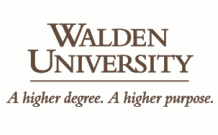

2020

Secondary Teachers' Perceptions of the Implementation of Response to Intervention

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College of Education

This is to certify that the doctoral study by

Patricia Hampton

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
2020

Abstract

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Patricia Hampton

MEd, Alabama State University, 2003

BS, Alabama State University, 1998

Project Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

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November 2020

Abstract

Teachers at a local high school in Alabama were struggling to implement the tiered interventions of the response to intervention (RTI) model. The purpose of this qualitative case study was to explore teachers' perceptions of the implementation of RTI at one high school to help teachers and administrators understand what professional development training, supports, and resources were needed to implement the model effectively. The concerns-based adoption model, which examines educators' concerns with new educational innovations, framed the study. The study's research questions focused on the teachers' perceptions, concerns, and required resources needed to implement the program as intended. The participants consisted of a purposeful sample of 12 secondary teachers from Grades 9-12 responsible for implementing the framework. Semistructured interviews were used as the primary source of data collection. The teachers were each observed twice in the classroom delivering the tiered interventions of the RTI model. Data were analyzed by open and thematic coding. Results included common themes related to ineffective and limited professional development (PD), differentiated instruction, inconsistent implementation guidelines, and the need for additional PD. Based on these findings, a 3-day PD was developed to address the teachers' learning needs to deliver the RTI model with higher fidelity. Complete delivery of these 3 training sessions may contribute to positive social change by building the teachers' capacity to execute the RTI model as designed. As a result, students' individual academic needs will be met, leading to an increase in students' academic achievement.

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Dedication

Blessed is she who has believed that the Lord would fulfill his promises to her, Luke 1:45 NIV. This doctoral study is dedicated to God, my doctors at the Montgomery Cancer Center, loved ones, friends, and colleagues. I know that without God's grace and mercy, none of this would be possible. The Lord has granted me my heart's desires. To the doctors and nurses with blessed hands and wisdom that were in charge of my health and well-being, thank you. To my family and closest friends, I love you guys so much. The love and support I received from you helped me through some of my darkest moments during this journey. There were many late nights spent writing, stressing, and crying, but the Lord knew the plans he had for me. I remember you all saying, "Calm down, you got this." You always encouraged me to stay the course and to finish what I started, and for that, I am forever grateful. To my colleagues, thanks for being a support system and a shoulder to lean on. Your words of encouragement and acts of kindness have not gone unnoticed. I truly appreciated the texts, phone calls, and morning bible scriptures, reminding me that this too shall pass, and anything worth having is worth the work invested. My guardian angel and grandmother, Lucinda, I hear you in my head all the time telling me how proud you are of me. You always wanted me to be a doctor. I am not a pediatrician, but the journey to this point felt just as rigorous! This accomplishment, this milestone in my life, it is for you. I love and miss you dearly. "I can do all things through Christ, who strengthens me" (Phillippians 4:13).

Acknowledgments

To my daughter Nikki, my only child, you are my world. I am so proud of the young lady you have become. Thank you for your patience and understanding. You are my legacy, and this academic accomplishment is dedicated to you. I hope I will be an inspiration for you to further your education as well. To my dearest Keith, thank you for your continuous prayers and words of encouragement. Thank you for supporting me in all my endeavors. You are a great man of faith, and I could not have done it without you by my side throughout my good and bad days. I love you.

To Pacosha and Kreshay, two of my closest friends who are like my sisters, thank you for being you. I am reminded that "Some friends play at friendship, but a true friend sticks closer than one's nearest kin." Thank you for your unwavering love and support; it means the world to me. We persevered through this degree together; we did it! To my siblings, I pray that I have been an exemplar for you all. We came a long way from where we started. I want to encourage you all to go after your dreams and never stop reaching for the stars.

My doctoral committee has been inspiring, encouraging, and readily available to support, respond, and advise. I want to thank my chair, Dr. James, second member Dr. Caldwell, and URR Dr. Englesberg, for their guidance and patience as I gained my scholarly voice. Dr. James, you encouraged me to continue moving "onward and upward." You gave me the encouragement and inspiration I required to complete this study. Dr. Caldwell, your honest feedback and high expectations pushed me to become a better writer. Ladies, thank you for helping me find my scholarly voice and courage to

finish the task I started. You both were exceptional mentors and pivotal to me throughout reaching my goal. Dr. Englesberg, thank you for all your constructive feedback in my final stages and making the process smoother for form and style. It is finished!

Table of Contents

Section 1: The Problem

Introduction

Vernon-Feagans, Bratsch-Hines, Varghese, Cutrer, and Garwood (2018) stated that if strong reading comprehension is not developed by third grade, the chances of a child graduating from high school or going to college are greatly diminished. They further stated that research-based literacy interventions have shown that early, targeted, and practical instruction results in approximately 70% fewer students being identified as having a specific learning or reading disability. The National Assessment of Educational Progress (NAEP, National Center for Education Statistics [NCES], 2017) indicated that two out of three public school students in fourth and eighth grades did not meet the standards for reading proficiency. The report noted lower reading scores for fourth and eighth graders in 2015 and 2017 (NCES, 2017). Overall, student progress in reading has declined, with the highest performers idle and the lowest-achieving students falling further behind. Response to Intervention (RTI) is a multitiered approach to the early identification and support of students with learning needs. Morse (2019) defined RTI as a systematic process that consists of using student performance data to match students with the type of services that increase the probability that they will attain expected learning outcomes. RTI has several components, such as universal screening, tiered evidence-based instruction, frequent progress monitoring, and data-driven decision making. Learning to implement RTI effectively in schools can be a significant task for teachers because of its complexity. For RTI to be successful, teachers need to understand these components (Morse, 2019). So, understanding how teachers perceive the processes

and procedures of RTI will help district leaders and building principals appreciate the necessary training, supports, and resources needed to enhance the fidelity of implementation. If district leaders and administrators do not take into account teachers' beliefs and attitudes about RTI, it might negatively affect how it will be implemented (Regan, Berkeley, Hughes, & Brady, 2015)

In 1965, former President Lyndon Johnson urged Congress to take the necessary measures to ensure equal opportunity in America's educational system (Wrabel, Saultz, Polikoff, McEachin, & Duque, 2018). Johnson wanted to close the achievement gaps between the low- and middle-income students in math, reading, and writing. In April, 1965, President Johnson signed the Elementary and Secondary Education Act (ESEA), which included six sections that aimed to provide more funding for elementary and secondary school districts with a large number of poor students (Nelson, 2016). Wrabel et al. (2018) stated that the first draft of the ESEA was an amended version of Public Law 81-874, which was approved in 1950 and served as an aid program that provided financial assistance to school districts in federally affected areas (e.g., housing projects, Indian land, military bases). The main idea behind the ESEA was equal access to education for all students. Congress included a provision to ESEA known as Title I. The rule provided more federal funding to low funded schools and offered programs that compensated low-income families for helping them pay for their children's educational needs (Nelson, 2016). ESEA was reauthorized every 5 years after that.

The No Child Left Behind (NCLB) Act was passed as a reauthorization of the ESEA and was signed into law by President George W. Bush on January 8, 2002

(Duignan & Nolen, 2019). Saultz, Schneider, and McGovern (2019) stated that the purpose of NCLB was to close the reading and math achievement gap in public schools for minority students. There were four critical components embedded in NCLB. The first component was of stronger accountability. NCLB required all states to come up with an accountability plan that included annual assessments in math and reading in Grades 3–8 and at least one assessment in Grades 10–12 (Husband & Hunt, 2015; Saultz et al., 2019). Saultz et al. (2019) further noted that each state was required to meet adequate yearly progress, which ensured that 100% of students reached proficiency in reading and math by the year 2014. Husband and Hunt (2015) declared that the states had to report this accountability data through the publication of local and state school report cards. Schools that did not meet adequate yearly progress goals for 2 consecutive years required school improvement efforts. The second component was greater flexibility in the use of federal funds for school districts. This component was in place so that schools could address their individual school improvement needs. The third component stated that parents of children in low performing schools have the option to send their children to a better performing school in the district or a public charter school. The fourth component emphasized that teachers had to be highly qualified. This component of NCLB required that all school improvement plans, professional development (PD), and assistance for low-performing schools and all Title I instruction be based on teaching strategies that have been proven effective (Husband & Hunt, 2015). Teachers had to demonstrate proficiency in core subject areas such as English and math. School districts had to prove that they had a significant amount of highly qualified

teachers to be eligible to receive Title I funds. Saultz et al. (2019) declared that NCLB made teachers more accountable for providing their students with the highest quality of education. They further stated that NCLB failed to address the learning needs of individual students.

On December 10, 2015, President Obama signed the Every Student Succeeds Act (ESSA) into law (Young, Winn, & Reedy, 2017). The Every Student Succeeds Act reauthorized the ESEA (Young et al., 2017) and replaced the NCLB Act (Duignan & Nolen, 2019). The purpose was to ensure that all students received a fair, equitable, and quality education. The focus was on improving education for all through high expectations and high-quality teaching. States and schools had to establish challenging standards in reading, math, and science aligned to college entrance requirements, assess students in Grades 3 through 8 and once in high school in reading and math, and establish state-wide accountability measures (NCES, 2018). ESSA also ensured students with disabilities received individualized supports and services for their success in general education classrooms. ESSA provided greater flexibility to states in determining specific instructional practices and services to improve school climate, increase school safety, and expand access to comprehensive learning supports (Young et al., 2017). Multitiered systems of supports (MTSS) such as RTI provided a research-based approach, varying levels of support, screening methods for collecting data, and progress-monitoring assessments to make data-driven decisions to improve outcomes for all students.

Response to intervention was created from NCLB and the Individuals with Disabilities Education Act of 1997 (IDEA) to support student learning and reduce the

number of students being referred to receive special education services. NCLB and IDEA brought attention to the need for early intervention for students who are at risk for academic failure. Between 1975 and 2000, the population of students identified as having learning disabilities (LDs) doubled to become the most represented disability at 6% of the school-age population (Preston, Wood, & Stecker, 2016). Also, Preston et al. (2016) stated that at that time, 50% of students with disabilities were identified as LD. According to the RTI framework, general education teachers should be able to provide multiple interventions to students who are struggling and for documenting student progress within these interventions (Miciak, Cirino, Ahmed, Reid, & Vaughn, 2019). These steps were to be followed before general education teachers made a referral for special education, thus decreasing student overidentification for special education. RTI is a multiered approach and usually has three or four tiers (Henderson, 2018). RTI is an individualized approach that focuses on modifying instruction to students' specific needs. Henderson (2018) declared that the major idea behind the RTI problem-solving approach is that with high-quality general classroom instruction, students will not need special education services. Miciak et al. (2019) stated that when a student is not making adequate growth at Tier 1, the teacher identifies and analyzes the problem, generates an intervention, sets a goal, implements the intervention, progress-monitors student achievement, revises the response if needed, and assesses the effectiveness of the intervention. They further posited that if a student has not made adequate progress at Tier 1, the teacher meets with a school problem-solving team to design a more intensive intervention plan for Tier 2. Progress is monitored and, if the student has not made

sufficient progress, the teacher meets with a more specialized team, including school special educators, to explore Tier 3 options.

According to Al Otaiba et al. (2016), many states have adopted RTI or MTSS to provide early intervention. Still, there were considerable inconsistencies in how states and schools implemented RTI. Kressler and Cavendish (2020) stated that although RTI is a K-12 initiative, there was limited research examining RTI in a high school setting. The success of RTI was mostly dependent on teachers' knowledge about RTI implementation because these teachers were the ones responsible for implementing the program. For RTI to be successful for students with reading disabilities, teachers needed knowledge about how to use data to identify students' level of performance relative to their peers or benchmark assessments and how to develop instructional plans related to their relative strengths and weaknesses (Al Otaiba et al., 2016). Joshi and Wijekumar's (2019) study revealed that teachers often report that they understand broadly what RTI is, how to administer assessments, and how to locate data. However, teachers also report having little knowledge of what to do with that information to make instructional decisions to help their students, particularly those who have or are at risk for developing reading disabilities. RTI does not work without knowledgeable teachers. However, teachers working to implement RTI have encountered complex challenges that stifle equitable outcomes. Kressler and Cavendish's (2020) study examined high school teachers' use and understanding of data-based decision making within an RTI framework. The findings revealed three overall challenges to their use of data: limited knowledge, training, and support. Stahnke, Schueler, and Roesken-Winter (2016) stated that

critically examining teachers' perception of the RTI implementation processes and sense-making of data use within an RTI program may illuminate reasons why RTI implementation fails or succeeds in secondary schools. They further noted that understanding teachers' perceived knowledge is key to understanding where each teacher is currently on their journey of learning.

The Local Problem

The problem at an urban high school is that the teachers were struggling to implement the tiered interventions of the response to intervention (RTI) model. Even though the school district has provided two PD trainings, the delivery of the model was still perceived to be a problem by the teachers. According to the school's RTI facilitator (personal communication, April 18, 2018), the issue of practice was related to inadequate and inconsistent implementation of the model. A lack of consistency in implementing the model has been identified as a barrier to the model's success in high schools by teachers, administrators, and district leaders (Long et al., 2016). A building-level assistant administrator (personal communication, April 23, 2018) stated that teachers have continuously expressed frustration and concerns about limited PD training on the model. The teachers' lack of knowledge on how to effectively implement the tiered strategies of RTI lead to a lack of interest in implementing RTI at the school. Long et al. (2016) further stated that often during the implementation of evidence-based interventions, teachers receive limited training, support, and educational leaders rarely identify and address implementation concerns. Common challenges identified by secondary teachers during the implementation of RTI included a feeling of being overwhelmed with the

amount of new information, inadequate training, lack of knowledge to implement the tiered strategies, lack of resources, and lack of time needed for data collection and analysis (Moreno, 2015; Regan et al., 2015). The literature suggested that frequent and ongoing PD affects teacher efficacy positively and makes them more open to new ideas and more willing to adopt new interventions (Isbell & Szabo, 2015; Regan et al., 2015). The building's lead principal (personal communication, June, 2018) stated that his utmost concern was working with faculty and the district RTI facilitator to identify what supports and resources are needed to implement the RTI model in the school effectively. By identifying and understanding the beliefs, attitudes, and readiness to implement the model, future training can be tailored to address implementation and program needs.

The fidelity of the application of the RTI system was cited as one of the most critical components necessary for RTI implementation (Meyer & Behar-Horenstein, 2015). According to Bartholomew and De Jong (2017), examining the accuracy of the application when evaluating interventions was a best-practice of school psychology but was often disregarded in school-based interventions. A report issued by the Alabama State Department of Education (2017a) noted that 75 of the 1,325 schools in Alabama were on the failing schools' list; eleven elementary schools were on the list, but most were high schools. State assessment scores and school improvement data revealed that the project study school was experiencing a decrease in academic performances, higher retention and dropout rates, and reduced graduation rates (Alabama State Department of Education, 2017a; Alabama State Department of Education, 2017b). The data provided evidence of the need for individualized instruction and supports. Jenkins and Sekayi

(2016) suggested the need for research that focuses on stakeholders' perceptions related to the benefits and barriers to RTI implementation. RTI implementation data on assessment practices and instructional and intervention delivery were used to evaluate the application of the tiered interventions. It is of utmost importance that teachers are well-trained, match instruction to needs, have access to these strategies, and know how to use them in a way that will impact students' academic growth.

A 2015 report from the Programme for International Student Assessment (PISA) announced that one in five of 15-year old students in the United States is a low performer (not reaching the baseline level of 2) in science and reading proficiency (Belfali & Ikeda, 2016). The latest findings from the NAEP (2019) indicated that approximately 63% of the nation's graduating seniors are below proficiency in reading, 75% in mathematics, and 78% in science. As attention continues to shift to struggling readers, interest in RTI at the secondary level has expanded. Porter (2019) declared that RTI models at the secondary level were challenging to implement due to several factors, including student diversity, complex curriculum, and high student-staff ratios. Throughout the history of education, various forms of instructional strategies have been applied; some have been successful, and some have not. For decades, since the reauthorization of IDEA, clear procedures from the state and federal government on how to implement RTI models have been slow to reach the district and school levels, leading to confusion and poor fidelity of implementation among secondary classroom teachers nationally (Brozo, 2015).

Nationally, secondary teachers were often overwhelmed by the number of students performing below grade level (Porter, 2019). Savitz, Allington, and Wilkins

(2018) noted that most approaches to intervention at the secondary level required students to be scheduled into intervention classes, which means they lose access to electives and other courses that may pique their interest. Also, students may become disengaged when their schedule is filled with second reading and math courses to get the remediation that is needed. According to the National Center for Education Statics (NCES) (2017) condition of education 2016 report, an academic gap by race existed (Kena et al., 2016). A difference as it relates to academic achievement and race was indicative that there might be a need for a system of interventions that are culturally relevant to the learner's individual needs.

Rationale

Identifying perceptions of school-based educators is an integral part of successful implementation because failure to do so can negatively affect delivery (Regan et al., 2015). Understanding teachers' concerns and understanding of the RTI process may have implications for how school leaders could support teachers and foresee some of the challenges teachers might face (Feiker Hollenbeck & Patrikakou, 2015; Meyer & Behar-Horenstein, 2015). Given the teachers' role in the RTI process, school leaders must examine their attitudes, perceptions, readiness to implement, and barriers to implementation (Castillo, March, Stockslager, & Hines, 2016; Isbell & Szaboo, 2015). Hall and Hord (2014) stated that exploring specific teacher attitudes, beliefs, and experiences is crucial to active professional growth and development.

A common goal of most RTI models included providing high-quality, differentiated instruction in the general education classroom setting to meet the academic

and behavioral needs of all students to reduce the number of special education referrals (Moats, 2017). Moats (2017) declared that teachers must learn how to implement the RTI model with higher fidelity and effectively apply student data in the planning of future interventions and instructional goals. To meet all students' needs effectively, teachers need to acquire additional assessment skills, problem-solving skills, and data collection skills (Isbell & Szabo, 2015). The status of the eighth grade NAEP reading scores between 2007 and 2017 (NCES, 2018) and the recent evaluation of RTI by the Institute of Educational Science (Balu et al., 2015) indicated that even though secondary schools nationwide have adopted and are implementing the RTI model, reading instruction is far from ideal. Thus, teachers' perceptions about their ability to work with diverse learners and how to differentiate instruction can impact their level of efficacy. According to Isbell and Szabo (2015), a person's sense of efficacy can affect their ability to benefit from job-embedded PD and to implement RTI effectively. The purpose of this qualitative study was to explore teachers' perceptions of the implementation of RTI at their high school to help teachers and administrators understand what PD training, supports, and resources are needed to implement the model effectively.

Evidence of the Problem in the Local Setting

According to the IRIS Center (2019), content-area teachers are often frustrated by the poor reading abilities of many of their students. Learning the material in subjects such as science, social studies, and English largely depends on grade-appropriate reading skills. Researchers at the IRIS Center (2019) noted that it is essential for content-area teachers to understand where reading breakdowns occur and how they can effectively and

efficiently teach the skills necessary for students to read and understand the complex content-area text. According to Thomas et al. (2020), RTI has been implemented in schools for more than a decade to promote early intervention and provide increasingly intensive intervention to students with academic difficulties. The majority of campuses in the school district of the research site have implemented RTI intending to provide all students with a high-quality education infused with a continuum of supports designed to meet each student's learning needs. However, the RTI facilitator at the project study school stated that most teachers in the school struggled to implement the program with fidelity and often complained about being confused or frustrated with the procedural processes of RTI (personal communication, April 18, 2018). The school of study is a Title I school, which means that it has a more significant number of low-income students. Alabama State Department of Education (2017a) data indicated that in the 2017-2018 school year, the majority (94%) of the school's student population were African Americans, and the second largest ethnic group was the Hispanic population at 4%. There was an evident need for intensive reading intervention at the project study school.

Many students enter ninth grade as nonproficient readers who have not been successful on the state reading assessment. Poor reading skills have been associated with adverse long-term outcomes, such as failure to graduate from high school (DePaoli, Balfanz, Atwell, & Bridgeland, 2018). In 2017, the state's graduation rate was 89%, whereas the graduation rate for the project study school was 72% (Alabama State Department of Education, 2017b). The data further revealed that 29% of the project study school's graduating seniors were not college or career ready. The state's

standardized assessment data (Alabama State Department of Education, 2017b) for the project study school indicated that 28% of African American students and 23% of Hispanic students scored at or above proficiency in reading for the 2017-2018 school year. On the NAEP (NCES, 2017), on a scale of 0-500, the average score of eighth-grade students in Alabama was 258; this was lower than the average rating of 265 for public school students in the nation. The percentage of students in Alabama who performed at or above the NAEP Proficient level was 28%. Also, the rate of African American students at or above proficiency was 12% as compared to the percentage of Hispanic students at or above proficiency, which was 14% (NCES, 2017). The African American and Hispanic student populations were entering high school reading 25-27 points lower than their Caucasian counterparts. RTI could provide early intervention to improve the reading outcomes for approximately 74% of secondary school students who are struggling across the state and the approximately 50% of students who are not meeting proficiency at the research site.

Evidence of the Problem in the Literature

Although there is limited research on the practical implementation of RTI in **s**econdary settings, high schools across the nation continued to implement RTI as a means of closing the necessary skills achievement gap and perhaps preventing academic failure in content areas (Bouck & Cosby, 2017). Hence, schools and teachers were often left to interpret and implement the model their way, leading to inconsistencies, confusion, and frustration. Mahoney (2020) stated that secondary teachers might have limited knowledge of evidence-based practices and adequate training in the implementation of

these practices in the general education classroom. Mahoney further noted that secondary teachers' familiarity with and reported use of evidence-based practices in the school was often limited in scope. The differences in student outcomes obtained in research versus practice emphasize the importance of implementation fidelity as well as the need for educators to be specially trained in RTI practices (Vollmer, Gettinger, & Begeny, 2019). Policymakers and district leaders need to know if RTI, as it is implemented, serves the needs of various learners.

Natural characteristics of secondary schools, including the structure of the day and other issues, could result in RTI implementation being more challenging (Bouck & Cosby, 2017). Bouck and Cosby (2017) also noted resistance among educators was a challenge with using RTI models in secondary schools. Implementation of RTI at the secondary school level required many structures to be in place, including effective leadership. Zhang, Liu, and Lin's (2019) exploratory study examined teachers' perceptions of the implementation of the RTI model at their school. The findings revealed that the teachers had negative feelings about how RTI was being implemented. The data showed that the influencing factors included lack of leadership support, cultural differences, teachers' knowledge and experience, and teachers' self-efficacy. A vital component of the RTI framework is the use of evidence-based teaching practices. Vollmer et al. (2019) stated that to implement RTI models effectively, teachers required specialized training. Vollmer et al. (2019) examined teachers' perceptions of the RTI training needed to deliver the model as intended effectively. The findings indicated that teachers believed that they needed more information on progress monitoring tools and

evidence-based interventions. Mahoney (2020) suggested that to best support the academic needs of students within general education classroom settings, teachers must be able to identify best practices that are unique to student needs and to collaborate with colleagues to implement the use of those practices within the classroom. School and district leaders must examine teachers' perceptions of the RTI model to identify the barriers to the successful delivery of the model and provide the necessary training, supports, and resources to support the sustainability of the program (Maier et al., 2016).

Definition of Terms

The definitions listed in this section were relevant to the context of the study. The purpose of these definitions was to provide clarity of the terms in the research. The following educational terms were used in the study:

At-risk students: Students not experiencing academic success in schools who have greater potential for dropping out of secondary school (Marbouti, Diefes-Dux, & Madhavan, 2016).

Fidelity of implementation (FOI): The degree to which an intervention delivery adheres to the intervention developers' model (Gould, Dariotis, Greenberg, & Mendelson, 2016).

Multitiered systems of support (MTSS): A three-tiered system where instructional goals are divided into different levels. The tiers include primary interventions that are provided to the entire school population, secondary supports that focus on individuals or groups of students with everyday needs, and tertiary supports that provide individualized treatments (Bohanon, Gilman, Parker, Amell, & Sortino, 2016).

Progress monitoring: Measurement of change in a student's skill level of learning over some time to address instructional needs and what evidence-based interventions are effective (Bjorn, Aro, Koponen, Fuchs, & Fuchs, 2016).

Response to intervention (RTI): A three-tiered continuum of supports developed to identify and meet the needs of students at-risk of not achieving academically in math and reading (Bouck & Cosby, 2017).

Significance of the Study

Many studies examined the effects of RTI on student learning, but few studies focused on teachers' perceptions of their knowledge to implement RTI (Castro-Villarreal, Villarreal, & Sullivan, 2015). I intended for the current study to provide the needed support for RTI practices in the classrooms for teachers and students in an urban high school in which the research was conducted. This study was significant because educational leaders and teachers need to understand obstacles encountered during the implementation of the RTI model so that changes in instructional pedagogy can occur and student achievement goals can be realized (Isbell & Szaboo, 2015). With the pressure for higher student achievement increasing, teachers are searching for ways to support students in their classrooms (Hottenstein, 2016). Yearly, school districts adopt educational initiatives, and each year schools see the abandonment of these initiatives, despite the influence these interventions have on student outcomes (McIntosh & Goodman, 2016). O'Quinn (2018) stated that as new initiatives and requirements are added to the expectations of teachers, fewer resources are available to ensure quality implementation. As a result, initiative fatigue sets in, and teachers are at risk for burnout,

frustration, and pessimistic attitudes about the program. Initiative fatigue could be detrimental to the success of a new program such as RTI, thus making it a significant concern for stakeholders to target and quickly diminish (Greene, 2019; O'Quinn, 2018). It was substantial for school and district leaders to examine teachers' attitudes and perceptions about RTI as a possible way to mitigate initiative fatigue. Also, this study was essential to school and district leaders because similar to Patterson's (2016) study findings, by gaining a more in-depth understanding of the problems with the RTI model, leaders can address concerns to ensure effective implementation of the model.

Educators need to demonstrate higher levels of efficacy in RTI implementation to reduce inappropriate student placement. Self-efficacy is a belief a person has about how well they can do something (Skaalvik & Skaalvik, 2016). Skaalvik and Skaalvik (2016) declared that self-efficacy determines how barriers are perceived and therefore influenced peoples' attitudes, beliefs, and behavior. They further emphasized that people with low self-efficacy tend to dwell on the problems or limitations of an initiative. A source of teacher self-efficacy is previous experiences with succeeding or failing on activities. Regan et al. (2015) stated that low self-efficacy, a lack of understanding of RTI, and a need for guidance for implementation were more noticeable at the high school level. This study was beneficial to all stakeholders because by identifying barriers to full implementation and program needs, all teachers and staff could receive the required training, supports, and resources that could enhance their self-efficacy to assist students who are struggling academically.

It was imperative to gain an understanding of the participants' knowledge of evidence-based intervention strategies and how they implemented these in the classroom to support teacher buy-in. Educators were allowed to express their knowledge of and concerns about RTI processes and procedures in their schools. Greene (2019) declared that buy-in from teachers is essential to the success of new educational reform initiatives. Greene further stated that teachers' receptivity to reforms depends in no small degree on their buy-in to the change effort. When teachers found their beliefs and goals were aligned with improvement efforts, they usually supported and felt positive about the change (Briggs, Russell, & Wanless, 2018). This study could provide insight into current teacher behaviors regarding the implementation process. Because teachers are often the individuals most involved in educational reform, understanding just how they perceive and respond to reform was critical. One of the underlying goals of this project study was that the results of the project study would provide new information on teacher knowledge and the use of interventions. Also, the study might be used to develop ways to better support teachers in their implementation of differentiated interventions. When teachers can deliver the RTI model successfully, resources could be targeted more effectively (Hottenstein, 2016). RTI implementation support could strengthen Tier 1 intervention implementation in general education classrooms, potentially decreasing the number of students needing Tier 2 and Tier 3 interventions.

The possible positive social change of this study was to allow teachers to implement specific content-based tiered instructional strategies of the RTI model with higher fidelity, resulting in more classroom teachers effectively delivering the model. As

a result, students' individual academic needs could be met, leading to an increase in students' academic performance in the general education classroom and, therefore, reducing the number of students referred to special education. Change within the district and in the larger population of secondary schools may be possible by provoking district leaders to review policy and procedures for the implementation of the model to address gaps in practice. Ultimately, this study had the potential to address teacher buy-in for RTI and PD training that supported the sustainability of the model in all secondary schools.

Research Questions

The purpose of this qualitative study was to explore teachers' perceptions of the implementation of RTI at their high school to help teachers and administrators understand what PD training, supports, and resources are needed to implement the model effectively. The research questions in this study were intended to identify a gap in practice between what was found in the research and what was being implemented in RTI programs at the secondary level. These research questions are designed to collect the lived experiences of high school general education teachers implementing RTI at their school. The concerns-based adoption model (CBAM) informed the research questions.

The following research questions were aligned with the research problem and purpose:

RQ1: What perceptions do teachers have of the implementation of RTI in their high school?

RQ2: What are the significant concerns about the procedural and implementation processes of RTI at their high school?

RQ3: What supports or resources do teachers feel they need to implement the model?

Review of the Literature

The problem identified in this study was that the teachers at an urban high school were struggling to implement the tiered interventions of the response to intervention (RTI) model. RTI has been widely adopted as a framework for meeting the instructional needs of students and as a school improvement strategy. Ruffini, Miskell, Lindsay, McInerney, and Waite (2016) suggested that RTI works best to improve students' academics when implemented with fidelity, meaning that schools are implementing the RTI framework as intended. RTI involves multiple components, and teachers must implement these components with fidelity (Ruffini et al., 2016). Cutbush, Gibbs, Krieger, Clinton-Sherrod, and Miller (2017) stated that fidelity of implementation is an essential factor in realizing outcomes of evidence-based interventions. Fidelity of implementation could inform decisions about the allocation of program resources, program expansion, and sustainability by revealing which components of the intervention were relatively easy or challenging to implement (Mendive, Weiland, Yoshikawa, & Snow, 2016). Mendive et al. (2016) conducted a study to examine the relationship of fidelity on system-wide programs such as RTI and student outcomes. The findings of the study suggested high fidelity of system-wide implementation was positively related to student outcomes. Since teachers are the ones responsible for delivering the model with accuracy, gaining their perceptions of barriers impeding the full implementation of the model was necessary.

