IMPLEMENTING THE MULTI-TIERED SYSTEM OF SUPPORTS IN AN ELEMENTARY SCHOOL: PROFESSIONAL DEVELOPMENT AND SUPPORTS FOR TEACHERS

by

BONITA V. ADAMS

(Under the Direction of Jami Royal Berry)

ABSTRACT

The action research study examined the Multi-Tiered System of Supports (MTSS) structures and processes in an urban elementary school setting. As a result, teachers had an opportunity to be involved in decisions, gain access to resources and professional development, and better understand the overall context of inclusive educational placements for children. The collection of data from individual interviews with two administrators, five general education teachers, grade-level department leads, a student support teacher, a gifted department lead, and three academic coaches served multi-purposes.

The consequent findings developed related to the research questions: (1) The impact of Professional Development; (2) The impact of student goal setting; and (3) the impact of research-based teaching practices. This study examines the present insights held by educators within the Panhandle Elementary School regarding Multi-tiered System of Supports (MTSS). In addition, the views that guide MTSS and what influences it from other current educational initiatives that

have preceded MTSS. General education teachers at Panhandle Elementary School completed a survey to share their perceptions about implementing MTSS within their school. Select teachers also contributed in discussion groups to converse about their thoughts on MTSS with colleagues to regulate what aspects help or encumber the implementation of MTSS.

INDEX WORDS: Individualized Education Program (IEP), Multi-Tiered System of Supports (MTSS), Response to Interventions (RTI), Job-Embedded Professional Development, and Progress Monitoring.

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DEDICATION

I can do all things through Christ who gives me strength-Philippians 4:13

To my Lord and Savior—Jesus Christ—If it had not been for the Lord on my side, I don't know where I would be. I could not have made it this far in life without my relationship with my Father. Thank you, Lord!

To my mother—Betty VanHook—for showing me the real meaning of family, superior work ethic, and the importance of budgeting. Thank you for being my number one cheerleader throughout every life event. It was you that motivated me to pursue this degree and for that I am very thankful and grateful. I know you are somewhere in heaven wearing something pretty and pink.

To my son—Matthew Kristopher—for making parenting such an enjoyable and blessed experience. Thank you for always making me laugh and keeping me on track throughout this journey.

To my siblings—Fred, Preston, Joseph, Gerald, Vanessa, Janessa, Betty, Yvonne, and Coretta —there is something special about each one of you that inspired me to be the BEST and for that I say THANK YOU!

To my nieces and nephews (aka lil sisters) —Callie and Briana—for thinking you are the boss of me! Thank you for making sure I did my homework.

To my 2nd grade teacher—Mrs. Williams—for challenging me to live up to my fullest potential and buying me those purple skates that completely changed my life.

To my Georgia church family—Salem Bible Church—for providing me with spiritual guidance for the last 19 years.

To my Chicago church family—New Covenant Missionary Baptist Church—for providing me with the vital spiritual foundation that has shaped me to be the woman of God that I am today.

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I would also like to thank Dr. Karen Bryant and Dr. John Dayton, who served on my doctoral advisory committee. Dr. Bryant, I appreciate all of your encouragement and dedication to your students. I know it has only been a few years `but it seems like a lifetime, and I pray that we will always keep in contact.

Additionally, I would like to acknowledge the best cohort that UGA has ever seen come through its doors. I appreciate your collaboration, encouragement, and lifelong friendships throughout this journey. I enjoyed sharing major milestones and accomplishments that have occurred throughout these last few years. I pray that life will have it that we keep in contact forever.

I would also like to acknowledge my former colleagues in Henry County Schools and Clayton County Schools Districts. Your support and participation of this action research study was greatly appreciated. I could not have asked for a better more engaged group of educators Thank you. Your perspectives effectuated this study.

Finally, to the countless educators and education leaders, who, throughout my career, have demonstrated excellence and dedication to students, thank you! Please stay the course and know that your work is not in vain.

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CHAPTER 1

INTRODUCTION

Multi-Tiered frameworks for instruction and intervention have become a popular means for meeting the academic and social-emotional needs of struggling students. In 2004, the Individual with Disabilities Education Act (IDEA) changed the method that identified students with learning disabilities and stipulated that the states had to implement a Multi-Tiered Response to Intervention model. According to Bender and Shores (2007), "RTI/MTSS is a process of implementing high quality, scientifically validated instructional practices based on learner needs, monitoring student progress, and adjusting instruction depending on the student's response" (p. 7). As part of the focus on higher levels of accountability, teachers are asked to incorporate research-based methods into classroom instruction, one of which—a multi-tiered system of supports/response to intervention (MTSS/RTI)—is the focus of this research study.

In 2004, when Congress updated IDEA to include the Response-to-Intervention (RTI) model of assessment, this model of evaluation sought to identify students who would benefit from more intensive support. The response to the intervention model of assessment, when used with fidelity, provided teachers a tool to gauge student academic and behavior needs. Christ (2005) indicated that when the process is streamlined, it becomes about finding ways to improve students' educational outcomes in special education. The process went from RTI to a more robust framework that helps educators provide academic and behavioral strategies for students with various needs (Epler, 2017). This framework referred to as the Multi-Tiered System of Supports (MTSS), grew out of integrating two other intervention-based structures.

Education leaders sought to find ways to help students catch up with their peers. Wexler (2018) suggested district leaders embraced the critical components of the MTSS, which included universal screeners, tiers of interventions, ongoing data collection, and parental involvement. These tiers and frameworks are used to assist all students at various levels and ultimately help schools organize levels of support based on intensity so that students receive necessary instruction and support (Terrence, 2019).

The Problem

Student achievement data indicated a need for improvement in instructional strategies for students to be successful at the Tier I level of the MTSS. Research shows that MTSS has the highest probability for student achievement when implemented as designed (Fuchs & Fuchs, 2005). Because the process can be labor-intensive, and some teachers have more MTSS students than others, efforts are in place to help all teachers feel supported and esteemed. If general education teachers are expected to implement MTSS, they must not only understand the process, the necessary supports for implementation should also be in place for teachers (Reeves et al., 2010).

Overview of the Research Site Context

Panhandle STEM Elementary Academy[1] (PHSEA) was established in 2018 from the former Panhandle K-8 Academy. After eight years, Panhandle Elementary K-8 Academy dissolved to create Panhandle STEM Elementary and Middle Academies. Panhandle STEM Elementary Academy (PHSEA) opened in the fall of 2010 in the southernmost "Panhandle" community of White County,

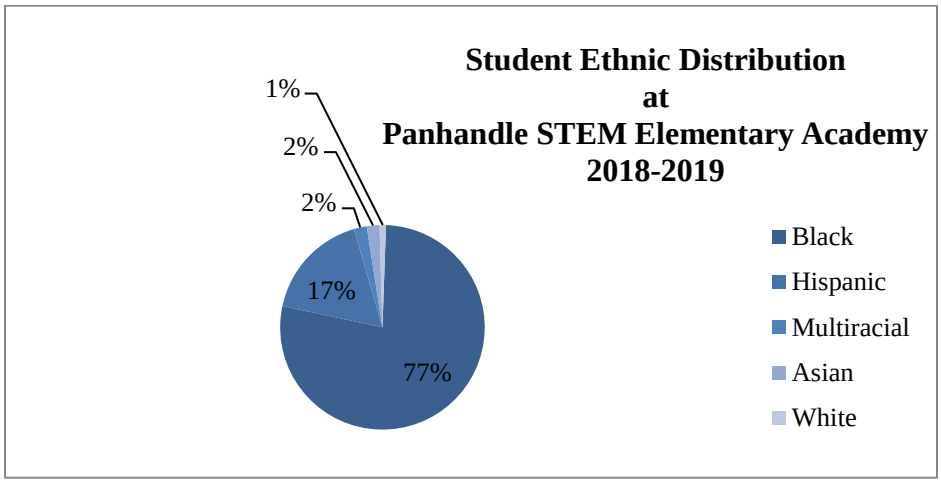
[1]All proper nouns related to the context are pseudonyms

Georgia. Enrollment for the inaugural 2010-2011 school year was approximately 1500 students. The student population consisted of 48% females and 52% males, 82% of students falling into the economically disadvantaged subgroup. In the years that followed, PHSEA had an average enrollment of 1400 students annually with approximately 700 Kindergarten through fifth (5th) and 700 sixth (6th) through eighth (8th) students.

Citing a lagging and decreasing College and Career Ready Performance Index (CCRPI) compared to surrounding elementary schools, the district decided to have grades K - 5 operate as a separate school. Panhandle STEM Elementary Academy (PHSEA) opened in fall 2018 with more than 700 Kindergarten through Fifth (5th) grade students. The state report for 2018-2019 described 720 students as 48% female and 52% male, 77% Black, 17% Hispanic, 2% Asian, 2% Multiracial, and 1% White students. Just as before the dissolution, Panhandle Elementary Academy (PHE) was a Title I school. All students enrolled at PHSEA received free breakfast and lunch through the Community Eligibility Provision Program (CEPP). See Figure 1: Student Ethnic Distribution at Panhandle STEM Elementary Academy School 2018-2019.

