. In order to allow for better results, ranges of years were placed into seven categories. Categories were (a) less than 1 year, (b) 1-4 years, (c) 5-9 years, (d) 10-14 years, (e) 15-19 years, (f) 20-24 years, and (g) 25 or more years. Reported years in education were as follows: 1-4 years \( n = 9, 18\% \), 5-9 years \( n = 6, 12\% \), 10-14 years \( n = 12, 24\% \), 15-19 years \( n = 9, 18\% \), 20-24 years \( n = 5, 10\% \), and 25 years or more \( n = 10, 20\% \). No participants chose less than 1 year.

**Years in current position.** The third demographic question asked participants to identify how many years they had served at the study site in their current position. Choices were (a) less than 1 year, (b) 1-4 years, (c) 5-9 years, (d) 10-14 years, (e) 15-19 years, (f) 20-24 years, and (g) 25 or more years. Reported years at the study site were as follows: less than 1 year \( n = 5, 10\% \), 1-4 years \( n = 20, 40\% \), 5-9 years \( n = 8, 16\% \), 10-14 years \( n = 10, 20\% \), 15-19 years \( n = 5, 10\% \), and 20-24 years \( n = 3, 6\% \). No participants chose 25 years or more.
**Highest degree earned.** The fourth demographic question asked participants to select his or her highest degree earned. Of 51 participants, 28% reported a highest degree level of bachelor degree, 61% indicated they had earned a Master of Arts (MA) or Master of Science (MS) degree, 10% reported they had earned an Educational Specialist degree (EdS), and 2% reported they had earned an Educational Doctorate (EdD) or Doctor of Philosophy degree (PhD).

**Quantitative Data for Research Question 1**

**Research Question 1.** In order to answer the first research question, What are high school educators’ beliefs related to RTI, data from the RTI Beliefs Survey–Part I were analyzed. The RTI Beliefs Survey–Part I consisted of 14 statements divided into three domains. Domains with belief statement numbers were as follows:

1. Academic ability performance of student with disabilities (3-5)
2. Data-based decision making (6-13)
3. Function of core and supplemental instruction (1, 2, 14).

Each statement used a 5-point Likert scale to rate the extent of agreement/disagreement using the following scale: 1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Neutral*, 4 = *Agree*, 5 = *Strongly Agree*. Low beliefs were average scores of 1-3.5 and High beliefs were average scores of 3.6-5.0. Educators’ responses were not disaggregated by job titles, years in education experience, years at the current location, or highest degree earned.

**Academic ability performance of student with disabilities.** Statements 3, 4 and 5 addressed participants’ beliefs about the academic performance of students with disabilities. Results included indications that on average, participants had low beliefs...
about each statement in this domain. Specifically, the means were all approaching 3.00, which indicated educators possessed a neutral view of their beliefs about children with disabilities performing at grade-level expectations. Median scores indicated over half of participants either strongly disagreed or agreed with Statements 3 and 4. However, for Statement 5 participants either strongly disagreed with the statement or highly agreed. Educators’ responses were generally in disagreement with statements. Table 1 reports data on beliefs regarding academic abilities and performance of students with disabilities. The three items comprising the domain are displayed (i.e. items 3, 4, and 5). The mean score represents the overall impression of the belief level of participants at the study site.

Table 1

| Domain 1: Descriptive Statistics for RTI Beliefs Survey |
|-----------------------------------|---------|-------|------|-------|--------|
| Statement                          | Mean    | Median| Mode | SD    | Minimum| Maximum |
| 3. The majority of students with learning disabilities achieve grade-level benchmarks in reading. | 2.57    | 3.00  | 3.00 | 0.944 | 1.00   | 4.00    |
| 4. The majority of students with behavioral problems achieve grade-level benchmarks in reading. | 2.57    | 2.00  | 2.00 | 0.922 | 1.00   | 4.00    |
| 5. Students with high-incidence disabilities who are receiving special education are capable of achieving grade-level benchmarks in reading. | 3.27    | 3.00  | 4.00 | 0.918 | 1.00   | 5.00    |
| Domain Mean                        | 2.80    |       |      |       |        |         |

In addition to descriptive statistics presented in Table 1, an overview of response percentages for each statement across all 5-point, Likert-type scale responses are provided in Appendix H. In response to Statement 3, 47% of participants were in disagreement and 18% agreed that students with learning disabilities could achieve grade-level benchmarks in reading. Participants were in disagreement with Statement 4, the majority of students with behavioral problems achieve grade-level benchmarks (n = 27, 53%). Participants were in agreement with Statement 5, students with high incidence
disabilities who are receiving special education services are capable of achieving grade-level benchmarks ($n = 25, 49\%$).

**Data-based decision making.** Statements 6, 7, 8, 9, 10, 11, 12, and 13 address beliefs participants possess about data-based decision making. This included instructional practices, resources, parental involvement, and professional development. Results included indications that on average, participants had high beliefs about each statement in this domain. Specifically, the means for over half of statements were approaching 4.00, which indicated participants agreed with items related to different areas addressed in data-based decision making. All participants’ responses were positive generally and approaching the maximum score of 5. Median scores indicated over half of participants either strongly disagreed or agreed with all items. Table 2 reports data on beliefs about concept, which were specific to progress monitoring within the RTI process. The eight items comprising the domain are displayed (i.e. items 6, 7, 8, 9, 10, 11, 12, and 13). The mean score represents the overall impression of the belief level of participants at the study site.

In addition to descriptive statistics presented in Table 2, an overview of response percentages for each statement across all 5-point, Likert-type scale responses are provided in Appendix H. In response to Statement 6, over half of participants were in agreement educators should implement more differentiated and flexible instructional practices to address diverse needs of learners ($n = 41, 80\%$). A small number of participants ($n = 3, 6\%$) were in disagreement with statement 6. A large majority of participants were in agreement with statement 7 ($n = 4, 78\%$). Another 14% ($n = 7$)
remained neutral with statement 7 that using additional interventions would increase success for more students.

Table 2

*Domain 2: Descriptive Statistics for RTI Beliefs Survey*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. General education classroom teachers should implement more differentiated and flexible instructional practices to address the needs of a more diverse student body.</td>
<td>3.96</td>
<td>4.00</td>
<td>4</td>
<td>0.773</td>
<td>2.00</td>
<td>5.00</td>
</tr>
<tr>
<td>7. The use of additional interventions in the general education classroom would result in success for more students.</td>
<td>3.94</td>
<td>4.00</td>
<td>4</td>
<td>0.835</td>
<td>2.00</td>
<td>5.00</td>
</tr>
<tr>
<td>8. Prevention activities and early intervention strategies in schools would result in fewer referrals to problem-solving teams and placements in special education.</td>
<td>4.06</td>
<td>4.00</td>
<td>4</td>
<td>0.835</td>
<td>2.00</td>
<td>5.00</td>
</tr>
<tr>
<td>9. The “severity” of a student’s academic problem is determined not by how far behind the student is in terms of his/her academic performance but by how quickly the student responds to intervention.</td>
<td>3.41</td>
<td>4.00</td>
<td>4</td>
<td>0.853</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>10. The “severity” of a student’s behavioral problem is determined not by how inappropriate a student is in terms of his/her behavioral performance but by how quickly the student responds to intervention.</td>
<td>3.39</td>
<td>4.00</td>
<td>4</td>
<td>0.874</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>11. Using student-based data to determine intervention effectiveness is more accurate than using only “teacher judgment.”</td>
<td>3.71</td>
<td>4.00</td>
<td>4</td>
<td>0.923</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>12. Evaluating a student’s response to intervention is a more effective way of determining what a student is capable of achieving than using scores from “tests”.</td>
<td>3.77</td>
<td>4.00</td>
<td>4</td>
<td>0.929</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>13. Graphing student data makes it easier for one to make decisions about student performance and needed interventions.</td>
<td>3.73</td>
<td>4.00</td>
<td>4</td>
<td>0.777</td>
<td>2.00</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Domain Mean: 3.74
Participants were in agreement with Statement 8 that if schools utilize more prevention activities and early interventions there would be fewer students in need of special education services \((n = 39, 76\%)\). Comparatively, Statements 9 and 10 had an equal number of participants in agreement with statements \((n = 26, 51\%)\). A third of participants remained neutral for statements 9 \((n = 18, 35\%)\) and 10 \((n = 17, 33\%)\) that severity is not determined by how far behind, or how inappropriate the student is in terms of academic or behavioral performance but how quickly students respond to instruction.

To determine intervention effectiveness, 67\% \((n = 34)\) participants were in agreement using student based data is more effective to determine the progress of an intervention than using teacher judgment. On the other hand, 25\% \((n = 13)\) remained neutral for statement 11. In response to statement 12, 74\% \((n = 38)\) were in agreement evaluating a student’s response to intervention is more effective in determining what a student can achieve than using test scores. Less than 20\% of participants remained neutral \((n = 8)\), while 10\% were in disagreement with the statement \((n = 5)\). A majority of participants were in agreement with statement 13 \((n = 35, 69\%)\), that graphing makes it easier to make decisions about student progress, while less than 10\% \((n = 8)\) were in disagreement.

**Function of core and supplemental instruction.** Statements 1, 2, and 14 addressed participants’ beliefs about the function of core and supplemental instruction to help students meet grade-level proficiency. Results included indications that on average, participants had high beliefs about each statement in this domain. Specifically, the means of Statements 1 and 2 were approaching 4.00. However, Statement 14’s mean score indicated participants possessed a low belief in this item. The median score for all items
was 4.00. The maximum score for Statements 1 and 2 indicated participants strongly agreed with the items. The maximum score for Statement 14, indicated they agreed with the item. Table 3 reports data on beliefs regarding the effectiveness of core and supplemental instruction and intervention. The three items comprising the domain are displayed (i.e. 1, 2, and 14). The mean scores represent the overall impression of the belief level of participants at the study site.

Table 3

*Domain 3: Descriptive Statistics for RTI Beliefs Survey*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Core instruction should be effective enough to result in 80% of the</td>
<td>3.82</td>
<td>4.00</td>
<td>4.00</td>
<td>0.865</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>students achieving benchmarks in reading.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. The primary function of supplemental instruction is to ensure that</td>
<td>3.80</td>
<td>4.00</td>
<td>4.00</td>
<td>0.917</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>students meet grade-level benchmarks in reading.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. The goal of assessments is to generate and measure effectiveness of</td>
<td>2.57</td>
<td>4.00</td>
<td>2.00</td>
<td>0.922</td>
<td>1.00</td>
<td>4.00</td>
</tr>
<tr>
<td>instruction/intervention.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domain Mean</td>
<td>3.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition to descriptive statistics presented in Table 3, an overview of response percentages for each statement across all 5-point, Likert-type scale responses are provided in Appendix H. In response to Statement 1, 74% (n = 38) of participants agreed core instruction should be effective enough to result in 80% of students achieving. Similarly, 76% (n = 39) of participants were in agreement with Statement 2, the primary function of supplemental instruction is to ensure students meet grade level expectations. Over 80% (n = 42) of participants were in agreement with Statement 14. While 16% of participants remained neutral that the goal of assessment is to generate and measure effectiveness of instructional practices.

Table 4 provides a summary of results for each assessed domain on the RTI Beliefs Survey–Part I. The means, medians, mode, standard deviation, and ranges for
each domain are presented. Mean scores of Domains 2 and 3 implied participants held neutral views with statements within each domain. Domain 1 had the lowest mean of 2.80, which indicated participants disagreed with statements within the domain.