The purpose of this qualitative study was to explore teachers' perceptions of the implementation of RTI at one high school to help teachers and administrators understand what PD training, supports, and resources are needed to implement the model effectively. To locate studies relevant to this study's problem and purpose for the literature review, I conducted searches for literature within the last five years. I searched for electronic dissertations, peer-reviewed articles, academic texts, scholarly journals, and books. Some of the databases used as search engines included ProQuest, Education Research Complete, Science Direct, ERIC, and Google Scholar. Key search terms added *IQ-achievement discrepancy model, response to intervention (RTI)*, *multi-tiered system of support (MTSS), educators' perceptions of RTI, RTI in secondary schools, the fidelity of implementation, and barriers to implementation.* I organized my findings by common themes identified in the literature that addressed teacher perceptions and concerns with the implementation fidelity of the RTI model and challenges to implementation in secondary school settings within the literature review of this study until saturation was reached. The major themes identified in the literature included scheduling, PD, and leadership support. Minor items identified in the research were fidelity of implementation, inadequate knowledge, and teacher buy-in.

The Conceptual Framework

The reauthorization of IDEA, which included the RTI provision, provided the foundation for how schools prevent, identify, intervene, and diagnose a student as having a specific learning disability (SLD). Successful implementation of these changes will require collaboration and fidelity commitment by educators needed to implement the RTI

model (Gasaymeh, 2017). Understanding teachers' concerns about integrating new interventions to their curricular practices are essential for the improvement of pedagogical practices (Min, 2017). The conceptual framework used to investigate this research study was based on the CBAM. CBAM is a framework and a set of tools for understanding and managing change in people when the change involves a shift in practice. Gasaymeh (2017) stated that the use of the CBAM framework is mainly widespread in the USA, Western Europe, Australia, with some recent studies using it in the Middle East. CBAM has been publicized as the most vigorous and empirically grounded theoretical model for the implementation of educational innovations (Hall & Hord, 2011; Min, 2017). Also, it is recognized as a valid and reliable measurement for assessing their implementation. The main aim of CBAM is to provide a framework that offers different tools to predict, measure, illustrate, and enlighten the change in the sequence that educators experience when using an educational innovation (Al Masarweh, 2019).

According to Trapani and Annunziato (2018), the model was initially proposed in 1973 by Hall, Wallace, and Dossett and was based on counseling psychologist Fuller's three phases of teachers' concerns (non-concern, concern with self, and concern with pupils). Fuller researched the concerns of student teachers and developed a model based on her findings (Trapani & Annunziato, 2018). Fuller's results suggested that teachers possessed different concerns based on what stage they were in their careers. Al Masarweh (2019) declared that the model was based on the idea that change is a continuing, individual experience. He further noted that the effectiveness of change

efforts was determined by the extent of guidance aligned with the learner's needs and concerns. Staff members of the Research and Development Center for Teacher Education of the University of Texas at Austin found similar concerns when observing teachers and professors adopting innovation. They began documenting the interests of other educators when taking new educational initiatives (Dilg, 2015). The model has been used by educational leaders and PD providers to support teachers in the adoption of educational innovations by examining their concerns to the implementation of research-based practices such as RTI (Hall, Hord, Aguilera, Zepeda, & von Frank, 2011). It helps change facilitators avoid the problems of programs failing because changes were not implemented correctly, or because staff concerns about changes were not addressed.

CBAM helps district and school-level leaders understand teachers' concerns before, during, and after the adoption of innovations for educational purposes. Tunks and Weller (2009) declared that the assumptions that underlie CBAM are that change is an individual process, an individual's perceptions are crucial to effective change, individuals go through phases in the beliefs of their skill level, and change leaders must continuously assess and provide support systematically. Hall et al. (2011) suggested that reformers should be aware of where an individual is categorized before any effective reform can be experienced. I chose the model as a framework to understand the concerns of teachers attempting to implement the tiered interventions of RTI at their school to provide insight into what type of supports and resources were needed to enhance the effective delivery of the model. CBAM supported the study's research questions by examining teachers' perceptions and levels of skill to implement RTI. Herro and Quigley (2017) stated that

understanding teachers' perceptions could assist the change leader in addressing concerns that may lead to the rejection of RTI. PD training can then be focused on providing training specific to the teacher's individual needs.

Due to the vital role of the teacher in the effective implementation of RTI, it becomes imperative to investigate teacher concerns in the adoption process (Avidov-Ungar, 2016; Herro & Quigley, 2017). Interests exert a powerful influence on the implementation of reforms and determine the type of assistance that teachers may need in the adoption process (Trapani & Annunziato, 2018). Trapani and Annunziato (2018) hypothesized that teachers are likely to resist change unless they are convinced that it will significantly benefit themselves and their students. This resistance can lead to the failure of any intervention program. The CBAM includes three tools used to collect data: Stages of Concerns (SoC), Levels of Use (LoU), and Innovation Configurations (IC).

One component of the CBAM has been the focus of over 30 years of research in school-based implementation reforms. The most relevant tool in the model is the SoC, which is used to measure teachers' concerns about an innovation they are expected to implement (Hall et al., 2011). SoC was the first developed tool for the CBAM framework, and it is the tool that needs to be used for investigating the teachers' perceptions within the learning scope of educators' involvement and concern. The SoC component of the model focuses on the feelings and concerns in response to the use of the RTI model, and consist of stages that evolve gradually from teachers being unconcerned, being self-focused, focus on tasks and focus on using the model and its impacts on students. The stages of concern component of the CBAM are most relevant to

this research study because it addressed the study's research questions in evaluating the participants' attitudes, beliefs, understanding, and concerns about the implementation and delivery of the RTI model.

The stages of concern component consist of seven phases (awareness, informational, personal, management, consequences, collaboration, and refocusing) that educators engaged in during school-based change initiatives (Hall et al., 2011). Awareness, information, and personal are focused on individual concerns, while management is focused on the mastery of tasks. The remaining stages, collaboration and refocusing, focus on the results and impact of the intervention. As teachers move through the stages, the focus is shifted from the teacher to the effective implementation of the research-based practice, and finally, on the influence of the method on student achievement (Min, 2017). The purpose of this qualitative study is to explore teachers' perceptions of the implementation of RTI at their high school. Research questions, informed by the stages of concern component of the CBAM, will explore the participants' perceptions, concerns, and understanding about the procedural and implementation processes of the RTI model, as well as identify needed resources and targeted PD opportunities for the effective delivery and sustainability of the model.

Educating Students with Disabilities

The disproportionate number of minority students referred to special education has caused concern among educational leaders. Hockett (2017) declared that over-identification is a persistent and growing problem in special education programs in the U.S. public school system. With nearly 3 million school-age students in the United

States identified as having an SLD, this population comprises virtually half of all students with disabilities (NCES, 2019). Students identified with SLDs represent nearly 35% of all students receiving special education services (National Center for Education Statistics [NCES], 2018). In 1954, *Brown v. Board of Education* was the standard for educational law for children of color and those with disabilities (Hockett, 2017). The Education for All Handicapped Children Act was passed by the U.S. Congress and signed into law by President Gerald R. Ford. The purpose of the law was to assure fairness and appropriateness in decision making about providing exceptional education to disabled children and youth (Blanck, 2019). Blanck (2019) further stated that the law required that every state must make available a free appropriate public education for all disabled children ages 3 to 18 by the beginning of the school year in 1978 and all children ages 3 to 21 by 1980. The law was renamed to the Individuals with Disabilities Education Act (IDEA).

The IDEA marked a change in the standard of public education for children with disabilities. The IDEA's focus was to provide specific educational and procedural guarantees for students with disabilities and their families (Dragoo, 2018). He further noted that the IDEA also outlined and required the use of procedural safeguards about the identification, evaluation, and placement of students in special education services. Before IDEA, millions of children with disabilities were segregated at home, hospitals, and institutions from their non-disabled peers, often without the benefit of educational services (Lustig, 2018). In fall 2017, 95% of 6 to 21-year-old students with disabilities were serviced in regular schools; 80% or more were serviced in general education

classrooms (NCES, 2019). IDEA required that students with disabilities be included in the general education classroom with their peers. A least restrictive environment (LRE) applied to academic, extracurricular, and other school activities offered their non-disabled peers (Lustig, 2018).

Identifying Students with Learning Disabilities

IDEA allowed state education agencies to choose between the discrepancy method and other alternatives by specifying that the state adopted SLD eligibility criteria must not require the use of a severe discrepancy between intellectual ability and achievement. SLD identification has consistently been shown to be problematic; however, research has primarily focused on SLD identification using test scores only (Maki & Adams, 2020). Despite the impact of SLD identification decisions on students, SLD identification is hugely problematic (Schroeder, Drefs, & Cormier, 2017). IDEA required the presence of a severe discrepancy between ability and achievement for a diagnosis of a specific LD (Alfonso & Flanagan, 2018). Under the ability-achievement discrepancy method, students were identified with SLD when they exhibited at least one achievement score that was significantly discrepant from their overall cognitive ability (Maki, Floyd, & Roberson, 2015). The problem with this method was that the concept of significant discrepancy was not defined in IDEA, which led to inconsistent identification practices. In 2004, the Individuals with Disability Education Improvement Act (IDEIA), a reauthorization of IDEA, dropped this requirement and allowed schools to use one or a combination of approaches to identify SLD (Alfonso & Flanagan, 2018). IDEIA mandated that ability-achievement discrepancy models no longer be the sole SLD

identification method and allowed for alternative research-based methods (Maki & Adams, 2020).

National, state, and district educational leaders should be aware of the requirements in IDEIA and assure that multiple and suitable assessments are used in determining whether SLD students are disabled before being assigned to special education. The IDEIA regulations concerning SLD stated that each state must adopt criteria for determining whether a child has an SLD (Schroeder et al., 2017). They further noted that IDEIA required that states adhere to specific guidelines. The guidelines included: (a) must not require the use of severe discrepancy between intellectual ability and achievement for determining whether a child has an SLD as defined in §300.8 (c)(10); (b) must permit the use of a process based on the child's response to scientific, research-based intervention; and (c) may permit the use of other alternative research-based procedures for determining whether a child has a SLD as defined in §300.8 (c)(10). Many states have opted to use other research-based alternatives for identification, such as response to intervention (RTI). As local education agencies are no longer required to use a discrepancy model, states have autonomy in SLD identification. However, with the lack of guidance, how a student is identified with SLD continues to be a challenge.

The Response to Intervention Model

New education policy has shifted towards a system of performance-based accountability as a way of improving students' academic outcomes. Today's schools faced increasing challenges in responding to national and state initiatives, such as high-

stakes testing and accountability laws (Barrio & Combes, 2015). The NCLB Act's primary focus was closing the achievement gap for all students, which changed the responsibility for public schools in students' academic outcomes (McGuinn, 2016). In the early 2000s, the U.S. Department of Education's Office of Special Education Programs convened a meeting of stakeholders to discuss methods for identifying students with LDs, and a new concept called the response to intervention (RTI) emerged (Arden, Gandhi, Zumeta Edmonds, & Danielson, 2017). Reasons for this meeting were: concerns with the tool (discrepancy formulas) being used to identify children with disabilities, increases in the number of students being referred for special education services, and the disproportionate number of minorities being assigned. RTI was discussed as an alternate tool to identify students with LDs. RTI was formally introduced to the public with its inclusion in the reauthorization of IDEA. The RTI framework was designed to identify and provide early intervention for students struggling academically and behaviorally.

RTI, a multitiered system of supports for students with learning and behavior needs, has expanded to secondary schools nation-wide, even though there was limited research on its effectiveness a the middle and high school levels (Denning & Dew, 2015; Swindlehurst, Shepherd, Salembier, & Hurley, 2015). The RTI model is a system-wide, problem-solving, data-driven approach developed as an early identification system for students with disabilities. The purpose of the model is to provide a continuum of tiered interventions in the general education classroom tailored to students' individual needs to reduce the number of students being referred for special education services. One of the

goals of NCLB was to improve the identification of students who may have LDs. The relationship between NCLB and RTI was based on the premise that educators can and will collaborate to ensure students' academic needs are met through evidence-based practices (Meyer & Behar-Horenstein, 2015). School-wide implementation required decision making at several levels from teachers, to problem-solving teams, to school administrators, and to district leaders who must provide the training, support, and resources.

Universal Screening

Schools use universal screening data to identify students at risk who might need extra support. Universal screening is a central component of RTI. Using a reliable screening tool is the first step in determining which students are at risk of academic failure. Universal screening might assist schools in the reduction of over-representation of children of color, where African American students are twice as likely to be identified (Elliott, Davies, Frey, Gresham, & Cooper, 2018). Schools usually apply universal screening tools two or three times a year, allowing screeners to catch those students not identified in previous screenings and monitor those identified previously (Pierce & Jackson, 2017). Universal screening usually provides benchmark goals for some literacy foundational skills. According to Gillis (2017), these benchmarks help educators gauge whether students are on the right path to acquire grade-level literacy skills, thereby identifying those who are at-risk. Unfortunately, because RTI universal screening practices have primarily been developed and examined within elementary schools, the feasibility and utility of these screening practices in secondary school settings have been

undetermined (Margherio, Evans, & Owens, 2019). However, Margherio et al. (2019) noted that investigations of standard universal screening practices within secondary schools are necessary because many of the methods used at the elementary level may not translate well into middle and high schools.

When screening for students with SLD, school professionals commonly review students with academic impairments. Margherio et al. (2019) stated that in elementary schools, curriculum-based measures (CBM) are used, but in secondary schools, there is limited research to support the use in those settings. They further noted that CBMs designed for secondary school use are challenging to create, implement, administer, and score. Grade point averages (GPA) are generally used in secondary school settings as universal screening tools. Allen, Kilgus, Burns, and Hodgson (2019) declared that students with SLD tend to have lower GPAs than their peers. They noted that the integration of GPA data and broadband rating scales within a universal screening process might maximize the identification of at-risk students.

Evidence-Based Practices

The reauthorization of the IDEA specified that states could adopt RTI and noted that the purpose of RTI was to identify struggling students early, provide them with evidence-based interventions, closely monitor their progress, and adapt interventions based on progress monitoring data (Al Otaiba et al., 2016). Also, ESSA supported the use of evidence-based methods by rewarding grants to school districts to fund research on effective educational strategies. ESSA defined MTSS as a comprehensive continuum of evidence-based, systematic practices to support a rapid response to students' needs, with

regular observation to support instructional decisions. Evidence-based practice is one that has been validated by research studies. Gersten, Jayanthi, and Dimino (2017) declared that RTI essentially paved the way for early evidence-based reading interventions, the goal of which was to help students improve their reading before they fell too far behind and were labeled as having an SLD. Wood, Goodnight, Bethune, Preston, and Cleaver (2016) posited that evidence-based practices (EBPs) are necessary to ensure that students are taught using methods that have demonstrated effects. RTI is a prevention model that features multiple tiers of reading interventions that are layered on students based on their individual needs.

EBPs served as the foundation for each tier of the RTI model; however, teachers might find it challenging to identify and evaluate the quality of these practices (Fuchs & Fuchs, 2017). Consistently, research focused on educators serving students with SLD has reported that evidence-based interventions were utilized infrequently (Ciullo et al., 2016). Balu et al.'s (2015) study examined data from 146 schools across the United States. The descriptive study aimed to describe current RTI practice by comparing the RTI implementation of veteran RTI implementers. The findings in the study noted that many teachers did not consistently implement RTI using evidence-based practices. The researchers found that less than half of the respondents could identify which tier of instruction would be most beneficial for students given a range of scenarios of students with varied reading abilities. The research highlighted that teachers need more support and PD, particularly about understanding how to use data to make decisions about

appropriate evidence-based interventions and general knowledge of evidence-based practices in literacy instruction.

EBPs are often encouraged and touted as an essential element of best practices for the delivery of the RTI model. Vollmer et al. (2019) advocated for training that would equip teachers with knowledge and skills related to evidence-based practices. Their survey study examined the extent of evidence-based RTI training on teachers. Vollmer et al. (2019) declared that to participate in an RTI system, educators require training focused on the development of specialized skill sets. Examples of these skill sets include the ability to select and implement evidence-based interventions, collect and analyze student data, and engage in data-based decision making regarding students' educational needs. The purpose of Wood et al.'s (2016) study was to discuss the limitations of PD and to provide research on multi-level coaching as a tool to change teachers' use of EBPs in the classroom. The data suggested that multi-level coaching following high-quality PD can be used to support teachers' use of EBPs within MTSS such as RTI.

Teachers vary in effectiveness based on the frequency and quality of strategies implemented. Lowis, Harrison, and Wiland (2019) found that evidence-based interventions for engagement and recovery could be a challenge for educators, as it involves accepting new interventions and then implementing and measuring the results. They noted that practitioners frequently use their opinions or experiences rather than evidence-based findings to guide their practice. Nagro, Hooks, and Fraser's (2019) study investigated the educator's current knowledge and implementation of an MTSS, specifically Tier III. The findings indicated that many teachers did not understand who

should receive Tier III supports, which interventions were evidence-based, and that tertiary supports were always a part of an MTSS.

Barriers to the implementation of EBPs in school settings include the complexity of the intervention procedures, a poor fit between intervention procedures and the classroom context, and limited evidence of the effectiveness of EBPs in school settings. Scheeler, Budin, and Markelz (2016) stated that there is evidence suggesting that educators are not implementing EBPs with fidelity. They further indicated that this lack of fidelity implementation emphasized the necessity for PD trainers to reexamine their role in promoting EBPs in schools. The authors argued that all teachers must be well prepared to deliver various interventions in the manner in which they were intended to be used. Intervention components must be implemented as recommended, or student outcomes might not improve (Gersten et al., 2017).

Tiered Interventions

The implementation of widely used multi-tiered support services (MTSS), such as RTI, could provide increasing numbers of students with access to evidence-based instructional practices, universal and systematic screenings, and progress monitoring (Wanzek et al., 2018). The RTI model is made up of three different tiers of instruction. These tiers include primary interventions that are provided to the entire school population, secondary supports that focus on individuals or groups of students with everyday needs, and tertiary supports that provide individualized treatments (Bohanon et al., 2016). Teachers are responsible for delivering evidence-based interventions to meet the needs of all students. Kozleski (2017) defined evidence-based practices as a process

involving the examination and application of research findings or other evidence that has been integrated with scientific theory. Furthermore, Bohanon et al. (2016) stated that RTI frameworks typically include shared and measurable goals that effectively identify students for connection with evidenced-based practices and system-level commitments (e.g., school- and district-level administrative support).

High-quality Tier I instruction is present at all three levels of the model. It focuses on intense, research-based instructional practices in the general education classroom that service approximately 80% of the students (Alabama State Department of Education, 2018). Tier I instruction consists of research-based core curricula and differentiated instructional strategies that have been shown to support student learning. This Tier requires educators to be familiar with evidence-based teaching methods that are effective in the classroom and how to differentiate instruction for various learners. Students still struggling in Tier I of the RTI program are referred for Tier II services.

Tier II provides additional focused guidance and supports and usually takes place in the classroom for approximately 15% of the student population. Tier II typically consists of an additional 20 to 30 minutes of small group intervention (Alabama State Department of Education, 2018). RTI literature suggested that intervention at this level be implemented in small groups of three or four students because it is a more practical approach for educators due to time and resources (Begeny, Levy, & Field, 2018). Small group instruction allows teachers to teach and reteach skills that students have not previously mastered. During small group instruction, teachers try a variety of intervention strategies in an attempt to align with the student's learning style. If the

current intervention is not practical, then the teacher makes decisions about how to change the intervention to something that will be more effective. Begeny et al.'s (2018) study found that providing instruction in a ratio of one teacher to no more than six students allowed for similar amounts of corrective feedback, opportunities for responding, and teacher attention.

Tier III is for students who are not responding to Tier I or Tier II instruction and interventions. Tier III focuses on intensive interventions that should serve an estimated five percent of the student population (Alabama State Department of Education, 2018). The focus of Tier III intervention is building foundational skills. Students in this Tier need specialized instruction. During Tier III, progress should be monitored weekly or twice a week. Sharp, Sanders, Noltemeyer, Hoffman, and Boone (2016) suggested the collaboration and inclusion of special education services at this Tier.

Progress Monitoring

The RTI Action Network described progress monitoring as the act of continuously assessing student progress or performance in the deficit areas identified through the universal screening process to inform practices. Lopuch (2018) declared that the purpose is to evaluate the effectiveness of instruction on individual or groups of students. It is an iterative process. Progress monitoring assessments are short tests that are given throughout the school year and give teachers immediate data on how students are progressing toward academic standards. Although teachers use many types of formative assessment to examine student performance and growth over time, the evaluation types most frequently associated with RTI progress monitoring include

mastery measurements, curriculum-based assessments (CBA), and Curriculum-based Measurements (CBM). CBM, the most common type of progress monitoring assessment tool used at the elementary level, are standardized and focus on short-term instructional objectives. Many schools choose to use CBM for universal screening and progress monitoring within their RTI models. However, these are difficult to utilize at the secondary level.

Progress should be measured at least monthly, but ideally weekly or biweekly (Regan et al., 2015). Philippakos and FitzPatrick (2018) suggested that progress monitoring measures be used periodically to evaluate students who are presently meeting objectives at the anticipated rate and more often for students who are receiving more focused intervention at Tier II. In progress monitoring, attention should focus on fidelity of implementation and selection of evidence-based practices. Progress monitoring results for students serviced in Tiers II and III are critical sources of information about students' responsiveness to instruction (Philippakos & FitzPatrick, 2018). Progress monitoring occurs at all three tiers of the RTI model to assess which additional intensive supports for learning are needed (Bjorn et al., 2016). Teachers must understand the value of progress monitoring. Pierce and Jackson (2017) noted that although progress monitoring data offer unique student information, teachers often found it challenging to monitor students. They further indicated that educators often cited difficulties with the frequency (weekly or biweekly) of administering progress monitoring measures for students in Tiers II and III, analyzing results, and making data-based decisions.

Data-Based Decision-Making

Previous research suggested that schools that have effectively implemented RTI have demonstrated significantly higher desirable academic and behavioral outcomes and reduced the number of students at risk of failure (Bohanon et al., 2016). RTI integrates assessment and intervention to maximize students' academic achievement. Bohanon et al. (2016) hypothesized that RTI implementation might be enhanced if it is implemented with a school improvement-by-design approach. They encouraged teachers to connect the vision and the mission of the innovation. According to Pellegrino and Hilton (2015), alignment of staff culture, procedures, and professional roles have been associated with increases in personal growth for students. The multi-level RTI framework is used to make data-based decisions from the universal screening and progress monitoring data to provide additional evidence-based interventions for those students in need of supplemental resources.

DBDM has been recognized as an essential part of education (Espin, Wayman, Deno, McMaster, & de Rooij, 2017). Teachers implementing the RTI framework should use data from the universal screenings and progress monitoring tools to make data-based decisions on students' individual needs for increased learning outcomes. However, Arden and Pentimonti's (2017) research suggested that many educators have not been taught how to utilize this data in a way that might lead to meaningful instructional changes or improved student outcomes. Data from the universal screening and progress monitoring are used to determine the effectiveness of tiered instructional strategies. Educators

should use this data to create short and long term learning goals students should demonstrate.

Response to Intervention at Secondary Schools

RTI is widely being used in elementary and secondary school settings. Although research exists to guide and support the implementation of RTI in primary schools, much less information exists for the application in secondary schools (Austin, 2016; Bouck & Cosby, 2017). Shinn, Windram, and Bollman (2016) posited that the purpose of RTI in secondary schools is to strengthen college and career readiness by increasing the quality of research-based instructional practices in core classes and enable academic interventions to be provided to those students struggling. Since literacy is crucial to academic success in secondary schools, researchers suggested focusing literacy preventions on listening, speaking, reading, and writing (Shinn & Brown, 2016).

Structure and Culture

The structure and culture of middle and high schools are very different from that of elementary schools, which means that the structure and implementation of RTI must be changed. Secondary RTI models are challenging to implement due to the diversity of students, complex curriculum, and high student-teacher ratios (Porter, 2019). High schools are more prominent, with more staff and more students coming from different feeder schools. Gibbons and Coulter (2016) stated that there is more diversity (educationally and socially), and consistent implementation is hard to organize and monitor. Porter (2019) posited that more barriers existed at the high school level because teachers are content trained. High school teachers view themselves as specialists in their

content; students who need extra literacy and learning supports are referred to other high school specialists, such as the reading and special education teacher (Gibbons & Coulter, 2016).

Barriers to Implementation

Scheduling. A challenge to RTI programs in middle and high schools is scheduling. Knoff, Reeves, and Balow (2018) declared that if space cannot be found or created within the school day to receive appropriate instructional supports, then the foundation of RTI (flexibility to differentiate instruction) is undermined. When a student needs to be pulled out for individualized instruction, high schools are faced with the challenge of allocating the time required to provide the interventions. High school students have increased elective and academic responsibilities necessary to graduate. Secondary educators struggle to pull students from needed courses to provide intervention (Knoff et al., 2018).

Recent findings from evaluations of RTI practices in secondary schools have suggested that implementation of the framework is a serious problem; it is not happening to fidelity (Balu et al., 2015; Shinn & Brown, 2016). Austin's (2016) study examined the perceptions of secondary teachers and administrators to identify perceived barriers to the RTI model in their schools. The major themes identified were system structures, evidence-based practices, PD needs, and teacher buy-in. Noell and Gansle (2016) stated that many secondary content teachers are resistant to incorporating responsive literacy practices in their daily lessons. They further noted that Tier I in the RTI framework is the weakest at the secondary level. If content teachers fail to offer responsive literacy

instruction to benefit every student and differentiated assistance for those in need of extra help, then the preventive potential of RTI is lost (Noell & Gansle, 2016).

Insufficient professional development. PD is the approach school districts use to ensure that educators continuously strengthen their practice. Effective PD targets educators' knowledge, beliefs, and skills to support the application of new methods. The most effective PDs engage teachers' focus on the needs of their students rather than their own (Cordingley, 2015). School leaders should ensure that their teachers frequently participate in quality PD to build staff capacity and increase student achievement. In the quantitative study by Castillo, Wang, Daye, Shum, and March (2018), the researchers examined the relationship between PD, educator's beliefs, and their ability to implement the tiered interventions of the RTI model. The authors stated that effective PD targets educators' knowledge, behavior, and skills to promote the implementation of new practices. The researchers provided background information on how learning opportunities focused on educators' outcomes, and data-based decision making is needed to enhance educational reform initiatives such as RTI implementation. Findings indicated a significant positive relationship between PD, educators' beliefs, and perceived skills related to implementation.

Traditional PDs have focused on the transference of information to teachers with the assumption that teachers have acquired a new skill and will immediately utilize the ability to change their classroom practices (Girvan, Conneely, & Tangney, 2016; Kennedy, Hirsch, Rodgers, Bruce, & Lloyd, 2017). Traditional PD opportunities rarely involve educators' beliefs, perceived skills, follow-up monitoring, or opportunities to

reflect on what is working and what needs changing. Practical PD training is necessary to help teachers learn and improve the instructional pedagogies essential to meet the individual needs of the students they teach (Darling-Hammond, Hyler, & Garner, 2017). In contrast, ineffective PD has the capability of negatively altering what teachers think about the intervention and how they deliver new educational innovation. Common flaws of ineffective PD are not tracking the extent to which teachers are implementing the intervention, addressing teachers' concerns, and failure to provide support throughout the delivery.

Federal and state RTI mandates have tasked principals and district leaders to create high-quality PD opportunities for teachers to implement the RTI model as intended. Bartholomew and De Jong (2017) supported previous literature as did the findings of Castillo et al.'s (2018) research by examining the perceived barriers of implementing RTI in a secondary school setting from an administrator's perspective. The purpose of Castillo et al.'s (2018) study was to gain an in-depth understanding of high school principals' knowledge about RTI and to explore any barriers that might be hindering high schools from implementing the RTI model as intended. The two major themes identified by principals that shed light on the current study as potential barriers to the implementation of the model in secondary schools were a lack of quality PD to effectively implement the RTI model and teachers' attitudes and beliefs about RTI. Bartholomew and De Jong (2017) found that high school principals perceived themselves and staff as lacking the proper knowledge and training to identify and implement the essential components of the RTI model. They also found that principals identified

teachers' attitudes and beliefs as a detrimental barrier to the implementation of RTI in their school.

Research on the change process in educational settings suggests that factors such as teacher training, attitudes and beliefs, buy-in, and administrative support might have a sizable connection to the successful implementation of RTI (Castro-Villarreal, Rodriguez, & Moore, 2015). Darling-Hammond et al. (2017) posited that there are seven characteristics of a quality PD: content-focused, involves active learning, encourages collaboration, models effective practices, provides an opportunity for feedback and reflection, offers adequate time to learn, exercise, and implement, and provides support from experts in the field. Feuerborn, Wallace, and Tyre (2016) cited the district's consistent negligence of providing quality PD as a significant "failure indicator" for educational interventions. In a mixed-method study by Regan et al. (2015), elementary and secondary teachers' perceptions were explored regarding their perceived knowledge of RTI and their preparedness to implement the model. Research in this study supported previous literature reviewed regarding the need for quality, content-focused RTI PD to support implementation delivery and sustainability of the model in secondary schools. The authors explained that if school districts desire to implement change efforts successfully, then teachers' perspectives and concerns must be examined. Regan et al. (2015) found that most teachers identified a lack of active PD as a barrier to the successful implementation of the model in their school. Their study indicated that the majority of the teachers understood the purpose of RTI as an intervention to increase academic achievement, but needed more knowledge or adequate training on how to

implement and assess the model. Most teachers described their experience of RTI as surface-level that evolved with time. The findings of their study supported previous research that without quality, continuous PD on the implementation of the model in the beginning stages, the less the likelihood of the model's success in secondary schools.