Figure 1

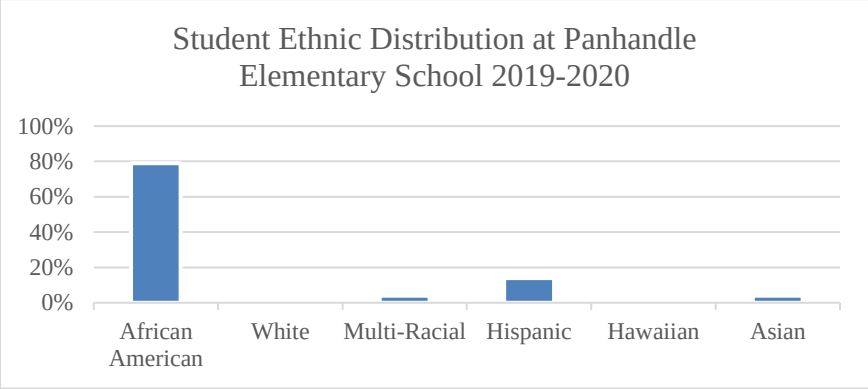
Student Ethnic Distribution at Panhandle STEM Elementary School 2018-2019



As of the school year 2019-2020, there were approximately 342 female students and 315 male PHSEA students. The school's racial and ethnic makeup included 0.5% Asian students, 0.5% American Indian/Alaskan Native, 79% African American students who were not Hispanic or other, 14%Hispanic students,4% self-identified multi-racial students, and 2% white students. See Figure 2: Student Ethnic Distribution at Panhandle STEMS Elementary Academy School 2019-2020.

Figure 2

Student Ethnic Distribution at Panhandle STEM Elementary Academy School 2019-2020



The following groups identified as subgroups for PHSEA, and they made up the following percentages of the school's population with 100% Economically Disadvantaged (ED), 79.3% Black, 15.5% Hispanic, 10% Department of Exceptional Students (DES), and 9% English Learners (ELL), (Georgia Department of Education, 2020). See Figure 3: Student Demographics Information 2019-2020.

Figure 3

PHSEA's Subgroups and Special Populations 2019-2020

Special Groups and Populations	
Economically Disadvantaged (ED)	100%
Department of Exceptional Students (DES)	10%
English Language Learners (ELL)	9%
Black	79.3%
HIS	14%

The 2019 Georgia Milestone Assessment Systems (GMAS) data flags show that while each subgroup meets the test administration's participation rate, economically disadvantaged (ED) students may experience a lack of opportunity or exposure to various outside learning opportunities.

The researcher experienced a change in district, school, and position at the start of the 2020-2021 school year. Similar challenges in both environments meant that the focus on data to identify the root causes of students' increase in the beginning learner level in mathematics, English Language Arts, social studies, and science remained the same. Thus, there was a need for intentional implementation of instructional practices, growth feedback, and corrective instructional provision coupled with real-world learning experiences and professional development opportunities to help teachers incorporate digital learning lessons into daily

instruction. The goal of addressing these root causes is to produce growth in the lower performing students in all academic core areas and better meet students' needs.

Panhandle STEM Academy students' overall College Career Readiness Performance Indicators (CCRPI), which includes Content Mastery, Progress, Closing Gaps, and Readiness, are outlined below. As indicated in Figure 4, PHE's 2018-2019, compared to the 2019-2020 overall CCRPI data, demonstrated a 3.6% growth and a 2.2% growth in Content Mastery. While PHE is on track in Progress, it still experienced a decrease of 3.3%. Consequently, PHSEA's Closing Gap increase of 26.4% speaks to PHSEA's expectations that all students and all student subgroups can make improvements in achievement rates. In terms of Readiness, PHSEA increased by 0.6%, demonstrating its ongoing efforts to prepare students for the next level, college, or career. Ultimately, learners will need to show the mastery of critical units of learned content, which will help with PHSEA's deficit in Content Mastery, and eventually improve student academic growth, See Figures 4 and 5.

Figure 4

Academic Progress of Panhandle STEM Elementary Academy School

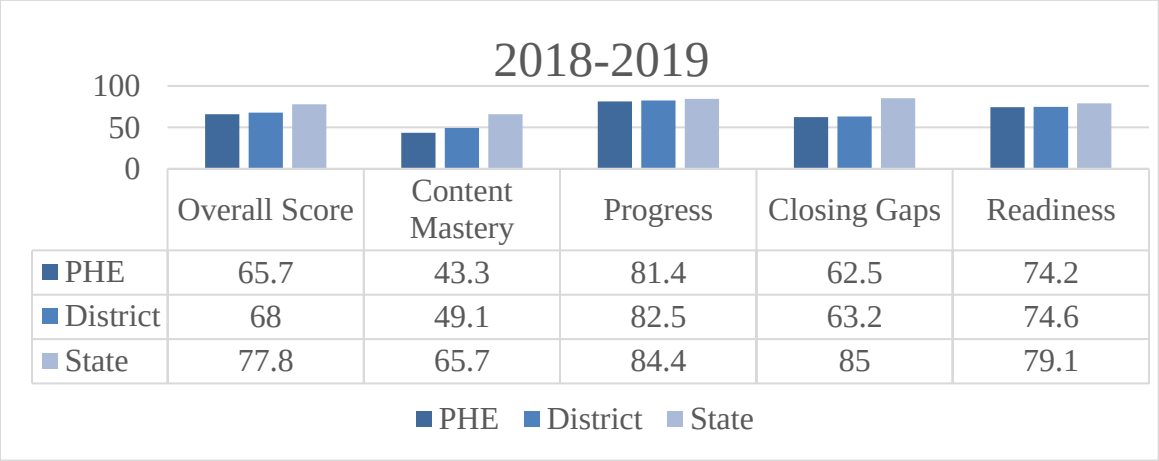
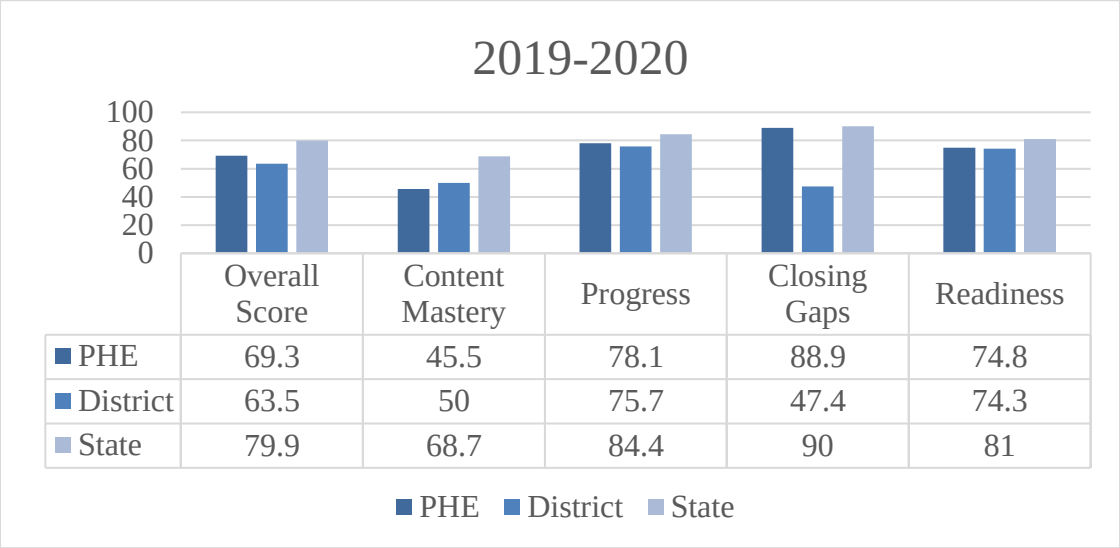


Figure 5

Academic Progress of Panhandle STEM Elementary Academy School



Adapted from Georgia Department of Education

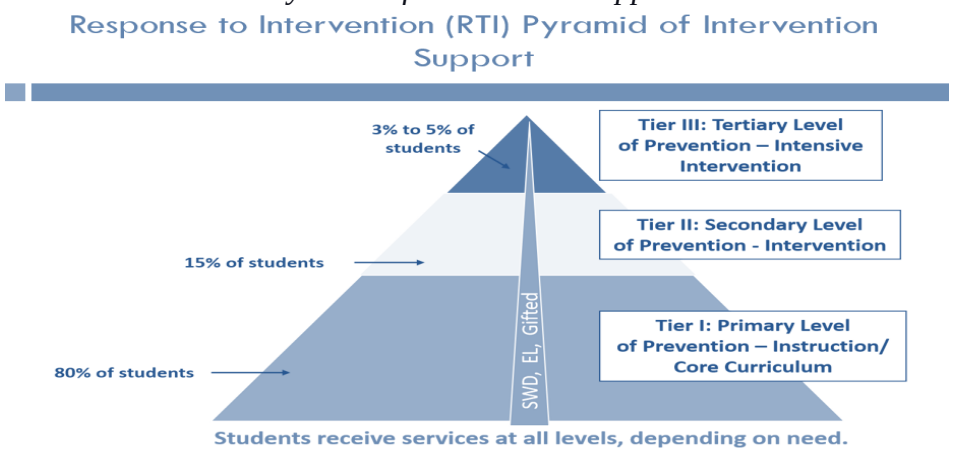
Purpose of the Study

The purpose of the study was to address the wide range of resources available and sought to integrate the best practices into the structure of MTSS at PHSEA to mitigate the lack of common understanding from educators. Participants in this study included teachers, school leaders, an instructional coach, and the researcher. The following elements steered the study: firstly, the development of an action research design and implementation teams were created. The team implemented and described the process of developing an enhanced delivery model for the MTSS. Secondly, professional development for teachers and school personnel in the utilization of MTSS was implemented, and thirdly, enhancing existing MTSS support structures for teachers to improve the MTSS system to effectively serve students and families.