Table 4

Summary of Results for Part I

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain 1: Beliefs of the Academic Ability and Performance of Students with Disabilities</td>
<td>2.80</td>
<td>2.67</td>
<td>2.67</td>
<td>0.766</td>
<td>1.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Domain 2: Beliefs of the Role of Data-Based Decision Making</td>
<td>3.74</td>
<td>3.75</td>
<td>3.63</td>
<td>0.609</td>
<td>1.88</td>
<td>5.00</td>
</tr>
<tr>
<td>Domain 3: Beliefs of the Effectiveness of Core and Supplemental Instruction and Intervention</td>
<td>3.88</td>
<td>4.00</td>
<td>4.00</td>
<td>0.588</td>
<td>2.67</td>
<td>5.00</td>
</tr>
</tbody>
</table>

**Quantitative Data for Research Question 2**

In order to answer the second research question, What are high school educators’ perceptions of skills related to RTI, data were analyzed from the Perceptions of RTI Skills Survey—Part II. The Perception of RTI Skills Survey—Part II consisted of 50 Likert-type statements divided into three domains. Domains with statement numbers were as follows:

1. RTI skills applied to academic content (19a-29a, 30a, 30c, 30e, 31a-35a, 37, 38a, 38b, 38c)
2. RTI skills applied to behavior content (19b-29b, 30b, 30d, 30f, 31b-35b, and 38d)
3. Data-based decision making skills (36a, 36b, 36c, 36d, 36e, 39a, and 39b)

Survey questions required participants to rate how they perceived their skill level on items. Each statement used a 5-point Likert scale with choices of competency in skill as follows: 1 = I do not have the skill at all (NS), 2 = I have minimal skills in this area; need substantial support to use it (MnS), 3 = I have the skills, but still need some support
to use it (SS), 4 = I can use this skill with little support (HS), and 5 = I am highly skilled in this area and could teach others this skill (VHS). Low perceptions of skills were average scores of 1-3.5 and High perceptions of skills were average scores of 3.6-5.0. Participants’ responses were not disaggregated by job titles, years in education experience, years at the current location, or highest degree earned.

**RTI skills applied to academic content.** The first domain included Statements 19a-29a, 30a, 30c, 30e, 31a-35a, 37, 38a, 38b, and 38c seek to gather information about participants’ perceptions of their RTI skills relating to academic content. The domain mean was 3.52. Results included indications that on average, participants perceived they possessed skills to implement RTI. Specifically, the means for all statements in this domain were below 3.65, which indicated participants possess skills in this domain but need support to use the skills. Appendix I reports data on the perceived level of skills applied to academic content. The 23 items comprising the domain are displayed (i.e. 19a-30a, 30c, 30e, 31a-35a, 37, 38a, 38b, and 38c). The individual statement’s mean score represents the overall impression of the perceived level of skill of participants at the study site. In addition to descriptive statistics presented in Appendix I, an overview of response percentages for each statement across all 5-point, Likert-type scale responses are provided in Appendix I. Majority of participants rated all the items either MnS, SS, or HS, which indicates they have skills but need some level of support.

Statement 37 results implied 94% \((n = 48)\) have the skill but needed varying levels of support with implementation. Statement 30e results indicated 92% \((n = 47)\) of participants possessed the skill but needed substantial to little support to utilize the skill. Statements 23a, 24a, 27a, 28a, 30a, 34a, and 35a results indicated \((n = 46)\) 90% of
participants have some level of the skill, but need varying levels of support. Similarly, 88% \((n = 45)\) of participants indicated they have at least minimal skills for Statements 19a, 22a, 25a, 26a, 29a, 32a, and 33a, but need varying levels of support to implement the skill. Statements 21a, 30c, and 38a results indicated 86% of participants have some level of skill, but need varying levels of support. Results for Statements 31a and 38c implied 84% \((n = 43)\) possess some level of skill but need varying levels of support. Likewise, Statement 20a \((n = 42, 82\%)\) and \((n = 41, 80\%)\) of participants indicated they have at least minimal skills but need some level of support for implementation.

**RTI skills applied to behavior content.** The second domain included Statements 19b-29b, 30b, 30d, 30f, 31b-35b, and 38d, seeking to gather information about participants’ perceptions of their RTI skills relating to behavioral content. The domain mean score was 3.43. Results included indications that on average, participants perceived they possessed skills to implement RTI. Specifically, the means for all statements in this domain were below 3.59, which indicated participants possess skills in this domain but need support to use skills. Appendix I reports data on the perceived level of skills applied to academic content. The 20 items comprising the domain are displayed (i.e. 19b-29b, 30b, 30d, 30f, 31b-35b, and 38d). The individual statement’s mean score represents the overall impression of the perceived level of skill of participants at the study site. In addition to descriptive statistics presented in Appendix I, an overview of response percentages for each statement across all 5-point, Likert-scaled type responses are provided in Appendix J. Majority of participants rated all items either MnS, SS, or HS, which indicated they have the skills but need some level of support. Statement 30b results
indicated 92% (n =47) of participants possessed the skill but needed substantial to little support to utilize the skill.

**Data-based decision-making skills.** The third domain included Statements 36a, 36b, 36c, 36d, 36e, 39a, and 39b, seeking to gather information about participants’ perceptions of their data display skills. The domain mean was 3.50. Specifically, the means for all statements in this domain were below 3.59, which indicated participants possess skills in this domain but need support to use the skills. Appendix I reports data on the perceived level of skills for progress monitoring using technology. The seven items comprising the domain are displayed (i.e. 19b-29b, 30b, 30d, 30f, 31b-35b, and 38d). The mean score represents the overall impression of the perceived level of skill of participants at the study site. In addition to descriptive statistics presented in Appendix I, an overview of response percentages for each statement across all 5-point, Likert-scaled type responses are provided in Appendix J. Majority of participants rated all items either MnS, SS, or HS, which indicated they have skills but need some level of support. Statements 36a, 36b, 36c, 36d, and 36e results indicated that (n = 46, 90%) of participants have some level of the skill, but need varying levels of support. Similarly, 80% (n= 41) of participants indicated they have at least minimal skills for Statements 39a and 39b but need varying levels of support to implement the skill.

Table 5 provides a summary of results for each assessed domain on the Perceptions of RTI Skills Survey–Part II. The means, medians, mode, standard deviation, and ranges for each domain are presented. Across all domains, mean scores implied participants perceived their skills in domains between needing very little support (HS) and having skills but still needing support (SS).
Table 5

Summary of Results for Part II—Perceptions of RTI Skills

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain 1: Perceptions of Skills Applied to Academic Content</td>
<td>3.52</td>
<td>3.50</td>
<td>3.00</td>
<td>0.662</td>
<td>2.20</td>
<td>5.00</td>
</tr>
<tr>
<td>Domain 2: Perceptions of Skills Applied to Behavior Content</td>
<td>3.43</td>
<td>3.25</td>
<td>3.00</td>
<td>0.708</td>
<td>2.05</td>
<td>5.00</td>
</tr>
<tr>
<td>Domain 3: Perceptions of Data Display Skills</td>
<td>3.50</td>
<td>3.57</td>
<td>3.00</td>
<td>0.770</td>
<td>1.29</td>
<td>5.00</td>
</tr>
<tr>
<td>Total Participants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>51</td>
</tr>
</tbody>
</table>

Qualitative Data for Research Question 3

In order to answer the third research question, How do high school educators describe the factors that impact the implementation of RTI? data were analyzed from an Interview Protocol consisting of four open-ended interview questions—Part III. The four questions were as follows:

1. What do you know about the purpose of RTI?
2. How do you perceive your role in implementing RTI?
3. What structures, resources, and professional developments/coaching models have contributed to the implementation of RTI at this site?
   a. Structures: personnel schedules, decision rules
   b. Examples of resources are staff, time, interventions, strategies, curriculum
   c. Professional developments: Site or District based training? Tell me why it was or wasn’t effective.
4. What do you believe are some barriers of implementing a RTI program with fidelity?
Overview of Interview Process

The second phase of the data collection was interviews. The entire meeting was audiotaped including the consent to interview. Prior to the start of the interview, the researcher confirmed the audiotape recorder was set up properly, additional copies of consent papers were available, for participants who did not bring their signed consent forms. Before the interviews were conducted, each participant acknowledged they received and signed consent forms. The researcher informed participants that an audiotape recorder and journal were used to detail responses. The researcher ensured each participant was comfortable with the interview and the location. No participants indicated they felt uncomfortable. Then the researcher informed the participant the signed consent forms and transcriptions were stored in a locked cabinet and destroyed after 3 years. Following this, the researcher answered any questions the participant had.

Interviews were initiated using the standardized open-ended structured interview protocol created and field tested by the researcher and a panel of six experts in the field of RTI and special education. To begin, each participant was asked to provide their pseudonym, number of years at the high school, number of years teaching experience, and their current title. Each participant was asked the four open-ended questions. The researcher recorded written field notes during interviews. A description of participants’ reactions to questions and personal thoughts the researcher had relating to themes that emerged during the interview. Each interview took approximately 30 minutes to complete, though some did take less, as a result of interview questions provided beforehand. Each participant responded freely to interview questions and provided many details relating to interview questions. After the interview, the researcher thanked the
participant for his or her time and responses. Each participant was reminded their responses were secured for 3 years and no one other than the dissertation chairperson would have access to the information. The researcher explained to participants the process of member checking was used to establish credibility of data. Following the interview, a transcript of the recording was sent for review. It was furthered explained after 5 days, if the researcher did not receive any modifications or deletions; the transcript was used in its original state. Finally, the researcher informed participants once the final report was analyzed a copy was provided to study site administrators and upon further request, additional copies were made available. Additional time was provided for participants to ask any additional questions.

**Data saturation.** Data saturation occurs when data does not provide any new information or insights (Creswell, 2012). For this study, data saturation was reached in the fourth interview. Although six interviews were scheduled and conducted, the fourth interview was determined as the point in which data saturation occurred. The researcher opted not to cancel the fifth and sixth interviews in the event any of the four participants decided to withdraw from the study after receiving the transcript. The fifth and sixth interviews did not provide any new information when compared to data collected from prior interviews. Each participant was asked the same structured, research questions, which made achieving data saturation easier.

**Data analysis.** Participants’ audiotaped responses were transcribed using Dragon Dictation. To ensure accuracy, the researcher read transcripts three times to detect errors. Field notes taken during the interview were transcribed, but were not provided to participants for review. A transcribed copy of individual responses was sent to each
Participant for review of accuracy. Member checking was used to ensure accuracy and reinforce credibility of the study. Participants were given 5 days to review transcripts for accuracy. If transcripts were accurate, the participant was advised he or she did not need to take any additional action and the transcript was used in its original state. No participants responded with corrections. Following the completion of the member check process, the researcher used NVivo 10 to begin the coding process. The four interview questions were uploaded into NVivo 10 along with participant’s responses to questions. Once data from interviews was uploaded and analyzed, a query was run to identify word and phrase frequencies within each question. The word and phrase frequencies were compared amongst participants to connect data to RQ 3. Similar responses were categorized to identify common factors affecting RTI program implementation efforts. Themes identified as shared by the majority of participants were categorized as common themes. Coding of data and field notes produced four common themes: (1) lack of professional development, (2) lack of support structure, (3) lack of knowledge of RTI, and (4) lack of clear roles.

A text search query was conducted to create additional code phrases. Theme 1 describes the need for change in professional developments. Participants mentioned the need to make changes to the type of trainings offered, the setting, who gets invitations to trainings, and who presents information. Theme 2 describes the need to modify the existing support structure of the school to include the integration of RTI. Participants cited the need to address the redesign of the organizational schedule and add support personnel to help facilitate the design. Theme 3 indicates the need to develop a consensus on core beliefs of RTI and build the capacity of educators at the study site. Theme 4
describes the need for clear, defined roles for each stakeholder. Results for the word frequency and text search query for each educator were recorded in a comparison table (see Table 6). The purpose for displaying responses in this manner is to show similarities and differences on factors affecting implementation efforts.

Table 6

*Interview Participants Comparison of Word and Phrases Frequencies*

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Category</th>
<th>Theme 1 Lack of Professional Development</th>
<th>Theme 2 Lack of Support Structure</th>
<th>Theme 3 Lack of Knowledge of RTI</th>
<th>Theme 4 Lack of Clear Role Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1</td>
<td>1 recipients type schedule personnel</td>
<td>capacity</td>
<td>undefined role</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant 2</td>
<td>2 recipients setting type schedule personnel</td>
<td>consensus capacity</td>
<td>undefined role</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant 3</td>
<td>3 recipients type schedule personnel</td>
<td>consensus</td>
<td>undefined role</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant 4</td>
<td>3 type schedule</td>
<td>consensus capacity</td>
<td>undefined role</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant 5</td>
<td>3 type schedule personnel</td>
<td>consensus capacity</td>
<td>undefined role</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant 6</td>
<td>3 setting schedule personnel</td>
<td>consensus capacity</td>
<td>undefined role</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Category 1: Low Beliefs/High Perceptions, Category 2: High Beliefs/Low Perceptions, Category 3: High Beliefs/Hill Skills, and Category 4–Low Beliefs/Low Skills. Low beliefs and Low skills mean scores fall between the ranges of 1-3.5. While High beliefs and High skills were mean scores were 3.6-5.0.