The implementation and evaluation of RTI require continuous, high-quality learner-centered PD that addresses the needs and concerns of the implementers. Kennedy et al. (2017) stated that there is strong evidence that most PD training is ineffective. Studies indicated that one-time PD opportunities do not promote learning that lasts, but instead, instruction needs to be sustained and intensive (Darling-Hammond et al., 2017). When considering how to provide PD to support and maintain a response to intervention program, Lane, Carter, Jenkins, Dwiggins, and Germer (2015) suggested administrators consider the readiness of the staff to receive the training, the organization of the building, and their level of administrative support for on-going PD activities. Secondary schools usually do not have a structured intervention time built into their daily schedules.

Inadequate knowledge. RTI influences how teachers instruct students in the classroom. For RTI to be successful in secondary schools, the capacity of the teacher to collect and analyze student data to implement individualized interventions is imperative (Savitz, 2017). One critical component of the capacity building process identified in the review of literature for barriers hindering implementation was educator knowledge (Castillo et al., 2016). Frequently identified problems identified by teachers impeding RTI implementation in a study by Castillo et al. (2016) included a lack of knowledge on how to properly implement the tiered interventions of the model and lack of knowledge

on data-based decision making. The main finding of the study suggested that there was a gap in theory and practice.

Teachers should possess the adequate knowledge required for early identification of reading difficulties, as well as effective assessment and intervention. Barrio and Combes (2015) examined teachers' level of concern on implementing the RTI model. The study revealed that many secondary teachers identified their skill level to implement the model as relatively low as compared to the elementary teachers. Teachers' main concerns were related to their lack of knowledge regarding the implementation of interventions. One consistent theme throughout the study was that teacher preparation was a requirement for effective implementation and positive student outcomes related to RTI (Barrio & Combes, 2015). Savitz (2017) examined secondary teachers' perceptions regarding their abilities and confidence to execute the tiered interventions of the RTI model. The teachers were asked about their opinions concerning the PD provided by the district leaders and school-based administrators. The findings of the study supported previous research and current literature that indicated the majority of the teachers had a feeling that they were not adequately prepared to implement the tiered strategies of the RTI model. Problems cited by teachers were a lack of and poor quality PD, teachers' negative attitudes about RTI, and previous negative experiences in trying to implement Tier 2 and Tier 3 strategies as reasons for lack of ability and confidence to execute.

Secondary teachers continue to confront the challenges of learning to put new curriculum and instructional methods into practice daily. Teachers are often expected to implement new policies and instructional practices without their consent. PD is not a

guarantee that there will be a change in practice. However, Savitz (2017) postulated that with the wide-spread adoption of RTI nation-wide, secondary teachers would need to become more familiarized with various differentiated instructional approaches that incorporate research-based literacy strategies into their content area. Barrio and Combes (2015) pointed out that effective PD should emphasize the vital need to develop teacher knowledge and skills to execute educational reforms.

Many secondary teachers find RTI demanding to implement. Rector's (2016) study found that many teachers do not follow the procedural protocol of RTI. The reasons cited for the lack of implementation fidelity were scheduling, lack of administrator support to provide resources or support staff to back the program, and teachers' inabilities to make the research-based instructional strategies applicable in the classroom. Ensuring teachers gain a clearer understanding of RTI begins with a conversation. Regan et al. (2015) posited that school initiatives often do not consider the perceptions of those implementing the change before its implementation. School climate, readiness, and its receptiveness to a new knowledge base help create practices that follow (Davis, 2018). As with any innovation, it may be helpful for teachers to look for new ways to communicate to help create readiness. When teachers examine their understanding of what it takes to implement RTI practices, it is a step towards creating availability.

Fidelity of Implementation

All components of the RTI model should be implemented with fidelity (Porter, 2019). He further noted that for the RTI model to be successful in secondary schools,

there has to be collaboration and consistency between teachers. Lack of cooperation and unity can lead to poor academic outcomes and further use of ineffective instructional strategies. Buy-in, commitment, and perceptions are crucial components of readiness and critical elements to the successful implementation of the model in middle and high schools. It is, therefore, necessary to realize that not all secondary schools are ready to implement RTI. Fidelity implementation of the model often necessitated school-wide instructional changes, continuous data analysis, and data-based decisions on resources, staffing, and budgets (Shinn & Brown, 2016). Monitoring implementation fidelity should be on-going to ensure interventions are being delivered as planned (Noell & Gansle, 2016).

Leadership Support

When teachers are required to implement new practices such as the RTI model, district and school-level leadership are crucial factors in the success of its implementation (Maier et al., 2016). Teachers need research-based instructional strategies provided by the administration through continuous targeted PD. Leadership support of intervention is essential because most times, they are the ones allocating the funds for the PD. In a study by Brezicha, Bergmark, and Mitra (2015), case descriptions were used to examine the relationship between leadership support and teachers' understanding of reform processes. The purpose of their study was to investigate how leaders could provide differentiated supports to teachers during change efforts. Brezicha et al. (2015) stated that the first year, which is the most turbulent in educational reform; it is also when teachers need the most support from each other and their school leader.

School-wide transformation and improved student outcomes have been shown to sustain over time with leadership support (Choi, Meisenheimer, McCart, & Sailor, 2017). In Choi et al.'s (2017) study, all significant themes were related to the differentiated supports needed by the staff to implement reform changes effectively. First, the importance of leadership's guidance in the beginning stages of the implementation process. A second theme was that teachers need continuous PD and standard planning times to ease apprehension and provide opportunities to collaborate and reflect. A final topic was the idea that leaders should support implementation efforts by setting a vision that encompasses teachers' beliefs in a common goal.

School leaders need to be aware of a teacher's feelings and prior experience, which will determine the types of supports that they need (Brezicha et al., 2015). This support ensures that teachers know and understand the reform, and have the skills and resources necessary to implement the intervention. Successful schools have transcendent leaders who create and sustain a positive school culture where faculty and staff are supported and provided opportunities to grow professionally. A transformational leadership style has been recommended for success in the school improvement process. Banks, McCauley, Gardner, and Guler (2016) defined transformational leadership as to how a leader seeks to inspire and motivate people to create change. Maier et al. (2016) suggested that certain transformational leadership behaviors demonstrated by school principals were positively related to student achievement. Some of those behaviors included being goal-oriented, purpose-driven, exhibiting moral and ethical practices, having high expectations and a vision for the future, confident, high enthusiasm, and

inspires motivation (Allen, Grigsby, & Peters, 2015). Teachers appreciate leaders who are transformational because they inspire trust, create a vision, and build human capital.

Many studies indicated the importance of administrators providing teachers the PD and resources necessary to understand the vision and conceptual framework of RTI to support procedural fidelity (Choi et al., 2017; Maier et al., 2016). In Meyer and Behar-Horenstein's (2015) study, teachers' perspectives implementing RTI were explored to gain a better understanding of how school and district leaders could provide support. Similar to previous literature reviewed, teachers in Meyer and Behar-Horenstein's (2015) study identified needing additional supports in the areas of PD, leadership, and tangible resources to improve delivery fidelity. Meyer and Behar-Horenstein (2015) posited that teachers desired an increased administrative presence in classrooms and explicit procedural directions.

Principals are the catalysts of social change in their school. Principals are responsible for transforming the school's culture and hiring and developing quality teachers (Allen et al., 2015; Anderson, 2017). The principal's role in shaping a school's culture includes support for collaboration in flexible ways to build teacher capacity (Choi et al., 2017). Competent, ethical leadership becomes imperative when increasing performance-driven accountability. An administration that is ethical, moral, and professional positively influence teachers' perceptions and the overall climate of the school (Ehrich, Harris, Klenowski, Smeed, & Spina, 2015). Ethical leadership promotes values such as inclusion and collaboration.

Teacher Buy-in

Although literature indicated the relevant role teachers play in educational reform, it neglected to display the effect teacher buy-in has on student achievement. Teacher buy-in is an essential factor that influences the outcomes of a PD (Darling-Hammond et al., 2017). Teachers have to believe in the PD to demonstrate knowledge of and transfer it to practice. Teachers must take ownership of their learning. A teacher's buy-in can have an enormous influence on a program's success. Some teachers readily accept reform and adjust their instructional practices, but some exhibit low buy-in for a new intervention. Yoon (2016) asserted that it is hard for teachers to teach what they do not believe in or support. Lee and Min (2017) stated that when teachers do not see the value in the initiative or do not understand the changes, they are less likely to make changes in their instructional practices. Researchers hypothesized that new educational innovations stand a better chance of being successful and sustained if there is high teacher buy-in, and teachers take ownership of the change process (Lee & Min, 2017). Lee and Min's (2017) study examined the relationship between teacher buy-in and student achievement. The authors used a four-point scale to analyze three teacher survey questions related to how a teacher values, commits to, or believes in an intervention program at their school and calculated a buy-in score for each teacher. The findings showed that the more committed teachers were to an initiative, the higher their students' academic success.

Understanding teachers' perceptions are essential to buy-in and successful implementation of any initiative (Castillo et al., 2016; Davis, 2018; Kennedy et al., 2017; Meyer & Behar-Horenstein, 2015). Yoon (2016) examined how the principal's data-

driven practices influence teacher buy-in. He hypothesized that the more principals use data to make decisions, the more teachers buy into the programs. Teacher buy-in is one of the critical factors that lead to successful and sustainable policy implementation but is often hard to earn (Davis, 2018). Teachers' poor execution of intervention programs may be linked to their perceptions and lack of motivation about the program. Collaboration between administrators and teachers can improve teacher buy-in of a new initiative. Ankrum (2016) stated that by regularly communicating with and engaging teachers in dialogue about improving teaching and learning, administrators build a culture of trust, which leads to improvement in instructional practice and ultimately positively affects student achievement.

One of the roles of competent leadership is the ability to foster the development of teacher leaders. Teacher leaders can strengthen the school by building teacher capacity through professional learning communities (PLCs), which can lead to an increase in teachers' pedagogical competencies (Ankrum, 2016). Lukacs (2015) examined the lived experiences of a teacher serving as a change agent in her school and the surrounding community. The study sought to investigate what motivated the participant to be an agent of change, strategies used to obtain buy-in from fellow educators and administrators, and the challenges faced in a secondary school setting. Strategies identified to increase buy-in from teachers included anticipating objections, appealing to their compassion and civil-mindedness, being respectful of their feelings and time, providing a rationale for the needed changes, and providing incentives for classes

demonstrating academic growth. A strategy identified to get administrators to buy-in was addressing predetermined concerns and collaborating to create a shared vision.

To avoid failing initiatives due to lack of teacher buy-in, teachers would need to become an intricate part of the change process. For the RTI process to effectively improve students' academic success, the leadership and staff must all be transparent, work collaboratively with a shared vision, and be fully committed to achieving that goal. The study demonstrated the importance of motivation and a transformational leadership style as vital factors in educational reform.

Implications

The project study has implications for positive academic and social change. The ultimate goal of educators is to lead students toward academic success so they can become college or career ready. Researchers have shown that RTI has had positive effects on student success. By examining teachers' knowledge, concerns, and readiness to deliver research-based interventions, students' learning styles could be identified. As a result of recognizing students' learning styles, academic achievement, and preparation could occur. Datnow and Hubbard (2016) said that appropriate classroom instructional strategies and assessment techniques and tools could help teachers plan or modify instruction, communicate important learning goals to students, and result in corrective feedback about how to improve. The social implication of the research is it might assist district leaders, administrators, and teachers in engaging in discussions on the necessary supports and resources needed to facilitate the implementation of a more effective RTI model in secondary school settings. Data presented in the study may shed light on new

instructional practices required for teachers to understand and to deliver the RTI model more to fidelity. Also, the research could reveal future PD training needed for teachers to garner a more comprehensive understanding of the RTI model processes. By examining the connection between RTI and teachers' perceptions, changes in instructional practices might occur that are more culturally relevant and meet the learning needs of diverse student populations (Datnow & Hubbard, 2016). Researchers have indicated that through PD, teachers can become more aware of what the RTI model entails as well as address concerns with ongoing PD while implementing the model (Girvan et al., 2016).

Summary

The reauthorization of IDEA, NCLB, and ESSA led to the establishment of multi-tiered systems of support such as RTI. RTI provided research-based, varying levels of support, screening methods collecting data, and progress-monitoring assessments to make data-driven decisions to improve outcomes for all students (McGuinn, 2016). Secondary schools nationally were adopting RTI as their intervention tool to identify students early with LDs with little evidence of its effectiveness at the secondary level. RTI is a three-tier problem-solving approach to assist students in reaching their academic goals. Tier I focuses on intense, research-based instructional practices in the general education classroom. Tier II provides additional focused instruction and supports. Tier III is for students who are not responding to tier one or tier two instruction and interventions. Section 1 of this project study focused on the problem of a local urban high school teacher having trouble implementing the tiered interventions of the RTI model in their school, despite having participated in two prior district PD training opportunities. An

assistant administrator (B. Barlow, personal communication, April 23, 2018) stated that teachers have continuously expressed frustration and concerns about limited PD training on the model. The review of literature addressed the role of PD, teacher knowledge of, and support for the model for successful implementation in secondary schools. Also, the analysis of the literature discussed potential challenges to implementing the model in secondary schools.

In Section 2 of this project study, I described the methodology of this study. The methodology included a description of the research design and approach, the setting and sample, data collection and analysis, limitations, and measures taken for the ethical treatment of participants.

Section 2: Methodology

Introduction

In Section 2, I describe the methodology of this qualitative case study. I chose a qualitative case study design to investigate secondary teachers' perceptions of the implementation of RTI at one local high school. The research was needed to gain a better understanding of what PD training, support, and resources were required to implement the model with higher fidelity. I gathered data for this case study from face-to-face interviews and participants' classroom observations. The following research questions were used to develop the interview protocol for the teachers:

RQ1: What perceptions do teachers have of the implementation of RTI in their high school?

RQ2: What are the significant concerns about the procedural and implementation processes of RTI at their high school?

RQ3: What supports or resources do teachers feel they need to implement the model?

Qualitative researchers explore the views and perspectives of people in real-world settings using multiple sources of data to understand a phenomenon or experience (Yin, 2015). Qualitative research aims to explore people's lived experiences to generate valuable knowledge (Simony et al., 2018). A qualitative approach was suitable to obtain the participants' attitudes and beliefs about the fidelity of the RTI procedural and implementation processes at their school. The selected participants were asked to

participate in semistructured interviews. Kallio, Pietila, Johnson, and Kangasniemi (2016) declared that the semistructured interview is a standard data collection method in qualitative research because of its versatility and flexibility. The interview questions were open-ended to enable me to improvise follow-up questions based on the participant's responses and to allow time for in-depth answers (Kallio et al., 2016). I conducted classroom observations of each participant in their real-world setting (Yin, 2015). I analyzed data using thematic analysis. Castleberry and Nolen (2018) defined thematic analysis as a method of identifying, analyzing, and reporting patterns (themes) within data. Castleberry and Nolen (2018) further noted that thematic analysis of open-ended responses from transcribed interviews could explore the context of learning at an in-depth level while allowing flexibility in analyzing the data.

In this section, I also offer a justification for the choice of a qualitative research design approach for this study. I describe how I used purposeful sampling and participation criteria to select the participants for this research. I explain how a relationship was established between the researcher and the participants. I describe how access was gained to the participants at the project study site, as well as the measures used to ensure that no participant was harmed in this study. Furthermore, I describe the data collection tools and how I analyzed the data from each instrument for themes about secondary teachers' perceived barriers and concerns regarding the implementation of the RTI program at their school.

Research Design and Approach

I chose a qualitative case study design to question the perceptions of the participants and provide a full description of data (Creswell & Creswell, 2017). A qualitative research design derived logically from the study's purpose and research questions to investigate secondary teachers' perceptions and concerns about the RTI process in their real-world setting (Yin, 2015). Qualitative methods of research were used to explain, explore, and describe events or happenings, and the study's research questions provided the basis for the qualitative approach. Wilde et al. (2019) stated that a qualitative approach is designed to provide an in-depth understanding of a real-world context by asking how and why questions about a specific event. A qualitative approach served to gain a comprehensive understanding of the attitudes and competencies in the RTI implementation of secondary general education teachers at a local urban high school setting. Given the current situation as it relates to teachers struggling to implement the tiered interventions of the RTI model, it was necessary to use a qualitative research approach to gain a full understanding of the phenomena (Creswell & Creswell, 2017). Yazan (2015) and Kane (2018) posited that the qualitative method was most beneficial in gaining insight into a contemporary phenomenon because this method is standard and the most utilized practice among researchers in the field of education. Creswell and Creswell (2017) noted that data collection methods in a qualitative research design might include interviews, focus groups, observations, surveys, journal reflections, and analysis of written documents. Qualitative research allows the researcher to conduct in-depth studies about contemporary phenomena by using multiple data sources and provides the

opportunity to merge the data and reveal themes that explain the problem. Qualitative research allowed me to understand the situation under investigation from the participants and not the researcher's perspective.

Qualitative research includes many methodological approaches or research designs (Creswell & Creswell, 2017). Qualitative approaches to research include narrative, grounded theory, phenomenology, and ethnographic research. Each method has a specific goal. Chen and Teherani (2016) declared that the choice of methodology depends on the focus of inquiry and the framing of the research questions, so the researcher must understand the critical features of each method and what aligns with the study's research questions. A qualitative case study approach is designed to explore a single case in a bounded system (Kratt, 2019). Case studies are different from the other types of qualitative methods in that they involve intensive analyses and descriptions of a single unit or system bounded by space and time (Hancock & Algozzine, 2017). Topics often examined in case studies include individuals, events, or groups. Hancock and Algozzine (2017) noted that the focus of case study research is to gain an in-depth understanding of situations and meaning for those involved. The case study was chosen as the method for this study because it can be used to explore and investigate a contemporary phenomenon in depth and within its real-life context (Yin, 2017). In the case study approach, the researcher selects a small number of participants and observes a pattern of behavior to gain a better understanding of the phenomenon (Ridder, 2017). Data are triangulated from multiple sources to investigate the event. I concluded that a qualitative case study approach was an appropriate research design to gain a deeper

understanding of the secondary teachers' perceptions about the implementation of RTI in one setting. This type of qualitative research was relevant to reveal information from the participants who are instrumental in the effective delivery of the RTI model. The qualitative case study approach allowed an in-depth explanation through individual interview sessions and participant observations to answer questions about the RTI implementation processes and procedures at the research site for a short period. A quantitative approach would not have been appropriate because quantitative research is a type of design used to test variables that serve as elements of the problem (Phillippi & Lauderdale, 2018). Quantitative analysis identifies and investigates the impact of only a few variables, whereas qualitative research attempts to explore a host of issues that may be influencing a situation (Brannen, 2017). Quantitative analysis often involves instruments, such as surveys and tests, to measure specific variables from large groups of people (Hancock & Algozzine, 2017).

A narrative research approach was not appropriate for this case study because it is used to expand on individuals' thoughts or experiences about specific events (Conover & Daiute, 2017). Researchers use this approach to tell a story about the problem of the study. Yin (2017) and Creswell and Creswell (2017) suggested that a narrative approach to research is best for capturing the life experiences of a single life, not a group. This research design was not suitable for this study, an examination of the perceptions of a group of secondary teachers on RTI implementation practices. Grounded theory qualitative research would not have been sufficient for this study. Grounded theory sets out to discover or construct arguments from data obtained and analyzed using

comparative analysis (Chun Tie, Birks, & Francis, 2019). Eppich, Olmos-Vega, and Watling (2019) stated that in grounded theory research, a researcher seeks to create a theory that explains some action, interaction, or process. Grounded theory research focuses on the researcher, not the participants. In grounded theory research, the researcher devises a theory based on data from the setting (Timonen, Foley, & Conlon, 2018). The purpose of this project study was not to formulate an opinion about the barriers to RTI implementation in secondary schools, but instead to identify themes to examine the perceptions of the teachers delivering the model.

A phenomenology research method was not suitable for this project study due to time constraints. Neubauer, Witkop, and Varpio (2019) posited that phenomenology focuses on the study of an individual's lived experiences within the world. Phenomenology research studies provide a deep understanding of a phenomenon as experienced by a group of individuals and over long periods (Alessi, Vidoli, & De Lorenzis, 2018). The phenomenological analysis looks at what the participants experienced and how they experienced it and then develops a blended description of the experience among all participants. This type of research does not provide in-depth insight into the phenomenon, but instead, the personal experiences of the participants (Alessi et al., 2018). Ethnography is used to study a group's beliefs, values, and attitudes that structure the behavior, language, and interactions of the group based on its culture (Hancock & Algozzine, 2017; Kusumaningrum, 2018). The researcher looks for specific patterns within the culture of the group to address a problem within the setting. Ethnography research provides outcomes based on a trend within the culture. Fetterman

(2019) stated that the researcher observes and records group members' perspectives to create a cultural portrait. This approach was not appropriate because the purpose of the study was not to explore the cultural phenomenon but instead the nature of the event.

The interviews and classroom observations were the tools used to collect data for this study. The purpose of this qualitative case study was to explore teachers' perceptions of the implementation of the RTI model at one high school to help the teachers and administrators understand what PD training, supports, and resources are needed to implement the model effectively. The case study design was appropriate for this study as I was seeking to gain a detailed description of educators' experiences and perceptions on implementing the RTI model in a secondary school setting. The case study approach allowed me to purposefully select and examine the attitudes, beliefs, and skillsets of secondary general education teachers responsible for implementing the RTI program. I discuss the selection of these educators, data collection procedures, the analysis of the data, and the study's findings in the remainder of this section.

Participants

Purposeful sampling was used to select 12 teachers for this study. Purposeful sampling is a process that allows the researcher to choose participants or sites for the research characteristic of the population to investigate the local problem (Butler, Copnell, & Hall, 2018). Guetterman (2020) acknowledged that qualitative sampling typically follows a non-probability-based approach, such as purposeful sampling, where participants are selected intentionally for their ability to provide information to address the research questions. Purposeful sampling offered me richly-textured information

relevant to the implementation of RTI at the research site by allowing the teachers who have specific knowledge of the RTI procedures and processes provide their perspectives about the delivery of the model (Creswell & Creswell, 2017; Vasileiou, Barnett, Thorpe, & Young, 2018). The setting for this qualitative case study was a local urban school district located in Alabama. The area has five traditional high schools (9-12), which are all Title I schools. The chosen school for the project study, the largest high school in the district, serves 1,057 students, and has 58 certified general and special education teachers on staff (Alabama State Department of Education, 2018). The participants in the study represented all four content areas from grades 9-12.

The criteria for selecting participants were as follows: (a) employed as a teacher at the chosen school, (b) the participant must have taught at least ten years at the secondary level, and (c) has actively participated in the delivery of the RTI model. The targeted participant pool for this project study was 12-15 teachers. The sample reflected the number of voluntary participants who agreed to participate in the project study and met the selection criteria. Vasileiou et al. (2018) affirmed that the sample size in qualitative research tends to be small to support the depth of case-oriented analysis that is fundamental to this mode of inquiry. Vasileiou et al. (2018) recommended that qualitative sample sizes are large enough to allow the unfolding of a new and richly textured understanding of the phenomenon under study, but small enough so that the in-depth, case-oriented analysis of qualitative data analysis is not excluded. They further noted that the more useable data collected from each person, the fewer participants that are needed; therefore, saturation is obtained. Malterud, Siersma, and Guassora (2016)

proposed the concept of "information power" to guide sample size and reach data saturation for qualitative studies. Information power indicates that the more information the sample holds relevant to the study, the smaller the number of participants needed to reach saturation. Weller et al. (2018) found that about 12–16 interviews were adequate to meet thematic saturation. The participants were interviewed and observed until data saturation was achieved.

Procedures for Gaining Access to Participants

Access to an organization to research its personnel could be complicated, involving either a formal process of gaining entry into an organization, followed by an informal process where the researcher becomes known to the relevant gatekeepers (Chughtai & Myers, 2017). They further noted that a formal process of access would require an understanding of the organization's rules regarding professional etiquette and strategic planning for recruitment and data collection. The informal process involves the researcher's ability to respect the boundaries of the access granted and adopt a strict position to the research process even if he or she is known to the research participants. I received approval from Walden University's Institutional Review Board (approval no. 11-04-19-0387891), granting permission to proceed with the collection of data for the research. Singh and Wassenaar (2016) stated that consent needs to be obtained from the legitimate authorities or gatekeepers in charge of institutions that are privately owned or managed to conduct research. The authors described the gatekeeper as someone who controls access to an institution or an organization such as a school principal, managing director, or an administrator. I followed the district's procedures and contacted the

Superintendent's Office through an email, asking for consent and authorization to research within the school district. The email provided the purpose of the study and its significance to the community. Upon approval from the Superintendent's office, I obtained the district's signed letter of cooperation. I mailed a copy of the study's proposal to the Superintendent's Office for review.

Permission must be granted by the gatekeeper of the research site (Singh & Wassenaar, 2016). This gatekeeper occupied an essential position in the research process by helping the researcher access the participants (Thomas, 2020). Before contacting potential participants, I made initial contact with the school of study's building-level principal. I requested a meeting through email explaining my role and the purpose of the project study. One week later, I met with the principal to discuss the research and data collection methods. I articulated the benefits of the research, with particular reference to the value that this study could bring to the school district and similar settings. At the end of the meeting, a letter of cooperation was signed by the principal granting permission to research the site. Also, the principal agreed to send my letter of intent to participate to all teachers at the project study school through the district's email system with the study's purpose and inclusion criteria inviting teachers to participate. By doing so, the principal saved the researcher's time and resources and also guaranteed the researcher's legitimacy to the participants (Thomas, 2020). I emailed my letter of intent to the research site's principal, and he forwarded the email to the faculty. The request stated that participants would not be under any obligation to participate in the research. Also, the participants were assured that all measures would be taken to ensure their confidentiality. Kadam

(2017) suggested allowing the potential participants sufficient time to make an informed decision about whether or not to participate in the research. The potential participants were allowed 7 days to complete and return the letter of intent to join if they wanted to participate in the study. Teachers interested in participating in the study meeting the inclusion criteria contacted me via email from their non-work email.

The researcher must also explain the potential risks and benefits of the study to the research site (Kadam, 2017). The teachers were emailed an informed consent explaining the research and any risks associated with the investigation. The consent form included a description of anticipated benefits to the participants and building/district leaders to include identification of potential barriers to RTI implementation at the secondary level and identification of program needs for the sustainability of the RTI model in high school settings. Sil and Das (2017) stated that the proper consent process could build trust and bridge the rapport between the researcher and the study's participants. The potential participants that agreed to participate in the study indicated their consent by forwarding the informed consent back to me from their email with the words "I Consent." Individuals who did not meet the inclusion criteria were removed as potential participants. Twelve teachers who volunteered met the inclusion criteria to participate in the study. The research participant has the right to be informed about the purpose, anticipated duration of the research study, study procedures, any potential benefits or risks, any compensation for participation or injury/treatment, and any significant new information regarding the research study (Sil & Das, 2017). A confirmation email was sent to each of the 12 chosen teachers' email addresses with

information about the research such as purpose and nature of the study, the significance of the study, expected duration of subjects' participation, privacy, and confidentiality, lack of compensation, probable risks, and voluntary status. The teachers chosen to participate in the study were advised to print or save a copy of the consent form. Also, participants were reminded that they could withdraw from the study at any time without consequences.

Establishing a Researcher-Participant Relationship

I have taught in a secondary school for 18 years in the school district where the study was conducted. As a classroom teacher, I am responsible for the delivery of the RTI model as an intervention to assist students struggling academically. Although the study was not conducted at the school where I work, I had the responsibility of establishing a rapport with the teachers that participated in my research. To obtain a thorough knowledge of the problems encountered, I had to go to the location of the participants and have direct contact, so trust and mutual respect are essential. It is crucial for the researcher and the participants to have an excellent relationship to generate useful data and to ensure compliance is maintained (Dempsey, Dowling, Larkin, & Murphy, 2016). Bell, Fahmy, and Gordon (2016) postulated that the ability to establish rapport is one of the most critical skills for qualitative researchers. Prior (2018) further indicated that rapport is created through the researcher's behaviors such as being attentive, making a connection with the participant, honesty, empathy, transparency, respectful of the participant's time, and friendliness. In an attempt to build researcher-participant rapport and to ease any discomfort participants may have about participating in the study, I

offered information about my time in the classroom as an educator in the district and role as a change agent in conducting this project study to make a connection with the participants.

When two people have trust and understanding, it opens the lines of communication, and the researcher can gain in-depth rich and meaningful information (Prior, 2018). After obtaining the principal's permission to conduct the study at the site, but before the principal sent out my letter of intent to participate in the study to the faculty, I asked the principal to allow me an opportunity to speak at a faculty meeting briefly. During the faculty meeting, I was allowed to explain the purpose of the study and data collection procedures. I provided an explanation of the participants' responsibilities in the study to facilitate transparency. Also, I explained at that time that participation in the study was voluntary and confidential. I gave out my email address as contact information for teachers who may have needed additional information about the study. By doing so, the lines of communication were open to questions and clarity of the focus of the research.