In general, MTSS involves using three levels or tiers of interventions for students, whether they are in general education or special education settings. These interventions include progressively rigorous and individualized instruction, paired with careful, frequent monitoring of student progress. According to the Pyramid of Intervention Supporting Figure 6, White County School's Psychological Services (2019), all students receive services at all levels, depending on the need.

Figure 6

Pyramid of Intervention Support

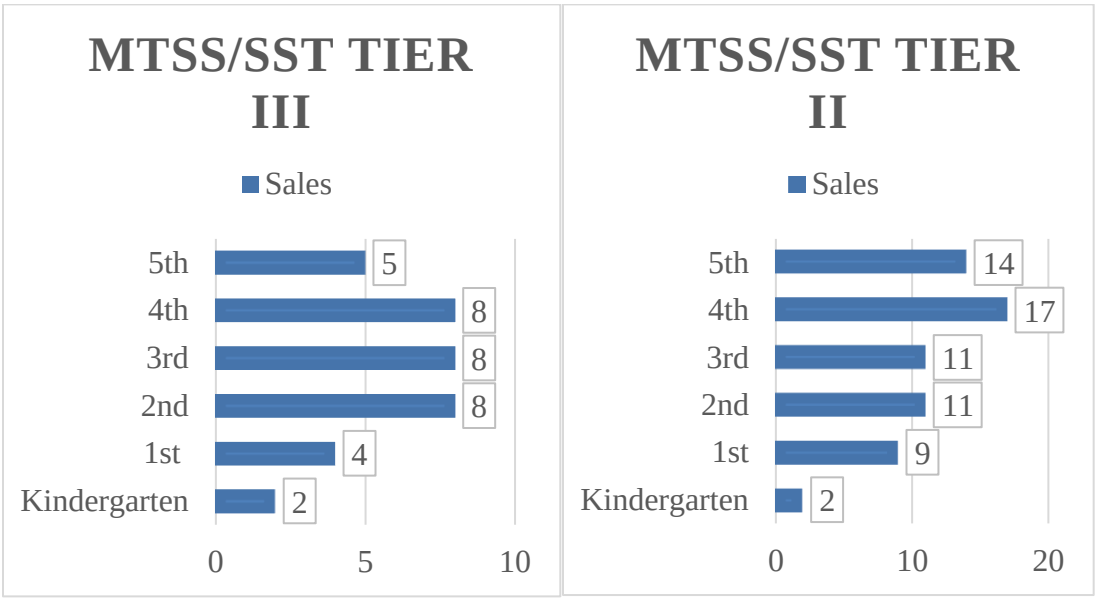


Indisputably, PHE's student movement from Tier I is higher than the optimal goal at the Tiers II and III levels. Figure 6 demonstrates students who were identified at the start of the 2020-21 school year and are enrolled in MTSS (Tier 2 or SST). These students benefited from academic or behavioral support as the areas of concern. The teachers selected the corresponding interventions that were scheduled, based on the MTSS tier and area of concern. Teachers were responsible for monitoring the student's progress or response to the selected intervention, as scheduled, based on the MTSS tier and area of concern. A schedule was created of when teachers

were to hold data discussions/parent meetings, which should occur every six weeks. SST student data discussions/parent meetings are scheduled by the SST chairperson every 4-6 weeks. See Figure 7 Student Demographics Information 2019-2020.

Figure 7

Percentage of Students at Tiers II and III



Research Questions

The following research questions guided this inquiry to address the purpose of this study:

1. How can professional development aid teachers and school personnel with the appropriate strategies to decrease student movement through the Multi-Tiered System of Supports (MTSS)in one public elementary school?

2. How does enhancing the existing MTSS school support structures for teachers impact the implementation of the Multi-Tiered System of Supports (MTSS)?

3. How does the action research team describe the process of developing and implementing an enhanced delivery model for the Multi-Tiered System of Supports (MTSS)?

Definition of Terms

Below are the key terms that were used throughout this study:

Individualized Education Program. (IEP) is defined by the Center for Parent Information and Resources (2018) as a written statement of the educational program designed to meet a child's individual academic, behavior, and social needs. The two primary purposes of an IEP are to set reasonable learning goals for a child and to state the services that the school district will provide for the child. Bucaria (2009) noted, "special education should give the student a toolkit to help work through the disability to perform at grade-level standards" (p. 240).

Multi-Tiered System of Supports. It is an ongoing process of using student performance and other data to give direction to making decisions for instruction and intervention. One of the many benefits of MTSS/RTI is that it is not just for Special Education placement but also for enhancing all students' academic and behavioral performance. Wright (2020) offered the opinion, "students who received RTI/MTSS academic support before school closure is at even greater risk for academic regression." (p. 21).

Job-Embedded Professional Development. (JEPD) is defined by Zepeda (2019) as the roles and responsibilities of school leaders in "creating a school culture that embraces risk-taking, establishes trust, and models learning to set the example for and with teachers" (p.xiii). This interpretation further supports the sole purpose of JEPD as essentially learning communities that are engaging and meaningful professional development that improves teaching and learning.

Progress monitoring. According to Hauerwas, Brown, & Scott (2013), progress monitoring is the standardized process of evaluating progress toward a performance target, based on rates of improvement from frequent assessment of a specific skill.

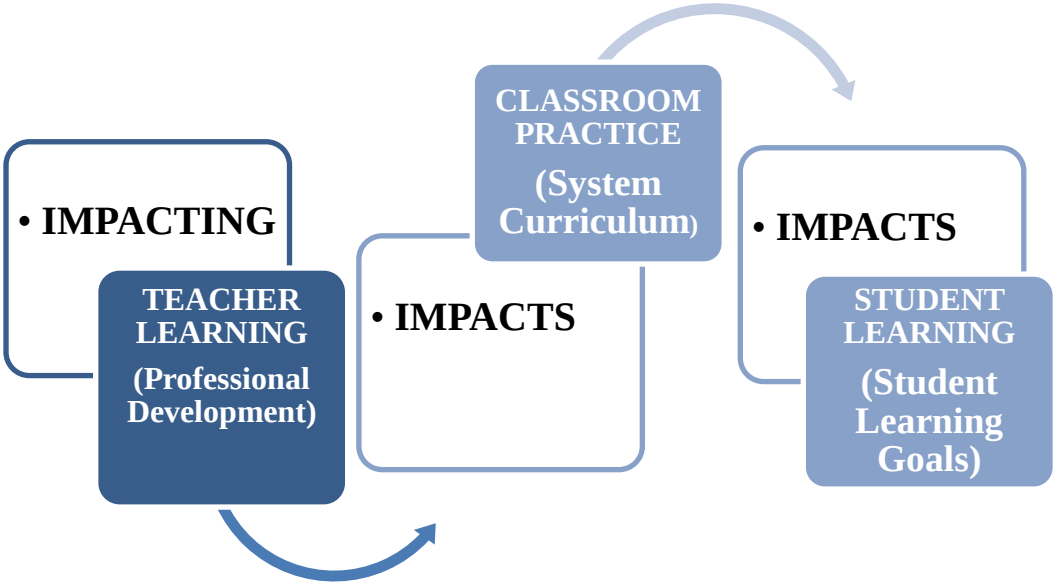
Theoretical Framework

Action Research has developed as a way to introduce change to practice and help refine understandings that create and connect to theory (Whitehead, 2017). The theoretical framework that guided this study was adapted from the Partners in School Innovation Association (2019) and focused on the Theory of Action. This theoretical framework was chosen because it provided practical guidance on how to transfer research into action. MTSS is considered the best practice model for addressing all students' academic, behavioral, and social-emotional needs (California Department of Education, 2015a) and school leaders face the challenge of implementing MTSS properly.