**Interview Findings**

Interview data were analyzed to determine systemic factors impacting RTI program implementation at the study site. The four interview questions were formulated to ascertain perceptions of participants’ understanding of RTI, their individual roles within the process, trainings they received to implement the process, and supports used or needed to implement the process. Participant responses were grouped by theme and defined by specific responses to ensure accuracy. Coding of data produced four common themes: (1) lack of professional development, (2) lack of support structure, (3) lack of
knowledge of RTI, and (4) lack of clear roles. Table 7 provides the four themes and a description for each.

Table 7

*Themes and Descriptions*

<table>
<thead>
<tr>
<th>Theme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of professional development</td>
<td>Educators are not receiving access to appropriate professional developments. To include the type, setting, recipient, and presenters.</td>
</tr>
<tr>
<td>Lack of support structure</td>
<td>The school structure does not provide the ideal environment for RTI implementation. Barriers are associated with time, content-specific teachers unfamiliar with different methodologies, and no time for interventions.</td>
</tr>
<tr>
<td>Lack of knowledge of RTI</td>
<td>Educators need assistance with creating a consensus around RTI beliefs and building the capacity of the implementers.</td>
</tr>
<tr>
<td>Lack of clear roles</td>
<td>Educators do not understand their individual role and responsibilities when implementing an RTI program.</td>
</tr>
</tbody>
</table>

**Theme 1: Lack of Professional Development**

The lack of appropriate professional development was stated amongst all participants. Participant 1 expressed the need for “more deliberate training, on the RTI process. The trainings should be ongoing, too. Not just send someone in to us and leave. That never works!” According to one participant, professional development should not be the “train the trainer model.” Participant 4 explained, “The model does not work. The message sometimes never gets back or it is lost in translation.” It was also expressed the wrong people are sent to professional development. Participant 2 stated, “I think our (CPST) team is trained properly, but they are not the ones in the classroom with the students. The professional developments should be offered at times that teachers can attend, too!” Participant 6 countered, “We have invited trainers to our school to offer assistance on RTI, but the teachers do not show up unless it’s one of those mandatory things.” Participant 3 offered a reason as to why there may be low numbers of teachers
showing up for on-site professional development, “I believe if we had more professional developments that showed us how to use the process and not just talk about the process, more teachers would buy-in to the process.” All participants had suggestions for what professional development should look like for the study site. Participant 2 shared, “More professional developments on the topic of RTI with modeling of best practices. I’d like to know more about how I can differentiate my classroom.” Participant 1 added, “I need to see results. I would like to observe a teacher to see how RTI looks in their class.” Participant 2 stated, “Our ESE specialist is really helpful. I am sure it can be overwhelming to her to try and help all of us. If we had a list of people who knew the process, that would be ideal.” Participant 5 explained, “This entire process sounds good theoretically, but without beliefs in the process, professional development, and opportunities to practice, it will never work.”

**Theme 2: Lack of Support Structure**

The lack of supportive schedule included the need for a scheduling design specifically for high schools and additional personnel to help facilitate the process. All participants expressed scheduling issues as the biggest obstacle for implementing RTI. Participant 6 explained, “Teachers have 90 minutes [per class], they have plenty of time to differentiate the instruction.” Participant 1 felt differently, “I think the idea of it [RTI] is unrealistic in the high school setting. Most of the time, these kids are too far behind and I simply do not have enough time to remediate and teach current grade level standards. What’s the point of testing a 17-year-old student anyway?” Participant 2 explained, “We need help in adjusting our master schedule so that we can implement all tiers of instruction and intervention.” Participant 4 disagreed, “The schedule we have now
is better than what we had in the past. Our master schedule allows time for teachers to plan and implement instruction and interventions. There are opportunities for departments to engage in data-based problem solving.” Participant 6 agreed, “Department leaders can get together and create classes of students based on deficiencies.” Participant 5 explained, “We can also do better at assigning students to personalization periods with content area teachers. For example, if I know a student is having issues with algebra, for his personalization period he could be placed with an algebra teacher. We need to be strategic in our scheduling.” Four (67%) participants expressed the need to hire additional staff to support implementation efforts. Participant 1 stated, “The district needs to understand this, if they want us to do RTI then they need to hire more people who just do interventions, or pay the teachers more money to do interventions before and after school.” Participant 5 expressed, “Sometimes I think we are doing a disservice to our most critical students. We’ve invested so much money into materials, but where is the time and manpower?” She later added, “I think we need a high school interventionist assigned to each school.”

**Theme 3: Lack of Knowledge of RTI**

All participants acknowledged the need for building consensus around new core beliefs system and increasing the capacity of educators to build a sustainable infrastructure for implementation. Five (83%) participants indicated they embrace the concept of RTI, but believe other educators have not. Participant 3 shared her perspective, “Although I do not think like this, I know teacher who believe it’s too late for high school students.” Participant 6 added, “There are teachers who believe that because our students are older, they should know and be able to do certain things. These
same teachers will fail the entire class without blinking an eye.” Participant 4 shared a similar thought, “Not once will they (teachers) look at their data or their instructional practices. I think they are fearful of the picture the data is going to display.” Five (83%) participants indicated they feel although they are knowledgeable about RTI, there is a need to build the capacity of all educators at the study site. Participant 5 shared, “Veteran teachers will not ask for help! They would rather pretend to know something.” Participant 6 stated, “I work with a variety of teachers and I am often surprised by the number of teachers with years of experience who do not know how to create a RTI referral.” She later added, “Every year we offer professional development and they [educators] still don’t get how to create a graph.” Participant 2 shared, “Right now my issue is I’m not prepared to implement the process because I don’t have all the tools. But my heart won’t let me just sit by and not do for my students.”

**Theme 4: Lack of Clear Roles and Expectations**

Responses of participants expressed the need to define roles and expectations for all educators. Three (50%) of the participants expressed they understood their role, but there were inconsistencies amongst staff about their individual roles and expectations.” Participant 6 adds, “I think everyone first needs to understand that RTI is not a special education initiative, it’s every student initiative.” Participant 5 shared, “I have my job description, so I’m quite sure of my role and what it entails. But it gets muddy when others are not doing what they should be doing.” Participant 4 explained, “We try to get the teacher to understand, the students are not going anywhere and if you fail to address the issue, the gap will get wider. Making it very difficult to catch the student up.”

Participant 6 added, “The CPS team understands that RTI is a general education
initiative, we will do our best to help any student. So that means my role must remain flexible.”

**Additional Findings**

During data analysis, additional findings were identified. Additional findings were signified by the presence in two interviews. Two participants (33%) identified buy-in from students is just as important as buy-in from educators. Participant 1 said, “If the teacher is committed to RTI as a process, it’s getting the kids to commit to coming to school, being engaged, and not being embarrassed to get help or tell somebody they need help.” He later added, “You think if a kid can’t read, you think they want to go to a reading intervention? No, because they worried that other kids going to know they can’t read.” Participant 4 shared a similar perspective, “We make a lot of decisions about them [students], without them. If we involve the students earlier in the process, they will understand our expectations” She added, “I encourage them to speak up, but respectfully if they need help. I tell them if you give 100, you’ll get 100 back.”

Two (33%) participants indicated competing district initiatives resulted in lack of buy-in to the RTI process. Participant 4 explained, “We are a very large district, with very large responsibilities. I think it is important for us to develop a common language around RTI for secondary schools. We need to do that before moving on to another district initiative.” Participant 3 added, “When a new initiative starts, there is training after training, but when a newer initiative is introduced the other one is thrown to the back and the training is replaced with webinars, Brainshark’s and PowerPoints sent through email.” She later shared:
Our district goes through so many changes and most of the time it’s at no fault of our own. The state dictates to us what is important and that’s what we roll with, no one ever seems to pause and see if anything ever works the way it should.

**Summary**

The mixed-methods study was reported by quantitative and qualitative data. Phase one of the study followed a quantitative research design. The RTI Beliefs Survey–Part I and the Perceptions of Skills Survey–Part II were used to quantify levels of beliefs and perceptions of skills regarding Response to Intervention. Results for the RTI Beliefs Survey–Part I indicated on average, participants had neutral views across all domains. Participants had the most positive beliefs in Domain 3 ($M = 3.88$; see Table 4). The domain measured beliefs participants had regarding the effectiveness of core and supplemental instruction and intervention, whereas their lowest mean score was in Domain 1 ($M=2.80$; see Table 4). The domain measured beliefs participants had regarding children with disabilities performing at grade-level expectations. Results for the Perception of RTI Skill Survey–Part II indicated that on average, participants perceived they possessed skills to implement RTI, but needed support to use the skills. Participants had the most positive perceptions in Domain 1 ($M = 3.52$; see Table 5). The domain measured participants’ perceived level of skills applied to academic content, whereas their lowest mean score was in Domain 2 ($M=3.43$; see Table 5). The domain measured participants’ perceived level of skills applied to behavior content.

Phase two of the study followed a qualitative research design. The Interview Protocol–Part III was used to describe systemic factors impacting the implementation of RTI at the study site. Data saturation was achieved after the interview with the fourth
participant. Four different themes emerged as a result of data analysis process, using NVivo 10. The first theme was a lack of professional development at the study site. Participants expressed a need to redesign professional developments to include opportunities to practice. The second theme was a lack of support structure. Participants shared the current structure of the school is not ideal for aligning of supports and interventions for struggling students. The third theme was a lack of knowledge about RTI. Although a large number of participants expressed they possess beliefs and skills needed for successful implementation, there was still a larger number of educators at the study site who do not understand the process of RTI. The fourth theme was lack of clear roles and expectations. Many participants expressed uncertainty of their role in the process and what their current expectations are. During data analysis of interview transcripts, two additional findings were revealed. Two participants (33%) identified buy-in from students and competing district initiatives were effecting RTI implementation efforts at the study site.

Chapter 5 includes an overview of the study. The next section includes a discussion on quantitative and qualitative findings and how they relate to the change process and systems change model. Finally, Chapter 5 includes implications of findings, limitations, and recommendations for future research.
Chapter 5: Discussion

As IDEA (2004) opened the door for RTI implementation within grades K-12, there is growing interest within the research community, specifically in implementation of RTI in the secondary setting. According to Sansosti, Noltemeyer, and Goss (2010), there appears to be a lack of field-based applications of Response to Intervention at the secondary level. The purpose of the study was to determine educators’ beliefs about RTI and how they perceive their own RTI implementation skills; and skills related to RTI; and explore systemic factors impacting RTI program implementation efforts. The researcher desired to investigate how RTI was perceived by high school educators in a large, urban school district with the goal of providing insight into systemic factors impacting RTI implementation efforts. According to Castillo et al. (2016), since RTI has the potential to impact numerous academic practices, it seems practical to understand educators’ beliefs about the process and their perceived skills to utilize the program. Chapter 5 begins with an overview of the study that outlines the framework of the study. The summary of findings provides a general synopsis of answers found in response to research questions. The next sections include implications of findings, delimitations of the study, limitations of the study, recommendations for future research, and a conclusion.

Overview of the Study

The researcher utilized an explanatory, mixed methods design. According to Creswell and Plano Clark (2011), the explanatory mixed methods design occurs in two separate, sequential phases. The first phase, a quantitative research design, used two instruments devised by the Florida Statewide Problem Solving RTI Project to quantify levels of beliefs and perceptions of skills related to RTI. Instruments were combined and
named RTI Beliefs and Perceptions of Skills Survey. Combined surveys were distinguished as Part I and Part II and included four demographic questions and 64 question Likert-type scaled items. Part I included 14 statements related to the RTI framework. A 5-point Likert scale was used to rate teachers’ degrees of agreement with each statement. Part II was comprised of 50 sets of skills pertaining to implementing RTI; it asked participants to rate the degree to which they use the skill. The survey was sent via the computerized SurveyMonkey™ link to 93 educators at the study site. Educators included site administrators, general education teachers, special education teachers, school psychologist, school social worker, and school counselors. The inclusion of administrators and support specialists was to ensure the study gathered information from all individuals who were involved in providing instruction and intervention. Of 93 educators, 51 participants completed the survey within 7 days. It needs noting the sample included a large size of veteran teachers, as 70% of participants had 10 or more years in education. Also, it is worth noting 73% of participants possessed a master’s degree or higher. However, the sample was skewed, with 66% of participants having less than 9 years in their current position at the study site.