The interview times and locations were agreed upon by both myself and the participants. Doing so was to respect the participants' time and confidentiality. Dempsey et al. (2016) affirmed that this agreement is necessary, so there is a comfort level for all parties involved and to build rapport. The location of each interview session was a quiet environment without distractions or interruptions from outside sources. Prior (2018) supported the idea of a comfortable environment to ensure a stress-free productive meeting. I started each interview by re-introducing myself and explaining the purpose of

the research, reviewed the Informed Consent, and the voluntary nature of the study. Each participant was given an opportunity to review a copy of their transcribed interview to check for accuracy. Through member checking, I engaged with participants to ensure mutual agreement and understanding of the accounts and analysis of the data. Caretta and Perez (2019) noted that member checking is one way of achieving transactional validity, which is a more robust version of validity reached through triangulation. Also, I engaged in a debriefing session with each participant to discuss classroom observation data. The participants were allowed to review my analysis to see if they agree with the themes identified and to offer further insight.

Protection of Participants' Rights

All researchers have a responsibility to conduct their work ethically. Before undertaking any research study involving participants, I had to comply with Walden's ethics review process. Merriam and Grenier (2019) and Albritton, Truscott, and Terry (2018) affirmed that the researcher is responsible for addressing ethical issues in the researcher-participant relationship and protecting the privacy of the individuals involved in the study. Ethical analysis requires the researcher to examine recruitment strategies, gaining consent from participants, data storage arrangements, and measures taken to ensure that no, or at least minimal, harm happens to participants (Carpenter, 2018). Researchers must maintain the confidentiality of the data they collect and promises made in the consent form. When the information they collect could place research participants at risk, researchers need to take steps to minimize that risk.

The researcher must be open about any actual or potential conflicts of interest and conduct their research in a way that meets recognized standards of research integrity (Carpenter, 2018). The participant must generally be as aware as possible of what the study is for and be free to take part in it without coercion or penalty for not taking part, and also open to withdraw at any time without giving a reason and without a threat of any adverse effect. Therefore, participants were given an informed consent form outlining the study's purpose, participants' roles, potential risks, voluntary nature, and the ability to withdraw from the study at any time without consequences. The participants who chose to continue with the study replied electronically with the word, "I Consent." Before each interview session, I went over the informed consent form. Also, ethical behavior was outlined, so the participants understood their moral obligation of being transparent and honest in their conversations (Merriam & Tisdell, 2016).

Ethical behavior is necessary to ensure no harm is done to the participants (Stankiewicz & Lychmus, 2016). They noted that protecting the privacy of the study's participants is a core tenet of research ethics. The teachers that were interested in participating in the study contacted me through their non-work email address. Since I am an employee of the school district, I used my Walden University email address as the primary contact but offered my non-work email as an alternative contact. It is usual practice to change the names of study participants when publishing qualitative research to disguise a participant's identity (Morse & Coulehan, 2015). They further indicated that such information, primarily because of the small samples used in qualitative research, might enable someone to identify a specific person. To minimize the risk of violating

confidentiality, I did not list the participants' demographic information (e.g., age, gender, grade-level taught, subject taught) or other identifiers.

The participants were not identified by name but instead were coded. Each participant was labeled using the codes T1 (Teacher 1) through T12 (Teacher 12) for anonymity. I was the only one who knew the coding system for the study. The data was destroyed when no longer needed, as stated by Walden University's protocol as added protection. Wolf et al. (2015) noted that the researcher should limit access to the key to the coding system and that steps should be taken to secure the data through physical or electronic means such as locked cabinets or passwords. The data collected during interviews and observation was secured on a password encrypted computer and stored in a locked cabinet in my home. Wolf et al. (2015) stated that the researcher should limit access to the key of the coding system and take steps to secure the data through physical or electronic means such as locked cabinets or passwords.

Data Collection

Qualitative data collection methods such as interviews, focus groups, and observations have been used to examine an array of topics in education, including the perceptions of key stakeholders responsible for change implementation (Sutton & Austin, 2015). Yin (2015) stated that qualitative investigation requires the researcher to be the main instrument used to collect data. Data for this study were triangulated from semistructured interviews and participants' observations. Semistructured interviews and observations are suitable and aligned to the qualitative tradition chosen to explore teachers' perceptions of and concerns with the implementation of the RTI process at their

high school (Yin, 2017). Triangulation of data was essential to gain a more meaningful representation of the problem of focus. Graue (2015) stated that if one piece of data supports or confirms the other, then it strengthens the reliability of the finding. Triangulation was used by gathering data by employing different collection methods such as interviews and observations. Korstjens and Moser (2018) affirmed that the goal of the triangulation of data is to enhance the process of qualitative research by using multiple approaches to support the trustworthiness and reliability of the study. Data collection did not begin until after Walden University's Institutional Review Board approval from the district's Superintendent Office, and permission from the building-level administrator at the research site. The interviews and observations provided a deeper understanding of each participant's viewpoint on the fidelity of implementing the RTI model at the project study school. Cramer and Gallo (2017) said that it is imperative to garner the views of the teachers responsible for the delivery of the RTI interventions if the model is to be successfully implemented.

Semistructured Interviews

Semistructured interviews served as the primary source of data to answer the study's research questions about the teachers' perceptions of the RTI implementation processes and procedures at the research site. Merriam and Grenier (2019) declared that in the educational field, interviewing is often used as a primary tool to collect research data. Patton (2015) noted that interviews provide researchers with rich and detailed qualitative data for understanding participants' experiences, how they describe those experiences, and the meaning they make of those experiences. Creswell and Poth (2016)

stated that an interview protocol is necessary to guide the meeting and to keep the conversation focused on the research questions. I developed the ten open-ended interview questions (Appendix B) that were used to gain an in-depth understanding of the phenomenon. The interview questions created were aligned with my research questions, the CBAM framework, and were based on research from the literature review on teachers' perceptions of and concerns with the RTI model. I developed the interview protocol to obtain a more significant understanding of the level of knowledge, resources, and training needed to implement the RTI model with higher fidelity. The interview protocol guided the conversations and contained specific questions related to the purpose and focus of the study (Patton, 2015). I conducted individual face-to-face interviews with core content teachers responsible for implementing the RTI program. Queiros, Faria, and Almeida (2017) said that face-to-face meetings have long been the dominant interview technique in the field of qualitative research, in which the purpose is to gather descriptions of the life-world of the interviewee for interpretation of the meaning of the described phenomena.

The scheduled 45-60 minutes interviews were planned on days, times, and locations mutually agreed upon by me and the participants. Creswell and Poth (2016) suggested conducting the meeting at a quiet, relaxed location free from distractions. They further stated that for meaningful conversation to take place, the interviewee needs to be at ease. The interviews took place at the teachers' homes and classrooms. The chosen locations made the teachers more at ease to express their perceptions about the RTI program. The teachers' houses and classes provided a familiar environment and a

comfortable atmosphere for the participants to speak freely, which assisted in collecting authentic, detailed data.

The conversations averaged 37 minutes in duration and were recorded using a mini digital voice recorder equipped with a noise filter. Creswell and Poth (2016) recommended using an audio-recorder with a microphone sensitive to the acoustics of the room. I began the conversation by reviewing the purpose of the study, the interview procedures, and measures in place to protect their confidentiality as a method to support accurate responses. Also, I reviewed the consent form, explained the voluntary nature of the study, and the right of the participant to withdraw at any time without consequences. The interview questions probed for an in-depth explanation of the participants' perceptions of previous training, supports, and experiences with the various components of the model (differentiation of instruction, progress monitoring, and data analysis), and the research school's implementation procedures.

When interviewing participants, the researcher should gather data on the participants' reactions, facial expressions, and body language to specific questions, which provides a more in-depth understanding of the participants' attitudes and beliefs (Oltmann, 2016). Oltmann (2016) and Queiros et al. (2017) suggested that an advantage of this data collection method is that the immediate responses of the interviewee to the question are more spontaneous, without extended reflection time, providing a more honest answer. Social cues, such as voice, intonation, body language, facial expressions, and the hand gestures of the interviewee, provided additional information to the verbal answer of the interviewee on a question. I notated on the interview protocol during the

teachers' interviews with any nonverbal responses observed during the meeting to specific questions. Participants were asked if they had anything they would like to add after the interview session. I transferred the audio files to a laptop computer in case something happened to the voice recorder or its memory card.

The interviews were transcribed verbatim from the audio-recordings following each meeting immediately, as suggested by Merriam and Grenier (2019). All interview data were transcribed into a word processing document, saved on a password encrypted computer, and locked in a file cabinet in my home. Interview recordings were transferred to a laptop computer as a backup. Also, the digital audio-recorder used during the interviews and the laptop computer that contained the transferred audio files are locked in the file cabinet at my house. Member checking was used to validate the accuracy of the transcribed information. Within seven days of the meeting, each participant had the opportunity to member-check the draft of their interview transcription. Yin (2017) stated that the purpose of member checking is to provide relevant and reliable findings of the information shared during the interview process. Also, this provided the participants opportunities to examine the outcomes and agree on whether or not the conclusions drawn from the data reflect their viewpoints, feelings, and experiences. Each teacher was contacted through a confidential email with the transcribed data and findings as an attachment. The teachers were given five days to approve or correct the draft for accuracy. All of the teachers confirmed the results via email, and no participant provided any corrections or feedback.

Observations

An essential goal of educational research is to find out which teaching practices are effective in promoting students' learning (Smit, van de Grift, de Bot, & Jansen, 2017). Observations allow the researcher to see what people do rather than what they say they do (Morgan, Pullon, Macdonald, McKinlay, & Gray, 2017). Smit et al. (2017) noted that for these practices to be assessed, adequate observation instruments are needed. Cohen and Goldhaber (2016) suggested using an observation instrument that represents a wide range of qualities, such as how teachers support student learning and their social and emotional needs. I developed the observation protocol (Appendix C) used to record information about what was observed when the teachers attempted to implement the tiered interventions of the RTI program. The observation protocol was designed to provide richly detailed descriptions of the teachers' knowledge of and ability to apply the RTI framework as intended.

Observing people in their natural environment not only avoids problems logical in self-reported accounts but can also reveal insights not available from other data collection methods such as interviews (Morgan et al., 2017). Participant observation involves watching, sensing, feeling, and being present with people and things. I was allowed to observe each participant twice, implementing the tiered interventions of the RTI model in their classrooms for one 60-minute class period. The observation instrument involved details about the observation's date, time, location, length, and teacher identifier. Descriptive notes detailed what was happening in the classroom. The observation

instrument contained reflective questions at the end to notate my personal feelings and opinions of what was observed in the setting.

I conducted two observations for each teacher at two separate times. The length of each of the observations was 60 minutes. I served the role of an active listener and observer. The purpose of the two observations was to capture how the participants' understanding and skills developed during the study. By focusing on what was observed and expressed by the participants and how it was revealed, rich data was generated (Simony et al., 2018). I notated how the teacher addressed students' social and emotional needs (e.g., greeting students as they entered/exited the classroom, climate, and feedback) and how the physical setting was arranged for learning. Also, I detailed information on the lesson objectives, evidence of differentiation, and teacher-student interactions. There was no student data or other identifiable information recorded on the observation protocol during the observation. Each of the 12 teachers was observed twice, totaling 24 classroom observations. I met teachers five days after each classroom observation to complete a debriefing session. There were a total of 24 debriefing sessions conducted as a follow-up to the classroom observations. The debriefings sessions were scheduled for 20 minutes each but averaged 18 minutes. During these sessions, I asked the teachers reflection questions about their instructional strategies, whether they think the plan or strategy addressed the needs of each student, and what they would do differently. Kim and Silver (2016) suggested that reflection with others is beneficial, perhaps more useful than individual thought and requires dialogue. They further noted that observational

debriefing sessions encourage the observed teacher to reflect on teaching and instructional strategies, helping them to develop and improve their practice continuously.

Throughout the time frame that I conducted classroom observations, I kept a research journal that contained notes for each observation and debriefing session. I compiled the findings from all 24 participant observations in this journal. Observational data from each observation protocol was transcribed into a word processing document within 24-hours and saved on a password encrypted computer. The observation protocols, computer, and journal are locked in a file cabinet at my house. At the time of the debriefing sessions, a transcribed copy of the observation was given to the teachers for review. Member checking provided the participants with opportunities to examine the findings and agree on whether or not the conclusions drawn from the data reflect what was observed. The teachers were given 5 days to review the document for accuracy and to reply by email if the data was confirmed or needed revisions. All of the teachers confirmed the results via email, and no participant provided any corrections or feedback.

Sufficiency of Data Collection

The purpose of this study was to investigate secondary teachers' perceptions of the implementation of the RTI model at their school to understand what training, supports, and resources are needed to implement the model with higher fidelity. To answer the research questions, I used a 10 question open-ended interview protocol to conduct interviews as the primary data collection tool. Open-ended questions are used to explore topics in-depth and to identify potential relationships (Weller et al., 2018).

Classroom observations were used to triangulate the data that emerged in the interview meetings. The interview protocol asked probing questions that obtained pertinent information to the research's phenomenon. I analyzed the interviews until no new data surfaced. Saturation means that a researcher can be reasonably assured that further data collection would yield similar results and serve to confirm emerging themes and conclusions (Faulkner & Trotter, 2017). When conducting participant interviews and observations, I was able to capture what was said and observed, to transform it into meaningful information. From an assemblage of interviews and observations, I was able to examine the perceptions, concerns, and knowledge of each participant implementing the RTI model at the project study site.

When saturation of both description and explanation has been achieved is a matter of judgment; ultimately, a researcher has to be confident that enough has been done to provide a satisfactory answer to the research questions (Blaikie, 2018). Qualitative studies typically use purposively selected samples, which seek a diverse range of "information-rich" sources and focus more on the quality and richness of data rather than the number of participants (Hennink, Kaiser, & Marconi, 2017). Fuchs and Fuchs (2017) noted that a rule of thumbs for qualitative sample size is for single-case studies from 4 to 30 participants is sufficient for data saturation. I used purposeful sampling to obtain 12 participants as my sample size. Young and Casey (2019) suggested that rich qualitative findings can be discovered with relatively small sample sizes. Sample size determination for open-ended questions or qualitative interviews relies primarily on finding the point where little new information is obtained. Weller et al. (2018) declared that small samples

retrieve only the most prevalent themes and that larger samples are more sensitive and can retrieve less frequent issues. Hennink et al.'s (2017) study examined 25 interviews but demonstrated that code saturation was reached at nine meetings. I gathered information from the participants until the interview information became repetitious, and no new data emerged from the findings. Data collection was sufficient, and saturation was reached.

System for Tracking Data

I audio-recorded the interviews and complemented the recordings with written notes so that I could be an active listener and focus on what was being said. Written records included observations of both verbal and non-verbal behaviors as they occurred and immediate personal reflections about the interview. Each participant was given an identifier to protect their confidentiality (Yin, 2015). Written notes were initially taken on the interview protocol but then transferred to a reflective journal after the interview session. Reflective journaling was used as an audit tool to keep track of my thinking and understanding of my work. Reflective journals were on-going and in real-time, citing questions, ideas, or emotions I may have about the research at any given time. I immediately transcribed the audio-recordings verbatim and copied the data from the observations (Creswell & Creswell, 2017; Yin, 2017).

Role of the Researcher

The role of the researcher in qualitative research is to attempt to access the thoughts of the study's participants (Merriam & Tisdell, 2016). The researcher gains access to the participants' natural environment and is the principal research instrument

used to collect and analyze data. While studying human behavior in particular settings, the researcher should be aware of their consciousness to prevent the projection of personal values, attitudes, biases, or beliefs (Karagiozis, 2018). I am employed as a teacher in the school district, but not at the school of study. As a classroom teacher responsible for implementing the RTI program at my school, I have gained knowledge of the RTI implementation practices at secondary schools. It was my responsibility to remain subjective. Clark and Veale (2018) said that a positionality statement provides participants the opportunity to consider the researcher's stance about the study. I explained my role in this study to the participants as not a colleague, but a student researcher investigating perceived obstacles in the delivery of the RTI model. I conducted myself professionally at all times, refrained from inputting my reflections on the RTI practices at my place of employment, and remained an active listener.

When I conducted interviews, I considered that each individual had his or her own experiences and brought his or her perspective about RTI. I had to understand that individuals responded differently to the environment around them (Clark & Veale, 2018). I was aware and sensitive to personal feelings, developed trustful relationships with the participants of the study, acknowledged and respected the individuality of each person, and understood participants' perspectives. I created a positive researcher-participant relationship by ensuring that my role in the district as an educator collecting sensitive data would not cause them harm.

Data Analysis

In qualitative data analysis, themes are developed that summarize the nature of the event. In the qualitative data analysis process, the inter-relationships between the ideas must be clarified to gain a better understanding of the problem (Houghton, Murphy, Shaw, & Casey, 2015). Richards and Hemphill (2018) described how qualitative research differs from quantitative research in that qualitative data analysis is mainly inductive, allowing meaning to emerge from the data, rather than the more deductive, hypothesis centered quantitative approach. They further noted that the sense that emerges from the data is often first seen as the information is coded. I conducted a detailed analysis using coding, categorizing, and labeling the data to generate themes. The analysis process followed an inductive reasoning approach to compile and interpret data for analysis to address the study's research questions. Zalaghi and Khazaei (2016) stated that the inductive approach emphasizes observation and deriving conclusions through observation. They further noted that the inductive approach includes looking for patterns and developing generalizations. I systematically analyzed and categorized the data to conduct a thematic analysis of the findings.

In general, analysis of qualitative data can be outlined in five steps: compiling, disassembling, reassembling, interpreting, and concluding (Castleberry & Nolen, 2018). Collecting the data into a useable form was the first step to finding meaningful answers to my research questions, and compiling meant transcribing the interview data so that I could easily see the information. Disassembling the data involved taking the data apart and creating meaningful categories. Castleberry and Nolen (2018) defined coding as the

process by which raw data are gradually converted into usable data through the identification of themes, concepts, or ideas that have some connection with each other. Coding involved me identifying similarities and differences in the data. Initially, codes were attached to data such as words, phrases, and sentences but also encompassed complete thoughts. The code serves as a tag used to retrieve and categorize similar data so that the researcher can pull out and examine all of the data across the dataset associated with that code (Richards & Hemphill, 2018). The codes or categories were then put into context with each other to create themes. A theme captures something important about the data about the research question and represents some level of patterned response or meaning within the data set (Roberts, Dowell, & Nie, 2019). Roberts et al. (2019) defined thematic analysis as a form of pattern recognition used in content analysis, whereby themes (patterns in the codes) that emerge from the data become the categories for analysis. They further noted that issues could be further divided into sub-themes. Interpretation occurred during the first three steps (compiling, disassembling, and reassembling). Conclusions are the response to the research questions or purpose of the study (Castleberry & Nolen, 2018). Concluding was accomplished by a detailed description of the coding procedures, how the codes led to themes, and the resulting interpretation.

Before collecting data, I assigned each participant an identifier such as Teacher 1: T1, Teacher 2: T2, Teacher 3: T3, and so forth to enhance confidentiality. The participant's identifier was used during data analysis instead of actual names. I used a word processor software to transcribe the interviews and classroom observations. Next, I

compared the transcripts against the audio-recordings and notes from the observations to corroborate the accuracy of the data. Once I verified the accuracy of the information, I created a second document. The document contained two columns and ten rows. One column was titled "interview question," and one column was titled "participant's response." Each row contained an interview question. I copied the teachers' responses to each item from the transcripts into the document in the "participant's response" column for coding. Saldana (2015) and Wicks (2017) stated that code is most often a word or short phrase that symbolically assigns a summative attribute for a portion of language. I examined the "participant's response column" for similar words and phrases throughout the interview questions. By doing so, this allowed me to recognize related words and phrases quickly. I coded identical or like words and phrases by color-coding the text with different colors for each group. With the content in different colors, I was able to identify themes (groups of codes) relevant to the research focus, the research question, and the conceptual framework. I used the "find" tool in the software to search for like terms and sayings throughout the participants' responses. This approach allowed data to be both described and interpreted for meaning (Roberts et al., 2019). An inductive, open-coding approach was implemented, meaning the data were coded, or categorized for analysis, without fitting it to a pre-determined coding frame (Bree & Gallagher, 2016). Open-coding includes labeling concepts, defining, and developing categories based on their properties (Saldana, 2015). Open-coding was the initial interpretive process by which research data were first systematically analyzed and categorized. The inductive approached ensured the analysis process was driven by the data collected during the

process rather than any biases. I identified similar words, phrases, and thoughts and categorized the data into 34 codes from the interviews and observations (Appendix D). I used thematic analysis to examine the coded terms and expressions. The various colors of the document assisted with the recognition of emerging themes. I reduced the data to establish four overarching themes.

Each teacher participating in the project study consented to allow me to observe them implementing the tiered interventions of the RTI program twice. I conducted the classroom observations as a non-participant observer, entering and exiting the setting with the students, making sure not to cause disruptions or distractions to the learning environment. The observations were 60 minutes in length and announced. The date, time, and procedures for entering and exiting were approved and detailed with the teachers before coming. The dates and times were agreed upon to eliminate coinciding with mid-terms and the fall break. I used an observation protocol (Appendix C) that I created to record descriptive notes of what was seen in the setting, and then transferred the data to a reflective journal to notate my perceptions of what occurred in the classroom. There were no interactions between myself and the teachers, or the students. Student data were not noted on the observation protocol.

I transcribed the descriptive and reflective notes from the classroom observations using a word processor immediately after the observations. I opened a second document and created three columns that contained a heading for each of the focal points of the observation (evidence of differentiation, teacher-student interactions, and student assessment). I employed an open-coding approach to analyze and synthesize the data.

Elliott (2018) defined open-coding as a rigorous process of analyzing, word for word, raw data into usable conceptual chunks or categories. I evaluated the observation notes for themes by examining reoccurring terms or phrases. As the words were found, I color-coded similar words or expressions with a different color for each group of like words or phrases. I evaluated the established codes (Appendix D), and themes emerged.

The use of technology was significant in the data collection and analysis processes. The district's email system was used to contact the superintendent, research site principal, and teachers participating in the study. I used a digital audio recorder to record and transcribe the interview meetings. I used a word processor to transcribe the interviews and classroom observation notes. A word processor was also used to sort the interview and observation data, and to identify and color-code related words, phrases, and ideas.

Interviews

The interviews served as the primary instrument for data collection. The meetings consisted of ten open-ended questions (Appendix B). The interview guide included open questions that elicited comprehensive information and offered participants the opportunity to talk about issues important to them. The interview protocol was designed to examine teachers' perceptions, knowledge of, and readiness to implement the RTI program. All teachers were asked ten interview questions. I used a Sony Digital Voice Recorder. The device came with plug and play software that allowed the audio files to be replayed at various speeds, thus facilitating transcription and analysis. One of the benefits of audio recording an interview is that it enables the interviewer to

concentrate on the discussion rather than writing notes, which can act as a distraction to both the interviewee and the person asking the questions (Gill & Baillie, 2018). I transferred the audio files to a laptop computer, where copies of the recorded interviews are stored in a locked file cabinet in my house.

The interviews were transcribed from an oral to written mode, structuring the interview conversations in a form amenable for closer analysis (Brinkmann & Kvale, 2018). Data analysis necessitated listening to interview recordings multiple times. Cope (2016) said that transcribing is commonly used in qualitative research when researchers want a written version of their interactions with participants, or from other audio sources for analysis. I typed all of the participant's responses verbatim. To confirm the accuracy of the data, I played the tape repeatedly until the transcript mirrored what was recorded. I replayed the audio-recordings again as I read along with the transcribed copies for the correctness of the transcription. I repeated the process for the remaining of the interviews. The interview protocol was used to guide the transcription process. I was able to follow the participants' responses from the recordings quickly after the reading of each question to begin typing. Upon completion of transcribing the data, I reexamined each teacher's response to gain an in-depth understanding of their perceptions and concerns with implementing the RTI program.

To analyze qualitative data effectively, one must use a systematic process to organize and highlight meaning (Vaughn & Turner, 2016). I used an open-coding, inductive approach to classify and code the interview data. Vaughn and Turner (2016) mentioned to identify meaningful themes in large amounts of text data; it is helpful to

organize the data question by question. I used the first and second cycle coding methods to analyze the interview data; then, I conducted a thematic analysis. Open-coding allowed me to organize the interview data into meaningful categories. Saldana (2015) declared that first cycle methods are the initial coding of data. He further noted that the second cycle methods are coding strategies that require analytic skills such as classifying, prioritizing, integrating, and conceptualizing. I developed codes that identified similarly coded data by grouping them and generating significant themes. The defined codes were in the form of words, phrases, and sentences that captured the essence and essentials of participant meanings. Saldana (2015) said that this method was appropriate for the second cycle coding of interview data. Coding involved assigning a label to a section of data in the interview transcript, using a word or short phrase taken from that section of the data. Next, I used thematic coding to color-coded words and phrases. I looked for recognizable reoccurring topics, ideas, or patterns (themes) occurring within the data that provided insight into the phenomenon. Hawkins (2017) and Wicks (2017) suggested locating themes within the data; the researcher should read the data multiple times to identify patterns occurring within the data set.

I produced a document that contained each of the interview questions in one column and the teachers' responses to each item in a second column. Therefore, this allowed me to recognize similar words and phrases quickly. I repeatedly read the teachers' responses line by line, examining related terms and sentences for each of the interview questions. I coded identical or like words and phrases by color-coding the text with different colors for each group. As a result of the content in different colors, I was

able to identify themes relevant to the research questions. Vaismoradi, Jones, Turunen, and Snelgrove (2016) posited that as an embedded topic that organizes a group of repeating ideas, themes enable researchers to answer the study's research question. This approach allowed data to be both described and interpreted for meaning (Roberts et al., 2019). Next, I used the word processor's "find" tool to search the entire document for the identical or keywords in another question. Comparable words and phrases in each response for each item were color-coded. Each reply was read repeatedly to identify keywords and phrases. I copied words that were color-coded the same and pasted the terms in a column into a new document. Liu (2016) declared that the primary purpose of this inductive approach is to allow research findings to emerge from the various, dominant, or significant themes inherent in raw data, without the restraints imposed by structured methodologies. He further noted that inductive analysis is a process of coding the data without trying to fit it into a preexisting coding frame or the researcher's analytic preconceptions. Saldana (2015) stated that the nature of your research questions and the answers you are seeking influence the coding choice you make. As the data were coded, specific themes surfaced.

Braun, Clarke, and Hayfield (2019) recommended the creation of a miscellaneous theme to temporarily house the codes that do not seem to fit into main themes. The initial analysis of the data revealed six themes, but further analysis of the data indicated four overarching themes. The major themes that emerged from the data were limited/ineffective PD, inadequate knowledge of how to differentiate instruction, inconsistent procedures, and the need for additional on-going PD. There is not a rule of

thumb as to the minimum number of thematic groups to be generated during thematic analysis. Still, themes should be presented in sufficient depth and detail to convey the richness and complexity of your data (Braun et al., 2019). Phrases such as *single-day training*, *a while back*, and *almost non-existent* were included in the theme inadequate or insufficient training. I reviewed the data from the classroom observations and organized the data for themes. The sorting and synthesizing continued until saturation in the interpretation of the data, and the findings occurred. I categorized the data into four significant themes.

Member checking is defined as a form of validation to seek views of members on the accuracy of data gathered, descriptions, or even interpretations (Simpson & Quigley, 2016). They further noted that member-checking is a best practice in qualitative research. The final transcripts and results were shared with all participants for verification and cross-checking. The teachers were offered a transcribed copy of the interview to review for accuracy. They were given five days to approve the document, or if revisions were needed, reply to me by email. All participants agreed that the findings and themes identified in the analysis were valid.

Observations

All the participants in the study agreed to allow me to perform classroom observations of them, delivering the tiered interventions of the RTI model. The classroom observations were used as a triangulation method to enhance the credibility of the interview findings and to understand and capture the context within which people interact (Merriam & Grenier, 2019). Classroom observations, which were essential for a

meaningful representation of the problem, allowed me to examine the teachers' knowledge of or readiness to implement the RTI program. I used an observation protocol (Appendix C) that I created to record descriptive notes of what was seen in the setting, and then transferred the data to a reflective journal to notate my perceptions of what occurred in the classroom.

The observations were announced and lasted 60 minutes each. The dates and times were mutually agreed upon before conducting the observations. I entered the classroom at the beginning of the class period with the students to avoid distractions. The observation protocol contained information about the date, location, length of the observation, and teacher identifier. The focus of the observations was to investigate the differentiation of instructional strategies in the classroom. Conroy (2017) stated that verbatim descriptions of every detail of the observed events would generate much data, so observation needs to be targeted and focused on the research questions. I detailed descriptive information about the setting (e.g., the layout of the room and climate), teacher-student interactions, and differentiated instructional activities observed, and student assessments then transferred the data to a reflective journal detailing my attitudes and beliefs about what occurred. There was no student data or other identifiable information recorded on the observation tool. After the completion of each observation, I exited the classroom with the students.

I transcribed the data from the tool in sequential steps immediately after each observation period and added my recollections and reflections to each event. By doing so, this enabled a more straightforward memory of what had occurred. I transcribed the

descriptive and reflective notes from the classroom observations using a word processor. I read and re-read the transcription investigating alignment between the classroom observation and the data found in the interview meetings. I opened a second document and created three columns that contained a heading for each of the focal points of the observation (evidence of differentiation, teacher-student interactions, and student assessments). I employed an open-coding approach to analyze the data. As the first and crucial reading of the data, during open coding, the researcher is interested in identifying and illuminating patterns (Elliott, 2018). I examined the observation's notes for reoccurring terms or phrases. As these terms were discovered, I color-coded similar words or expressions with a different color for each group of like words or phrases. I evaluated the established codes (Appendix D), and themes emerged. Comparable codes and issues appeared in the observational data that mirrored those found in the analysis of the interview data.

The classroom observation data revealed that most of the participants possessed insufficient or limited knowledge of how to differentiate the learning process (e.g., tiering, compacting, small-group instruction, different assignments, tasks in multiple modes, variety of scaffolding, etc.) during teaching. I scheduled a 20 minutes debriefing meeting with each teacher five days after each observation. There were 24 debriefing meetings conducted as a follow-up to the 24 participant observations. The purpose of these sessions was to ask the teachers reflection questions about their instructional practices.