Action theory (or theory of action) is an area in philosophy concerned with ideas about the processes causing willful human bodily movements of a more or less complicated kind. Basic action theory typically describes the action as behavior caused by an agent in a particular situation. It explains in a commonsense way which features expected to produce results that lead to the final desired outcome (Haertel, National Academy of Science, 2009). The Theory of Action seeks to identify the key elements that will help develop a detailed start of the problem or situation for students, teachers, and leaders. This framework highlights the implementation of student learning goals, classroom system curriculum, and professional learning systems. This framework is represented in Figure 8.

Figure 8

Theoretical Framework: Action Theory Implementations of Student Learning Goals, Classroom Systems, and Professional Learning Systems.



Adapted from Partners in School Innovation, 2019 https://www.partnersinschools.org/

Implementation of Student Learning Goals

To maximize time for brilliant learning and opportunities for developing learning goals, Hattie (2011), noted that teachers are tasked with helping students find their motivation, leading them to appropriate goals, and lighting the path to get there. Learning objectives provide fundamental advances to personal development. They allow students to take ownership of their learning and help teachers figure out where to focus extra attention. Right motivation comes from within. It can be inspired, encouraged, and facilitated by outside forces, but the most potent resolve is intrinsic (Fink, 2003).

Classroom System Curriculum

According to the Johns Hopkins Institute for Education Policy (2017), "curriculum is a critical factor in student academic success." (p.1). Curriculums help to determine the targeted and guided teaching efforts in all subjects. They play a vital role in how data used to drive instructions and ensure students with disabilities are included in the general education classroom. The use of assessments (formative), disaggregated data, research-based instructions, and clearly stated learning objectives. Effective Professional Learning Communities (PLC's) are pivotal in the academic success of all students.

Professional Learning Systems

Zepeda (2019) stated, "job-embedded learning is professional learning that occurs at a school as educators engage in their daily work activities (p. 23). This type of professional learning must occur regularly and align with academic standards (Zepeda, 2019). Leaders must provide professional development that focuses on best practices and stays focused on priority areas. Priority areas include but are not limited to the RTI/MTSS process, professional learning communities, and data-driven instructions.

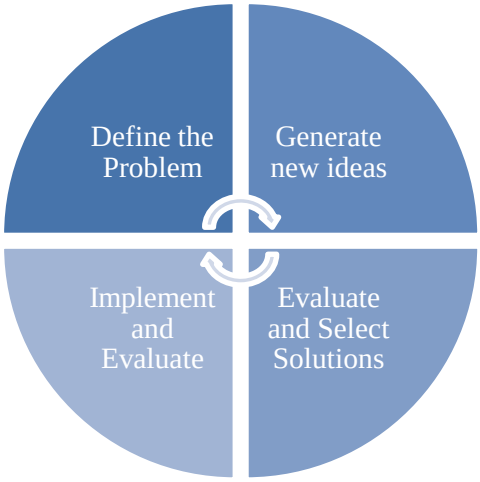
Conceptual Framework

According to Miles and Huberman (1994), "A conceptual framework explains the main things to be studied—the key factors, variables, or constructs—and the presumed interrelationships among them" (p. 20). This study utilized the American Society for Quality (ASQ) theory to explain how to "effectively manage and run a successful organization. Leadership must guide their employees and develop problem-solving techniques" (p.1). The ASQ further stated that finding a suitable solution for issues can be accomplished by following the necessary four-step problem-solving process.

The conceptual framework is constructed to identify strategies that will decrease student movement through the MTSS process and increase teacher "buy-in" and effective implementation. According to the author, some characteristics of "defining a problem" include but are not limited to being able to differentiate fact from opinion, avoid trying to solve the problem without data, and specify the underlying causes of the problem. The researcher generated new ideas by guiding the conversation with specific short- and long-term term alternatives. See Figure 9, Problem Solving Conceptual Framework.

Figure 9

Problem Solving Conceptual Framework



Source: The problem-solving process (adapted from American Society for Quality, 2020 https://asq.org/quality-resources/problem-solving)

The conceptual framework in Figure 8 indicates how the action research team implemented the MTSS intervention professional development. The teacher/team is responsible for determining which interventions would be most appropriate for supporting the student's needs. The intervention was implemented faithfully and consistently for a reasonable time.

Fidelity of the implementation model defined the problem, analyzed the situation, developed a plan, implemented the program, and evaluated the scenario**.**

Overview of the Methodology

Action research is an iterative approach, combining theory and practice (Avison et al., 1999; Baskerville & Wood-Harper, 1996). A cyclical framework, action research, focuses on action and change, operates over reasonably short periods, and involves substantial collaboration and participation (MacColl et al., 2005). Coghlan and Brannick (2014) captured the personal qualities of action research by describing the main elements as "a good story, rigorous reflection on that story and extrapolation of usable knowledge or theory from the reflection on the story" (p.16). Action research is a suitable model for this study because it allowed the team to engage in the practice, manifestation of self, and space for the teachers to understand teaching and learning.

In this study's framework, the researcher and action research team used literature surrounding the instructional practices of primary and upper grade teachers and professional learning to create a group of support for the implementation team teachers. Action research was appropriate for this study because it allowed for necessary collaborative problem-solving. This study used a mixed-methods action research approach. Creswell and Wisdom (2013) stated that "mixed methods" refers to an emergent methodology of research that advances the systematic integration, or "mixing," of quantitative and qualitative data within a single for investigation or sustained program of inquiry. All data measures helped to provide answers to the three research questions for the study.

Throughout this study, the action research design team, coupled with the implementation team, supported primary and upper-grade teachers in an urban and high-poverty school. The

teams reviewed the literature and what it said about effectively implementing the MTSS process with consistency and fidelity.

Interventions

The primary intervention of this study took the form of small group professional development comprised of primary and upper-grade teachers, a Student Support Teacher (SST), an assistant principal, and a principal. The group's focus was to design professional development that focused on best practices of instructions, analyzing data, the processes, procedures, and expectations of MTSS. Pre-and post-survey responses, focus group discussions, and interviews considered changes in teachers' instructional practices, intervention implementation, knowledge of progress monitoring, and conferences around data.

The action research implementation team included an assistant principal, an instructional coach, a student support teacher, primary and upper-grade teachers, and the primary researcher. The assistant principal conducted interviews, as well as current professional development focusing on analyzing data. With assistance from the SST, primary and upper-grade teachers, and the primary researcher, the assistant principal also conducted conduct small group and individual sessions on disaggregating data. The remaining action research implementation team members provided professional development on the best practices of instruction, processes, procedures, and expectations of the MTSS, administered and analyzed pre-and post-survey responses, led focus group discussions, and created schedules for informal walkthroughs.

Significance

This study examined the change process as teachers experienced the implementation of MTSS, with more fidelity. There is a direct connection between the existence of a strong teacher knowledge of a process and school performance as measured by student achievement (Sebastian, Huang, & Allensworth, 2017). The ability to create strong instructional teams involves school administrators providing training for teachers and teacher leaders, as well as building a culture that promotes confidence and capacity for the members of the instructional team. This study adds to the understanding about the specific steps of this training and the specific details that the administrative team must create to influence the capacity and confidence of teachers.

Organization of the Dissertation

Chapter 1 provides an overview of the dissertation's study and provides a framework that presents the research questions, problem of practice, and methods for the task. Chapter 2 provides a review of the related literature for the study. Chapter 3 describes the methodology involved in action research and the mixed methods related to this study. Chapter 4 presents the case, while Chapter 5 discusses the findings and limitations of the study. Chapter 6 provides an analysis of the significant results, the study's implication, and final thoughts.

CHAPTER 2

Review of the Related Literature

This chapter reviews the literature on the evolution of the Multi-Tiered System of Supports (MTSS). It also explores common themes in the literature regarding MTSS. It concludes with studies that highlight how MTSS has been implemented at various sites around the United States. School personnel face one of the most noticeable challenges of the education system. Education as a whole has been described by some as incessantly changing in search of improvement (Latham, 1988). Administrators are tasked with new initiatives year after year as educators, and students alike, experience turnover in educational initiatives, despite the impact (or lack thereof) these initiatives have on student outcomes (McIntosh & Goodman, 2016). This process has been deemed as the "birth and death [cycle] of educational innovations" (Latham, 1988, p.18), and some speculate that it is due to the surface-level nature of the change that these initiatives propose (Coburn, 2003). Essentially, the MTSS framework will continue to be implemented in buildings across the state of Georgia and will continue to withstand the ever-changing policies experienced on a national, state, and local level.

Derivation of the Multi-Tiered System of Supports

The MTSS framework is set apart from other comparable concepts that have been projected in the past as it gains momentum in the community of education (PBIS Rewards, 2021). The process has been viewed as similar to the Response to Intervention (RTI) process. Novak (2019) stated that MTSS, unlike RTI, addresses systematic barriers and conditions for students and educators. Further, MTSS is a distinct approach that builds upon the original

concept of tiered support, as with RTI, but is more proactive. McIntosh and Goodman (2016) described MTSS as "an approach that can help to connect existing efforts and systems across domains and integrate the support that is already provided to students into a seamless whole" (p. 4). The MTSS process is a new acronym; however, not a new concept entirely. There must be resources and proper training to effect systemic change and student academic success with any new or existing initiative.