The next phase of the study, involved the qualitative method, which was designed from results of quantitative data. The researcher created an Interview Protocol –Part III, which included four research questions. The four interview questions were formulated to ascertain perceptions of participants’ understanding of RTI, their individual roles within the process, trainings they received to implement the process, and supports used or needed to implement the process. Participants who completed the survey were asked to provide their contact information if they were interested in a 30-minute interview to
expound on their beliefs and perceptions. A total of 20 of 51 participants provided their contact information. Of the 20 participants, six participants responded to the invitation for the interview. Interviews were audio-recorded, transcribed, and transcripts were provided to participants to check for accuracy.

**Discussion of the Mixed-Methods Design**

A mixed-methods study design was selected to determine educators’ beliefs and skills related to RTI; and explore systemic factors impacting RTI program implementation efforts. Mixed-methods research allows a researcher to use both quantitative and qualitative methodologies (Creswell, 2012). Creswell (2012) indicated combining quantitative and qualitative data collection methods in a single study provides a clearer picture of the problem.

**Elaboration and Interpretation of the Findings**

There were three research questions in this mixed-methods design study. The summary of findings was guided by research questions.

**Research Question 1.** The RTI Beliefs Survey–Part I revealed on average, educators hold a neutral view with statements about the RTI framework ($M = 3.57$). According to the Florida Problem Solving RTI Project (2016), a mean score of 4.0 indicates agreement with identified beliefs. Following the approach stated in the previous chapter, results are aggregated into three domains: (a) academic ability and performance of students with disabilities, (b) data-based decision making, and (c) functions of core and supplemental instruction. The mean score for each domain was 2.80, 3.74, and 3.88, respectively.
Academic ability performance of student with disabilities. Belief statements in this domain focus on students with academic or behavioral disabilities and their ability to meet grade level expectations. The mean score for this domain was 2.80; implying average participant beliefs were not compatible with this domain. Examining response data reveals that 86% \((n = 44)\) of participants are in disagreement with three statements in this domain. Evidently, a large percentage of educators at the study site do not believe students with disabilities can achieve grade level academic benchmarks. However, nearly half of participants \((n = 25, 49\%)\) believed with special education support students with academic or behavioral disabilities could achieve grade level expectations.

Data-based decision making. Belief statements in this domain address beliefs participants possess about progress monitoring in the RTI process. The mean score for this domain was 3.7; implying neutrality exists. Examining response data revealed 65% \((n = 33)\) of participants were in disagreement with the eight statements in this domain. Over half of participants \((n = 38, 75\%)\) agreed prevention and early intervention strategies would result in fewer RTI referrals and placement in special education.

Function of core and supplemental instruction. Belief statements in this domain address beliefs about the function of the core instruction to help students meet grade-level proficiency. The mean score for this domain was 3.88; implying neutrality exists. Examining response results indicated 63% \((n = 32)\) of participants agreed with statements within this domain. In descriptive statistics, \(SD\) values indicated variability of response for each belief. A high standard deviation means responses are spread out; however, a low standard deviation indicates most responses are very close to the average. The three statements in this domain had the lowest \(SD\) value (see Table 7), which implied
despite the neutrality ($M = 3.88$), many participants also agreed or responded as strongly agree.

Unlike Florida’s PS/RTI project evaluation report (2011), the current study’s participants reported beliefs did not imply a level of agreement on any domains. On average, educators surveyed by the project’s staff reported beliefs about data-based decision making and functions of core were consistent with fundamental beliefs of RTI. Both domains exceeded 4.0, which implied educators were in agreement with identified beliefs. Evaluation data indicated more than 80% of surveyed educators reported being in agreement with most beliefs about the role of data and student RTI in decision making. However, 60% of educators reported neutral in terms of their beliefs regarding the academic performance of students with disabilities. In the current study, participants reported neutral beliefs across all domains. Domain 3 had the highest percentage of agreement. Response data for function of core and supplemental instruction revealed 63% ($n = 32$) of participants were in agreement with items within the domain. A much lower percentage of participants were in agreement with Domain 1 and 2. Response data for the role of data-based decision making indicated 35% ($n = 18$) of participants were in agreement with beliefs within the domain. Similarly, 14% ($n = 7$) of participants were in agreement with beliefs about the ability and achievement of students with disabilities academic performance.

In conclusion, the current study descriptive analysis indicated participants’ beliefs are not consistent with core beliefs needed for implementing RTI at the secondary level. Castillo et al. (2016) found educators would typically embrace changes when they understand the need for change. Therefore, involving educators in conversations focusing
on challenging common beliefs regarding issues such as the nature of student learning, and roles data-based decision making and instructional practices play in student achievement is imperative. Results of the Beliefs Survey–Part I indicated participants may need more systematic professional development and to see an increase in student achievement to change their level of beliefs. Participants’ levels of commitment are evaluated on a continuing basis to assess the impact of professional development efforts on educator beliefs about RTI.

**Research Question 2.** What are high school educators’ perceptions of skills related to RTI, as measured by the Perceptions of RTI Skills Survey? The Perceptions of RTI Skills Survey–Part II revealed on average, participants have the skills to implement RTI, but need support to use them ($M = 3.46$). This rating is similar to the mean score of educators in Florida’s PS/RTI project (2011). Following the approach stated in the previous chapter, results are aggregated into three domains: (1) skills applied to academic content, (2) skills applied to behavioral content, and (3) data manipulation and technology use. The mean score for each domain was 3.52, 3.43, and 3.50, respectively.

**RTI skills applied to academic content.** Statements in this domain assessed perceived skills related to using student data to make decisions about academic instruction and interventions. The mean score for this domain was 3.52, implying participants believed they had the skills to implement the process, but needed some degree of support. Given the lower average rating, professional development targeting skills related to academic content would be necessary. Examining response data reveals zero participants perceived they do not have the skills at all. Conversely, 4% ($n = 2$) of participants perceived they were highly skilled in the area, and could teach others.
Participants who reported having high skills may require less professional development and coaching support. Overwhelming, 96% ($n = 49$) of participants perceived they have academic content skills, but need some degree of support. In addition to professional developments, responses indicated participants need coaching and more practice opportunities.

**RTI skills applied to behavior content.** Statements in this domain assessed perceived skills related to using student data to make decisions about behavior instruction and interventions. The mean score for this domain was 3.43, implying participants believed they had the skills to implement the process, but need some degree of support. Given the lower average rating, professional development targeting skills related to behavior content would be necessary. Examining response data revealed no participants perceived they do not have skills at all. Conversely, 2% ($n = 1$) of participants perceived they were highly skilled in the area, and could teach others. Although not a high number of participants, these participants may require less professional development and support. Overwhelming, 98% ($n = 50$) of participants perceived they have behavior content skills, but need some degree of support. In addition to professional developments, responses indicated participants need coaching and more practice opportunities.

**Data-based decision-making skills.** Statements in this domain assessed perceived skills related to using graphing and technology to facilitate progress monitoring. The mean score for this domain was 3.50, implying participants believed they had skills to implement the process, but need some degree of support. Given the lower average rating, professional development targeting skills related to the ability to interpret and display data would be necessary. Examining response data revealed 4% ($n =$
2) of participants perceived they do not have the skills at all. Conversely, 6% \((n = 3)\) of participants perceived they were highly skilled in the area, and could teach others. Overwhelming, 90% \((n = 46)\) of participants perceived they have data display skills, but need some degree of support. In addition to professional developments, responses indicated participants need coaching and more practice opportunities.

Similar to Florida’s PS/RTI project evaluation report (2011), the current study participants reported the highest level of perceived skills when applying RTI skills to academic content. Additionally, the evaluation data mean score for RTI skills applied to behavior content was about 3.5 and data display skills, was slightly below 3.0. A similar pattern of perceived skills was indicated for current participants. Castillo et al. (2016) found educators will typically embrace changes when they perceive they have skills necessary to implement change, or will receive support to develop necessary skills. Current data seems to suggest additional supports are instituted for participants to develop and sustain skills to implement RTI at the secondary level. As noted in Florida’s PS/RTI project evaluation, additional supports may include professional development, coaching, and technical assistance. The project’s staff found lower levels of perceived skills were the result of staff turnover. An analysis of participants’ demographics indicated 50% \((n = 25)\) of participants were at the study site for less than 4 years. Therefore, there is a chance some participants likely have not received training to implement RTI at the secondary level.

**Research Question 3.** How do high school educators describe factors impacting the implementation of RTI as indicated through collection of face-to-face interviews? Six participants were interviewed using the Interview Protocol–Part III. Interview data were
analyzed to determine systemic factors impacting RTI implement efforts at the study site. Participant responses were grouped by theme and coding of data produced four common themes: (1) lack of professional development, (2) lack of support structure, (3) lack of knowledge of RTI, and (4) lack of clear roles.

**Lack of professional development.** In order for change to be successful, Castillo et al. (2016) found educators must understand the need for the change, have skills to implement the change, and have confidence in their ability to perform within the new environment. Although participants perceive they have skills necessary to implement RTI, the need to redesign professional development was stated amongst all participants. Additionally, participants indicated a need for more systemic professional developments with less train-the-trainer type of professional developments. Castillo et al. (2016) indicated in order for implementation of RTI to be successful, educators who are expected to facilitate the process are provided training, coaching, and follow-up support. Participants agreed and expressed frustration that although they are responsible for providing instruction and intervention, they were not able to attend professional developments offered by the district. However, few participants stated that when the professional development is brought on campus, there is low attendance. Castillo et al. (2016) found as professional developments become more hands-on and less lecturing, it is anticipated more educators will attend on-site trainings.

**Lack of support structure.** To facilitate and support implementation of RTI at the secondary level, it is imperative to examine and align available resources. Resources are defined as funding, materials, technology, schedule/time, and personnel (Castillo et al., 2016). Participants reported a need for a scheduling design specifically for high
schools and additional personnel to help facilitate the process. All participants expressed scheduling issues as the biggest obstacle for implementing RTI. Scheduling issues refer to difficulties in RTI implementation caused by shortage of time or arrangement of time periods for RTI interventions or RTI tasks. Many participants felt they do not have enough time to implement interventions for large groups of students with varying needs.

A few participants stated time was built in to the schedule for remediation, but questioned the purpose for remediating skill deficits for older students. Research has shown educators believe collaboration is important for effectively implementing RTI (Gessler-Werts, Lambert, & Carpenter, 2009; Sansosti et al., 2010). Participants agreed and indicated a need to develop a common planning time to collaborate and engage in data-based problem solving. In addition, participants also expressed the need to hire additional staff to alleviate some of educators’ responsibilities for providing instructional support and intervention.

**Lack of knowledge of RTI.** In education, an educator’s beliefs are closely intertwined with knowledge and practices. Although many participants surveyed reported they understood principles of RTI, far less felt they have received support necessary to ensure RTI is implemented appropriately. All participants acknowledged the need for building consensus around RTI core beliefs. Castillo et al., (2016) stated the first step in educational systems change is the development of consensus among various stakeholders in a school regarding the new practice. The level of commitment from educators regarding any new initiatives will likely impact the extent to which implementation occurs. Belief in RTI means educators are focusing upon the impact their instructional delivery has upon the student and not focusing upon student deficits (Duffy, 2010). Some
participants expressed concern other educators at the study site thought RTI was just another initiative that would eventually go away if they ignored it. The lack of understanding of the need for the process led to resistance. Some participants expressed the belief it was too late to provide interventions to students at the high school level. In addition, few participants reported they do not have the skills to implement the process, but they embrace the concept of RTI. Given education is a dynamic system in which both internal and external factors are continually evolving, the level of consensus and support for such an initiative needs constant evaluation and systematic targeting (Castillo et al., 2016).

**Lack of clear roles.** While the majority of participants defined RTI and understood the basic tenets of the process, some struggled with identifying their roles in the implementation process. With implementation of RTI, roles of educators in a school are likely to change (Sansosti & Noltemeyer, 2008). Thus, it is expected for educators at the secondary level to be uncertain of their roles in RTI (Sansosti et al., 2010). Participants reported the need to clarify roles and responsibilities among other educators at the study site. Some participants believed inconsistencies among other educators about their individual roles and expectations were causing delays in getting help for struggling students. In some cases, if the participant was a part of the Collaborative Problem Solving Team, they often understood their role. Conversely, participants who were not a part of the team on a regular basis or did not refer a student for services, felt disconnected from the process.