The teachers were offered a transcribed copy of the observation notes to review for accuracy. Member-checking provided the participants with opportunities to examine the findings and agree whether the conclusions drawn from the data reflect what was observed. They were given five days to approve the document, or if revisions were needed, reply to me by email. By doing these member-checks, I wanted to ensure the trustworthiness of the data.

Establishing Credibility

Triangulation and member-checking were used to establish the credibility of the findings. Triangulation is described in the literature as an approach where the researcher uses multiple methods, several theories, or different data sources to strengthen the study's credibility (Creswell & Creswell, 2017). Triangulation allowed me to get closer to the problem and a greater understanding of the issue with the implementation of RTI in secondary schools. Yin (2017) posited that the triangulation of data contributes to validity and reliability by providing a more accurate picture of the phenomenon. The interviews served as the primary source of data for this study, but participant observations substantiated the findings. I analyzed and coded both the interviews and observations. I examined the coded transcripts for the similarity between the keywords and phrases in the discussions and those in the observations. Similar words and phrases were detected in both sets of data. Triangulation was achieved by comparing the themes identified in the interview transcriptions with those identified in the classroom observation analysis.

Research guides and texts discussing quality, efficacy, and credibility in qualitative research often recommend member checks, such as sending respondents their

transcript for review, as one of the recommended procedures to confirm or enhance credibility in qualitative research (Thomas, 2017). Madill and Sullivan (2018) stated that member checking is consistent with interviews and participant debriefs when the information is fed-back into the investigation. I conducted member checks after interview meetings and debriefing sessions after classroom observations. Member checking, also known as participant validation is a technique for exploring the credibility of results and is often mentioned as one in a list of validation techniques (Birt, Scott, Cavers, Campbell, & Walter, 2016). The results were returned to the participants to check for accuracy and resonance with their experiences. After transcribing the audio-recorded interviews, each participant was given a copy of their interview transcript to check for accuracy. It was used as ways of enabling participants to reconstruct their narrative through deleting responses they feel no longer represent their experience, or that they think negatively presents them. McMahon and Winch (2018) said that debriefings are a separate moment in the qualitative data collection process where the researcher sits with a participant to discuss the flow and resulting findings from a recently undertaken data collection activity. They further noted that debriefings are an essential supplement to qualitative methods such as focus groups, interviews, or observations.

Discussion of Findings

While RTI has been recognized as a framework for intervention and learning for approximately 15 years, conversations continue in secondary settings, where RTI still feels new (Smith, 2019). The purpose of this study was to explore secondary teachers' perceptions of the implementation of RTI at one high school to help teachers and

administrators understand what PD training, supports, and resources were needed to implement the model effectively. The findings from this study emerged from interviews and classroom observations. The data from the interviews and classroom observations were used to triangulate the data and provide an in-depth understanding of each teacher's perspective, knowledge, and readiness to implement the tiered interventions of the RTI model. The focus of the classroom observations was to investigate the teachers' abilities to differentiate instruction in the three tiers of the RTI model to meet the needs of various learners. After identifying 34 codes, I reduced the data to four themes to address the three research questions and provide clarity to the study's problem. The three research questions pertained to the teachers' perceptions of the delivery of RTI at their school, their concerns about the procedural and implementation processes, and perceived supports or resources needed to deliver the model with higher fidelity. The four themes that emerged from the data were: limited/ineffective PD, inadequate knowledge to differentiate instruction, inconsistent procedures, and additional PD.

The four issues were interrelated through their influence on each other. The teachers believed that there were limited, ineffective learning opportunities provided by the school district and the school's administration, which led to inadequate knowledge of how to differentiate instruction in the three tiers of the RTI framework. This insufficient knowledge, coupled with inconsistent implementation procedures and processes, resulted in teachers not delivering the model with consistency throughout the building. The teachers believed that more training on the RTI model's research-based interventions and practices were needed, which could lead to sufficient progress monitoring, data-based

decision making, and an increase in teacher buy-in for the program. This section was arranged by the research question and the key themes that emerged. The first two themes addressed Research Question 1, the third theme addressed Research Question 2, and the last theme addressed Research Question 3.

Research Question 1

What perceptions do teachers have of the implementation of RTI in their high school? Based on the findings, in general, the teachers perceived the RTI program at the school as ineffective and not being implemented with fidelity. The teachers expressed that the school district provided limited, ineffective PD opportunities (Theme 1) needed to support their implementation of the RTI program as intended. The teachers also stated that they believe they have inadequate knowledge of how to differentiate instruction (Theme 2) to meet the needs of the diverse learners in their classroom.

Theme 1: Limited, Ineffective Professional Development

The teachers were asked to explain the RTI process at their school. All of the teachers understood the purpose of RTI and how multi-tiered systems of interventions worked and their role in implementing Tier 1 intervention in the classroom. T1 explained, "It's when you notice that a student is struggling with the content, so you put interventions in place to see if they will improve." T2 stated, "Tier 1 is what teachers do day to day in the classroom." T2 further explained that RTI in the classroom looks like "good old fashion teaching, seeing what works and changing what does not work." T3 described her role in RTI as "Identifying students' deficits and then finding a strategy to move the students forward, and then you also have to monitor it over time to see how it

affects the student's academics." T7 replied, "All students get the same core instruction; Tiers 2 and 3 students need additional help."

The participants' responses revealed that the common understanding among the participants was that RTI has three tiers of intervention. Still, few demonstrated sufficient knowledge of crucial mechanisms of the RTI framework, precisely how to monitor Tier 1 interventions and how to use student data for future planning. The teachers encountered difficulty in utilizing the student data to plan instruction for struggling students in Tiers 2 and 3. This uncertainty was present in at least 83% of the teachers' responses; they reported knowing there was a need to make instructional changes, but not knowing how or what kind of changes to make. At least 91% of the teachers reported they need to learn how to evaluate instructional practices to determine what is working and what needs to be revisited. T3 admitted that she struggled with using data as a way to measure and document students' academic progress. T5 reported, "I know that I need to make changes to my instructional practices, but I don't know how to do so for some of my students. I need to find practical strategies that can help all my students, especially English-language learners."

According to the participants, the RTI program at the research site was ineffective and not meeting the academic needs of the student population. T9 said, "I feel like our RTI program doesn't work. I mean, we are not doing it right. Case in point, this nine-weeks, the school had over 200 ninth-graders on the failure list for one or more core classes. There is no way we're doing RTI right and have these many failures in one grade." She further stated that some teachers do not attempt to deliver the model for

students who are struggling academically and that implementation throughout the school was inconsistent. T4 described the RTI program as weak and needing improvements. She also cited inconsistencies and a lack of administrative guidance and support as reasons as to why she perceived the program as needing improvements. Collaboration time is essential for RTI to work, and teachers didn't have time to collaborate. T5 believed the RTI program was ineffective because of time to collaborate. She said, “We don’t have a lot of time to work together and communicate about what we're doing in our classrooms that work. We need time together as a school to process and understand the data and interventions.” She commented, “Collaboration with RTI is crucial to provide consistent instruction." A lack of or inconsistent PD negatively influenced all of the teachers' perceptions of RTI.

To implement RTI efficiently, teachers need to possess knowledge of evidence-based instruction, tiered instruction, multiple assessment tools, progress monitoring, and fidelity of implementation (Alahmari, 2019). The theme of limited, ineffective PD emerged in codes and phrases from the data such as training, program application, support, and a lack of understanding interventions. Research has shown that teachers want to improve their instruction to support students at risk or with disabilities. Many teachers, especially general educators using an RTI model, may feel unprepared due to a lack of PD in the use of specific interventions (Wood et al., 2016). Unfortunately, many teachers have limited access to quality PD opportunities on strategies to meet the needs of all students in the classroom. PD can give educators additional knowledge and skills to use research-based practices. The teachers indicated that they needed additional training

to implement the program with higher fidelity. PD is most often a one-day in-service or workshop; however, this method often produces little improvement in teacher performance (Wood et al., 2016). All of the teachers indicated that the district provided two previous training on the program at the beginning of the two consecutive school years following the adoption of the model but failed to provide additional training and supports throughout the delivery of the program. The teachers indicated that either the training opportunities were limited or not meeting their learning needs. T1 shared, “We sat through an hour-long presentation, and then were asked if we had any questions at the end. I perceive the training as the bare minimum and a bit confusing." T2 commented, "The workshops were typically one-day sessions providing an overview of the model and not how to deliver the tiered interventions of the program. The training pretty much explained the paperwork involved when we have to document our efforts."

Many of the teachers perceived the training to be too brief or a repeat of a previous training session. T4 said, "What we were provided was hardly considered training on RTI. The school district left us out here without resources or the help needed to pull off the program." T7 referred to the training as "almost non-existent." Overall, the teachers felt as though too much information was given too fast in a short amount of time, causing them to feel discouraged and overwhelmed. T2 further stated that there had been new staff hired over the last few years who did not participate in the previously offered district PD, and review training was needed to refresh the veteran teachers. She said, "Therefore, RTI is not being delivered as intended consistently throughout the building." A lack of PD influenced three other themes that emerged from the data. This

theme corroborated results from a recent qualitative study that found educators' primary concerns related to RTI to involve regular education teacher's support of RTI, understanding of the need, and insufficient training to implement correctly (Cowan & Maxwell, 2015).

The teachers expressed frustration with previous training and the current implementation practices. All of the teachers believed that RTI had not been adequately explained to the teachers before implementation. T2 said, "RTI requires a system change, and we attempted to implement the program without changing the system." T11 articulated, "We were never given explicit directions on how to carry out RTI. The district provided a compressed training; then we were expected to implement the program with little guidance. No one knew for sure what they were doing; we were all learning as we went along." Some teachers described the workshops as poorly funded and not focused. T6 and T10 both implied that the district often adopts new educational initiatives, but rarely allows the intervention enough training, time, or resources to see the impact on student achievement. The uncertainty teachers experienced during initial efforts to implement RTI contributed to anxiety. According to T8, many teachers were afraid to attempt RTI because the process was "unclear" and "unfamiliar."

All teachers mentioned what they would like to see in quality RTI PD. The teachers requested training on using the district's documentation forms, uploading data to the district's data management system, and using the data to drive instruction. T12 stated, "Our self-efficacy, our desire to implement the model would increase if the principal provided us with the training and support we need to feel comfortable with how to do the

model. At this point, most of us are just not comfortable with the interventions." The teachers suggested modeling of differentiated instruction in the various contents, scaffolding, mentoring, and collaboration. Darling-Hammond (2017) suggested that effective PD should be content-focused, incorporate active learning, model effective practices, provide coaching and support, and offer feedback and reflection. Some of the teachers mentioned that administrators and all teachers, not just general education teachers should be trained to implement the tiered interventions of the RTI model. T3 commented, "When we have RTI training, all the coaches, elective teachers, and administrators don't attend. RTI is a collective approach, and the education of the students belongs to all of us." T7 expressed the same sentiment but declared that all certified personnel attend RTI training. T7 said, "All teachers, administrators, behavior interventionists, counselors, librarians, etc. should attend RTI training. Their expertise may provide different strategies to assist us in implementing the program." He believed that all teachers should receive the same types of training, not just general education teachers.

Theme 2: Inadequate Knowledge on Differentiation of Instruction

The knowledge and skills of a teacher are central tenets of RTI implementation. Educators who are knowledgeable at delivering the tiered components of the RTI model can help ensure students receive the appropriate interventions as well as determine the effectiveness of overall classroom instruction (Wallace, 2019). RTI implementation involved uncertainty for all of the participants. All 12 teachers made comments about the fidelity of application, and how their school was not consistently implementing the tiered

intervention of RTI with accuracy throughout the building. T1 perceived the lack of precision in delivering the tiered interventions to be a result of being improperly trained on the implementation of the RTI framework. The concept of differentiation of instruction came up in all 12 interviews under the theme of inadequate knowledge. T2 reported that she would like to learn to use technology and different apps in the classroom to differentiate instruction and engage students.

The majority of the teachers perceived their self-efficacy to deliver the tiered interventions of the RTI model as insufficient. All of the teachers indicated a limited differentiation between Tier 2 and Tier 3. T8 replied, “I don’t know much about the services in Tier 2 and 3 enough to explain; I need further clarification where the two separate." T11 indicated that she provides Edgenuity, a district purchased online curriculum, as a Tier 2 and Tier 3 comprehensive academic support for all her students as enrichment. She said, "I give everyone the same academic supports. I mean, the district has purchased and approved it as a Tier 2 and Tier 3intervention, so why not use it, right? If it is a Tier 2 intervention, how is it a Tier 3 intervention 2? I get confused between the two tiers and what interventions to give students in each tier." T5 acknowledged that he needed assistance with identifying and delivering research-based strategies to improve his Tier 1 instruction for all students. He felt that improving Tier 1 instruction was necessary for preventing students from needing further intervention. He stated, "The best thing teachers can do to support students' academic needs is to have valuable classroom instruction. Quality Tier 1 instruction could reduce the number of kids needing Tier 2 and 3." T6 commented, "I want someone to come into my class and show me how to do

what is expected. Show me with my kids and show me that it works; that is the piece that is missing."

Through the classroom observations of the participants implementing the RTI framework, I found that the participants' understanding of RTI varied and was evident by their use or disuse of research-based instructional strategies in their classroom. More specifically, the teachers struggled with the differentiation of the learning process during classroom instruction. Differentiation of the learning process is how teachers engage the students in the lesson. Examples of differentiation of the learning process include: using tiered activities, compacting, small-group instruction, different assignments, tasks in multiple modes, and a variety of scaffolding.

During classroom observations, I noticed high-quality core instruction was provided to the whole group. Tier 2 is targeted, and systemic interventions are designed for students through small groups with progress monitoring. Many teachers (83%) were using small group instruction but struggled to differentiate within those small groups to meet everyone's needs. T7 explained, "When I have 35 plus students in a class, with math skills ranging from third grade to eighth-grade levels, it is hard for me to know how to adjust my lessons to meet the needs of all my students without leaving someone behind." He further explained that he believed that the chosen interventions were not rigorous enough to address the gaps in the students' mathematics skills. The majority (11/12) of the teachers indicated they were not knowledgeable about how to accommodate the core curriculum to meet individual student's reading needs. Some of the teachers felt as though literacy instruction was the English teachers' job, or the district

should provide secondary schools with reading coaches. T9 stated, “I feel as though I just don't know enough about the different strategies to help all my students." In the debriefing sessions after the observations, when I asked the teachers how they would teach the lesson observed differently, many stated that they would make a few changes in the delivery of the content. T3 commented, “I really don't know." This data served as an indication of the need for further support on how to differentiate instruction to meet the needs of all learners.

Research Question 2

What are the significant concerns about the procedural and implementation processes of RTI at their high school? The results of the data indicated that the teachers identified unclear, inconsistent procedures (Theme 3) as a result of vague district and administrator's expectations. Also, the teachers identified inconsistencies in RTI documentation processes due to inconsistent guidelines as significant concerns with the delivery of RTI at their school.

Theme 3: Inconsistent Procedures

Unclear expectations. School staff needs to have clear expectations about RTI implementation. Because RTI implementation requires significant changes for the faculty, vague ideas, and unclear procedures will jeopardize the process. T7 expressed that there is too much confusion about the data collection process. T10 described the RTI process as "working out the flaws as you go." Apprehension could occur due to a lack of clarity around teacher and administrator roles within the implementation process. T10 stated, "Some teachers are confused about how the RTI program's components blend."

The teachers unanimously identified confusion about the RTI procedural processes at their school as a major hindrance because of frequent changes to district-wide implementation procedures. They stated that the district expected RTI to be implemented, but without clear implementation guidelines. The teachers acknowledged inconsistencies in RTI practices and misunderstanding of the RTI processes as significant obstacles to the program's delivery. All 12 participants repeatedly stated that they would like some guidance from the administration regarding the clarity of the school district's RTI procedures. T3 commented, “I sometimes have a hard time knowing what constitutes a student moving to the next tier. It would be great if teachers were provided a uniformed process in moving students through the tiers. In the first tier of RTI, research-based core instruction for all students is an essential element. So, there need to be clear expectations for how to deliver, monitor, and evaluate Tier 1 instruction."

RTI expectations and procedures were continually changing and evolving. Many teachers indicated that each year RTI is changed and implemented differently. The absence of best practices guidelines made it hard for the teachers to distinguish tier boundaries for RTI. Also, the district and school administrators' failure to provide teachers with concrete answers about RTI implementation procedures and detailed tier procedures added to the teachers' sense of uneasiness. T2 found she often misplaced students in the tiers of intervention and used the wrong strategies. T5 describes RTI implementation in the building as "very little consistency." She said, "Some teachers do it consistently, but most do it when they have time." The lack of a systematic approach to implement RTI has educators confused about the steps and components of proper

implementation (Barrio, Lindo, Combes, & Hovey, 2015). T9 attributed the inconsistency of RTI implementation procedures to the constant changing of reform policies and district leaders. She noted that the school district had experienced a turnover of two superintendents and three chief academic officers in five years, which has caused a shift in leadership positions at the central office. The appointment of new educational leadership has led to conflicting RTI expectations and practices. These comments revealed the consequences of constant reform changes on teachers' sense of security and their wary commitment to RTI.

The majority of the teachers commented that the systems each year were overhauled from previous years. T2 explained, "In previous years, the school's RTI facilitator and the problem-solving team entered all the data that the teachers submitted and made all of the RTI decisions on future strategies, but the last three years it became the teachers' responsibility." T8 shared her frustration by saying, "I guess the main thing for me is, I'd like to know if we are going to keep doing it this way for a while? Or again, is it something that is going to be changing?" T12 said that changes to implementation and documentation requirements created obstacles. She declared, "When procedures and processes remain consistent, teachers understand and become more skilled at RTI implementation; therefore, fear decreases and self-efficacy increases." Not knowing district intent and expectations for RTI implementation led teachers to feel cautious and insecure.

Documentation processes. Many teachers indicated that there was confusion regarding the process for collecting student progress data, documenting student progress,

and the district's procedures for inputting student data. It was believed that these factors encouraged some teachers to avoid the RTI process, thus denying students to achieve success. T12 stated that she thought it was a burden because she was not sure what was required of her. T4 described the documentation process as “ever-changing" like the newest fad. She asserted, "One minute we have to document student progress this way, and the next minute, they want it done another way." T11 indicated that "The data collection process was just time-consuming, but not difficult." Time entering data into the school district's RTI database was identified as a significant challenge for RTI implementation by the teachers. T3 stated, “It’s too time-consuming. We take up a lot of time with it.” All teachers perceived the RTI documentation processes as time-consuming.

The inconsistency and time constraints of the paperwork added to resistance to implementing the RTI framework. T10 indicated that she believes too much time is spent inputting RTI data in the computer, taking away from time that could be spent planning instructional interventions. Students may spend weeks, even months, in the intervention tiers of RTI. In the past three years, the project study school reported a large number of students requiring Tier 2 and Tier 3 strategies. T1 said, "Tiers 2 and 3 involves a lot of additional paperwork." The RTI data collection process requires teachers to go back and assess what is working and what is not. Some of the teachers felt as though they did not have enough time to implement and evaluate the interventions that were delivered to make further instructional decisions. T6 replied that the documentation process took a lot of time and energy and felt pressure from the administration to document that the

students were benefitting from the intervention when she could not see any difference. T4 stated, “There wasn’t a specific layout, so everyone was confused." All the teachers expressed the sentiment of feeling overwhelmed.

Many teachers expressed concern about finding time to provide intervention for all students in tiers 2 and 3. RTI paperwork for these teachers became a demanding job because of the large number of students needing Tier 2 and 3 services at this school. T10 commented, "You spend a huge amount of time producing paperwork on one child. There's a lot of documenting with this process a lot. “RTI paperwork consists of six forms, academic intervention form (research-based instructional strategies), parental contact form, attendance form, behavior intervention form, classroom observation form, and a referral form. T9 felt as though too much time is focused on teacher documentation instead of the students' needs. T7 stated, "It's hard finding the time to analyze the data." T7also mentioned the lack of time necessary for decision making. Many teachers stressed the importance of accurate RTI delivery for timely and more intense interventions.

Research Question 3

What supports or resources do teachers feel they need to implement the model? The findings indicated that all teachers unanimously identified the overarching theme related to the need for additional PD (Theme 4) on the RTI model's component to support implementation fidelity at their school. Also, the teachers identified other resources or support, such as time for collaboration and support staff.

Theme 4: Additional Professional Development

The final theme that emerged in this study was the need for additional PD. The participants felt that more PD was needed about RTI. The teachers specified that they wanted more PD on the different components of the RTI program, such as research-based tiered interventions and assessment measures. T5 mentioned improving Tier 1 instruction. She said, "I want to focus on Tier 1 instruction because I think our teachers need to know better strategies." T8 felt that PD was necessary to improve student assessment and decision-making. He explained, "That would take a lot of PD, most of us confused about that." The other teachers agreed that more training was necessary to understand the components of RTI. T11 said, “I think if teachers understood more, they would use it more."

The teachers indicated PD was essential to their knowledge and understanding of differentiated instruction. The previous PD provided the teachers with an overview of the RTI program, such as its purpose, goals, and components, but failed to address the individual educator's classroom implementation needs or provide ongoing training and support for the model's processes and procedures. Additional PD is needed to include strategies for providing differentiated reading instruction, progress monitoring, and documentation. Bjorn et al. (2016), proclaimed that PD training such as hands-on workshops and classroom mentorships are beneficial to teachers because they can gain specific directions on implementation procedures as well as intervention strategies that can be used in the classrooms. T4 stated, "To help students struggling in high school, I think teachers would benefit from more training." She believed that the faculty did not

have a consistent understanding of how to deliver the research-based strategies in the different content areas.

Collaboration. Many teachers indicated increased collaboration between teachers would be helpful. Collaboration and time for preparation are fundamental components of RTI. It provides cohesion that will make the process successful and sustainable (Miller & Freeman, 2016). T11 suggested collaboration between "grade levels" teachers. T8 recommended the establishment of PLCs designed around data analysis. T1 talked about a PLC as well and explained how she thought grade levels should arrange it instead of how departments currently organize the typical planning period. She suggested having a special education teacher required to sit in on those meetings to provide input on instructional strategies. She suggested having a special education teacher needed to sit in on those meetings to provide feedback on instructional strategies. Principals must schedule opportunities to work together on instructional improvement. Scheduling issues were the most often recorded issue because there is a limited amount of time within the school day for all of the processes and practices of RTI. T6 and T10 suggested reducing class times from 60 minutes to 55 minutes and having an intervention block the first 40 minutes of school for all students.

Supports. Some teachers felt as though they needed additional supports to implement the instructional changes successfully. T2 said, “I feel there needs to be more staff to help with RTI. We need special education teachers in the classrooms. I understand that there is a shortage in that field, but they are needed." T3 replied, "We need more support staff such as reading and math specialists to help with the high

number of RTI students." She felt as though additional support staff would lighten the load for teachers who are already stressed to meet the demands of teaching. Many teachers perceived that administrators believed RTI is only the general education classroom teachers' responsibility, and that's why Tiers2 and 3 remain in the classroom. T7 also implied a need for other support staff. She stated, "There has to be a quicker process for identifying students. We (teachers) need other support staff to help in the identification process."

The research study findings supported the development of a multi-day on-going PD project in response to the teachers' perceptions of and concerns with the implementation of the response to intervention (RTI) program at their school. The workshops will be focused on increasing teachers' knowledge of the RTI framework and efficacy to deliver the program with higher fidelity. As a result of teachers performing the RTI model as intended, students' academic needs can be addressed.

Discrepant Cases

As a researcher, I must look for negative cases (Ravitch & Carl, 2015). Discrepant data provides an alternative perspective of an emerging category or theme. Discrepant (negative or deviant) case analysis is a critical analytic strategy for ensuring validity in qualitative research (Hanson, 2017). Hanson (2017) said that these cases are often seen as a control group or point of comparison with the usual circumstances in a case study methodology. Discrepant case analysis involves searching for and discussing data that contradicts patterns or themes observed in the findings. When analyzing the coded data to develop ideas, I reviewed the entire data set to determine whether the data

accurately reflected the attitudes and beliefs of all of the participants. During this review process, it was essential to look for alternative explanations and possible misrepresentations (Ravitch & Carl, 2015). During the data collection and analysis, there were no discrepant cases found. Every participant provided unique, yet valuable, data to the research study to lend answers to the research questions. This step was crucial to the validity of the study.

Data Validation

One approach to promote social change, mitigate bias, and enhance reaching data saturation is through triangulation: multiple sources of data (Fusch, Fusch, & Ness, 2018). Fusch et al. (2018) noted that triangulation adds depth to the data that are collected. All data were verified for accuracy of my interpretations through member-checking of the transcribed interview data and observational data. Also, I conducted debriefing sessions. Yin (2015) and Merriam and Tisdell (2016) stated that doing member-checks is appropriate to validate research findings. The participants indicated that no changes were required, and both the analysis and outcomes were valid.

Project Description

The teachers in the research study were struggling to implement the tiered interventions of the response to intervention model at their school. Despite having received two prior training opportunities, the delivery of the model was still perceived to be a problem. All the participants stated that the PD failed to address their learning needs about the RTI program. An analysis of the interview and observational data led to the emergence of the themes limited/ineffective PD, inadequate knowledge of differentiated

instruction, inconsistent procedures, time-consuming processes, low-acceptance of the model, and the need for additional PD. The themes were summarized to four overarching themes that included limited/ineffective PD, inadequate knowledge of how to differentiate instruction, inconsistent procedures, and the need for other PD. Based on my analysis of the findings, a comprehensive on-going PD project on RTI's components and best practices would be logical. The project is designed to be delivered throughout an academic school year (187 days). I will provide recommendations for evidence-based practices and research-based instructional strategies that address the teachers' concerns with the procedural and implementation processes of the RTI model to support teachers in the delivery of the model as intended. The project will act to build teachers' capacity to implement the model with higher fidelity.

Conclusion

The purpose of this qualitative case study was to examine secondary teachers' perceptions of the implementation of the RTI model in their school. To better understand the problem, I conducted interviews and classroom observations of those responsible for implementing the program. Kane (2016) said that research has shown that RTI when applied with a plan can have significant effects on student engagement and achievement. Many secondary schools have to overcome barriers to discover what works within the district and what hinders success for students and teachers. When implementing interventions such as RTI, researchers have indicated that teachers' perceptions and concerns with the framework need to be addressed (Barrio & Combes, 2015). Both interviews and observations were appropriate data collection instruments for qualitative

research design to solve the local problem and the research questions (Merriam & Tisdell, 2016; Yin, 2015). In Section 2, I justified the qualitative research design, how the participants were selected, instruments used to collect, and how the data was analyzed.

I transcribed, analyzed, and coded the interview and observation data. Member checking and debriefing sessions were used to ensure the accuracy of the findings. The findings provided valuable information as it relates to the CBAM framework on teachers' perceptions and concerns with the RTI processes in their school as it relates to implementation and procedural practices. The research's outcomes supported the literature about the CBAM framework concerning the need to examine the requirements and concerns of teachers implementing a new educational innovation. The findings of the project study reflected a necessity for on-going PD training opportunities on the components of the RTI model. The teachers feel they could benefit from additional PD. The PD could improve the teachers' capacity and self-efficacy to implement the RTI model. On-going PD would allow new and veteran teachers to receive the support needed to achieve the model as designed and support a shared value for the RTI program as a tool to assist students struggling academically. In Section 3, I established, described, and rationalized the PD that resulted from the study's findings. Also, I conducted a literature review, a project evaluation plan, and provided implications for the project.

Section 3: The Project

Introduction

Research has shown that changing instructional practices is not an easy task and takes time as teachers reflect on the outcome of their practices (Martin, Kragler, Quatroche, & Bauserman, 2019). Martin et al. (2019) noted that PD captures what is known about how teachers make changes in their practices that can ultimately lead to students' success and the transformation of teachers' beliefs and instructional practices over time. To understand how educators change practices that lead to student achievement, how teachers develop professionally must be examined and how this can lead to a transformation of their instructional beliefs and practices. Understanding teachers' perceptions and concerns with educational innovations designed to meet students' diverse needs provides insight into implementation decisions and offers examples for training (Cavendish, Morris, Chapman, Ocasio-Stoutenburg, & Kibler, 2019).

Teacher development is an ongoing process through which teachers keep growing with their voluntary effort (Pokhrel & Behera, 2016). When designing PD for teachers, facilitators should begin with an understanding of teachers` needs at their school and in their classrooms (Watson, 2015). There must be a shift from educators being passive participants to being active learners. Teachers need support in the school, and they need to be able to plan, implement, and evaluate their practice based on self-reflection (Wihlborg, Friberg, Rose, & Eastham, 2018). To be productive and successful, Wihlborg et al. (2018) stated that teachers' PD must be of high quality and relevant to teachers`

needs. Watson (2015) noted that the degree to which new information is used is strongly influenced by the extent to which understanding and resources offered through the learning experience make sense to the recipients in terms of their existing beliefs and practices.

The purpose of this qualitative case study was to investigate teachers' perceptions of the implementation of RTI at their high school to help teachers and administrators understand what PD training, supports, and resources are needed to implement the model effectively. Based on the findings of this case study, I developed a multiday PD training to address the teachers' needs at the research site. The development of the project was based on the themes that appeared during data analysis: limited/ineffective PD, inadequate knowledge of differentiated instruction, inconsistent procedures, and the need for ongoing PD. The project was developed to provide meaningful, site-based training on the processes and methods of the RTI program that would address the teachers' concerns about implementation fidelity and improve the academic performance of students in Grades 9-12. The strategies presented in the PD sessions will assist teachers in differentiating instruction in the three tiers of the model and becoming more knowledgeable about how to monitor student progress to make practical data-based instructional decisions.