Multi-tiered System of Supports have been a prominent focus of research and practice in grade-schools given that they provide a proactive model through which struggling students may receive targeted interventions without the need for a special education label (Evans, 2020). Researchers believe that a MTSS originated in the public health field (Walker et al, 1996). There have been ongoing efforts to address the academic and behavior challenges of students. These challenges are not uncommon today, nor were they in the past (Capozza, 2019). Many education agencies and experts in this area have failed to resolve these issues and challenges. The implementation of the framework known as the MTSS is one solution to the challenges. MTSS supports the adults at the school, as well. Every Student Succeeds Act (ESSA), the main education law for public schools — cites MTSS as a way to increase teacher effectiveness. Every Student Succeeds Act (ESSA) gives the states funding that can be used for professional development to help teachers use MTSS (Rosen, 2020).

The MTSS process should intentionally be carried out with fidelity and integrity. It was developed with teachers and students in mind. According to Rosen (2014), MTSS was initially designed to help schools identify struggling students early and to intervene quickly. In doing this, parents are encouraged to speak with the teacher regarding the child's strengths, review examples of weaknesses, and brainstorm next steps. When this strong foundation of instructions

is no longer working, it is at that point where the student is considered for more intensive interventions.

According to Shepley & Grisham-Brown (2019), arguably the most commonly discussed benefit of tiered support models is that they facilitate proactive methods of identification and intervention for struggling students who do not yet meet criteria to receive special education services. That is, rather than wait for students to fail, tiered support models provide teachers with a means of remediating delays before special education services are needed. Given the impact of this benefit, the field of early childhood education has attempted to develop tiered support models for use in early childhood settings. When parents are aware of the tiered process and how services are provided according to the individual needs of the student, it is then explained to the parents the necessary steps needed in order to proceed. Jackson and Remillard (2005) stated, "schools should view the parent as the "intellectual resources" for their children" (p. 52). These evaluations are provided as proof that a medical profession has "claimed" that the child is eligible for special needs services. Fitzgerald and Watkins (2006) reported that the decision to place a child in special education is an important one however a difficult one as well. In many cases, students are capable of learning at a level that engages and challenge them to achieve academic success.

In 2004, Congress updated the Individual with Disabilities Education Act (IDEA) to include the Response-to-Intervention (RTI) model of assessment. Initially, this model of evaluation sought to identify students who would benefit from more intensive support. The response to the intervention model of assessment, when used with fidelity, provided teachers with a tool to gauge student academic and behavior needs. The process leading to special needs services is embedded in the MTSS' level three services. The Tier III service is a more intense

level involving the input of a team comprised of a school psychologist, assistant principal, MTSS team leaders, regular education teachers, and most importantly the parent. Essentially, teachers are encouraged to use research-based instructional practices at the start of the school year in order to maintain at least 80%-85% of students receiving Tier I services in order to decrease the need for Tier II and III services.

Supplemental support is provided through the Early Intervention Program (EIP). When students are receiving these services, they have already been identified as at risk of not reaching academic or grade level expectations and could run the risk of being held back. Exposure to traumatic stress in childhood can contribute to mental, emotional, and behavioral challenges including mood disorders and difficulties with self-regulation that can lead to poor academic performance (Terrasi & de Galarce, 2017). At the same time, many jurisdictions across the country have adopted punitive approaches to discipline that do not align with the current research on the effects of trauma and are often disproportionately applied to students of color and students with disabilities (Skiba & Peterson, 2000; Curran, 2016).

Poverty has a consequential impact on student achievement. The No Child Left Behind Act and more recently Every Student Succeeds Act (ESSA) put pressure on educators to close the achievement gap that exists for economically disadvantaged students. While this gap remains, high-poverty, high-achieving schools do exist. The purpose of this study was to discern the impact of practitioner-designed professional development (PD) on teacher beliefs about students from poverty. This study focused on the creation and implementation of PD designed to help teachers explore their beliefs and investigated whether these beliefs changed after teachers received PD addressing teaching students from poverty. This PD was based on research from

multiple studies on educators' perspectives and effective teaching strategies for poor students (Wickham, 2016)

Distinctive Differences between RTI and MTSS

The practice of using a 'tiered' system to distribute instruction and interventions in schools is not new. Response to Intervention (RTI), is widely practiced in America's schools (Batsche, Curtis, Dorman, Castillo, & Porter, 2007; Florida's Positive Behavior Support Project, 2011; Gersten et al., 2009; National Association of State Directors of Special Education [NASDSE], 2006). Interventions are provided to students on varying levels equated to student need. Response to intervention (RTI) has evolved from its first decade of implementation (Berkeley et al. 2020According to Berkeley et al., states and local agencies guide and regulate RTI policy and have a critical role in the implementation process. Student academic success is contingent on how public education is viewed on a broader basis. After a review of the 50 states' education agencies, it was found that progress had been made. This progress reflected the revisions that were made to the Individuals with Disabilities Education Act (IDEA). The initial roll out and purpose of RTI looks different from the tiered models in schools today (Bradley & Danielson, 2004). All learners are offered a research-based educational experience through both a tiered system as well as an RTI framework. Response to intervention (RTI) and related tiered intervention models (e.g., MTSS) are now widely practiced in the nation's schools and have been the subject of intensive research and policy initiatives (Berkeley et al., 2020).

Berkeley et al. (2020) provided a snapshot of RTI implementation a decade later. The authors pointed out that tiered systems of intervention are now widely adopted across the United States. Since the implementation of tiered systems, some states have significantly altered their

RTI approach in the past decade, sometimes more than once, the most common course correction has been the shift to MTSS models. In many education arenas and settings, the usage of the terms RTI and MTSS are often unclear. Charlton and colleagues (2018) found that consistent language and practices were essential for scaling up integrated RTI/MTSS. Much of the research suggests that regardless of the term usage, having a three-tiered model has predominated since 2017 (Charlton, 2018). Bailey (2018) posited that although terminology usage was diverse across states, in 2017 all states supported at least one initiative or provided guidance related to implementation of tiered systems of support in some capacity. In particular, Bailey recapped that Every Student Succeeds Act (ESSA, 2015), will likely continue to shift how State Education Agencies (SEA) and Local Education Agencies (LEA) conceptualize and implement tiered systems of support. The ESSA identified MTSS as a school-wide general education approach that has additional benefits for some groups of students, including those with disabilities and English language learners (Berkeley et al., 2020).

Berkeley's (2020) study indicated, "despite inconsistencies and some lack of clarity, states and LEAs are committed to tiered systems" (p.33). It was found that there is noteworthy disparity in how states enact their models. This is perhaps the most important finding, that two decades into tiered systems of support adoption, this variation reflects those states are still seeking to determine their own best approach to practice. According to Novak (2019), MTSS is a distinct approach that builds upon the original concept of tiered support, as with RTI, but is more proactive. The expected teachers will create an environment where learning goals and expectations are achievable and apprehended on day one. One of the most significant shortcomings of RTI is that educators and systems often supplant high-quality Tier 1 instruction with Tier 2 or Tier 3 instruction.

At the same time, MTSS focuses on the whole child. Novak (2019) also found that there are three categories of system drivers that can impact a tiered system. Leadership Drivers include shared responsibility and collaboration, resource allocation and consideration for funding and scheduling, student and family engagement, and using a scientifically based planning model. Competency Drivers consider staff recruitment and retention, professional development, and educator feedback and evaluation. Implementation Drivers encourage administrators to use evidence-based practices, implementation fidelity, data-based decision making, and standards-based curriculum, instruction, and assessment. All three drivers working together will address systematic barriers and impact student and teacher success.

Early Identification and Preschool

Hurlbut and Tunks (2016) suggested the MTSS process is also vital as a pre-referral process as a prerequisite to individual education referrals and eligibility determination. Identification and pre-referral methods are the general education teacher's responsibility as they are the first point of contact with a student who struggles academically or behaviorally. In public schools, general education teachers must be adequately prepared to teach students with multiple learning needs, including students who do not speak English, who have identified or suspected disabilities, and/or who have diverse cultural and racial backgrounds. All students have the right to a Free Appropriate Public Education (FAPE). This includes students of all colors, races, ethnic groups, socio-economic status, educational placement, or age. Buccaria (2007) stated, “some students with disabilities have never been taught academic skills and concepts in the areas of reading, mathematics, science, and social studies” (p.238). This includes the very basic levels that are

encountered in early education. All students are capable of learning at the rate that is commensurate to their age and learning capacity.