In conclusion, the analysis of interviews revealed several difficulties that are likely to affect the implementation of RTI at the study site. Main challenges noted
include ensuring professional development for educators, not enough time to implement interventions and collaborate, lack of knowledge about the RTI process, and confusion about educators’ roles. Additional findings revealed buy-in from students and educators as a factor impacting implementation efforts. Research has shown the more training and experience educators have to attain adequate skills in an area helps decrease their resistance to change (Darling-Hammond, 2009). It is evident from interview findings there is a perception among survey participants that not all educators understand the purpose of RTI or have much faith in the process. This finding is in agreement with the Beliefs Survey–Part I data that indicates educators’ beliefs are not consistent with core beliefs needed for implementing RTI at the secondary level.

**Implications**

One implication of the current study was RTI is successfully implemented at the high school level when educators are provided with ongoing professional development, modeling, and follow-up support. Participants in this study indicated a need for more strategic, consistent professional developments. This study found most of the district-based professional development opportunities provided were train-the-trainer model, or sit and get model, and educators who were in the classroom and responsible for implementing RTI were not invited to participate. Professional development opportunities were offered not just to the leadership team, but also to all stakeholders. Those in charge of designing and facilitating professional development should reconsider how they produce and facilitate professional development (Fisher & Frey, 2011).

Interview findings indicated the need for the redesign of professional development to include small group modeling using current student data. The present
study is supported by literature. Given more opportunities to collaborate and share evidence of success will likely decrease resistance and increase positive peer pressure (Fullan, 2010). Dunst and Trivette (2012) found professional development that actively engaged adult learners in acquiring new skills or knowledge had the largest effects on learner outcomes.

Another implication was the importance of providing additional personnel to help facilitate the RTI process at the secondary level. Participants in the present study identified the need to hire additional personnel to provide all support to struggling students. This idea is supported by literature. Fisher and Frey (2011) conducted a study at a high school and discovered having personnel assigned to coordinating all supplemental and intensive intervention supports provided educators with the support they needed to further the implementation of RTI. Educators were no longer required to keep track of students who needed supplemental interventions. Instead, the coordinator would streamline the process by setting up the schedule, verifying attendance, and monitoring the progress of those in attendance. Fisher and Frey (2011) found adjusting educators’ schedules to include office hours where students could meet with any content teacher to receive supplemental interventions was beneficial to overall student achievement. Students found this to be valuable because instead of attending supplemental support from their assigned teacher they could attend a session to hear the content explained in another way from a different teacher. Adults were not standing in front of the classroom lecturing students. Students understood what they were to focus on and students who needed an extra push were provided opportunities to attend after-school sessions.
Perhaps the most complex implication is the need to redesign the high school schedule to include time for collaboration amongst educators. Sanger et al. (2012) found when implementing RTI at the secondary level it is important to make it a collaborative effort. The model will not work if educators are working in isolation or not conducting the model as intended. Participants in the Sanger et al. (2012) study found it was important to discuss RTI in a school-wide approach instead of through individualized procedures. Though professionals have various training backgrounds, they also found it valuable to collaborate and discuss screening, progress monitoring, instruction, and interventions. The current secondary school structure exacerbates silos. Burns and Gibbons (2008) argued most secondary educators are content specific and are only concerned with improving their subject area instructional delivery. Implementation should be a team process. School leaders could support facilitation of a collaborative problem solving team process by developing a master schedule that includes common planning time for teachers to meet and discuss data; it should also include grade-level or school-level RTI instruction periods on a daily basis. High school educators do not have time within their instructional day to provide specialized interventions for multiple students; however, if students with similar deficits are paired together during common instruction time, all students can receive the instructional and behavioral supports they need. School teams could use data to identify the most debilitating problems their at-risk students have and target their resources to remediate them. Sanger et al. (2012) found as students make their way through high school, it is more challenging to recognize which students to identify for potential RTI interventions. Therefore, the need for experts to collaborate with all educators to identify individuals needing additional supports
accurately is a very important consideration when implementing the model in a high school setting.

**Delimitations of the Study**

Researcher made specific choices for the study. The site was selected for study because the researcher observed the school’s implementation of RTI. Another site was not considered because the researcher was not aware of practices of another school, nor did the researcher know the school’s implementation progress. The researcher decided not to use another site because of the desire to assess educators’ beliefs and perceptions of skills of a high school where educators were implementing the process.

In addition to general education teachers and special education teachers, the researcher chose to include administrators and support personnel as educators, wanting to ensure all staff who are responsible for utilizing RTI practices would be a part of the study. It was important to assess beliefs and level of skills among key stakeholders because the extent to which implementation occurs requires some level of commitment.

**Limitations of the Study**

Limitations are unavoidable within any research study. Creswell (2012) defined limitations as potential weaknesses or problems with the study that are identified by the researcher. Although findings from this study add to the secondary RTI literature, several limitations are noted. One limitation is the study was conducted in a large urban school district. Results of the research study may not be transferrable to a smaller high school, smaller school district, rural or suburban school district. Additionally, this research study was conducted at one school; therefore, the number of participants who completed the survey may be lower.
The second limitation of the study is the use of self-report surveys, which may have produced exaggerated responses. Each participant has their own experiences and understanding, which may cause them to respond a certain way regardless of the actual evidence they are assessing. Additionally, participants may hesitate to provide information deemed as personal, such as their beliefs and perceptions of their skills. Some participants may not want to respond to the survey or interview questions due to fear and reactions of administrators.

The third limitation to this study was potential bias on the part of the researcher who was a full-time MTSS/RTI Instructional Facilitator with 6 years of coaching experience at the district level. The researcher wanted to explore beliefs and perceptions of RTI skills at the high school level; therefore, every effort was made to be objective and not let personal experiences or perspectives affect the analysis of qualitative data.

The fourth limitation to this study is the study was not a requirement; participants opted to complete both surveys because they were interested in the topic or knew the researcher they self-selected.

The fifth limitation to this study was the time the researcher had to complete the study. Interview dates were scheduled during the week a natural disaster occurred, which prevented schools from opening for 14 days. When the school re-opened, it was imperative not to interfere with the school’s operation.

Last, it would be interesting to see study results from a quasi-experimental design where participants received both surveys at the beginning of the year, and then a year of professional development demonstrating modeling of implementation supplemental support strategies, differentiated instruction, progress monitoring, and problem-solving
provided to all educators. After one successful year of professional development, modeling, and follow-up support, participants in the study would retake both assessments to see if there were any changes in their RTI Beliefs and Perceptions of RTI Skills

**Recommendations for Future Research**

Findings discussed in this study provide an initial point for examination of high school educators’ RTI Beliefs and Perceptions of RTI Skills and systemic factors impacting implementation efforts at the secondary level. The researcher recommends getting buy-in from school leaders prior to the start of a new school year so they will require the entire staff to participate in completing both surveys during their first week of professional development meetings.

The researcher recommends a study to compare differences and similarities of RTI Beliefs and Perceptions of RTI Skills, among general education teachers, special education teachers, professional support staff, and administration. A secondary analysis is computed to investigate similarities and differences based on variables such as number of years in education, and years in current position among general education teachers, special education teachers, and administration and their RTI Beliefs and Perceptions of RTI Skills. Based on the data analysis, semi-structured interview questions are designed and homogeneous focus groups of general education teachers, special education teachers, professional support staff, and administrators are interviewed.

Another recommendation would be to replicate the survey with another high school with similar demographics and compare results of the two studies. It would be interesting to see if the same Beliefs and Perceptions of RTI Skills were shared across the two large high schools within the district. If results of the high school were significantly
lower, then this may lead district personnel to reconsider their professional development offerings and follow-up activities. Conversely, if the other high school results were statistically higher, this may suggest the school has a structure in place conducive for RTI implementation.

Finally, the researcher recommends including a permanent product review to measure the extent of implementation. Castillo et al. (2016) defined a permanent product review as the process to collect, review, analyze, and problem solve around artifacts supporting implementation. A permanent product review is used to determine the degree to which each critical component of the RTI model was found in data management system records, presentations, and paperwork completed by participants.

**Recommendations for the Practice**

In order for RTI to be implemented properly, the district should redesign professional development for educators. Participants stated that many of the district professional developments related to RTI were facilitated at times that they could not attend or only select people were invited to attend. Implementation of RTI requires extensive professional development for all stakeholders. According to various models of school-based staff development, effective professional development designs should include theory, modeling, practice opportunities, collaborative feedback, and coaching support (Castillo et al., 2016). It is recommended that professional development should be ongoing and monitored to ensure delivery of instruction is meeting the needs of the educators.

Knudson (2013) found that if stakeholders were not moving in the same direction, skilled educators would form effective silos. Thus, the knowledge and skills possessed by
individuals will remain with the individual and possibly deteriorate (Pearson, 2015). Therefore, it is recommended that educators with high beliefs and level of skills provide the modeling and coaching to the educators at the study site. Allowing peer colleagues to facilitate the professional developments promotes a collective growth and responsibility for the success for all educators, rather than just a select few. Additionally, with increased shared opportunities the prospect of building silos of highly effective teachers will be reduced. Conversely, if a resistant educator is surrounded by a team that embraced the change, the pressure will likely lead the teacher to try a new approach (Zimmerman, 2006). According to the authors, professional development is the best way to grow and sustain RTI at the secondary level. It is also recommending during professional developments to advertise teacher/student success with RTI in order to increase buy-in. Perhaps these practices or events could be continuously shared during staff meetings, team meetings, and/or department meeting.

**Conclusion**

A mixed-methods research design was used to assess the RTI Beliefs and Perceptions of Skills of high school educators; and identify factors impacting implementation efforts. The current study descriptive analysis indicates participants’ beliefs are not consistent with core beliefs needed for implementing RTI at the secondary level. In addition, current data seems to suggest additional supports need instituting for participants to develop and sustain skills to implement RTI at the secondary level. This study found many barriers exist and need overcoming before RTI at the secondary level is implemented. Participants identified a need to redesign professional development for secondary educators including more modeling and opportunities to practice. They also
identified a lack of knowledge, unclear roles and expectations, and lack of support structure could be impacting implementation efforts.

Working within a RTI framework at the secondary level requires a change in practices. This change requires educators to work collaboratively towards a common goal. Castillo et al. (2016) found for any change to take place educators must first understand the need for change, have skills to initiate change, and have confidence in their ability to function within a changing environment. System change principles are critical and are applied to facilitate implementation of any new practices. Perhaps educators who possess beliefs and have skills should be the leaders of the change. Removing secondary school structural barriers should be a collaborative approach and led by school leaders. With authentic collaboration, purposeful and ongoing professional development, role clarity, redesigned secondary school structures, and increased RTI knowledge, secondary educators should be ready to implement change and see an increase in overall student achievement.
References


Appendix A

Email Communication to Principal
EMAIL COMMUNICATIONS TO THE PRINCIPAL
October 18, 2016

Miriam Gayle

October 18, 2016

To Whom It May Concern:

My name is Miriam Gayle and I am a research student from Nova Southeastern University working on a dissertation in the area of Response to Intervention (PS/RTI) at the high school level. The purpose of the case study is to (1) determine teachers', support personnel, and school-based administrators' beliefs and skills related to PS/RTI; and (2) explore systemic factors that impact PS/RTI program implementation efforts. The findings of the study will help identify commonly held beliefs among school-based personnel and the level of support needed to develop skills necessary to facilitate the PS/RTI program. I would like to respectfully request that my case study be done at your location.

Participation is on a voluntary basis; no coercion will be used. Additionally, participants will be asked to participate in an audio taped structured interview and survey. The interview will be held in the school or a location of their choice and time of their convenience. The survey can be completed at any time through SurveyMonkey.

I appreciate your time, consideration and prompt written response in granting permission for data to be collected from participants. Upon completion of the study, the final report will be available for you to review. Please let me know how I can begin this process by contacting me at the above email address or phone number.

Thank you for your consideration in this matter,

Miriam Gayle
Appendix B

Permission for Survey Instruments
Hi Miriam,

The Florida Problem Solving/Response to Intervention Project received your email dated 10/17/2016, requesting permission to reproduce the following:

- Beliefs Survey
- Perceptions of RtI Skills

However, please note that we recommend your using the revised versions of these instruments (Beliefs on RtI Scale and Perceptions of RtI Skills - Revised) which can be found at http://floridarti.usf.edu/resources/program_evaluation/evaluation_tools/index.html along with other evaluation tools.