In Section 3, I provide a rationale for the project genre, a current review of the literature that guided the development of the project, a description of the project, and a project evaluation plan. I conclude with a summary of the project's implication for social change on local and broader audiences.

Project Description and Goals

The findings from the analysis of the interviews and observational data in Section 2 served as the determinant for the necessity of additional ongoing PD training sessions. The project that was created as a result of the findings of this study is continuing PD training sessions for Grades 9-12 teachers responsible for implementing the RTI program. I developed the training to focus on the topics of differentiation of instruction, effective progress monitoring, and data-based decision making. The training modules address the specific needs and concerns participants in this project study expressed as significant for the effective delivery of the RTI program at their school. The PD will be provided during the school district's 3-calendar in-house PD days, which are in September, January, and March, but can be split into minisessions and presented throughout various other times in the school year.

The overall aim of the training sessions is to improve the teachers' understanding of the RTI model processes, increase teachers' self-efficacy to implement the model with higher fidelity, and to support their classroom instruction to meet the academic needs of all learners. The goals of the PD sessions are to allow teachers the opportunity to engage in research-based strategies to use in the classroom to support self-efficacy and to provide clarity and expectations on the district's implementation procedures. Teachers responsible for the delivery of the RTI program will participate in ongoing PD that will positively affect their perceptions and self-efficacy to deliver the model as intended to meet the diverse academic needs of all students.

Rationale

Continuous professional development (CPD) is a term used to explain all the interventions in which teachers involve themselves during their careers (Dilshad, Hussain, & Batool, 2019). CPD includes all the practices which are needed to impact the classroom. The purpose of CPD is to enhance the work performance of educators in the school and increase learners' academic achievement (Dilshad et al., 2019). Active PD engages teachers in learning experiences that are similar to those they may use with their students. CPD training is an appropriate and logical project in response to this case study's findings because it addresses the learning needs of the teachers in this project study. All 12 participants noted the need for additional PD on the differentiation of instruction in the tiered interventions during the interviews. Most of the teachers admitted to having limited knowledge of how to differentiate instruction to meet the needs of all learners, mainly English as a second language learner. Also, the teachers in the study indicated the need for additional procedural supports, such as how to monitor and document student data accurately. Data further suggested that there is a lack of consistency and clarity of the procedures between the teachers implementing the RTI model at the project study school.

Ayodele and Samantha (2018) stated that the PD of teachers is critical to improved classroom teaching and learning to achieve quality education. They further noted that studies have shown that when teachers collaborate, they share ideas, knowledge, and skills that promote better teaching of their subjects through coordinated activities. The rationale to provide CPD on the components of the RTI framework was

based on the research site's 11th-grade students' performance on the state's standardized test. Brown (2018) indicated that students who received interventions and instruction as designed in the RTI model might have a positive influence on the state standardized test scores by decreasing the number of students deemed not college or career ready. A report by the Alabama State Department of Education (2018) for the 2016-2017 school years indicated that approximately 6% of the students taking the state assessment were proficient in mathematics and 16% in reading. Currently, the Alabama State Department of Education (2019) report for the 2017-2018 school years indicated that only 8% of the 11th-graders testing were proficient in mathematics and 23% in reading. The data suggested that only 27% of the school of study's graduating seniors were college and career ready.

The CPD was designed to address secondary teachers' perceived barriers that were hindering the implementation and sustainability of the model at the project study school. Cuticelli, Collier-Meek, and Coyne (2016) emphasized that classroom teachers need support in instructing reading interventions with the highest quality to increase student reading outcomes. Understanding teachers' efficacy to deliver interventions such as RTI is critical to the successful implementation of the program and providing high-quality instruction in the various content areas (Swanson et al., 2017). The training session topics that organized this CPD project were designed to allow the teachers hands-on realistic and meaningful learning opportunities to facilitate effective delivery of the RTI model. Researchers have identified the need for ongoing PD and resources as key factors that affect the successful implementation of new practices (Chitiyo & May, 2018).

Chitiyo and May (2018) asserted that clear guidance and sustained support for the implementation of mandates such as RTI are necessary for teachers to fulfill their responsibilities. Cavendish et al. (2019) noted that in-house and district PD opportunities have the potential to help bridge the policy to the practice gap. By engaging in CPD, the secondary teachers and administrators at the research site could establish PLCs where teachers and administrators can create shared value for RTI, collaborate and share best practices and literacy resources, and can efficiently examine student data and adjust instruction to address the needs of individual learners.

Review of the Literature

The purpose of this section is to provide a current scholarly review of the literature on the use of CPD together with the knowledge of differentiating instruction and assessing interventions to enhance the sustainability, support, and fidelity of implementation of the RTI model in secondary schools. CPD was found in the literature as an effective mechanism for the successful implementation and sustainability of RTI (Mundschenk & Fuchs, 2016).

Strategy Used for Searching the Literature

The topics discussed in the review of the literature emerged from the four overarching themes revealed in Section 2. The literature review combined a focus of CPD and the establishment of PLCs to improve the teachers' capacity to implement the components of the RTI framework with higher fidelity and support students' academic outcomes. The literature review reflects that CPD is essential to the building capacity of teachers attempting to implement the RTI program (Helman & Rosheim, 2016). To

locate studies relevant to this study for the literature review, I conducted searches for literature within the last 5 years that were peer-reviewed and full text. Some of the databases used as search engines included ProQuest, Education Research Complete, Science Direct, ERIC, and Google Scholar. Key search terms included: a*ctive learning, training on tiered interventions, tiered interventions, differentiated instruction, effective progress monitoring, collaboration, teacher self-efficacy, professional learning communities,* and *implementation fidelity of RTI.* The literature review addressed areas of need at the project study school. The literature was reviewed and added until saturation was obtained. The identified themes from this search were: PD, differentiated instruction, assessment measures, and school-wide support.

Professional Development

The purpose of PD is for educators to develop the knowledge, skills, and practices they need to help students perform at higher levels (Learning Forward, 2020). School systems throughout the world acknowledge that teacher quality is the most critical in-school factor impacting student outcomes; however, PD training often lacks clear and direct links with classroom practice (Gore et al., 2017). Castillo et al. (2016) contend that educators' skill development plays a crucial part in building their competence to implement RTI by engaging teachers in continuous cycles of learning. Castillo et al.'s (2016) study emphasized the importance of PD focused on the critical skills and supports necessary to perform the RTI framework such, as teacher collaboration, progress monitoring, and data-based decision-making skills.

Training workshops offered one or two times are unable to provide the quality sustained support needed for meaningful professional learning (Darling-Hammond, 2017). High-quality continuous PD is essential to improving teacher and student learning (Collins & Liang, 2015; Learning Forward, 2020). Bates and Morgan (2018) noted seven crucial elements of actual professional knowledge, which include: a focus on content, active learning, support for collaboration, modeling of effective practice, coaching and expert support, feedback and reflection time, and must occur for a constant duration. Teachers need time to implement and reflect on new instructional practices, and although some workshops address questions teachers may have, the follow-up and continuous support is usually absent (Bates & Morgan, 2018). The secondary teachers in Jackson and Alvarez's (2017) study were able to increase their knowledge on the essential components of RTI and build their capacity to make data-based decisions by engaging in continuing PD training throughout the school year with mentor coaching. The principal in the study chose a small number of teachers and created an RTI team to attend five PD training sessions throughout the school year. The teachers, who participated in the training sessions, conducted turn-around training for the remainder of the faculty. Jackson and Alvarez (2017) proclaimed that by giving staff the knowledge and skills to implement RTI, it increased the likelihood that faculty could implement RTI with higher fidelity.

The research suggested that when implementing RTI, providing practitioners with long-term support in the form of CPD is vital to allow time to reflect and problem solve in collaborative groups (Greenwood & Kelly, 2017). The conclusions from Greenwood

and Kelly's (2017) study indicated that the majority of teachers expressed the need for high levels of PD and coaching for effective delivery of the RTI model. The need for an increase in CPD to understand the RTI process was expressed throughout the study. Also, the need for more time to understand the data collection and intervention practices in the process. Spruce and Bol's (2015) research established similar findings. They further contended that teacher beliefs and knowledge directly affect their classroom practice. Spruce and Bol's (2015) mixed-method study examined teacher beliefs, experience, and classroom practices about self-regulated learning. Self-regulated learning is a proactive process in which teachers set goals, select and deliver strategies, and self-monitor their instructional effectiveness. The results supported current research indicating that there is a gap in teacher knowledge and practice. The data contributed to an argument for ongoing PD in the establishment of learning communities where teachers are taught to be active in their learning and gain strategies to become self-regulated learners. Hilton, Hilton, Dole, and Goos (2016) supported Greenwood and Kelly's (2017) and Spruce and Bol's (2015) conclusions. Hilton et al. (2016) investigated the changes that occurred in teachers' knowledge and classroom practices during an ongoing PD program and its effect on students' learning outcomes. The purpose of the research was to investigate the efficacy of continuing teacher PD for promoting middle school students' advanced reasoning in mathematics. The findings suggested a statistically significant difference with ongoing PD on how teachers perceived their ability to help students with complex concepts.

Learning Forward (2020), which is a foundation developed to build teachers' knowledge and skills to lead and sustain effective PD, asserted that for professional learning to occur, educators need to serve as active partners in determining the content of their education, how learning occurs, and how to evaluate its effectiveness. Whitworth and Chiu (2015) and Desimone and Pak (2017) agreed that PD should include active learning, a strong content focus, be coherent and of significant duration, and involve collective participation. Content-focused PD leads to increased teacher knowledge and can lead to changes in teacher practices (Darling-Hammond, 2017). Darling-Hammond et al. (2017) defined effective PD as structured learning that results in changes in teachers' classroom practices and academic gains for students. Darling-Hammond et al. (2017) declared that common characteristics related to effective PD include ongoing and sustained opportunities, alignment with students' learning goals, implementation of practices supporting student learning, focus on teachers' learning needs, collaborative environment, and student data to inform instructional practices, and offers feedback and reflection.

Every year district leaders and principals spend millions of dollars on PD in hopes of improving their teachers' instructional capacity with the hopes of increasing student achievement. Gore et al. (2017) acknowledged that leading researchers conclude that for teachers to deliver the highest quality PD, investment needs to be limited to fewer teachers, fewer strategies, or additional resources. Gore et al. (2017) examined a pedagogy-based, collaborative PD approach known as "Quality Teaching Rounds" for its impact on the quality of teaching. The findings of the study demonstrated a significant

positive effect on teachers' instructional pedagogy implementing research-based strategies, specifically secondary teachers when trained in smaller, content-focused groups. Castillo et al. (2016) examined the relationship between direct, intensive RTI skills training and job-embedded coaching on teachers' perceived skills to implement the RTI program. The data suggested that receiving continued on-the-job mentorship and peer collaboration was positively related to increases in perceived RTI implementation skills in academic content. Furthermore, training focused on the application of a limited number of strategies or skills. Fullan (2018) posited that change is more likely to occur when leaders focus on a few well-defined goals.

Teachers' knowledge and readiness to implement RTI play a vital role in both the quality of instruction and student performance (Darling-Hammond, 2017). Cramer and Gallo (2017) identified teachers' outcries for training and resources when implementing a new educational initiative in Florida. The authors' study used a survey to examine the perceptions of special education teachers on the implementation of the modern state standards for students with disabilities. The conclusions confirmed that teachers who had received regular training indicated that they were more confident in implementing the measures. Likewise, Brown (2018) showed that when teachers have continuous ongoing PD, they feel satisfied with implementing new practices. The author's findings suggested that teachers who engage in PD may reflect upon their current instructional practices and strive to advance their future instructional practices.

CPD that supports the needs of teachers can generate successful educators who are skillful and prepared to implement the multitiered RTI model. Targeted CPD is

necessary to ensure effective implementation of the intervention. According to Darling-Hammond et al. (2017), research has shown that many PD opportunities are ineffective in supporting changes in teacher practices and student learning. Effective PD increases teachers' understanding and instructional pedagogy, which ultimately supports student achievement (Parsons, Ankrum, & Morewood, 2016). The researchers stated that effective teacher PD is designed to meet the needs of the teachers and students. It is pertinent for PD facilitators to recognize the needs and learning goals of teachers. PLCs have been identified as a practical approach for providing teachers opportunities to engage in learning with their peers to improve their instruction. PLCs can allow for collaboration and reflective practice, where teachers can come together with their colleagues to learn actively and reflect on their practice with their colleagues.

Differentiated Instruction

Teachers are expected to be able to adapt their instruction to the different needs of various learners. Due to the diversity of student learners, educators should be prepared to make accommodations to meet the needs of any student who enters the classroom. Differentiated instruction (DI) aims to meet the differences in student learning to provide all students with the best possible learning opportunities (Coubergs, Struyven, Vanthournout, & Engels, 2017). Differentiated instruction is a teaching approach that takes into account the differences between students and recognizes their strengths and weaknesses. Suprayogi, Valcke, and Godwin (2017) defined differentiated instruction as a flexible and equitable approach to teaching and learning. Differentiation of instruction

is vital as learners grasp information at their own pace, so determining their preferred mode of education that aligns with their learning style is imperative (Malacapay, 2019).

The concept of student engagement is based on the belief that learning is enhanced when students are curious, interested, or inspired (Student Engagement Definition, 2016). Learning tends to suffer when students are bored or disengaged. Student engagement involves many facets, but one of the most critical entails the structuring of the curriculum and delivery of instruction to maximize engagement. Students are bored with sitting still all day passively listening to teachers lecture as the primary form of instruction, leading them to participate in off-task behaviors. Boredom reduces academic motivation and attention. Chin, Markey, Bhargava, Kassam, and Loewenstein (2017) declared that everyone had experienced boredom and disengagement at some point in their lifetime. DI is one instructional approach that fosters varied instructional activities to reduce students' classroom disengagement.

The teacher can play an essential role in decreasing boredom and disengagement by including learning strategies in their lesson plans that are exciting and stimulating for students. Teachers should increase student engagement by reducing the use of lectures and whole-group discussions. Bolkan and Griffin (2017) examined how various teaching behaviors influenced students' emotional and cognitive experiences in class and how these experiences related to students using their phones for off-task acts. The results of the study indicated that the students' decisions to engage in using their cell phones during the instructional time were related to their teacher's teaching practices. The findings were aligned to previous research that teachers should differentiate instruction because

boredom drives people to seek stimulation. Bolkan and Griffin (2017) asserted that bored people often use their mobile phones to achieve this stimulation. Mazer's (2017) conclusions supported Bolkan and Griffin's (2017) that boredom significantly influenced student engagement in classroom instruction. Consistent themes stated by the students about the curriculum's lack of challenge and variation included a slow pace, too much repetition of already mastered information, few opportunities to study topics of personal interest, and an emphasis on the mastery of facts rather than the use of thinking skills. The results indicated that DI could provide a learning environment that took into consideration the individual characteristics of students and was a useful approach for the inclusion of students with gifted students and special needs/ disabilities in general education settings. Consistent with the previous two research studies, Auslander (2016) indicated that many secondary students lack high-quality, differentiated instruction, especially English language learners, leading to their disinterest in the class. As maintained by Al Otaiba et al. (2016), pedagogical strategies such as differentiating instruction in small groups can increase opportunities for students to respond and stay engaged. Malacapay (2019) revealed that both visual and auditory learners learned best when the teacher used audio and visual presentations, while kinesthetic learners learned best when applied to real objects instead of the lecture focused lessons.

Differentiated instruction is a teacher's proactive response to learners' needs, but many teachers have limited knowledge of how to differentiate instruction to meet the needs of their students (Al Otaiba et al., 2016). DI is often seen as the modification of curricula, teaching methods, and learning resources to address the unique needs of the

learner. Coubergs et al. (2017) examined teachers' perceptions of DI and their related classroom practices utilizing an 87 item teacher questionnaire. Two key factors emerged that affected teachers' attitudes and classroom practices: teachers' beliefs and ability to implement. McCulloch, Hollebrands, Lee, Harrison, and Mutlu (2018) examined secondary mathematics teachers' attitudes and beliefs about using technology as a tool to assist in teaching mathematics, as well as the factors considered when choosing the type of technology. The findings revealed that a teacher's choice of whether or not to use technology depended on the belief that technology can be useful in the classroom, how well it aligned with the goals of the lesson, and how comfortable the teacher felt using the technology. The conclusions from Coubergs et al. (2017) and McCulloch et al. (2018) suggested that it is essential to focus on the types of strategies and preparation to ensure that teachers can successfully incorporate differentiated strategies into classroom instruction.

Previous and current research indicated that teachers that participated in PD on how to differentiate instruction demonstrated higher student outcomes than teachers who do not implement these practices (Al Otaiba et al., 2016; De Neve, Devos, & Tuytens, 2015). A well-implemented Tier 1(classroom instruction) is the foundation for the RTI model. Al Otaiba et al. (2016) emphasized PD to ensure that teachers know how to differentiate instruction. The researcher indicated that when teachers received ongoing PD, in-class supports on Tier 1 teaching, and were trained on how to use student performance data to adjust instruction, efficacy to differentiate instruction increased. Dixon, Yssel, McConnell, and Hardin (2015) focused on teacher efficacy as a way to

explain teacher willingness to differentiate instruction. The findings demonstrated that teacher efficacy is a crucial element in the differentiation of teaching regardless of what level or what content area the teacher taught. Likewise, Goddard and Kim (2018) examined the relationship between teacher collaboration, teachers' instructional practices, and teachers' efficacy in high poverty schools. The results revealed a positive correlation between teacher collaboration, differentiated instruction, and teacher efficacy. The data suggested that collaboration among teachers is necessary for school improvement and PD efforts. Also, mastery of teachers' instructional experiences strengthened efficacy beliefs.

DI seems promising for both teachers and students, but its actual adoption by teachers remains critical. Teachers who do not recognize ways to differentiate or who do not feel capable of instructing different groups at the same time struggle with differentiating instruction. Teachers' self-efficacy, class sizes, resources, training, and motivation play significant roles in how differentiated instruction is adopted and implemented (Suprayogi et al., 2017). Studies indicate that teachers not only find differentiating teaching challenging to apply, but also fail to sustain its use over time (Valiandes & Neophytou, 2018). Pozas, Letzel, and Schneider (2019) investigated secondary teachers' implementation of DI practices and whether their beliefs influenced the delivery of these practices. Pozas et al. (2019) showed that secondary teachers seldom implemented DI practices and have a smaller collection of strategies. The teachers in the study differentiated their instruction mainly by placing students in ability

groups, but rarely differentiated instruction through more challenging instructional approaches.

Although teachers understand the benefits of DI, they often consider it to be time-consuming and challenging to put into practice. Some of the obstacles teachers have identified to implementing DI in the classroom in the literature review were lack of administrative support, students' behavioral problems, lack of time to plan for differentiation, and knowledge and self-efficacy to differentiate. Differentiating content requires teachers to either modify or adapt how they give students access to the material they want the students to learn. The vast majority of existing research showed strong support that there is a positive correlation between teachers' knowledge and implementation of DI. De Neve et al. (2015) found that teachers' sense of efficacy was a strong predictor of implementation of DI. Brentnall (2016) examined teachers' perceptions of previous training on DI and how they were able to use the strategies in the classroom. Brentnall (2016) concluded that there was an overall positive impact of PD on teachers' ability to use the DI strategies. Lauermann and Konig (2016) confirmed Brentnall's (2016) conclusions that teachers' professional competence predicts their well-being and success in the classroom.

A lack of motivation may be a reason that some teachers attend PD focused on differentiation of instruction and then return to the classroom without implementing what they have learned to address student variability in the classroom. Moosa and Shareefa (2019) investigated the differences in teachers' sense of efficacy and their knowledge when implementing evidence-based practices depending on their experience. The results

of the study showed that there is no significant difference in teachers' knowledge and application of DI based either on their experience or skills. Teachers have to be motivated and willing to change their instructional practices. The teacher's attitude towards change might be linked to self-efficacy. Existing literature showed resilient evidence that there is a substantial relationship between a teacher's sense of efficacy and instructional strategies adopted by that teacher (Moosa & Shareefa, 2019). Moosa and Shareefa (2019) noted that teachers who experienced early successes with differentiation were more likely to persist. To address students' various learning needs, teachers must be able to adequately differentiate their instruction (Gaitas & Martins, 2016). Without adequate training, teachers are unable to provide meaningful teaching for all students. Pozas et al. (2019) acknowledged it is vital that DI be addressed in pre-service education and in-service teacher training. Fuchs and Fuchs (2016) expressed that few teachers adapt or change when students do not respond to their instruction. Valiandes and Neophytou (2018) examined the characteristics of a successful PD training aimed to help teachers become more self-confident and capable in designing and applying differentiation in their lessons and the changes that this PD caused. The conclusions of the study demonstrated four striking characteristics of PD on differentiated instruction that positively changed teachers' attitudes and practices: ongoing collaboration and mentorship, active learning, content-focused, and the establishment of PLCs. Teachers with higher self-efficacy and expert knowledge are more likely to master the challenges of the teaching profession, and thus less likely to experience burnout (Shoji et al., 2016).

Teachers who demonstrate higher instructional knowledge and self-efficacy reported less stress when attempting to differentiate instruction. Gaitas and Martins (2016) corroborated these findings. Among the 273 participants in the study, all teachers reported having difficulty differentiating instruction. The four areas that the general education teachers identified having problems when attempting to differentiate teachings were activities/materials, assessment, planning, and classroom environment conducive to differentiation. All the teachers reported that their inability to effectively differentiate instruction to meet the needs of all their students, coupled with a lack of clarity on how to implement the RTI framework, caused them to suffer from job-related stress and teacher burnout (Gaitas & Martins, 2016). Classroom teachers are being asked to monitor behavior intervention programs, adapt instruction for at least half a dozen different learners with individual learning needs, and be aware of such issues as sensory overload/integration, students with anxiety disorders, and more. Lauermann and Konig (2016) examined the relationship between teachers' instructional knowledge, self-efficacy, stress, and burnout. The findings indicated a significant positive correlation between all factors. The data suggest that teachers experienced a higher degree of exhaustion because they were most stressed by their perceived inability to differentiate instruction due to the limited number of PD training or modeling of expectations offered by the district.

Assessment Measures

Progress monitoring. The response to intervention (RTI) model has four essential components: universal screening, tiered interventions, progress monitoring, and

data-based decision making. Many schools that are engaging in RTI do not yet have the entire parts fully in place and implemented with fidelity (Johnson & Hutchins, 2019). Educators require progress monitoring (PM) skills to successfully achieve a three-tiered RTI model focused on data-based decision-making (Pentimonti, Walker, & Edmonds, 2017). In Tier 2, schools must utilize progress monitoring and evaluate if students are making academic progress. Regular monitoring of student progress is an essential component of the RTI program because it measures the change in academic performance or growth of a student and is used to determine whether more intensified strategies are needed. PM of student data is a strategy that is useful when making decisions about student learning and is used during the RTI process to evaluate the effectiveness of an intervention or instructional approach. PM can be used to determined short and long-term academic outcomes of the responses.

Educators at all levels require reliable and valid assessments to measure student learning. Educators must collect, graph, and make instructional changes based on academic skill data (Lopuch, 2018). Tindal, Alonzo, Saez, and Nese (2017) suggested using software technology to assist in organizing and graphing student data to design interventions based on skill deficits. A recommended measure for RTI progress monitoring of content knowledge is a curriculum-based measurement (CBM). CBM is a set of standardized measurement procedures that can be used to guide student performance in the skill areas of literacy and reading, early mathematics computation and application, spelling, and written expression (Hintze, Wells, Marcotte, & Solomon, 2018). Pentimonti et al. (2017) and Fuchs and Fuchs (2016) declared that PM should be

brief, evidence-based, and continuous. The use of CBM is a valid and reliable way to measure student response to intervention. It is also a reliable indicator of performance on state tests at the secondary level (Bresina, Baker, Donegan, & Whaley, 2018). CBM is often used during the universal screening component of RTI to identify students who may be at risk for academic failure and during the progress monitoring phase to track responsiveness to instruction.

PM provides teachers with information about a student's level of performance and their rate of academic improvement. PM data serve three primary purposes: informing instruction, targeting student learning, and strengthening decision-making (Mercado, 2016). Many teachers perceived their knowledge of PM and data-based decision-making during the RTI process as weak. Mercado (2016) examined how the presentation of RTI progress monitoring information influenced the data-based decision making when referring students for special education services. The findings suggested a significant difference in decision-making when data was presented in graphs versus tables. The teachers in Mercado's (2016) study were able to gain a better understanding of the data when presented in a six-point graph form because it was easier to see whether or not the student was exhibiting growth. An implication of Mercado's (2016) study for this PD project was a need for PD for teachers on how to develop and interpret PM graphs to support decision-making for future instruction. Also, once the teacher gains the skills needed to monitor student data, they can instruct students on how to monitor their progress as well. Van den Bosch, Espin, Pat-El, and Saab (2019) examined three approaches for improving teachers' CBM graph comprehension, each differing in the

extent to which reading the data, interpreting the data, and linking the data to instruction was emphasized. The teachers improved more in CBM graph comprehension. Improvements were seen primarily in understanding and connecting the data to teaching.

Current research indicated that when teachers use PM to make instructional decisions, student-level data improve (Fuchs & Fuchs, 2016). For example, when a student is identified as struggling in reading or mathematics, the teacher will implement a change to the instruction and, over time, collect data to see if the student improves. A consistent inadequacy in student progress indicates a need for more intensive instructional strategies. PM is an iterative process, meaning it may take several changes before finding the right instructional strategy that works. The district usually sets the PM schedule time for uniformity. Data collection procedures are on schedules based on student needs (Lopuch, 2018). Lopuch (2018) suggested that students at higher risks for failure should be monitored more frequently.

Principals in Bartholomew and De Jong's (2017) study identified staffing and time management as two significant barriers implementing the progress-monitoring component of the RTI model in high schools. The participants felt that there was not enough time to do a suitable task of PM. This finding echoed what was identified in Fan et al.'s (2016) study regarding the levels of stress caused by the excessive demands of PM due to inadequate training. The implication of this study for the PD project is the need for the establishment of a more consistent process to reduce confusion about how students' progress is to be monitored.

Data-Based Decision Making

In education, there is a growing emphasis on the use of data to guide decisions at the school-level (van Geel, Keuning, Visscher, & Fox, 2016). Teachers collect information about their students all the time, even though it may not be done systematically. Prenger and Schildkamp (2018) stated that data-based decision making (DBDM) could help teachers improve their instruction and can lead to school improvement and better learning outcomes by indicating where guidance needs to be improved. Evidence suggested that teachers who progress monitor regularly to inform instructional decisions are more aware of their students' academic growth and provide more structure to their lessons (Filderman, Toste, Didion, Peng, & Clemens, 2018). Gelderblom, Schildkamp, Pieters, and Ehren (2016) defined data-based decision making as the process of collecting, analyzing, and interpreting data to study educational practices. Gelderblom et al. (2016) and Filderman et al. (2018) further explained data-based decision making as the use of the obtained information as a basis for making decisions about adapting practices, implementing those practices, and evaluating whether those adaptations have improved learning outcomes.

For students with persistent reading difficulties, research suggested one of the most effective ways to strengthen interventions is to individualize instruction through the use of performance data (Filderman et al., 2018). Keuning, Van Geel, and Visscher (2017) found that the use of data is beneficial for students with learning difficulties, provided that information is used both for identifying students with learning difficulties and for modifying instruction promptly. Keuning et al. (2017) suggested that educators

must have access to high-quality data and the availability of current technological tools if DBDM is to be successful. Prior research studies acknowledged that data should not only be used for compliance and accountability but also continuous school improvement efforts (van Geel et al., 2016). Teachers must apply the findings from their data use to their teaching activities. The teachers' decisions to adapt their instruction are based on experience and instinct. Prenger and Schildkamp (2018) believed that the individual teacher's psychological personality might influence teachers' DBDM. The researchers' quantitative study examined which psychological factors contributed to teachers' data use in the classroom. The results indicated that perceived control, attitude, and intention regarding data use all significantly influenced data use in the school. Educators' knowledge and skills (data literacy) regarding DBDM are essential for successful DBDM.

Teachers must engage in continuous learning opportunities. Mandinach and Jimerson (2016) stated that data use-related knowledge and skills must be reinforced through in-service training and PD throughout teachers' careers. Educators need to know how to transform raw data into actionable insight; therefore, skills such as collecting, organizing, analyzing, summarizing, and synthesizing data are required (Mandinach & Jimerson, 2016). Educational initiatives such as RTI demand teachers use DBDM skills to meet the needs of all learners effectively, but many teachers in the project study felt inadequate in making those decisions. Some teachers have a negative outlook towards data use and do not believe the data represents the student's true capabilities (Espin et al., 2017). Teacher beliefs about data use are vital, so learning how to use the data must

address not only the technical aspects of data use but also teachers' ideas of what data "count" and how data use benefits students (Mandinach & Gummer, 2016). Wallace (2019) asserted that many educators indicate they do not have sufficient training in interpreting student data, nor do they know how to use such data to inform instruction. It is the professional responsibility of all data-literate educators to continuously analyze and respond to various state, district, and classroom data to improve academic outcomes for all their students.

Obstacles to the use of data have been identified in many studies. Examples include lack of collaboration in the use of data, a negative attitude towards data use, and a lack of knowledge and skills (Poortman & Schildkamp, 2016). Meyers, Graybill, and Grogg's (2017) research confirmed that teachers have reported feeling inadequate and disconnected when it comes to using student data to make instructional assessments. The researchers' study examined teachers' perceptions and reflections of the data-based decision process of RTI in one middle school. The findings showed that teachers found that using data encouraged them to think holistically about children and empowered them to solve school problems more than previous experiences. Poortman and Schildkamp (2016) suggested that district leaders provide PD opportunities to support teachers in using data for school improvement. The authors stated that PD on using data is most successful when it takes place in data teams because teacher collaboration allows them to focus on collective inquiry to improve student learning. Wagner, Hammerschmidt-Snidarich, Espin, Seifert, and McMaster (2017) posited that teachers should be proficient at using data to evaluate the effects of instructional strategies and interventions. They

further noted that teachers must be able to make, justify, and validate their data-based instructional decisions to parents, students, and educational colleagues. Wagner et al.'s (2017) research indicated that when teachers participate in training on how to analyze and interpret student data, self-efficacy increases, and they are more likely to have a positive outlook towards data use. A lack of adequate training can result in misunderstanding of student data or misinterpretation regarding student placement (Wallace, 2019).