Swartz et al. (2010) found that Tier I practices were most effective when the following components included interdisciplinary training using assessment and progress monitoring to guide decisions and incorporating effective research-based interventions. General education teachers "should be familiar with instructional practices to work with the diverse learning needs of all students from Special Needs to the Gifted and Talented" (Walker, 2019, p.53).

A tenet of the MTSS is that even evidence-based interventions will not be effective with all children (Kong et al., 2019). The effectiveness of interventions is based on the pedagogy and instructional practices of the teacher. Early literacy is the most effective way to increase reading skills before entering grade school. Children's early vocabulary development plays a critical role in their later reading achievement. Preschool children who demonstrate language delays are at risk for comprehension and reading disabilities in the last school years (Biemiller, 2012; Catts, Hogan, & Adolf, 2005; Juel, 2006).

The Multi-Tiered System of Supports (MTSS) is a framework for differentiating instruction based on each child's assessed needs (Carta, Miller& Young, 2019). There are ongoing efforts to improve preschool children's response to early literacy intervention in MTSS by adding more intensity to children's experiences based on response to intervention (Carta, Miller &Young). The majority of research, however, advocates for some children to have a more significant experience in small-group instructions than with a technology-assisted format Kong et al. (2019).

The Nebraska Center for Research (2014) conducted a study entitled the *Preschool Multi-tier Prevention-Intervention Model for Language and Early Literacy (Pre-3T): Development*

Summary and Implementation Guide. The study included teachers and teaching assistants from three Head Start classrooms. The implementation of a multi-tiered narrative intervention in their preschool classrooms was the focal point of the study. They delivered large group, small group, and individual lessons with students and administered and scored a progress monitoring tool with all children once a month. The study yielded results that suggest a multi-tiered approach is possible in preschool settings. Analyzing and interpreting progress monitoring data, making data-based decisions, and implementing tiered instructional strategies was critically important to the implementation of the model as noted in the study. The implementation of MTSS in preschool is, by far, one of the most proactive efforts of ensuring academic success in a child's life. Missall et al. (2020) urged states, districts, and schools to be proactive in improving the outcome of all students. Successful early childhood inclusion uses MTSS to support children's development and learning. The article further retorts that successful implementation of MTSS is contingent on the commitment of leadership, the time for data collection and analysis, and effective decisions.

Teacher Preparation and Student Outcomes

Preparing educators with the professional knowledge and pedagogical skills necessary to positively impact student learning outcomes is the responsibility of teacher preparation programs (Prasse et al., 2012). Prasse et al. theorized that these skills are rarely taught in higher education institutions but introduced upon the start of the teaching experience. There is a need for initial teacher preparation of teacher candidates in the area of MTSS. Most higher education institutions have not incorporated MTSS and RTI domains and knowledge and implementation into the curriculum. General education teachers must be adequately prepared to teach students with

multiple learning needs, including students who do not speak English, who have identified or suspected disabilities, and/or who have diverse cultural and racial backgrounds (Hurlbut &Tunks, 2016). Additionally, much of the knowledge base and the professional competencies expected of a well-prepared teacher are embedded in a Multi-Tiered Response to Intervention (MTSS/RTI) delivery system (Prasse et al. 2012). Preservice teachers are vulnerable and are more susceptible to being targeted by informed parents and the community. Schools must consider important legal ramifications in regard to special education identification and eligibility. Identification and pre-referral processes are the responsibility of the general education teacher as the first point of contact with a student who struggles academically or behaviorally (Fletcher & Vaughn, 2009; Mastropieri & Scruggs, 2005).

Epler (2017) suggested using a culminating project that helps teachers embed the MTSS and RTI. The process to ensure student success and teacher learning. Prasse et al. 2012, found that data suggest that many early career teachers, through their own self-reports, do not enter the schools with either the beliefs or professional competencies needed to positively impact student learning and without the necessary understanding of professional practice with a multi-tiered system of educational services. There is an urgency to enhance professional competencies in early career teachers and positively impact student learning. Some evidence has suggested that if teachers receive preparation in RTI implementation at the pre-service level, then they may implement interventions in the classroom with more integrity and less coaching (Begeny & Martens, 2006). Making data-based decisions is contingent on teachers' mastery of core skills and are prerequisites before entering a classroom setting. Initial teacher preparation programs need to address these shortcomings.

Preparing Teachers to Work with Students with Disabilities

A recent study of teacher preparation programs outlined the overall importance of guaranteeing that pre-service teachers are equipped with the appropriate skills and pedagogical resources needed to ensure student academic success. The California Teacher Education Research and Improvement Network worked in conjunction with the Policy Analysis for California Education in order to address the support (or lack of) pre-service teachers entering the classroom for the first time. The study found that more than two thirds (68 percent) of Students with Learning Disabilities (SWLDs) in public schools spent the majority of their instructional time in general education classrooms in 2015—up from a mere 11 percent three decades earlier.

"With such significant changes afoot, more attention is needed to support for teachers—particularly new teachers—leading these classrooms" (p.1). The study distinguished the difference between preparation programs for primary versus secondary pre-service teachers. The findings showed that "elementary teachers, for the most part, spend substantially more time with the same (and fewer) students each day" (p. 11). These teachers, both pre-service and in-service, may be more efficacious with regard to supporting SWLDs simply because they have more time to spend with these students and to address their individual learning needs throughout the year. In contrast, secondary teachers might have hundreds of students and not have the same time or opportunities to address as many learning differences among their students.

According to Blanton (2011) a shift in teacher preparation programs was necessary as "less attention has been paid to the preparation of general education teachers, who also teach students with disabilities" (p. 7). Service delivery for students within the MTSS structure requires collaboration with a focus on differentiation of instruction and universal design for learning (Davis, 2015). Even where teacher education programs offer candidates the option for

multiple licenses, teachers tend to identify themselves as being one kind of teacher or another as stated by Blanton. Serving students with disabilities is fundamentally about building strong classroom communities. Key in this discussion, Blanton explained that when students are taught by teachers who recognize the unique learning needs of each and every individual, they learn that the effort required for learning may be different for each student—and it is effort that should be celebrated. Blanton indicated, "although there are many pathways to a career in teaching, new teachers from all pathways must enter the classroom with sufficient practice behind them; learning how to teach well before being given full responsibility for a classroom is paramount" (p. 17).

Teachers Instructional Practices and Student Growth

Allsopp (2010) conducted a study on what districts and schools across the country at the time were doing about Response-to-Intervention (RTI). Schools were having some level of difficulty implementing the Response-to-Interventions (RTI) with fidelity. Essentially when instructional practices are not working a team is put in place, "the team consists of individuals pivotal to the collaborative process including teachers, coaches, administration, social workers, psychologists, and support staff" (Shapiro, 2015). Ultimately, students are targeted based on trend data which drive instruction. Student learning data must be aligned to state and district curriculum standards and benchmarks (Fuchs & Fuchs, 2005; USDE, 2010). One critical section of this study was a format where educators were provided with frequently asked questions based on participants' experience with implementing elements of RTI. It also investigated evidence-based instruction, professional development, progress monitoring, and structures for regular intensive interventions (Zirkel and Thomas, 2010). There were five schools (three elementary and two middles) involved in the administration of this experiment. The administrator of this

experiment deemed it necessary to define the RTI process in a broader context before allowing the participants to contribute to the conversation.

As building leaders and teachers continue to address the academically challenged student, the focus on the socially and behaviorally challenged student remains an issue. Some school districts are shifting to behavior interventions. One such support system is the Positive Behavioral Interventions and Supports (PBIS), popularized by the 1997 reauthorization of the Individuals with Disabilities Act of 1997, it was initially established to provide behavioral interventions for students demonstrating specific "behavior disorders." The linking between the MTSS and PBIS supports helps to create a successful school-wide learning environment when implemented with fidelity. Schools are now incorporating aspects of both PBIS and RTI into the MTSS framework.

For nearly as long as compulsory public education has been a reality in the United States, teachers and reformers have sought ways to meet the myriad needs of students in any one classroom and to offer students alternatives to what has otherwise been a "one-size-fits-all" approach to typical classroom instruction (Goddard et al., 2015). Student success is contingent on a teachers' knowledge of differentiation and can help students assimilate and apply information. Differentiation is the responsive attention by educators to a learner's academic needs with regard to learning readiness, learning style, and learning interest (Tobin & McInnes, 2008; Tomlinson, 1999, 2001). The use of differentiation promotes teacher leadership as the practice extends beyond the walls of the classroom to advocate for a high-quality curriculum for all learners (Tomlinson & McTighe, 2006).

Goddard et al. (2015) conducted a study that was focused around two questions: Is differentiated instruction influenced by teachers' perceptions of instructional leadership in their

schools and is teachers' reported use of differentiated instruction associated with student achievement? Student achievement is directly related to teachers 'perception of instructional leadership as both are dependent on the school culture and climate. Goddard et al. (2015) suggested, "evidence that there are school climates influencing instructional practices that matter to student learning and that are potentially malleable by school leaders in particular" (p. 15).