**Permission is granted** by the copyright holder to print and use for educational purposes with the following conditions:

- An appropriate acknowledgment of the Florida Problem Solving/Response to Intervention Project (a collaborative project between the Department of Education and the University of South Florida) is included.
- The material is not used for commercial purposes.

Thank you for your interest in these resources. Please contact me if you need further assistance.

Sincerely,

Judi Hyde
Appendix C

Flyer for Participants and Email Reminder
RESEARCH STUDY PARTICIPANTS NEEDED FOR ONLINE SURVEY
MIRIAM GAYLE, DOCTORAL STUDENT
NOVA SOUTHEASTERN UNIVERSITY

TITLE: HIGH SCHOOL EDUCATORS’ BELIEFS AND PERCEPTIONS OF SKILLS FOR RESPONSE-TO-INTERVENTION (RTI) IMPLEMENTATION

WHO: HIGH SCHOOL EDUCATORS: VOLUNTEERS TO COMPLETE THE RTI BELIEFS AND SKILLS SURVEY

WHAT: 20-MINUTE ONLINE SURVEY REGARDING THEIR RTI BELIEFS AND SKILLS

PURPOSE OF STUDY:
The purpose of this mixed methods study is to (a) determine the beliefs and perceptions of RTI practices among secondary teachers and school-based administrators; and (b) explore systemic factors that impact RTI program implementation efforts at an urban high school.

BENEFITS AND RISKS:
The risks of involvement in this study are minimal and include possible stress from answering work related questions. The following procedures will be used to minimize these risks: You can exit the survey at any time. There are no direct benefits to you for participating in this study; however, your participation will contribute to educational research in the area of RTI in secondary schools. Choosing not to participate will not affect your employment with the school district. As a survey participant, information you provide is anonymous, that is, no names or other identifiers will be used in this study. If you are selected to participate in the interview phase, a pseudonym will be given to protect your identity.

HOW TO ACCESS THE SURVEY:
1. Type the following web address in the internet search bar:
   https://www.surveymonkey.com
2. By submitting the completed survey, you are giving consent to use your data record in this study. The participant must click the “Next page” button or the “Exit Survey” button, located in the upper right hand corner of the page. If you click on the “Exit Survey” button, you will immediately exit this site. At the end of the survey, you will be asked if you would like to participate in a 30-minute interview with the researcher. If so, your name, email address, and a contact number should be provided.
RESEARCH STUDY PARTICIPANTS NEEDED FOR ONE-ON-ONE INTERVIEW
MIRIAM GAYLE, DOCTORAL STUDENT
NOVA SOUTHEASTERN UNIVERSITY

TITLE: HIGH SCHOOL EDUCATORS’ BELIEFS AND PERCEPTIONS OF SKILLS FOR RESPONSE-TO-INTERVENTION (RTI) IMPLEMENTATION

WHO: HIGH SCHOOL EDUCATORS: VOLUNTEERS WHO COMPLETED THE RTI BELIEFS AND SKILLS SURVEY

WHAT: EDUCATORS WILLING TO PARTICIPATE IN A 30-MINUTE INTERVIEW AND AN ADDITIONAL 20 MINUTES TO ENGAGE IN MEMBER-CHECKING, WHICH CONSISTS OF A REVIEW OF THE TRANSCRIBED INTERVIEW TO CONFIRM THE RESEARCHER’S REVIEW OF ANALYSES. (APPROX. 20 MINUTES).

PURPOSE OF STUDY:
The purpose of this mixed methods study is to (a) determine the beliefs and perceptions of RTI practices among secondary teachers and school-based administrators; and (b) explore systemic factors that impact RTI program implementation efforts at an urban high school.

BENEFITS AND RISKS:
There are no direct benefits to you for participating in this study; however, your participation will contribute to educational research in the area of RTI in secondary schools. Choosing not to participate will not affect your employment with the school district. As an interview participant, information you provide is anonymous, that is, no names or other identifiers will be used in this study. A pseudonym will be given assigned to protect your identity. The risks of involvement in this study are minimal and include possible stress from answering questions regarding RTI beliefs and skills.

RESEARCHER’S CONTACT INFORMATION:
Miriam Gayle
Doctoral Student at Nova Southeastern University
(XXX) XXX-XXXX
Email address: XXXXXXX@XXX.XXX.XXX

Chairperson of Dissertation: Dr. Deeb Kitchen Email: XXXXXXX@XXX.XXX.XXX
Hello! Thanks to all of you who have already responded to the survey. However, I’m still in need of your help in collecting data for my study, and your response would be appreciated.

Here is the link to the study: https://www.surveymonkey.com/

I kindly ask you to please respond to it by Friday, September 1.

Thank you for your participation,

Miriam Gayle
Appendix D

Letter of Recruitment and Consent – Survey
Participant Consent Letter - Survey

High School Educators' Beliefs and Perceptions of Skills for Response-to-Intervention (RTI) Implementation

IRB protocol #:

Principal investigator: Miriam N. Gayle, Ed.S.
Co-investigator: Deeb Kitchen, EdD

For questions/concerns about your research rights, contact:

Human Research Oversight Board (Institutional Review Board or IRB)
Nova Southeastern University
(954) 202-5399/Toll Free, 800-490-9790
IRB@nova.edu

Site Information (if applicable):

What is the study about?

The purpose of this mixed methods study is to (a) determine the beliefs and perceptions of RTI practices among secondary teachers and school-based administrators; and (b) explore systemic factors that impact RTI program implementation efforts at an urban high school.

Initials Date
Why are you asking me?

You are cordially invited to participate in a research study on high school educators - RTI beliefs and perceptions of skills. Your participation is being solicited because you are a high school educator at Blanche Ely High School. For the purpose of this study, educators include administrators, general education teachers, special education teachers, school psychologists, school social workers, and school counselors. This inclusion of the administration and specialists is to ensure that the study gathers information from all individuals that are involved in providing instruction and intervention.

What will I be doing if I agree to be in the study?

In accordance with the purpose of this study, educators who agree to participate will be asked to: (1) complete an online questionnaire via SurveyMonkey (approx. 20 minutes) and (2) provide email address and phone number if you would be interested in participating a 30-minute, face-to-face interview.

What are the dangers to me?

The risks of involvement in this study are minimal and include possible stress from answering work related questions. To minimize the risk, you can exit the survey at any time. As a survey participant, information you provide is anonymous, that is, no names or other identifiers will be used in this study. If you are selected to participate in the interview phase, a pseudonym will be given to protect your identity. If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Miriam Goyne, by phone at [redacted] or by email at [redacted]. The dissertation chair for this study is Dr. Deeb Kitchen and he can be reached at [redacted]. You may also contact the IRB at the numbers indicated above with questions as to your research rights.

Are there any benefits for taking part in this research study?

There are no direct benefits to you for participating in this study; however, your participation will contribute to educational research in the area of RTI in secondary schools. Choosing not to participate will not affect your employment with the school district. Choosing not to participate will not affect your employment with the school district.

Will I get paid for being in the study? Will it cost me anything?

There are no costs to you or payments made for participating in this study.

How will you keep my information private?

All information obtained in this study is strictly confidential unless disclosure is required by law. The researcher will not use any of your information for anything outside of this study. Additionally, the researcher will not use any of your personal information in any reports of this study. The IRB, regulatory agencies, and the dissertation chair may review research records. After 3 years, the educators' responses will be destroyed. All information
What if I do not want to participate or I want to leave the study?

If at any point during the online survey, educators may opt out of the study by exiting the survey. If you decide not to participate for any reason, there will be no repercussions. Choosing not to participate will not affect your employment with the school district. If you choose to withdraw, any information collected about you before the date you leave the study will be kept in the research records for 36 months from the conclusion of the study and may be used as a part of the research.

Other Considerations:

If significant new information relating to the study becomes available, which may relate to your willingness to continue to participate, this information will be provided to you by the investigators.

Voluntary Consent by Participant:

By signing below, you indicate that:

- this study has been explained to you
- you have read this document or it has been read to you
- your questions about this research study have been answered
- you have been told that you may ask the researchers any study-related questions in the future or contact them in the event of a research-related injury
- you have been told that you may ask Institutional Review Board (IRB) personnel questions about your study rights
- you are entitled to a copy of this form after you have read and signed it
- you voluntarily agree to participate in the study entitled “High School Educators’ Beliefs and Perceptions of Skills for Response-To-Intervention (RTI) Implementation”

Participant’s Signature: ________________________ Date: ________________

Participant’s Name: ________________________ Date: ________________

Signature of Person Obtaining Consent: ________________________

Date: ________________

Initials: __________ Date: __________
Appendix E

Letter of Recruitment and Consent - Interview
Participant Consent Letter - Interview

High School Educators’ Beliefs and Perceptions of Skills for Response-to-Intervention (RTI) Implementation

IRB protocol #: 2017-430

Principal Investigator Co-investigator
Miriam N. Gayle, Ed.S. Deeb Kitchen, EdD

For questions/concerns about your research rights, contact:
Human Research Oversight Board (Institutional Review Board or IRB)
Nova Southeastern University
(954) 262-3369/Toll Free: 866-499-0790
IRB@nova.edu

What is the study about?
The purpose of this mixed methods study is to (a) determine the beliefs and perceptions of RTI practices among secondary teachers and school-based administrators; and (b) explore systemic factors that impact RTI program implementation efforts at an urban high school.
Why are you asking me?

You are cordially invited to participate in a research study on high school educators' RTI beliefs and perceptions of skills. Your participation is being solicited because you are a high school educator at Blanche Ely High School. For the purpose of this study, educators include administrators, general education teachers, special education teachers, school psychologists, school social workers, and school counselors. This inclusion of the administration and specialists is to ensure that the study gathers information from all individuals that are involved in providing instruction and intervention.

What will I be doing if I agree to be in the study?

In accordance with the purpose of this study, participants who agree to participate will be asked to: (1) participate in one 30-minute audio-recorded interview and (2) engage in member checking, which consists of a review of the transcribed interview to confirm the researcher’s review of analyses. (approx. 20 minutes)

What are the dangers to me?

The risks of involvement in this study are minimal and include possible stress from answering work-related questions. A pseudonym will be given to protect your identity. If you have any questions or concerns regarding the study or your participation in the study, you may contact me, Miriam Gayle, by phone at [redacted] or by email at [redacted]. The dissertation chair for this study is Dr. Debbi Kitchen who can be reached at [redacted]. You may also contact the IRB at the numbers indicated above with questions re: your research rights.

Are there any benefits for taking part in this research study?

There are no direct benefits to you for participating in this study; however, your participation will contribute to educational research in the area of RTI in secondary schools. Choosing not to participate will not affect your employment with the school district.

Will I get paid for being in the study? Will it cost me anything?

There are no costs to you or payments made for participating in this study.

How will you keep my information private?

All information obtained in this study is strictly confidential unless disclosure is required by law. The researcher will not use any of your information for anything outside of this study. Additionally, the researcher will not use any of your personal information in any reports of this study. The IRB, regulatory agencies, and the dissertation chair may review research records. After 3 years, the educators’ responses will be destroyed. All information

What if I do not want to participate or I want to leave the study?

If at any point during the interview, educators may request to end the interview at any point. If you decide not to participate for any reason, there will be no repercussions. Choosing not to participate will not affect your employment with the school district. If you choose to withdraw, any information collected about you...
before the date you leave the study will be kept in the research records for 36 months from the conclusion of the study and may be used as a part of the research.

Other Considerations:

If significant new information relating to the study becomes available, which may relate to your willingness to continue to participate, this information will be provided to you by the investigators.

Voluntary Consent by Participant:

By signing below, you indicate that

- this study has been explained to you
- you have read this document or it has been read to you
- your questions about this research study have been answered
- you have been told that you may ask the researchers any study related questions in the future or contact them in the event of a research-related injury
- you have been told that you may ask Institutional Review Board (IRB) personnel questions about your study rights
- you are entitled to a copy of this form after you have read and signed it
- you voluntarily agree to participate in the study entitled “High School Educators’ Beliefs and Perceptions of Skills for Response-To-Intervention (RTI) Implementation”

Participant's Signature: ___________________________ Date: ____________

Participant's Name: ___________________________ Date: ____________

Signature of Person Obtaining Consent: ___________________________

Date: ____________
Appendix F

Survey Instrument—Part I
Beliefs on Rl Scale

1. Your PS/Rl Project ID:
   Your PS/Rl Project ID was designed to assure confidentiality while also providing a method to match an individual's responses across instruments. In the space provided (first row), please write in the last four digits of your Social Security Number followed by the last two digits of the year you were born. Then, shade in the corresponding circles.