School-Wide Support

One of the roles of district-level leadership is to establish a more consistent implementation system to reduce confusion in the RTI procedure, which may boost staff buy-in. Teachers' openness to reforms depends in no small degree on their buy-in to the change effort (Briggs et al., 2018). Pierce and Jackson (2017) stated that for RTI to be successful, teachers, administrators, and the district staff must buy into the framework. Teachers are vital to the successful implementation of any educational innovation. They are directly responsible for aligning the program's goals with classroom instruction, which requires them to adjust their teaching. The students' academic outcomes measure most times, the effectiveness of educational initiatives. Teachers' perceptions, beliefs, and values, which constitute their buy-in, are vital components for the success of any school reform initiative (Lee & Min, 2017). When buy-in is low, the new program is less likely to be implemented for the long term (Pierce & Jackson, 2017). Wang (2019) noted that previous research has established that teachers within a school can have different levels of buy-in toward the program based on their prior experience and their understanding of the program's purpose. The literature suggested that a teacher's buy-in

can have an enormous influence on a program's success. Lee and Min (2017) examined the relationship between teacher buy-in and student academic growth. The findings revealed that higher teacher buy-in had a significantly positive relationship with students' academic growth.

Teacher buy-in is an essential factor that has influenced the outcome of PD. While PD provides an opportunity for teachers to enhance their skill set, it is their buy-in to the PD that ultimately determines the effectiveness of the PD and whether or not the teacher will make changes to classroom practices (Fagan et al., 2017). Without high buy-in, teachers will likely implement little of what they learn. Wang (2019) implied that when teachers fully buy-in to new practices as a result of PD, they will often drive the change process. Fagan et al. (2017) examined how teacher buy-in affected the classroom habits and practice of teachers who took part in a district-wide PD. The study indicated that there was a significant relationship between teacher buy-in and change in classroom practices. Similarly, Wang (2019) examined teachers' perceptions of a school-based PD approach at a secondary school. The conclusion drawn from the study was to increase teacher buy-in; PD needs to focus more on concrete examples and reflective sharing.

Researchers continually highlight the crucial role of school-wide support in the successful implementation of reforms such as RTI (Briggs et al., 2018).
When teachers find that their beliefs are consistent with improvement, they typically support and feel positive about the change. Briggs et al. (2018) examined teacher buy-in to new educational initiatives as well as the factors influencing buy-in to understand the way policy-level changes affect teachers' classroom practices. The findings of the study

indicated that one of the significant factors influencing teacher buy-in of new initiatives is professional identity. The characteristics of the teacher determine how well the intervention will be received. For example, these characteristics include a perceived need for the change, a belief that the response will produce desired benefits, a sense of efficacy in one's ability to implement the intervention, and the compatibility of the intervention with current classroom practices. School-wide support of a reform initiative such as RTI is necessary for sustainability (Elder & Prochnow, 2016). Sustainability is the implementation of an effort over time and is supported by evidence-based practices that demonstrate effectiveness. Practice sustainability is critical to ensure that students have continued access to evidence-based practices (McIntosh, Mercer, Nese, & Ghemraoui, 2016). Elder and Prochnow (2016) stated that research has indicated that whether the school uses data for decision making is an essential predictor of the sustainability of interventions such as response to intervention.

PLCs are increasingly being used in education systems seeking to improve school processes and outcomes (Hairon, Goh, Chua, & Wang, 2017). PLCs are being used to enhance teacher learning, capacity, practice, and school-wide support leading to improvements in student learning. Mundschenk and Fuchs (2016) declared that when teachers and staff see themselves as a PLC, the implementation of RTI is less complicated. In PLCs, teachers learn from and with each other and focus on the implementation of new ideas and practices (Helman & Rosheim, 2016). Teachers are provided an opportunity to reflect on individual practices and student learning and join other teachers in analyzing student data from a variety of sources. Henderson (2018)

affirmed that PLCs could assist in closing the gap between research and practice by improving teachers' focus on student learning, utilizing data to drive instruction, and assist teachers in becoming a valuable source of information and skillsets.

PLCs and RTI can provide strong learner supports if used effectively within a school (Henderson, 2018). The successful implementation of RTI requires teachers to engage in a collaborative process for meaningful change in the school, and PLCs do just that. PLCs could promote a shared vision and refocus attention on the school mission. As schools become more collaborative, it strengthens a school's capacity for the successful implementation and sustainability of its RTI framework (Burns, Jimerson, VanDerHeyden, & Deno, 2016).

Consistent Procedures and Expectations

Most educational change initiatives fail, not because of the caliber of the ideas, but because of the people who plan and implement them (Wilson, 2018). Lewis (2019) asserted that change is vital because it provides opportunities for growth, development, and new resources. Change is sometimes necessary to correct past failures and accomplish learning and improvements. Transformation involves the movement away from the way things used to be. This process causes disorder in patterns, creates uncertainty, and may result in confusion, anxiety, and feelings of incompetence (Brody & Hadar, 2018). Transition efforts during any new educational intervention require clarity. Clarity is achieved through understanding those you lead and using that understanding to inspire change (Pollack & Pollack, 2015). Lewis (2019) stated that leaders could hinder change efforts if those responsible for implementing the change lack clarity or clear

expectations. When leaders create a culture of transparency, everyone knows what they are doing, why they are doing it, and who is responsible for what. Leaders often underestimate the amount of communication essential to develop a consistent understanding, an effort that may be weakened by inconsistent messages, and lead to a hindered change implementation (Pollack & Pollack, 2015).

Jain, Duggal, and Ansari (2019) declared that schools need transformational leaders that can enhance motivation and commitment among their followers. Transformational leadership characteristics include charisma, possessing the ability to influence the employees through a clear vision profoundly, and having individual consideration that will motivate the employees to achieve organizational goals. Transformational leaders ignite followers to seek innovative ways and improve followers' sense of self-determination for their job. Arnold (2017) said that a transformational leader with the characteristic of intellectual stimulation encourages creativity and empowers their followers to get involved in decision making and the implementation processes. Trust and a clear vision have been identified as widely used concepts in organizational change literature (Arnold, 2017). Jain et al. (2019) examined the relationship between transformational leadership skills adopted by school leaders on subordinates' level of trust in that leader. The findings of the study revealed that the followers' level of trust and mental well-being positively mediated the relationship between the leader and the employees' commitment.

There is a need for teacher clarity to successfully implement the components of the RTI framework (Muhammad, 2017). The majority of intervention research and

practices focus on students at the elementary level. Still, there is a need for clarity and insight on the interventions' delivery and challenges that may exist at the secondary level (Regan et al., 2015). Swindlehurst et al. (2015) pointed to the need for additional clarity around fidelity of implementation with RTI, specifically with what procedures need to be in place for full implementation. Clear guidelines and a high level of procedural specificity can help ensure fidelity in the delivery of interventions, the integrity of the problem-solving process, and the application of valid and reliable decision rules (Duffy, 2018).

Clarity builds teacher capacity. It is crucial for administrators to continuously remind educators of the shared vision and hopes for reaching that vision (Martin et al., 2018). RTI must be provided undoubtedly, and expectations must be discussed to ensure fidelity (Brown, 2018). Regan et al. (2015) declared that a lack of clarity exists for teachers at the secondary school about RTI. Shead (2019) noted that without a clear vision, the organization would be pulled in many different directions. Shead (2019) and Porter (2017) concurred that having a shared vision is the first step in meaningful change. A shared vision fosters the success of innovation because everyone has ownership in the change efforts, understanding, and believing in his or her role in helping students learn. Porter (2017) defined a shared vision as a clear understanding of the expectations of what is needed. The researcher argued that people want to follow someone with a plan. By having a clear vision, you will attract followers who want to align themselves with your ideas (Shead, 2019).

All teachers must understand why the school has adopted RTI, learn the purpose and components, and commit to implementing with integrity to have RTI implemented with fidelity (Bernhardt & Hebert, 2017). Johnson and Hutchins (2019) noted unclear guidelines for implementing interventions, and inconsistent information from the state department of education as significant barriers to the implementation of the RTI model in secondary schools. Both Cavendish, Harry, Menda, Espinosa, and Mahotiere (2016) and Cavendish et al. (2019) examined teachers' perceptions of the RTI implementation processes in their schools. The data highlighted that many teachers indicated a lack of clarity about the purpose of RTI and how it differed from special education placement. Also, they noted the lack of transparency that resulted from limited guidance from the district on Tier III interventions. Hence, there is a need for teacher clarity to implement the critical components of the RTI framework successfully.

Project Description

The findings from the analysis of the interviews and observational data in Section 2 served as the determinant for the necessity of additional ongoing PD training sessions. Data analysis in part 2 of this study suggested a gap in practice in how participants perceived their skill level to implement RTI and their actual ability to perform the model as intended. The conclusions indicated that the participants needed additional PD training on the components of the RTI model to meet the needs of diverse learners better. The project that was created as a result of the findings of this study is continuing PD training sessions for Grades 9-12 teachers responsible for implementing the RTI program that will focus on differentiation of instruction, effective progress monitoring, and data-

based decision making. The PD will be provided during the school district's three-calendar in-house PD days, which are in September, January, and March, but can be split into mini-sessions and presented throughout various other times in the school year at faculty meetings. The PD is mainly achieved using researcher-developed slideshow presentations (Appendix A Part 2), but also includes a series of RTI online training modules developed by the IRIS Center embedded in the presentations. Sponsored by the United States Department of Education's Office of Special Education Programs at Vanderbilt University and designed for PD facilitators, the IRIS Center provides engaging hands-on RTI resources that bridge the gap between research and practice for all educators implementing the model (IRIS Center, 2019). The online training modules are time flexible, but the teachers participating in the training will complete the modules during the training sessions. Also, the teachers can gain a certificate of completion and building-level PD continuing education hours for the end of the learning modules by taking a pre- and post-test.

The focus of the training sessions is to improve the teachers' understanding of the RTI model processes, increase teachers' self-efficacy to implement the model with higher fidelity, and to support their classroom instruction to meet the academic needs of all learners. Also, the training will have several implications for positive social change, such as providing ongoing PD, establishing consistent documentation procedures, and addressing time-consuming data collection processes. The training will focus on the specific needs identified in the study. The goals of the PD sessions are to improve teachers' understanding of the RTI processes, allow teachers the opportunity to engage in

research-based strategies to use in the classroom to support self-efficacy and to provide clarity and expectations on the district's implementation procedures. I believe that ongoing PD will positively affect teachers' perceptions and self-efficacy to deliver the model as intended to meet the diverse academic needs of all students.

Needed Resources and Existing Supports

Administrative support and teacher buy-in are two required resources in this project. Strong leadership is foundational to RTI system change (Thomas et al., 2020). Billingsley, McLeskey, and Crockett (2018) declared that leadership is a critical component in establishing and maintaining a multi-tiered system of support (MTSS). Educational leaders guide change efforts by influencing others to achieve a shared vision. There is evidence to suggest that school principals have a strong influence on whether or how teachers implement evidence-based practices such as RTI (McIntosh, Kelm, & Canizal Delabra, 2016). McIntosh et al. (2016) speculated that the absence or presence of an administrator could enable or hinder the adoption or implementation of an MTSS such as RTI. Without buy-in for RTI, systems change is challenging to develop and sustain (Thomas et al., 2020). Principal and district support enhances teacher buy-in. Teachers' beliefs influence their decisions about practices and guide their actions. Therefore, exploring teacher beliefs and buy-in for RTI can shape implementation, success, and sustainability (March, Castillo, Daye, Bateman, & Gelley, 2019). The teachers have to embrace the training, be willing to implement new practices in the classroom, and participate in the ongoing collaboration with peers.

The other resources that are necessary for the project include a location equipped with a computer and projector to present a slideshow presentation, projector screen, internet connection, laptop computers for teachers to complete online training modules, training handouts, and evaluations. The location for the PD will have to be organized so that the participants can work in collaborative groups to support their colleagues. As the facilitator of the training, I am capable of ensuring that the technology is connected and working correctly. The financial resources needed for the project are minimal due to its partial online format. As for existing supports, I discussed the findings of the research with the school's in-house RTI facilitator, and she has agreed to serve as a liaison between the administration and me to support the project's implementation timeline at the school's first in-house PD in September of the next school year. Additionally, she will be responsible for the photocopying of the training handouts. The school's technology coordinator is also existing support and stated that she would ensure that there is enough supply of technology available for my use.

Potential Barriers

The most significant potential barriers to the success of this project will be a lack of administrative support and insufficient teacher buy-in. The principal must commit to allowing me to conduct the RTI training sessions for all three in-house PD days. If previous obligations on PD training were scheduled, the principal might choose not to deliver the PD project during the expected time frame. The teachers must commit to openly and actively attend and participate in all three days of the PD. Also, the project will not be successful if the teachers do not process the knowledge and implement the

new practices in the classroom. They will not see a shift in their attitudes or confidence to implement the model with fidelity. Additionally, introducing the project to the campus principal after July could delay the delivery timeline since the school's PD calendar is completed in the spring.

Potential Solutions to Barriers

There is growing recognition that educators can only continue to be effective if they are engaged in further PD throughout their entire career (Van der Klink, Kools, Avissar, White, & Sakata, 2017). The teachers in this project study stated that previous PD training did not address the concerns of the teachers, which led to resistance and low buy-in. Van der Klink et al.'s (2017) study observed a shift in teacher personal focus from concerns about their classroom management capacities to concerns about their ability to grow as a teacher and person. The teachers felt overwhelmed and ill-equipped to differentiate instruction in the various tiers to meet the academic requirements of all students. Furthermore, the teachers had concerns about many of the procedural processes of RTI, precisely, how to adequately monitor student progress, time-demanding documentation processes, and the inconsistencies in how the model should be delivered. Also, the findings revealed that the teachers were unclear on how to use student data to drive future instruction. A potential solution to this PD project's potential barriers is the complete delivery of the ongoing PD training sessions. The implementation of the CPD will increase the teachers' knowledge about the components of the RTI framework and increase their self-efficacy to implement the model with higher fidelity. Also, the

delivery of the training will enhance the school's procedural processes to support full compliance with the district's expectations to meet all the teachers' and students' needs.

Proposal for Implementation and Timeline

The project is ready and available for implementation upon the approval of the doctoral study. The expected date for the execution of the training sessions is for the 2020-2021 school year at the research site but might commence the following school term. I will present the findings with the school's principal and all teachers participating in the ongoing PD during a faculty meeting to provide a rationale for the project's application. Upon approval, I will meet with the research school's RTI facilitator to schedule the times and locations of the training sessions and to provide training materials that need to be copied. Teachers will receive a paper copy of the slideshow presentation (Appendix A Part 2). Also, I will meet with the technology coordinator to request the technology (e.g., projector, projector screen, computers, internet connection, presentation clicker) needed to present the training. The anticipated administration of the project will begin in September 2020 and end in March 2021. The training sessions are 21 hours total covering 3-7 hour days. The training can be broken up into 1-hour mini-sessions to be presented at various faculty meetings throughout the school year and should be completed by the end of the school year. Each training session will conclude with an evaluation form and a question and answer session to address any concerns or unresolved ideas.

Role and Responsibilities

As the researcher, I will facilitate the PD sessions during the 2020-2021 school years because I developed the project and have the most knowledge about the content. As the presenter, I will be supportive and receptive to the participants' needs and address any questions or concerns as the training proceeds. I will provide engaging, active PD training sessions through differentiated hands-on activities offered in the slideshow presentations (Appendix A Part 2) embedded with the interactive online modules from the IRIS Center. Through the online RTI modules, I will provide user-friendly, trustworthy resources that will allow the teachers the opportunity to gain a better understanding of the RTI framework's components and earn PD certificates for additional PD hours.

Teachers want PD sessions that will have them actively engaged in the practice of skills, strategies, and techniques (Matherson & Windle, 2017). The teachers participating in the training sessions will need to be actively involved in meaningful analysis of teaching and student learning. By engaging teachers in productive work, the PD could enhance the teachers' knowledge and skill, and improve their classroom teaching practice. To increase their sense of self-efficacy, the teachers must continuously use the strategies and methods taught in their classrooms and PLCs.

It is paramount that principals are aware of how they can provide the support teachers need in the current educational context (Ei Phyu & Banks, 2018). Ei Phyu and Banks (2018) further noted that administrative support had been proven to be a significant contributing factor to teachers' job satisfaction and commitment. The

principal will support the training by meeting with the teachers on their planning periods within one week after the training sessions. The purpose of these meetings is to offer teachers the opportunity to reflect on learning. Also, teachers could reflect on how the strategies are being used in the classroom. The principal will establish grade level PLCs to support the ongoing collaborative efforts of the teachers. The creation of a PLC, in which the focus is on teacher learning and collaboration, is a promising way to promote the continuous PD of teachers (Gaikhorst, Beishuizen, Zijlstra, & Volman, 2017).

Project Evaluation Plan

Evaluating PD is vital to the research's goals, such as gaining a better understanding of a PD's quality, initiating positive change and improvement, and better informing and guiding reform efforts (Merchie, Tuytens, Devos, & Vanderlinde, 2018). McChesney and Aldridge (2018) suggested that the evaluation should measure the influence that the PD activities had on teaching and student learning. When evaluating the effectiveness of a PD, trainers must evaluate teacher knowledge and skills, teacher attitudes and beliefs, teacher classroom practice, and student learning outcomes (McChesney & Aldridge, 2018). The PD is anticipated to improve educators' knowledge and skills in the RTI process.

The evaluation of this project is formative. The goals of the PD sessions are to improve teachers' understanding of the RTI processes, allow teachers the opportunity to gain knowledge of research-based strategies to use in the classroom to support self-efficacy and to provide clarity and expectations on the district's implementation procedures. An exit slip consisting of five open-ended questions will be administered

after the training sessions that will serve as formative feedback from the participants to inform and improve future training. Drago-Severson and Blum-DeStefano (2017) expressed that feedback can directly enlighten and support improved instruction. They further declared that the feedback could help teachers more effectively create and sustain cultures of learning in their schools and the district. The exit slips will allow teachers to share the highlights and needs of the training. Also, participants can share additional practices or concerns that need addressing in future training. In addition to the formal assessment, I would conduct informal assessments during the session, where I would monitor the level of engagement of the participants during collaborative activities for knowledge acquisition and understanding. Finally, the grade-level administrators might note changes in instructional strategies or practices during classroom observations.

Project Implications

Local and Far-Reaching Social Change

The project has the potential to positively influence teachers' classroom instruction and improve the academic performance of students at the research school, the local community, and could be used by other school districts. Castillo et al. (2018) indicated that intensive PD focused on the components of RTI as well as school-level beliefs, and perceived skills were related to successful implementation within an RTI model. Also, the findings suggested that using feedback data to refine PD and meaningfully involving participants in their learning should be considered. To implement RTI efficiently and increase student achievement, teachers need to possess knowledge of evidence-based practices, how to differentiate instruction in the tiers,

progress monitor, and DBDM skills to support the fidelity of implementation (Alahmari, 2019).

In response to the findings in the project study for the need for additional on-going PD on the components and processes of the RTI model, the proposed project could positively affect social change at the research site and other secondary school settings. The problem at an urban high school is that the teachers are struggling to implement the tiered interventions of the RTI model. The project offers a solution to the study's problem. The PD training sessions and IRIS Center's modules were designed to increase teachers' knowledge of the RTI processes and to provide evidence-based interventions that will support the teachers in meeting the needs of diverse learners. The project might increase the secondary teachers' self-efficacy and strengthen the implementation of the tiered interventions, thus increasing student achievement and reducing the numbers of students referred for special education services. Also, the teachers would benefit from the collaboration with peers through established PLCs. PLCs allow teachers an opportunity to collaborate, process, and reflect on practices to shape future instruction.

Sustained school-based CPD has the potential to overcome some of the shortcomings of traditional one- day off-campus PD (Goodyear, 2017). Goodyear (2017) stated that CPD provides formal and informal learning experiences, time to reflect, collaborative activities, and on-going support from an outside facilitator. High-quality, sustained teacher PD has a positive effect on teaching practices and students' academic outcomes (Capraro et al., 2016). Although the project was created in response to the research study's problem, the IRIS Center's online training modules are universal. They

can be used for any grade level by any school district. The processes and strategies presented are relevant to broader audiences other than secondary teachers.

Conclusion

In Section 3, I presented a description of the project that emerged from the research. The goals of the PD sessions are to improve teachers' understanding of the RTI processes, allow teachers the opportunity to engage in research-based strategies to use in the classroom to support self-efficacy and to provide clarity and expectations on the district's implementation procedures. On-going PD training is an appropriate and logical project in response to this case study's findings because it addresses the learning needs of the teachers in this project study. I provided a current review of the literature that supports my conclusions. I included the project's needed resources, potential barriers, and possible solutions to the obstacles. Also, I provided a timeline for the implementation of the project and the roles and responsibilities of the stakeholders. The implications for both local and far-reaching social change were also explained in Section 3.

In Section 4, I described the project's strengths and limitations, presented alternative solutions to the local problems, and provided my perspectives of the doctoral dissertation process and reflected on/discussed the importance of my work overall. Also, I discussed my learning/growth as a scholar-practitioner and project developer.

Section 4: Reflections and Conclusion

Introduction

In Section 4 of this study, I present my reflections about the study's findings. I discuss the project's strengths, possible limitations, and recommendations for alternative solutions to the local problem. Also, I discuss scholarship, project development, leadership and change, and the importance of the work. I concluded the section with the implications, applications, and directions for future research.

Project Strengths

The project that I created from the study's findings will provide teachers with continuous PD on the components of the RTI model that could positively influence teaching practices and enhance student learning. Smith (2019) stated that the RTI model could be successfully executed, depending on a school's needs, funding, and personnel. Smith further explained that the following factors contributed to individual student gains and wide-spread school improvement: high expectations, a positive school culture, CPD, student assessment, data analysis, and research-based interventions. Castillo et al. (2016) stated that PD workshops that incorporated repeated exposure training and job-embedded coaching would be more likely to increase educators' RTI skills. The teachers at the project study school were struggling to implement the tiered interventions of the RTI model. As a result of these implementation issues, more students met the criteria for more intensive intervention and special education services than may have been necessary. Sanetti and Luh (2019) declared that interventions are often adopted slowly and delivered with poor fidelity, resulting in poor academic outcomes for students. Fuchs and Fuchs

(2017) proclaimed that gaps between the literature and practice consistently affect the implementation and the effectiveness of RTI. Sanetti, Collier-Meek, Long, Byron, and Kratochwill's (2015) findings indicated that the vast majority of implementers (e.g., teachers) struggle to implement interventions consistently for more than 10 days without implementation support. However, educators are not receiving the on-going support needed to deliver interventions consistently, and students are not receiving interventions required to meet their learning needs.

The PD developed for this project study had several strengths that could manage the problem at the research site. The first strength of the PD is that it is informative nature and involves active learning. The PD presents two approaches, a slideshow presentation and online learning modules, for improving implementation fidelity in the RTI program. The PD would provide secondary teachers with an overview of RTI and insight into some evidence-based practices that could enhance their self-efficacy to implement. Also, it would present teachers with the district's guidelines and procedures for progress monitoring to support continuity in the implementation process. The PD sessions are on-going through the school year, which allows the teachers an opportunity to collaborate and evaluate current practices that enhance future teaching and student learning.

The second strength is that the PD addresses the teachers' significant needs and concerns identified in the interviews and classroom observations. In the interviews, all participants expressed a need for continuous training on the components of the RTI model, notably how to differentiate instruction in the tiers and monitor student progress

accurately. Also, this need was evident in the classroom observations where teachers who were differentiating instruction in small groups struggled to differentiate within those groups. The participants in the study unanimously stated that they wanted more evidence-based strategies to support implementation fidelity. The teachers were concerned that the school's current procedures and processes were not consistent and failed to identify those students who needed more intense interventions promptly. This PD would provide teachers with a more systematic approach to delivering RTI to improve students' academic outcomes.

A third strength of the project is the online training modules developed by the IRIS Center that would allow the teachers to be self-directed learners. The IRIS Center (2019) is supported by the U.S. Department of Education's Office of Special Education Programs. It offers engaging online resources about evidence-based instructional and behavioral practices to support the education of all students. The purpose of these modules is to bridge the gap between research and practice. A further strength of these modules is that they were developed in collaboration with researchers and education experts. Also, the educators have the option to receive PD credits upon completion of the units. The sections' topics cover many of the teachers' concerns identified in the findings (e.g., evidence-based practices, differentiated instruction, RTI and content instruction, progress monitoring, collaboration, etc.). Each module consists of the following: (a) a case-based video scenario that introduces the topic and invites inquiry, (b) questions that activate prior knowledge about the issue, (c) scaffolded and engaging content developed using instructional design principles, (d) summary of the module content, and (e) an

opportunity for learners to evaluate what they have learned or need to study further (IRIS Center, 2019).

Project Limitations

The project has two limitations. The first limitation could be that the school or district's Internet is not operational. The project I designed for the research school requires the use of technology. Also, the IRIS Center website could be unavailable. In this case, teachers would be unable to use the online IRIS Center modules. According to Hubbard (2018), teachers need to be prepared to learn and relearn as devices and applications evolve continually. A second limitation could be the teachers' resistance to using technology as a learning tool. Hubbard (2018) stated that a teacher's opposition to using technology could be a result of personal beliefs. Hubbard further noted that by having not experienced the potential value of technology firsthand, a teacher might be unaware of its transformative potential for both the teacher and the students. While observing the participants in the classroom, I noticed very little technology integration other than the use of Smart Boards utilized to play instructional videos. Liao, Ottenbreit-Leftwich, Karlin, Glazewski, and Brush (2017) declared that studies have shown that teachers who are more comfortable with technology are more likely to transfer what they learn in PD courses and workshops into their classroom.

Recommendations for Alternative Approaches

The problem in this study is that the teachers are struggling to implement the tiered interventions of the RTI framework despite having participated in two prior PD training opportunities. The findings from the research revealed that PD was necessary to

train struggling teachers on how to implement the model effectively. Other identified themes from the study were lack of knowledge of differentiated instruction, inconsistent procedures, time-consuming processes, and low acceptance. PD training is the primary method utilized by educators to obtain new knowledge and instructional strategies. Thomas et al. (2020) revealed that the secondary teachers participating in the research indicated that PD about the RTI process, roles, and responsibilities had been inadequate and that they would like more extensive PD moving forward. In addition to training and scheduling, the teachers reported a lack of time to collaborate in RTI or data teams. The on-going PD training sessions are the logical solution to address the teachers' identified problems and concerns at the project study school.

The PD sessions would provide knowledge, skills, and resources to support the implementation fidelity of the RTI model. Still, there are other possible alternative approaches to address the local problem if the project's limitations or delivery timeline impede the implementation of the project. The first alternate approach could be to assign the IRIS Center training modules throughout the school year as enrichment. Beach (2017) stated that web-based learning environments are primary sources of information for teachers, providing accessible opportunities for learning and contributing to teachers' collection of professional knowledge and instructional material. Online learning platforms, including PD websites, deliver information in a means that removes time, place, and situational barriers (Beach, 2017). Also, teachers would be provided a printed RTI manual as a desktop reference that includes topics on the overview of RTI, evidence-based strategies for each tier, progress monitoring forms with examples, and district

protocols. The IRIS Center modules are self-directed and provide real-world application practice. The manual would provide support for strategies and will serve as an exemplar for documentation forms and procedures. A second alternative approach could be to implement the PD project during the summer hours or Saturdays. Nugent, Chen, and Soh (2020) stated that PD opportunities that are offered as summer or Saturday workshops could be informative and provide accessible opportunities for teachers who may have time constraints or other situations during the regular school hours. Teachers could receive a paid stipend for their participation. The summer or Saturday training can be flexible and delivered in minisessions.

Other alternative approaches deal with planning periods, scheduling, and PLCs. The project study school operates on a modified block schedule where students rotate odd and even classes. Currently, the schedule has eight periods, each 90 minutes long, alternating four per day. Also, the schedule includes 30 additional minutes added to the fifth and sixth periods for lunch. The teachers at the project study school get a 90-minute planning period daily. The third alternative approach consists of teachers participating in a 60-minute PD session with other content teachers on their planning period. This way, the teachers will still get their 30 minutes planning period required by law. At the very heart of the PLC model is the need for time for teachers who work with the same students or teach the same content to confer with each other (Beaton & Beaton, 2019). The implementation timeline for the project would be modified to include the months agreed upon by the principal. The PD would be delivered in minisessions but remain 21 hours in length. The fourth and final alternative approach is the principal could schedule a

standard planning time for the various departments. The content teachers would share a common planning time, which would serve as multiple PLCs within the school setting led by the department chairs. The teachers would meet once a month to discuss differentiated strategies that are currently working, evidence-based interventions, and progress monitoring. The department chairs would attend all of the PD training sessions in the summer but conduct turn-around training within the content-based PLCs. The principal could still assign the online learning modules as enrichment to individual teachers needing additional support.