School climate involves the disposition and mood of a school and can positively impact student learning. Freiberg and Stein (1999) described school climate as "the heart and soul of the school," the feeling that either encourages teachers and students to engage, love the school, and to want to be a part of it, or to reject the school and disengage from it. It is the outcome of the school's norms and values, the way in which people at the school relate to and interact with one another, and the way systems and policies manifest.

Providing Student Supports Remotely

The Multi-Tiered System of Supports (MTSS) was intended to help meet the individual needs of students in a normal traditional face-to-face setting. Regrettably, due to the Corona virus Disease-19 (COVID-19), for some students, a remote learning environment was the only option during the 2020-21 school year. Some challenges, as stated by the Connecticut State Department of Education (CSDE) (2020), are but not limited to the engagement of new learning, providing supports for struggling learners, and the utilization of high-quality core general education practices as well as targeted interventions for students experiencing learning, social-emotional or behavior difficulties.

The world-wide spread of COVID-19 has redefined learning as a remote, screen-based activity limiting most learners to on-line teacher support (Harris & Jones, 2020). Essentially, if that is the case, then the planning and implementation of interventions during school closing

remains an important task for districts and schools. It is incumbent on stakeholders to use a variety of ways to provide quality instructions from a distance. Courtney (2020) suggested that educators should continue to align learning to content standards, connect new learning to topics already taught, and supplement instruction with "packaged" content videos at a distance. The possibility of all students achieving academic success at the Tier I level of supports despite adequate curricula, instruction, and differentiation of instruction is inevitable.

A more short-term level of supports that occur in Tier II can be a challenge and difficult during remote learning. Attending to the needs of struggling learners is important (CSDE, 2020). Of the many (remote learning) instructional practices that were suggested, "the ones that stood out the most is the importance of teachers collaborating with interventionists and special educators to identify evidence-based strategies that can be implemented" (p. 5). Additionally, teachers' regular communication and collaboration with parents and support teachers will ensure that needs of all students are understood and met.

When the Tier II remote learning supports are ineffective, that is when a more intensified and specialized intervention is put in place. Lesh (2020) stated that a greater intensity of intervention can be achieved with a smaller teacher-student ratio remotely. Educators should structure distance learning so that the time spent on interventions is related to the grade level content instruction.

Technology Inequities

Equity is deeply embedded in the MTSS framework — which, at its core, provides a set of systems, structures, and practices to build a positive, equitable, and inclusive learning environment for each student. The COVID-19 pandemic has brought attention to the stark inequities in public education worldwide, with the United Nations sharing these statistics: Half of students did not have access to a computer, and 40% did not have internet access (Walter, 2020).In the United States, about 7 million school-aged children resided in homes without home internet service during the 2018-2019 school year(Walters, 2020).Panhandle STEM Elementary Academy (PHSEA) continued to experience difficulty implementing research-based instructional practices and interventions from a distance. PHSEA served approximately 650 students ranging from kindergarten to fifth grades and began the 2020-2021 school year with a limited number of student devices and internet connectivity and access. This lack of access to the internet and computers has been termed in the literature the "homework gap" which refers to the lack of minimum connectivity children need in order to complete schoolwork at home (Mitchell, 2020).

Mitchell (2020) further posited that the school closings that occurred in March 2020 exposed not only a health crisis but a technological one as well. Undoubtedly, families experienced hardships as a result of job loss, death, and other resources such as community services. These technological matters brought to the forefront issues related to limited student growth and achievement. In the United States, the lack of reliable internet access will continue to contribute to chronic absenteeism, poor academic success, and an increased dropout rate. The future of low-income groups during this pandemic is contingent on the equal sharing of an online community that benefits students both educationally and socially.

Empirical Findings

Professional development on teacher effectiveness and how it can support the development of the knowledge and skills teachers need to address students' learning challenges is important. Teachers are called on to have a broad knowledge base and skill set that are needed when implementing the MTSS process. Prasse et al. (2020) stated “yet most teachers do not possess these skills” (p.23). Professional development is used as a reactive measure when instructional needs arise or as Prasse et al. ascertained that current field-based professional development initiatives focus on the existing teacher corps. However, acquiring a more proactive approach as attempted in preparation programs will prepare teacher candidates with this knowledge base and clinical skills needed in the classroom.

A study completed by Yoon et al. (2007), found that teachers who receive substantial professional development—an average of 49 hours across the nine studies highlighted— can boost their students’ achievement by about 21 percentile points. Vega (2015) discovered that one-shot, "drive-by," or fragmented, "spray-and-pray" workshops lasting 14 hours or less show no statistically significant effect on student learning (p. 1). Sebenoler, M. C. (2014) examined the effects of professional development (PD) on literacy instruction using 75,689 lessons from 1,945 classrooms in 112 schools participating in the Study of Improvement. The results revealed the importance of PD as a device for changing teacher practice. The results precisely discovered that teachers who had intense PD in comprehension had 10% more comprehension instruction to offer students and intense PD in writing offered 13% more writing instruction to students.

Correnti (2016) provided an in depth and informed look at the need for a proactive measure of informing early career teachers of the Multi-Tiered System of Support. It explains how the skills of these teachers are rarely taught in higher education institutions and is first

introduced upon the start of the teaching experience. It further addresses the need for initial teacher preparation of teacher candidates in the area of MTSS. It also provided an overview of the MTSS/RIT domains and knowledge and implementation.

In other empirical findings, the Multi-Tiered System of Supports (MTSS) educational method was introduced to schools in Kansas in a pilot study (Rackaway, 2013). Initial participation rates in the program were measured. This study was unique as it sought to define the incidence rate among males and females in MTSS tiers in the study region. The study also sought initial teacher satisfaction to support their development and training in the new MTSS system. A survey consisting of 13 items was sent to 600 randomly selected elementary public-school teachers in the Kansas First Congressional District. As expected, students placed in Benchmark constituted the highest number of participants. Students across MTSS tiers in Central and Western Kansas schools were distributed according to MTSS guidelines and were gender neutral. This study implied that it is vital for effective instruction in reading and mathematics to approach education based on students' assessment results gained by frequent progress monitoring and assessment Rackaway (2013).

Chapter Summary

The research literature indicated that for support programs to maintain effectiveness, there need to be professional development opportunities for all teachers, paraprofessionals, and administrators involved in the RTI/MTSS process (Hall and Mahoney, 2013). It is also important to note that the effectiveness of the Multi-Tiered System of Supports (MTSS) can be impacted by teacher buy-in, proper data collection and analysis, meaningful and individualized interventions, consistency, and accountability (Benner et al., 2020). This chapter reviewed tiered systems of support, the history of MTSS, the importance of professional development on the implementation of MTSS with fidelity, the lack of MTSS in teacher preparation programs, and the empirical research regarding MTSS.

An additional gap in the literature exists in the use of action research as an approach for studying the implementation of MTSS. This action research study sought to add to the research by determining if implementing MTSS with fidelity would mitigate the lack of common understanding about MTSS from educators.

Chapter 3 describes the methodology, data collection methods, the action research methodology, and the data analysis techniques utilized in this research study. The next chapter also describes in detail the interventions of this study.

CHAPTER 3

Methodology

This action research study examined the Multi-Tiered System of Supports (MTSS) structures and processes in an urban elementary school. Teachers had an opportunity to be involved in decisions, gain access to resources and professional development, and gain a better understanding of the overall context of inclusive educational placements for students. The following research questions guided this study:

1. How can professional development aid teachers and school personnel with the appropriate strategies to decrease student movement through the Multi-Tiered System of Supports (MTSS) in one public elementary school?
2. How does enhancing the existing MTSS school support structures for teachers impact their implementing the Multi-Tiered System of Supports (MTSS)?
3. How does the action research team describe the process of developing and implementing an enhanced delivery model for the Multi-Tiered System of Supports (MTSS)?

This chapter describes the theoretical and conceptual framework of this action research. It also includes a clarification of the research design, data collection methods, data analysis, and a discussion of the reliability and validity.

Qualitative Research

Qualitative researchers are interested in understanding the meaning people have constructed: "how people make sense of their world and their experiences in the world" (Merriam, 2009, p. 13). This research was conducted using critical participants in the school,

including the principal, assistant principal, student support teacher, four lower grade teachers, four upper-grade teachers, and the instructional lead teacher. As mentioned above, interviewing the group allowed the researcher to observe how decisions were made and how they related to each other. Glanz (2014) stated, "the power of qualitative research is in its ability to enrich our understanding of a given phenomenon" (p. 80). Parkinson and Drislane declared that qualitative research uses participant observation or case studies that result in a narrative, descriptive account of a setting or practice (2011). This researcher answered the research questions based on what Glanz (2014) stated as the "behavior occurring in naturalistic settings" (p. 80).