   Directions: For items 1-4 below, please shade in the circle next to the response option that best represents your answer.

2. Job Description:
   - PS/Rl Coach
   - Teacher-General Education
   - Teacher-Special Education
   - School Counselor
   - School Psychologist
   - School Social Worker
   - Principal
   - Assistant Principal
   Other (Please specify):

3. Years of Experience in Education:
   - Less than 1 year
   - 1 - 4 years
   - 5-9 years
   - 10 - 14 years
   - 15-19 years
   - 20-24 years
   - 25 or more years
   - Not applicable

4. Number of Years in your Current Position:
   - Less than 1 year
   - 1 - 4 years
   - 5-9 years
   - 10 - 14 years
   - 15-19 years
   - 20 or more years

5. Highest Degree Earned:
   - B.A./B.S.
   - M.A./M.S.
   - Ed.S.
   - Ph.D./Ed.D.
   Other (Please specify):

1
**Directions:** Using the scale below, please indicate your level of agreement or disagreement with each of the following statements by shading in the circle that best represents your response.

1 = Strongly Disagree (SD)
2 = Disagree (D)
3 = Neutral (N)
4 = Agree (A)
5 = Strongly Agree (SA)

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Core instruction should be effective enough to result in 80% of the students achieving benchmarks in reading.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. The primary function of supplemental instruction is to ensure that students meet grade-level benchmarks in reading.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. The majority of students with learning disabilities achieve grade-level benchmarks in reading.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. The majority of students with behavioral problems (EH/SED or EBD) achieve grade-level benchmarks in reading.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. Students with high-incidence disabilities (e.g. SLD, EBD) who are receiving special education services are capable of achieving grade-level benchmarks (i.e., general education standards) in reading.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. General education classroom teachers should implement more differentiated and flexible instructional practices to address the needs of a more diverse student body.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. The use of additional interventions in the general education classroom would result in success for more students.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. Prevention activities and early intervention strategies in schools would result in fewer referrals to problem-solving teams and placements in special education.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. The “severity” of a student’s academic problem is determined not by how far behind the student is in terms of his/her academic performance but by how quickly the student responds to intervention.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. The “severity” of a student’s behavioral problem is determined not by how inappropriate a student is in terms of his/her behavioral performance but by how quickly the student responds to intervention.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. Using student-based data to determine intervention effectiveness is more accurate than using only “teacher judgment.”</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
### Problem Solving/Response to Intervention

**Beliefs on Rd Scale**

*Developed by the Florida FS/Rd Statewide Project — [http://floridartis.usf.edu](http://floridartis.usf.edu)*

<table>
<thead>
<tr>
<th>Number</th>
<th>Statement</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.</td>
<td>Evaluating a student’s response to interventions is a more effective way</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>of determining what a student is capable of achieving than using scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>from “tests” (e.g., IQ/Achievement test).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Graphing student data makes it easier for one to make decisions about</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>student performance and needed interventions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>The goal of assessment is to generate and measure effectiveness of</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>instruction/intervention.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*THANK YOU!*
Perceptions of RtI Skills Survey - Revised

1. Your PS/RTI Project ID:
   Your PS/RTI Project ID was designed to assure confidentiality while also providing a method to match an individual's responses across instruments. In the space provided (first row), please write in the last four digits of your Social Security Number followed by the last two digits of the year you were born. Then, shade in the corresponding circles.

2. Access the data necessary to determine the percent of students in core instruction who are achieving benchmarks (district grade-level standards) in:
   a. Academics
   b. Behavior

3. Use data to make decisions about individuals and groups of students for:
   a. Core academic curriculum
   b. Core/Building discipline plan

4. Perform each of the following steps when identifying the problem for a student for whom concerns have been raised:
   a. Define the referral concern in terms of a replacement behavior (i.e., what the student should be able to do) instead of a referral problem for:
      • Academics
      • Behavior

Directions: Please read each statement about a skill related to assessment, instruction, and/or intervention below, and then evaluate YOUR skill within the context of working at a school/building level. Where indicated, rate your skill separately for academics (i.e., reading and math) and behavior. Please use the following response scale:

1. I do not have this skill at all (NS)
2. I have minimal skills in this area; need substantial support to use it (Mns)
3. I have this skill, but still need some support to use it (SS)
4. I can use this skill with little support (US)
5. I am highly skilled in this area and could teach others this skill (VHS)
The skill to:

b. Use data to define the current level of performance of the target student for:
   • Academics
   • Behavior

c. Determine the desired level of performance (i.e., benchmark) for:
   • Academics
   • Behavior

d. Determine the current level of peer performance for the same skill as the target student for:
   • Academics
   • Behavior

e. Calculate the gap between student current performance and the benchmark (district grade level standard) for:
   • Academics
   • Behavior

f. Use gap data to determine whether core instruction should be adjusted or whether supplemental instruction should be directed to the target student for:
   • Academics
   • Behavior

5. Develop potential reasons (hypotheses) that a student or group of students is/are not achieving desired levels of performance (i.e., benchmarks) for:
   a. Academics
   b. Behavior

6. Identify the most appropriate type(s) of data to use for determining reasons (hypotheses) that are likely to be contributing to the problem for:
   a. Academics
   b. Behavior

7. Identify the appropriate supplemental intervention available in my building for a student identified as at-risk for:
   a. Academics
   b. Behavior
### The skill to:

<table>
<thead>
<tr>
<th></th>
<th>N3</th>
<th>MnS</th>
<th>SS</th>
<th>HS</th>
<th>VHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Access resources (e.g., internet sources, professional literature) to develop evidence-based interventions for:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Academic core curricula</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Behavioral core curricula</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c. Academic supplemental curricula</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d. Behavioral supplemental curricula</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e. Academic individualized intervention plans</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f. Behavioral individualized intervention plans</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Ensure that any supplemental and/or intensive interventions are integrated with core instruction in the general education classroom:</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>a. Academics</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Behavior</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Ensure that the proposed intervention plan is supported by the data that were collected for:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Academics</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Behavior</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Provide the support necessary to ensure that the intervention is implemented appropriately for:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>a. Academics</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Behavior</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Determine if an intervention was implemented as it was intended for:</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Academics</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Behavior</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Select appropriate data (e.g., Curriculum-Based Measurement, DBEIS, FCAT, behavioral observations) to use for progress monitoring of student performance during interventions:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>a. Academics</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Behavior</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Construct graphs for large group, small group, and individual students:</td>
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</tr>
<tr>
<td>a. Graph target student data</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Graph benchmark data</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c. Graph peer data</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d. Draw an aimline</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e. Draw a trendline</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The skill to:</td>
<td>N3</td>
<td>MNS</td>
<td>SS</td>
<td>HS</td>
<td>VHS</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
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<td>-----</td>
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<td>-----</td>
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<tr>
<td>15. Make modifications to intervention plans based on student response to</td>
<td></td>
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<tr>
<td>intervention.</td>
<td></td>
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</tr>
<tr>
<td>16. Collect the following types of data:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Curriculm-Based Measurement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. DIBELS</td>
<td></td>
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<tr>
<td>c. Access data from appropriate district- or school-wide assessments</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>d. Standard behavioral observations</td>
<td></td>
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<tr>
<td>17. Use technology in the following ways:</td>
<td></td>
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</tr>
<tr>
<td>a. Use electronic data collection tools (e.g., PDAs)</td>
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</tr>
<tr>
<td>b. Graph and display student and school data</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

THANK YOU!
Appendix G

Interview Protocol–Part III
Title: High School Educators’ Beliefs and Perceptions of Skills for Response-to-Intervention (RTI) Implementation

Welcome

Introduce researcher and make introductions. Explain that all information will be recorded and kept confidential.
Review consent form and ensure that all signed forms were collected. Offer time for questions before proceeding with discussion.

Topic

The purpose of this mixed methods study is to (a) determine the beliefs and perceptions of RTI practices among secondary teachers and school-based administrators; and (b) explore systemic factors that impact RTI program implementation efforts at an urban high school. Selection of participants is based on the mean, or average of the RTI Beliefs and Perceptions of RTI Skills Survey.

Questions

5. What do you know about the purpose of RTI?
6. How do you perceive your role in implementing RTI?
7. What structures, resources, and professional developments/coaching models have contributed to the implementation of RTI at this site?
   a. Structures: personnel schedules, decision rules
   b. Examples of resources are staff, time, interventions, strategies, curriculum
   c. Professional developments: Site or District based training? Tell me why it was or wasn’t effective.
8. What do you believe are some barriers of implementing a RTI program with fidelity?

Closing

Thank you for participating. Your responses are confidential and will be kept secured for 3 years. I will not share this information with anyone other than my dissertation chairperson, Dr. Deeb Kitchen. Once the final report is analyzed a copy will be provided to the study site administrators. Upon request, additional copies can be made available to participants. Do you have any questions for me? If not, thank you again for your time and cooperation.
Appendix H

RTI Beliefs Survey Summary Data
### Domain 1: Summary of Educators’ Beliefs Related to the Academic Ability and Performance of Students with Disabilities

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. The majority of students with learning disabilities achieve grade-level benchmarks in reading.</td>
<td>7</td>
<td>14</td>
<td>17</td>
<td>33</td>
<td>18</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>4. The majority of students with behavioral problems achieve grade-level benchmarks in reading.</td>
<td>5</td>
<td>10</td>
<td>22</td>
<td>43</td>
<td>14</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>5. Students with high-incidence disabilities who are receiving special education are capable of achieving grade-level benchmarks in reading.</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>12</td>
<td>17</td>
<td>33</td>
<td>24</td>
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<tr>
<td>Total Participants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Responses ranged from 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree).

### Domain 2: Summary of Educators’ Beliefs Related to Data-Based Decision Making

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. General education classroom teachers should implement more differentiated and flexible instructional practices to address the needs of a more diverse student body.</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>7</td>
<td>14</td>
<td>30</td>
</tr>
<tr>
<td>7. The use of additional interventions in the general education classroom would result in success for more students.</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>8</td>
<td>7</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>8. Prevention activities and early intervention strategies in schools would result in fewer referrals to problem-solving teams and placements in special education.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>10</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>9. The “severity” of a student’s academic problem is determined not by how far behind the student is in terms of his/her academic performance but by how quickly the student responds to intervention.</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>12</td>
<td>18</td>
<td>35</td>
<td>23</td>
</tr>
<tr>
<td>10. The “severity” of a student’s behavioral problem is determined not by how inappropriate a student is in terms of his/her behavioral performance but by how quickly the student responds to intervention.</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>14</td>
<td>17</td>
<td>33</td>
<td>23</td>
</tr>
<tr>
<td>11. Using student-based data to determine intervention effectiveness is more accurate than using only “teacher judgment.”</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>13</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>12. Evaluating a student’s response to intervention is a more effective way of determining what a student is capable of achieving than using scores from “tests”.</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>8</td>
<td>16</td>
<td>30</td>
</tr>
<tr>
<td>13. Graphing student data makes it easier for one to make decisions about student performance and needed interventions.</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>23</td>
<td>29</td>
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<tr>
<td>Total Participants</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Responses ranged from 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree).
Domain 3: Summary of Educators’ Beliefs the Effectiveness of Core and Supplemental Instruction and Intervention

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>1. Core instruction should be effective enough to result in 80% of the</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>9</td>
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<tr>
<td>students achieving benchmarks in reading.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2. The primary function of supplemental instruction is to ensure that</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>students meet grade-level benchmarks in reading.</td>
<td></td>
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<tr>
<td>14. The goal of assessments is to generate and measure effectiveness of</td>
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<td>0</td>
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<td>2</td>
<td>8</td>
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<tr>
<td>instruction/intervention.</td>
<td></td>
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<tr>
<td>Total Participants</td>
<td>51</td>
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</tr>
</tbody>
</table>

*Note. Responses ranged from 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree).*
Appendix I

Descriptive Statistics for the Perceptions of RTI Skills Survey
Domain 1: Findings on the Skills in Applying RTI Practices to Academic Content