Scholarship

Cambridge University Press (2020) defined a scholar as a person with vast knowledge and one who studies a subject in great detail through a university. I have gained a deeper understanding of the term scholar as I progressed through this program from the course work, the prospectus stage, and culminating in a PD project. Throughout my journey at Walden University, the concept of becoming a scholar-practitioner was emphasized in each course. Through profound reflection, I learned several things about myself as a scholar and as a practitioner. First, I learned that the doctoral experience was a complex, challenging, and life-changing process. I faced many challenges in my desire to be a scholar-practitioner. I had to learn to write in a scholarly tone. I had to learn how to synthesize the academic work of others that I was reading and cite evidence to justify my ideas. Before this program, I did not know how to conduct a literature review. I always tell my students not to be afraid to ask for help if they do not understand. After struggling in a quantitative research class, I followed my advice, and I learned how to ask

for help. I became more competent at using Walden's library databases to search for current literature to support my research.

Secondly, developing the PD project provided opportunities for growth as a scholar-practitioner. My research skills improved through the journey of completing a doctorate program. I learned about various qualitative methods and their benefits, thus choosing the best way to answer my research questions. I had to design, conduct, evaluate research, and apply what I had learned in course work. I learned to problem solve. I know how to collect and analyze data. I utilized standard ethical practices throughout my research to ensure no participants were harmed in the study. Next, I have become a better communicator. The discussion boards in the online classroom modules provided opportunities to engage in dialogue with colleagues and the professor on current issues faced in education.

Cultivating a scholarship mindset is a requirement for success in early and later academic careers (Zygouris-Coe & Roberts, 2019). Walden supported me with a scholarly community consisting of peers who are published and experts in their field of education. This guidance played an essential role in how I experienced the doctoral process and what mindset I developed about the purpose of scholarship. My coursework provided me with the skills necessary to conduct and evaluate the effectiveness of my research. I have learned the importance of collaborative learning. My chair and committee members, serving as mentors, provided the support and feedback necessary to complete this project study. They helped to ensure that high standards of academic research were maintained through each stage of the research process. As a doctoral

student and scholar-practitioner at Walden University, I desired to bridge the gap between what I was learning in the classroom and my profession as an educator by sharing my knowledge and ideas with others to inform and enhance instructional practices.

Project Development

Engaging in research experiences can connect classroom learning to real-life questions (Kilgo & Pascarella, 2016). As a secondary teacher and candidate in Walden's Doctorate of Education program in Curriculum, Instruction, and Assessment, I sought a research topic that has continuously affected my instructional practices and those of my peers. I wanted a study that would influence society by creating new knowledge, change instructional practices, and improve the social conditions of my community and those on other campuses. As a high school general education teacher in the same district as the project study school, I was aware of the need for further research on the concept of RTI. The teachers at the research site were having difficulties with implementing the RTI program with fidelity.

After completing the research portion of the project study, I began considering how I might develop a project that would meet the participants' needs and concerns with the RTI program. The PD project progressed from the data collection, coding, and analysis of the findings identified in the interviews and classroom observations. The participants believed that the previous training opportunities were not meeting their learning requirements or the academic needs of their students. The findings guided a literature review, which then led to the development of the project. I developed the PD as

a solution to address the teachers' concerns with the RTI program to lower the number of students receiving more intense interventions and those being referred to special education. I wanted to offer the teachers a way to meet their students' diverse academic needs. Teachers were provided continuous guidance in the form of training sessions that would enhance program delivery fidelity, ensure consistency and clarity on RTI processes and protocols, and present opportunities to work collaboratively in PLCs to sustain the model in future years.

As a project developer, I used peer-reviewed literature to gain clarity of the challenges and concerns teachers across the nation faced implementing the RTI framework. This understanding will help me to improve my practices as a classroom teacher and the quality of support that I can provide other school districts in the future on the barriers that impede the full implementation of the model. Also, I believe that this new information will allow me to assist in teaching and learning for teachers at my school and their students through meaningful and authentic PD training. The goals of the PD sessions are to improve teachers' understanding of the RTI processes, allow teachers the opportunity to engage in research-based strategies to use in the classroom to support self-efficacy and to provide clarity and expectations on the district's implementation procedures. As the developer of this project, I realized that I needed to evaluate the participants' attainment of the PD's goals and to what extent to inform future training. As a result, an exit slip consisting of five open-ended questions was designed as a formative assessment tool.

Leadership and Change

Change happens with good leadership. Dumas and Beinecke (2018) noted that change leaders must encourage their organizations to learn, innovate, experiment, and question. They further stated that leadership should prepare their organizations for change by continually seeking new perspectives and encouraging participation throughout the organization. Stakeholders must be willing to do the necessary work to accomplish the organization's objective no matter what it takes. These leaders seek to expand the capacities of each employee, enhance his or her way of thinking, and promote individual ambition (Litz & Scott, 2017). I believe that I am equipped to be a change leader in my school district. I chose to explore the topic of RTI because of personal experiences in the community. The idea of conducting a research study on this issue was to create positive social change by focusing the district leaders' attention on the concerns that teachers encountered delivering the model, specifically in secondary school settings.

As a school leader, I will create positive social change through collaboration with all stakeholders to make the best decisions to support positive school culture and student achievement. I will use self-reflection to monitor my progress and work to improve my abilities as a classroom teacher and leader. Through this project study, I was able to seek new perspectives to obtain a better understanding of the PD, support, and training resources needed by teachers to implement the RTI model with higher fidelity. The PD project encourages teacher participation and collaboration throughout to accomplish the goals of the project. If the school district adopts my plan for future PD training at all

schools in the area, I feel my project could provide positive social change not only to this district but to other K-12 school districts as well.

Analysis of Self as Scholar

As I look back over my growth as a scholar at Walden University, my writing, vocabulary, and research skills have developed to a doctoral level. I learned how to write scholarly, use academic vocabulary, and conduct scholarly research. My thought processes have evolved. Throughout this doctoral process, I had to increase my critical thinking skills. I am now able to analyze, synthesize, and interpret data to conclude. Conducting interviews required the expertise of accomplishing an insightful interview that yielded rich and meaningful data. Also, it allowed the participants to feel safe and at ease (Dempsey et al., 2016). I had to learn how to become an excellent interviewer to collect rich, useful data on a sensitive topic such as RTI because it has been known to be laden with emotions. As a result, I had to learn qualitative interviewing skills such as being a good listener, having patience, showing empathy towards the interviewee, asking probing questions, and providing feedback. I now have enough confidence to conduct qualitative research. I matured as a researcher, a role that will allow me to bring about positive change in my future work.

Analysis of Self as a Practitioner

I attempted to implement what I have learned throughout my educational journey. Currently, I am a high school science teacher with 18 years of experience working in an urban Title I school district. I have learned that I am great at teaching. I have high expectations for myself as an instructor and even higher academic expectations for all my

students. I am always involved in self-reflection. Teachers who do not engage in self-reflection are less likely to question their practices and change their beliefs about teaching (Civitillo, Juang, Badra, & Schachner, 2019). As a practitioner, I have attended many PD opportunities on various topics and implemented different instructional strategies in my daily classroom practices to develop professionally and to meet the individual academic requirements of all my students. As a practitioner, I have learned from my colleagues. As an aspiring scholar-practitioner, we discussed how engaging in these types of learning experiences would benefit my practice as a classroom educator. We collectively created these learning experiences to extend new knowledge about what emerging interventions can move our students forward. I continue to participate in online PD training and local and state conferences to increase my knowledge and understanding in the field of education.

Research is a systematic, scientific, objective activity, which includes the collection of relevant information, and careful analysis of data, recording, and reporting of valid conclusion, that may lead to the creation of new knowledge. Educational research is the process of scientific inquiry to solve the problems of the educational sector of the country. Teacher research has the goal of examining a teacher's classroom practice to improve it or to understand better what works. My PD project will facilitate change in the classroom setting. As a teacher, I have recorded videos of myself teaching to offer a more realistic example of what occurred during classroom instruction. The research process allowed me to grow as a researcher and teacher. I am grateful for the support and guidance that I received from my research committee. The committee pushed me to

think not as a teacher, but as a researcher to deliver a project that would create positive social change in my community and further. Also, I am appreciative of the study's participants who provided their perspectives and insights on the RTI processes and procedures at their school. It was this insight that led to the creation of the PD project.

Analysis of Self as a Project Developer

At the start of this journey, I did not understand the difference between a dissertation and a project study. I was advised that a project study involved me examining a local problem and designing a project that would transform social change. When I began this project, I did not have an idea of how much work goes into developing PD training. It was a challenging and prolonged task. As an educator and a student, I was familiar with developing slideshow presentations to present to students and peers. I have worked on other projects in my professional career, such as working with the department chair to create technology-related activities for teaching and learning; however, I have never planned three days, seven-hour PD comprehensive workshop before this experience. I had an opportunity to develop a project that has the potential to change attitudes and beliefs, instructional practices, and influence positive social change in an urban Title I high school. The ultimate goal of the project was to improve teachers' effectiveness in implementing the components of the RTI model and provide continuity in procedural processes.

I have never worked on anything of the magnitude of this project study, but it was a gratifying experience. For this study, I conducted a thorough review of the literature related to RTI and implementation fidelity. I learned a lot of information about RTI, and

I am becoming an expert on the topic. The training sessions I developed focused on providing teachers with evidence-based strategies and resources to implement the RTI model with higher fidelity. The slideshow presentation that will be used during the training required the least amount of work. I worked with the school's in-house RTI facilitator and the district's RTI facilitator to modify a pre-existing presentation to merge prior training material with new information and resources that addressed the concerns identified in the study's findings. Initially, I attempted to develop all the training materials that would be used in the PD workshops; however, the IRIS Center (2019) has developed many tools and materials to assist PD providers who deliver training to teachers. I refined the PD into manageable components that could provide a considerable amount of assistance for teachers implementing the RTI program in various districts.

Reflection on the Importance of the Work

The RTI framework is designed to provide instructional support to meet the learning needs of all students. School districts across the country have adopted and now utilize the model and its tiered interventions to address individual academic requirements in the classroom (Turse & Albrecht, 2015). As I reflect on my work, this qualitative study proved to be important in that it detailed the participants' perceptions of and concerns with the RTI interventions, procedures, and processes in their high school. While hearing about and observing these concerns, I sought to identify the best PD training, support, and resources for the teachers responsible for implementing RTI at the research site. All participants agreed that additional PD was needed to improve their abilities to perform the model as intended. The PD training sessions and the

establishment of PLCs allow teachers, administrators, and district leaders opportunities to collaborate and share best practices. As a result, teachers' self-efficacy to implement the components of the RTI program will increase. As teachers gain knowledge and skills in this area, their instructional practices are likely to change, closing the gaps between research and practice, which could improve the academic outcomes for all students. Therefore, this PD project must be delivered.

The project has helped me grow as a student, educator, and change leader. I have learned new instructional strategies to not only help the teachers at the research site but strategies that will benefit my students. I have learned to design meaningful, hands-on PD. When this PD training is implemented, teachers within the district will be receiving support that influences future lessons and classroom assessments. The PD training could easily be modified to suit the needs of other regions that are looking to improve their teachers' capacity to implement RTI. In this way, the PD project has the potential to benefit teachers and students across the country, possibly.

Implications, Applications, and Directions for Future Research

The project study has the potential to create positive social change for teachers and students on the classroom level. A potential social change that could arise from this study is designing a high-quality ongoing RTI PD for secondary school settings that could affect the teachers' knowledge and skills to deliver the model with higher fidelity in all core content areas. As teachers improve their instruction, students' learning experiences will also improve. PD is essential for teacher effectiveness because it helps teachers achieve and apply new knowledge and skills and implement effective

instructional practices for student success. Teachers require PD training that is relevant to best practices and research-based strategies that can be applied in the classrooms.

Castillo et al. (2018) indicated that PD utilizing evidence-based practices could provide teachers the skills necessary to implement RTI as intended. The participants in this study emphasized the need for additional PD on how to differentiate instruction for students and how to monitor students' academic progress in the RTI program accurately, as they had not received adequate education prior. This project study's findings indicated that the previous RTI training provided to the teachers at the project study school failed to meet the learning needs of the teachers because the content was inconsistent, and there was no continuity in the implementation procedures and processes. The PD project that I designed as a solution to the problem will provide the teachers at the research site with the knowledge, skills, and resources to enhance their delivery of the RTI model. Also, this PD will give the teachers assessment resources and an ongoing collaborative community for sharing resources. Collaboration and support among colleagues will have a significant influence on teaching and learning. The knowledge and strategies acquired in PLCs could be implemented in the classroom to increase students' learning and achievement. As a result, this could enhance teachers' self-efficacy to implement RTI in content areas, reduce the number of students needing more intensive intervention, and reduce the number of students being referred for special education services.

The results of this study could influence PD opportunities offered to teachers in the current district and beyond. One application of the PD project is to implement the PD at the project study school and other similar secondary settings in the community. The

topics presented in the PD sessions are universal; therefore, the presentations could also be offered in elementary settings. I plan to collaborate will all school settings in the district to provide meaningful, authentic RTI PD for all teachers. Also, I would like to present the findings to state and national educational conferences. I want the study to be published in peer-reviewed journals.

Once the PD has been implemented, further research should be conducted on teachers' perceptions to determine the effectiveness of the PD. There needs to be new research about how the teachers applied the strategies and how readiness to implement improved since the training. Future quantitative analysis is required to measure student achievement. The findings could be used to guide future RTI decisions for the district concerning the local problem. By contributing to future choices, this project study will be positively influencing the teachers and students in the school district of the project study school. With further research and modifications, this project could be used in settings with comparable identified PD needs.

Conclusion

Teachers should be supported by their schools and school district through PD to meet the RTI implementation standards (Alahmari, 2019). Cartledge, Kea, Watson, and Oif (2016) declared that to implement RTI efficiently, teachers need to possess knowledge of evidence-based instruction, tiered instruction, multiple assessment tools, progress monitoring, and fidelity of implementation. In this qualitative case study, I explored teachers' perceptions of the implementation of RTI at one high school to help teachers and administrators understand what PD training, supports, and resources are

needed to implement the model effectively. In the data analysis, I found a need for continuous PD regarding differentiation of instruction, assessment, and school-wide support. As a result, a PD project genre was developed with the following goals: to improve teachers' understanding of the RTI processes, allow teachers the opportunity to engage in research-based strategies to use in the classroom to support self-efficacy, and to provide clarity and expectations on the district's implementation procedures. The PD project, if implemented as intended, has the potential to change teachers' classroom practices positively, increase collaborative practices, and improve students' academic learning.

Conclusion

I used a qualitative approach to explore 12 secondary teachers' perceptions of the implementation of the RTI model at one low-performing high school to gain an in-depth understanding of what professional training, supports, and resources were needed to implement the RTI model effectively. Data analysis revealed a need for additional PD in the areas of differentiation of instruction, progress monitoring, and data-based decision making. The goals for a PD project were created to meet the learning needs of the teachers. The overarching goals of the PD project are to improve the implementation fidelity of the RTI framework and increase students' academic achievement. The project study identified future learning opportunities that could assist school districts struggling to implement the RTI model. Through self-reflection, I was able to understand the significance of the RTI program on student achievement and social change.

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Appendix A Part 1: The Project

Strengthening RTI for At-Risk Learners

Introduction

The findings of the research study gathered from semistructured interviews and classroom observations guided this project. Teachers at the research site responsible for implementing the RTI framework shared their perceptions and concerns with barriers to the full delivery of the model at their school. The analysis of the data from this research resulted in the identification of four themes that the teachers stated they needed help to implement the RTI program effectively. The issues were: professional development, differentiated instruction, assessment, and school-wide support. A review of the findings reflected that the teachers might benefit from on-going professional development training on the components of the model; more specifically, how to differentiate instruction for individual student needs and how to monitor student data to make data-driven instructional decisions that support the sustainability of the model at their location. I developed a 3-day PD titled, *Strengthening RTI for At-Risk Learners*, included in Appendix A Part 2. The project will involve a 3-day workshop where teachers will gain new knowledge about the RTI process and learn research-based differentiated strategies to improve students' learning outcomes in the classroom. I will serve as the facilitator and implement the three training workshops using a slideshow presentation (Appendix A Part 2). The workshops will require the participants to participate in their learning experience actively.

The training will be delivered through research-based classroom differentiated instructional strategies, which the teachers can use with their students, that promote new learning, collaboration, and reflection. Some of the strategies presented in the training sessions are Think-Pair-Share, Turn and Talk, Table Talk, Three-Minute Pause, and Circle Chat. The training workshops include interactive activities such as Kahoot, Jeopardy, and The IRIS Center modules. The IRIS Center modules will be embedded throughout the presentation, providing interactive blended learning opportunities. The IRIS Center (2019) provides instructional supplements to support PD facilitators with training on how to effectively deliver the RTI model. The teachers, participating as active learners, will gain knowledge of how to incorporate these strategies into their classrooms.

Many of the strategies are group activities. Think-Pair-Share is a group discussion strategy. Hamdan (2017) stated that the strategy is designed to provide students with an opportunity to think about a given topic by enabling them to formulate individual ideas and share these ideas with another student. The strategy works in three phases which includes: (1) The teacher provokes students' thinking with a question or prompt; (2) Students pair up to talk about the answer each came up with; and (3) The teacher calls for pairs to share their thinking with the rest of the class (Hamdan, 2017). Turn and Talk is similar to the Think-Pair-Share strategy and provides students with opportunities to develop ideas and share their thinking with another student (Zarrinabadi & Ebrahimi, 2019). The teacher asks a question and students turn to a preselected partner and discuss their thinking about the question.

The Table Talk strategy is another group conversational strategy that provides students with an opportunity to engage collaboratively with their peers to process new information. Students are provided a prompt, then discuss their ideas with others at their table. The main purpose of the strategy is to introduce new information, collect student thinking, and to close an activity (Zarrinabadi & Ebrahimi, 2019). A Circle Chat is another activity for student-to-student interaction. Similar to Think-Pair-Share and Turn and Talk, the strategy is collaborative and reinforces the development of ideas and sharing. In this activity every student speaks with multiple people in a circle, which allows for greater exposure to others' thoughts (Seaman & Rheingold, 2017). Students are arranged in circles of no more than ten. The students should have two minutes intervals to talk to different partners about the question they are asked.

The Three Minute Pause and Quick Write strategies are used for reflection. Hamid, Musriana, Amin, and Qalby (2017) stated that the Three Minute Pause strategy helps students' process information. The teacher provides a short break during which the students summarize new content, connect new content to prior knowledge, and are free to ask clarifying questions. The pause time provides students with an opportunity for reflection that can enhance knowledge retention. Quick writes are also a good way to help students develop ideas and reflect (Ciullo, Mason, & Judd, 2019). The teacher provides an idea and for ten minutes, the students write down everything that comes to mind without stopping. Once the ten minutes are over, students are allowed the opportunity to share and reflect.

Experiential techniques and alternative learning environments are useful in helping students better understand and retain information (Shabaneh & Farrah, 2019). The teachers' understanding and retention is enhanced and improved by providing alternative learning activities. Kahoot and Jeopardy are game-based interactive learning activities that can be used a reflection or learning support tool. The students participate in quiz-based games that reinforce key ideas and concepts and encourages collaboration among peers. The students are given a pin to join a teacher created game.

The slideshow presentation (Appendix A Part 2) for all three training sessions of *Strengthening RTI for At-Risk Learners* is located at the following link: https://www.dropbox.com/s/5peca4flkdwngp7/The%20PD%20%20Project%209_15_20.pptx?dl=0

Purpose

The purpose of this project is to provide secondary teachers on-going professional development (PD) opportunities to address their concerns and challenges with delivering the response to intervention (RTI) model effectively in their classrooms. This project was designed to provide secondary teachers with authentic, hands-on training to improve the teachers' understanding of the response to intervention (RTI) model processes, increase the teachers' self-efficacy to implement the model with higher fidelity, and to support their classroom instruction to meet the academic needs of all learners. The training sessions are necessary for continuous support with each component and tiered level of the RTI framework.

Goals and Objectives

The overall goal of the PD sessions is to improve the teachers' understanding of the RTI processes by offering a thorough overview of the framework. A fundamental goal of the training is to increase the academic achievement of students through the improvement of teachers' capacity to implement research-based strategies and participate in evidence-based practices. The learning objectives include: offering teachers the opportunity to engage in research-based approaches to use in the classroom to support self-efficacy, acquire strategies to differentiate instruction based on individual students' learning needs and to provide clarity and expectations on the district's implementation procedures.

Targeted Audience

The training sessions have been developed for all secondary teachers (grades 6-12) responsible for implementing the RTI program. Also, the information presented will be beneficial to district leaders and administrators. By understanding teachers' readiness to implement the RTI framework, future professional training can be designed to meet learners' needs.

Project Design and Timeline

The 3-day training workshops will be designed to focus on differentiation of instruction, effective progress monitoring, and data-based decision making. The participants will participate in active learning activities that are hands-on, engaging, and research-based practices. The expected date for the execution of the training sessions is for the 2020-2021 academic school year at the research site but might commence the

following school term. The project will be delivered during the project study school's three in-house PD days in September, January, and March. The agendas for the training workshops are as follows:

Agenda

The PD will occur during a 3-day training period. The PD also can be divided into mini-training sessions, depending on previous obligations concerning the in-house professional development calendar.

Agenda Day 1

8:00-8:30	Welcome, Outlines of the training, and PD learning objectives
8:30-9:00	Think-Pair-Share Activity: "It's easier to build strong children than to repair broken men."
9:00-10:00	RTI Overview/Purpose/Benefits
10:00-10:15	Break
10:15-11:15	IRIS Center Module: RTI (An Overview)
11:15-11:30	Reflections
11:30-12:30	Lunch on Your Own
12:30-1:00	Three-Minute Pause
1:00-1:30	Differentiating Instruction Overview and Strategies
1:30-1:40	Review Video: Differentiating instruction in Grades 6-12
1:40-2:40	IRIS Center Module: Differentiated Instruction (Maximizing the Learning of All Students)
2:40:3:15	Kahoot Activity: RTI and Differentiating Instruction
3:15-3:30	Review/Closure/Reflection: Exit Slip

Agenda Day 2

8:00-8:30	Welcome, Outlines of the training, and PD learning objectives
8:30-9:00	• Quick Write Activity: Can we solve problems within a multi-tiered system of support such as RTI if we don't know the expectations? • Table Talk: "However beautiful the strategy, you should occasionally look at the results."
9:00-9:15	The Problem-Solving Approach and The Team
9:15-9:30	Small-Group Activity
9:30-10:00	Progress Monitoring • Overview • Benefits • District Forms
10:00-10:10	Break
10:10-11:10	IRIS Center Module: Progress Monitoring
11:10-11:30	Reflections
11:30- 12:30	Lunch on Your Own
12:30-12:45	Turn and Talk Activity
12:45-1:30	Data-Based Decision-Making: Overview and Purpose
1:30-2:40	IRIS Center Module: Data-Based Decision Making
2:40:3:15	Jeopardy: Progress Monitoring and Data-based Decision Making
3:15-3:30	Review/Closure/Reflection: Exit Slip

Agenda: Day 3

8:00-8:30	Welcome, agenda, handout of presentation, and learning objectives
8:30-9:00	Circle Chat
9:00-9:30	Administrative Support and Guidance
9:30-10:00	Small Group Activity
10:00-10:10	Break
10:10-11:00	Collaboration, Impact of buy-in, and PLCs
11:00- 12:00	Lunch on Your Own
12:00-12:30	RTI Sustainability, Implementation/time guidelines
12:30-2:00	IRIS Center Module: Considerations for School Leaders
2:00-3:00	RTI Jeopardy Review
3:00-3:30	Review/Closure/Reflection Exit Slip

Materials

- Wireless Internet access
- Laptop computers for participants
- Power cords for laptops and charging capabilities
- Projector or SmartBoard
- Presenter's Laptop computer with Microsoft PowerPoint 2010 or higher capabilities
- PowerPoint presentation for all three training sessions
- Access to the IRIS Center website

- Access to the school district's shared RTI Google drive for the participants to retrieve documentation forms
- Printed agenda for each of the three sections for each participant
- Printed handouts of PowerPoint presentation for all three sessions for each participant
- pens and post-it pads
- A copy of the exit ticket (session evaluation) for each attendant

Evaluation Plan

The evaluation of the professional development (PD) trainings will focus on the effectiveness of the PD workshops to increase teachers' knowledge and readiness to implement the tiered interventions of the response to intervention program with higher fidelity. The evaluation of this project is formative and summative. Informal evaluation can be monitored by the participants' level of engagement during the collaborative and reflective responses during the training. The formative assessment of the PD project will occur as teachers give feedback after each PD session. An exit slip consisting of three open-ended questions will be administered after the training sessions that will serve as formative feedback from the participants to inform and improve future training. Also, all of the IRIS Center modules contain a built-in assessment component. Data from these pre- and post-assessment tools can be used by the school's in-house RTI facilitator and me to monitor teacher understanding and to identify learning needs. At the end of the PD workshops, participants will complete a summative evaluation of the project in the form of a questionnaire. The questionnaire will capture teachers' perceptions of the influence

of the PD on instructional practices. The findings from both the exit slips and questionnaire will be used to enhance the project for future training sessions.

Year-Long Support

The research site conducts faculty meetings during planning periods. The follow-up to each of the PD sessions could occur during these planning periods or departmental meetings. A building-level administrator can meet with the teachers collectively to discuss how the training has changed teachers' teaching practices. The on-going meetings throughout the year will serve as a professional learning community for teachers to share ideas and instructional strategies for best practices. Also, the principal could assign the teachers additional learning topics throughout the school year from the IRIS Center to assist with an in-depth understanding of the RTI program and to provide the teacher with extra real-world application opportunities.

Conclusion

The PD project was designed to improve teachers' understanding of the RTI processes, allow teachers the opportunity to gain knowledge of research-based strategies to use in the classroom to support self-efficacy and to provide clarity and expectations on the district's implementation procedures. The development of the project was based on the learning needs that the teachers in the study stated they needed assistance with to implement the RTI program effectively. The issues were: professional development, differentiated instruction, assessment, and school-wide support. Participants will engage in the PD workshops as a group with specified learning objectives. The project can serve

as a tool the district could use to inform and support those responsible for implementing the RTI framework to perform the program as intended.

EXIT SLIP

What did you learn today? _____

_____

_____

What could have been done better today? _____

_____

_____

Do you still have any questions or concerns that need to be addressed in the future? If so, please explain._____

_____

_____

_____

_____

Professional Development Sessions Questionnaire

The purpose of this evaluation is to acquire participant feedback about your participation in the RTI three-day professional development training sessions to inform future RTI workshops.

INSTRUCTIONS: Please indicate your response to the items.

Rate aspects of the training on a 1 to 5scale: 1 = "Strongly Disagree," 2 = “Disagree” 3 = "Neither Agree nor Disagree," 4= “Agree” 5 = "Strongly Agree."

Thank you.

	Scale number
1. I was well informed about the goals and objectives of this training.	
2. This training lived up to my expectations.	
3. The training content is relevant to my job.	
4. The training goals and objectives were clear to me.	
5. The activities in this training gave me sufficient practice and feedback.	
6. The presenter was knowledgeable and well prepared.	
7. The pace and difficulty level of this training was appropriate.	
8. I accomplished the objectives of this training.	
9. I will be able to use what I learned in this training.	
10. The training was a practical way for me to learn the content.	.

11. How would you improve this training? (Check all that apply.)
___Clarify the training objectives.
___Reduce the content covered in training.
___Increase the content covered in training.
___Improve the instructional methods.
___Make training activities more stimulating.
___Make the training less complicated.
___Slow down the pace of the training.
___Speed up the pace of the training.
___Shorten the time for the training.
___Add more videos to the training.

12. What other improvements would you recommend in this training?

13. What is least valuable about this training?

14. What is most valuable about this training?

Appendix B: Interview Protocol

Interview Questions

1. How does the RTI process work at this school?
2. What is your overall perception of how the RTI model is working at the school?
3. How knowledgeable or confident do you consider yourself to be when implementing the tiered interventions of the RTI model in your classroom?
4. Can you describe the RTI implementation process in your classroom? What is your responsibility in Tier I interventions at your school?
5. How do you monitor the progress of the Tier I interventions you put into practice?
6. How do you use data to identify students in need of Tier II or Tier III interventions?
7. What concerns or barriers have you experienced in implementing the RTI model in your classroom?
8. What resources have the district or principal provided to assist you in implementing the tiered interventions of the RTI model?
9. What types of support or resources would improve your capacity to implement the RTI tiered interventions in your classroom?
10. Is there anything you would like to add, or any questions you would like to re-visit or discuss?

Appendix C: Classroom Observation Protocol

(Front Side)

Participant Identifier_____ Observer: Patricia Hampton (Researcher)

Date_____

Start Time_____ End Time_____

OBSERVATION	**NOTES**
Learning Objective (s):	
Classroom Arrangement (Draw diagram)	
Evidence of Differentiation: **Content:** **Process:** **Products:**	
Teacher-Student Interactions:	

Participant Classroom Observation Form
(Back Side)

Student Assessment:	

Reflection Questions

1. Did the lesson meet the needs of learners?

2. If no, toward what type/s of student did the lesson seem geared?

3. Did lesson plan/strategies include culturally responsive content/teaching?

Debriefing Questions

a. What were your objectives in doing _____strategy?

b. Did you feel that you were successful in meeting these objectives? Please explain.

c. If you could teach the same class again, what would you do differently? What would you do the same way?

Appendix D: Identified Codes

Interview Codes	**Observation Codes**
Lack of understanding interventions Consistency Support/Resources Teacher Collaboration Clear Expectations Researched-based strategies Low Self-efficacy Lack of PD Ever-changing organizational tools/forms More training Time-consuming Common planning Excessive paperwork Data collection Program application Progress monitoring Differentiation Teacher buy-in Inconsistent implementation Administration guidance Interventions by subject Tier 2 interventions Systems and Procedures Mentorship/coaching Need more time	Resources Whole-group instruction Small-group instruction Differentiation of the Process Product Assessment of Learning Limited scaffolding strategies Technology Research-based strategies