<table>
<thead>
<tr>
<th>Statement</th>
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<th>Mode</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
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<tbody>
<tr>
<td>19a. Access to data necessary to determine the percent of students in core instruction who are achieving benchmarks</td>
<td>3.31</td>
<td>3.00</td>
<td>3.00</td>
<td>.927</td>
<td>1.00</td>
<td>5.00</td>
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<td>20a. Use data to make decisions about individuals and groups of students for the core curriculum</td>
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<td>3.00</td>
<td>.844</td>
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<td>5.00</td>
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<tr>
<td>21a. Define the referral concern in terms of a replacement behavior instead of a referral problem</td>
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<td>4.00</td>
<td>.812</td>
<td>2.00</td>
<td>5.00</td>
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<tr>
<td>22a. Use data to define the current level of performance of the target student</td>
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<td>4.00</td>
<td>4.00</td>
<td>.747</td>
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<td>5.00</td>
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<td>4.00</td>
<td>3.00</td>
<td>.784</td>
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<td>5.00</td>
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<tr>
<td>24a. Determine the current level of peer performance for the same skill as the target student</td>
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<td>4.00</td>
<td>4.00</td>
<td>.809</td>
<td>2.00</td>
<td>5.00</td>
</tr>
<tr>
<td>25a. Calculate the gap between student current performance and the benchmark</td>
<td>3.35</td>
<td>3.00</td>
<td>4.00</td>
<td>.934</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>26a. Use gap data to determine whether core instruction should be adjusted</td>
<td>3.35</td>
<td>3.00</td>
<td>4.00</td>
<td>.934</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>27a. Develop potential reasons that a student or group of students is/are not achieving desired level</td>
<td>3.51</td>
<td>4.00</td>
<td>4.00</td>
<td>.834</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>28a. Identify the most appropriate type(s) of data for determining reasons that are likely contributing to the problem</td>
<td>3.31</td>
<td>3.00</td>
<td>3.00</td>
<td>.853</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>29a. Identify the appropriate supplemental intervention available in my building for a student identified as at-risk</td>
<td>3.65</td>
<td>3.00</td>
<td>3.00</td>
<td>.832</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>30a. Access resources to develop evidence-based intervention for academic core curricula</td>
<td>3.63</td>
<td>4.00</td>
<td>4.00</td>
<td>.716</td>
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<td>5.00</td>
</tr>
<tr>
<td>30c. Access resources to develop evidence-based intervention for academic supplemental curricula</td>
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<td>4.00</td>
<td>4.00</td>
<td>.799</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>30e. Access resources to develop evidence-based intervention for academic individualized intervention</td>
<td>3.51</td>
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<td>4.00</td>
<td>.728</td>
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<td>5.00</td>
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<td>4.00</td>
<td>4.00</td>
<td>.831</td>
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<td>5.00</td>
</tr>
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<td>33a. Provide the support necessary to ensure that the intervention is implemented appropriately</td>
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<td>4.00</td>
<td>.857</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>34a. Determine if an intervention was implemented as it was intended</td>
<td>3.41</td>
<td>4.00</td>
<td>4.00</td>
<td>.808</td>
<td>1.00</td>
<td>5.00</td>
</tr>
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<td>.855</td>
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<td>5.00</td>
</tr>
<tr>
<td>37. Make modifications to intervention plans based on response to intervention</td>
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<td>4.00</td>
<td>.702</td>
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<td>5.00</td>
</tr>
<tr>
<td>38a. Collect Curriculum Based Measurement data</td>
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<td>1.020</td>
<td>1.00</td>
<td>5.00</td>
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<tr>
<td>38b. Collect FAIR-FS data</td>
<td>3.25</td>
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<td>3.00</td>
<td>1.114</td>
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</tr>
<tr>
<td>38c. Access data from appropriate district- or school-wide assessments</td>
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<td>3.00</td>
<td>1.017</td>
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</table>

Domain Mean                                      3.52

Note. * multiple modes exist. The smallest value is shown
## Domain 2: Findings on the Skills in Applying RTI Practices to Behavioral Content

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<th>Median</th>
<th>Mode</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
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</thead>
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<td>5.00</td>
</tr>
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<td>3.00</td>
<td>3.00</td>
<td>.856</td>
<td>2.00</td>
<td>5.00</td>
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<tr>
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<td>4.00</td>
<td>4.00</td>
<td>.902</td>
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<td>5.00</td>
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<td>2.00</td>
<td>5.00</td>
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<td>3.00</td>
<td>.857</td>
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<td>3.00</td>
<td>.918</td>
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<td>5.00</td>
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<tr>
<td>27b. Develop potential reasons that a student or group of students is/are not achieving desired level of performance</td>
<td>3.45</td>
<td>4.00</td>
<td>4.00</td>
<td>.856</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>28b. Identify the most appropriate type(s) of data for determining reasons that are likely contributing to the problem</td>
<td>3.35</td>
<td>3.00</td>
<td>3.00</td>
<td>.913</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>29b. Identify the appropriate supplemental intervention available in my building for a student identified as at-risk</td>
<td>3.45</td>
<td>3.00</td>
<td>3.00</td>
<td>.832</td>
<td>1.00</td>
<td>5.00</td>
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<td>5.00</td>
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<td>3.00</td>
<td>3.00</td>
<td>.806</td>
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<td>5.00</td>
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<tr>
<td>30f. Access resources to develop evidence-based intervention for behavioral individualized intervention plan</td>
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<td>5.00</td>
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<td>4.00</td>
<td>.832</td>
<td>1.00</td>
<td>5.00</td>
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<td>5.00</td>
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<td>4.00</td>
<td>4.00</td>
<td>.857</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>35b. Select appropriate data to use for progress monitoring of student performance</td>
<td>3.37</td>
<td>3.00</td>
<td>3.00</td>
<td>.871</td>
<td>1.00</td>
<td>5.00</td>
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<tr>
<td>38d. Collect standard behavioral observations</td>
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<td>3.00</td>
<td>3.00</td>
<td>.934</td>
<td>1.00</td>
<td>5.00</td>
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<td><strong>Domain Mean</strong></td>
<td><strong>3.43</strong></td>
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### Domain 3: Findings on the Skills in using Graphing and Technology for Progress Monitor

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<th>Statement</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
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<tr>
<td>36a. Graph target student data</td>
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<td>.783</td>
<td>1.00</td>
<td>5.00</td>
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<tr>
<td>36b. Graph benchmark data</td>
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<td>4.00</td>
<td>4.00</td>
<td>.809</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>36c. Graph peer data</td>
<td>3.53</td>
<td>4.00</td>
<td>4.00</td>
<td>.809</td>
<td>1.00</td>
<td>5.00</td>
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<td>.850</td>
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<td>4.00</td>
<td>.853</td>
<td>1.00</td>
<td>5.00</td>
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<td>3.00</td>
<td>.966</td>
<td>1.00</td>
<td>5.00</td>
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<td>4.00</td>
<td>3.00</td>
<td>.920</td>
<td>1.00</td>
<td>5.00</td>
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</table>

**Domain Mean** 3.50
Appendix J

Perceptions of RTI Skills Survey Summary Data
Summary of Descriptive Analysis of Perceptions of RTI Skills Applied to Academic Content

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<tr>
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<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
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<td>16</td>
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<td>3</td>
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<td>21</td>
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<tr>
<td>21a. Define the referral concern in terms of a replacement behavior instead of a referral problem</td>
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<td>0</td>
<td>4</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>22a. Use data to define the current level of performance of the target student</td>
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<td>0</td>
<td>2</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>23a. Determine the desired level of performance</td>
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<td>0</td>
<td>4</td>
<td>8</td>
<td>21</td>
</tr>
<tr>
<td>24a. Determine the current level of peer performance for the same skill as the target student</td>
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<td>0</td>
<td>5</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
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<td>4</td>
<td>6</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
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<td>4</td>
<td>6</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>27a. Develop potential reasons that a student or group of students is/are not achieving desired level</td>
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<td>2</td>
<td>4</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>28a. Identify the most appropriate type(s) of data for determining reasons that are likely contributing to the problem</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>29a. Identify the appropriate supplemental intervention available in my building for a student identified as at-risk</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
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</tr>
<tr>
<td>30a. Access resources to develop evidence-based intervention for academic core curricula</td>
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<td>2</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>30c. Access resources to develop evidence-based intervention for academic supplemental curricula</td>
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<td>2</td>
<td>1</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>30e. Access resources to develop evidence-based intervention for academic individualized intervention</td>
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<td>6</td>
<td>20</td>
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<tr>
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<td>1</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>17</td>
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<tr>
<td>32a. Ensure proposed intervention plan is supported by the data that were collected for</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>33a. Provide the support necessary to ensure that the intervention is implemented appropriately</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>34a. Determine if an intervention was implemented as it was intended</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>35a. Select appropriate data to use for progress monitoring of student performance</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>37. Make modifications to intervention plans based on response to intervention</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>38a. Collect Curriculum Based Measurement data</td>
<td>6</td>
<td>12</td>
<td>19</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>38b. Collect FAIR-FS data</td>
<td>4</td>
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<td>5</td>
<td>10</td>
<td>20</td>
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<tr>
<td>Total Participants</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Responses ranged from 1=I do not have this skill (NS), 2=I have minimal skills in this area; need substantial support to use it(MNS), 3=I have this skill, but still need some support to use it (SS), 4=I can use this skill with little support. (HS), and 5=I am highly skilled in this area and could teach others this skill (VHS).
Summary of Descriptive Analysis of Perceptions of RTI Skills Applied to Behavior Content

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
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<tbody>
<tr>
<td>19b. Access to data necessary to determine the percent of students in core instruction who are achieving benchmarks</td>
<td>1</td>
<td>2</td>
<td>9</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td>20b. Use data to make decisions about individuals and groups of students for the core/building plan</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>8</td>
<td>23</td>
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<tr>
<td>21b. Define the referral concern in terms of a replacement behavior instead of a referral problem</td>
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<tr>
<td>22b. Use data to define the current level of performance of the target student</td>
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<td>12</td>
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<tr>
<td>23b. Determine the desired level of performance</td>
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<tr>
<td>24b. Determine the current level of peer performance for the same skill as the target student</td>
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<td>18</td>
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<tr>
<td>25b. Calculate the gap between student current performance and the benchmark</td>
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<td>4</td>
<td>7</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>26b. Use gap data to determine whether core instruction should be adjusted</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>27b. Develop potential reasons that a student or group of students is/are not achieving desired level of performance</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td>28b. Identify the most appropriate type(s) of data for determining reasons that are likely contributing to the problem</td>
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<td>4</td>
<td>5</td>
<td>10</td>
<td>21</td>
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<tr>
<td>29b. Identify the appropriate supplemental intervention available in my building for a student identified as at-risk</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>30b. Access resources to develop evidence-based intervention for behavior core curricula</td>
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<td>0</td>
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<tr>
<td>30d. Access resources to develop evidence-based intervention for behavioral supplemental curricula</td>
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<td>10</td>
<td>24</td>
</tr>
<tr>
<td>30f. Access resources to develop evidence-based intervention for behavioral individualized intervention plan</td>
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<tr>
<td>31b. Ensure that any supplemental and/or interventions are integrated with core instruction in the general education classroom</td>
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<tr>
<td>32b. Ensure proposed intervention plan is supported by the data that were collected for</td>
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<tr>
<td>33b. Provide the support necessary to ensure that the intervention is implemented appropriately</td>
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<tr>
<td>34b. Determine if an intervention was implemented as it was intended for</td>
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<tr>
<td>35b. Select appropriate data to use for progress monitoring of student performance</td>
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<td>38d. Collect standard behavioral observations</td>
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</tbody>
</table>

**Total Participants**: 51

*Note*: Responses ranged from 1=I do not have this skill (NS), 2=I have minimal skills in this area; need substantial support to use it(MNS), 3=I have this skill, but still need some support to use it (SS), 4=I can use this skill with little support (HS), and 5=I am highly skilled in this area and could teach others this skill (VHS)*
Summary of Descriptive Analysis of Perceptions of RTI Skills for Using Data for Progress Monitoring

<table>
<thead>
<tr>
<th>Statement</th>
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<tr>
<td>36a. Graph target student data</td>
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<tr>
<td>36b. Graph benchmark data</td>
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<tr>
<td>36c. Graph peer data</td>
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<tr>
<td>36d. Draw an aimline</td>
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<tr>
<td>36e. Draw a trendline</td>
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<td>4</td>
<td>3</td>
<td>6</td>
<td>21</td>
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<tr>
<td>39a. Use electronic data collection tools</td>
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<td>6</td>
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<tr>
<td>39b. Graph and display student and school data</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>21</td>
</tr>
</tbody>
</table>

Total Participants: 51

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