Essentially, qualitative research affords opportunities that quantitative analysis does not. Qualitative research is a process of real-life inquiry that aims to understand social phenomena. It focuses on the "why" and “how” rather than the "what" of social phenomena and depends on the direct experiences of human beings as meaning-making agents in their everyday lives (Creswell, 2008). Quantitative methods rely on experiments and surveys to collect measurable data such that statistical processes can be applied (Creswell, 2003). A few of these opportunities include but are not limited to "naturally walking into a classroom" or "recording behavior objectively or anecdotally without any prescribed or predetermined criteria" (Glanz, 2014 p. 80). Qualitative research allowed for more flexibility and involvement in real-time situations and helped find and understand the phenomenon.

Action Research Design

Action research was the method used for this study. Action research is defined as the process in which “participants examine their educational practice systematically and carefully” (Watts, 1985, p. 118). This type of study is an opportunity for like-minded professional educators to discuss current situations and consider various levels of solutions. Watts (1985) asserted that

teachers and principals should identify a problem, examine and assess a problem, help each other by working collaboratively, and consider teachers' benefits and professional development. Glanz (2014) indicated, "action research is an attempt to provide technical knowledge and requisite skills so that you will feel more knowledgeable and comfortable in employing research strategies in your daily practice" (p. 5).

The action research applied in this study maintained the goals of Panhandle Elementary School as it created a safe and confidential environment for the participants, such as the four lower and four upper-grade teachers, the principal and assistant principal, the student support teacher, and the instructional lead teacher. The participants had an opportunity to gain research-based knowledge of how to support teachers with operative Tier I instructions effectively and ultimately decrease student movement through the Multi-Tiered System of Supports. Action research is the missing puzzle piece in ensuring academic success for all students and professional development designed to create a collaboration and support culture for teachers.

Case Study

A case study is a research approach in which one or a few instances of a phenomenon are studied in depth, the focus on one or a few cases, phenomena, or analysis units, but they are not restricted to one observation (Crowe, 2011). This case study took place at a single school and attempted to address the effective instructional practices at the Tier I level of supports, implementation of MTSS interventions, and professional development using an action theory.

Sample Selection

According to Glanz, 2014, sampling or purposeful selection means selecting the group to collect data from your research. The researcher must be cautious and deliberate in choosing the participants or "subjects" in a qualitative and action research study. Patton (2015) further stated that purposeful sampling is widely used in qualitative research to identify and select information-rich cases related to the phenomenon of interest. The action research design team assembled for this study included building administrators with teaching and teacher leadership experiences that afforded them opportunities to impact fellow teachers' instructional practices directly. This action research team also included teacher leaders involved in building-level decisions related to teacher professional development of intervention implementation, research-based instructions, and identification and implementation of best practices at the Tier I level of support.

All participants were involved in the implementation of the Multi-Tiered System of Supports. The participants also had a vested interest in providing sound and effective instructional practices at the Tier I level of support to curtail student movement through the MTSS process. The core design team was made up of lower and upper-grade teachers, instructional coaches and student support teachers. All team members who participated in the study did so voluntarily, and they were all employed by the White County School District and worked at Panhandle STEM Elementary Academy School.

Participants

There were 13 participants in this study; five of whom were general education teachers, two of whom were administrators, three serving as academic coaches, one serving as a gifted support teacher, and one employed as a student support teacher, all within the White County Public Schools in the state of Georgia for the 2021-2022 academic year. Every participant

voluntarily participated in the study, and no incentive was offered for participation. The researcher emailed teachers in July 2021 with a brief description of the proposed study.

Materials

To assess educators' perceptions about student academic achievement, problem-solving, and instructional efficacy and participants were asked to complete a closed-ended pre-survey about MTSS. The pre-survey for the proposed study was administered electronically using Survey Monkey. Participants were recruited voluntarily via email. All participants were employed at Panhandle Elementary School in White County, Georgia. The pre-survey was administered to all members of the implementation team who returned a consent form. The items were modified to specifically focus on teacher efficacy, knowledge, experience, and preparedness to implement MTSS. As a follow up, the researcher developed a series of interview questions to gain further insight into educators' perceptions about Multi-tiered Systems of Support.

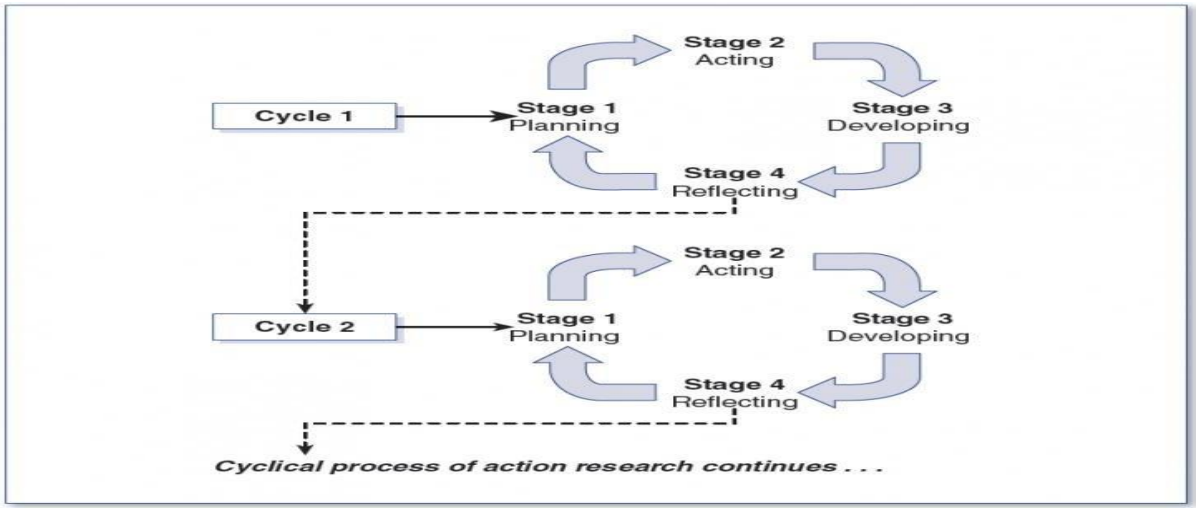
The researcher held focus groups in the fall of 2021. The purpose of these groups was to discuss educators' perceptions of student learning, problem-solving, and expectations for instructional effectiveness in a safe and judgment-free environment. Upon beginning the first focus group, participants read a short oral script that provided an overview of the topics covered during the focus group and thanked them for their continued participation in the study. The researcher provided a verbal script and an informed consent to sign before beginning the focus group. Questions asked during the focus group were informed by the MTSS pre-survey and interview results. The researcher and her student support teacher co-moderated the focus group and interviews. The actions research team worked on focus groups at the beginning and middle

of the research study. In addition, the AR team participated in weekly meetings, walk-throughs, and teacher observations.

Action Research Cycles

Action research has historically been viewed as cyclical (Mertler & Charles, 2011). Parsons and Brown (2002) described the process as one of "observing-doing-observing-adjusting" and then doing it again (p. 8). This study was completed using three action research cycles, and the steps taken in each cycle are depicted in Figure 10. The Action Research (AR) and Design Team (DT) met and worked in partnership to decide, design, and plan interventions. The AR Team identified the topic, gathered information, reviewed the related literature, and developed a research plan. The AR and DT were also instrumental in implementing the program, collecting and analyzing the data, and essentially developing an action plan. In each cycle, the AR members shared and communicated the results with DT, which prompted reflection.

Figure 10
Action Research Cycles



Adapted from Mertler and Charles, (2011

Data Collection

In this study the researcher and action research team used literature surrounding primary and upper-grade teachers' instructional practices and professional learning to create a group of support for the implementation team teachers. Based on this descriptive case study, action research was appropriate because it allowed for necessary collaborative problem-solving. This study used a mixed-methods action research approach. Creswell and Wisdom (2013) stated, "mixed methods" refers to an emergent methodology of research that advances the systematic integration, or "mixing," of quantitative and qualitative data within a single investigation or sustained program of inquiry. All data measures helped to provide answers to the three research questions.

Throughout this study, the action research design team, coupled with the implementation team, supported primary and upper-grade teachers in an urban and high-poverty school. The teams reviewed the literature and what it said about effectively implementing the Multi-Tiered System of Supports with consistency and fidelity. Professional learning community (PLC) is a current "buzz" term in business and educational contexts, seemingly referring to anything from decision making committees to regular meeting groups or collegial learning teams (Owen, 2014).

The formation of both a Design and Implementation team paved the way for the professional learning community to be created. These efforts were followed by identifying the teachers who needed support, implementing the interventions, collecting and analyzing data, reflecting on our actions, and revising our work as we continued with the implementation cycle. A sense of urgency was created through a detailed presentation given to gain buy-in from various stakeholders. The information was presented to a group of upper and lower grade teachers, the leadership team, and selected support staff members. The data were first introduced to the

Leadership team, then the teachers' volunteer group, followed by the support staff. Included in the presentation was the statistics related to the number of students receiving services in Tiers II/III of MTSS and the lack of proper implementation of interventions.

Information shared throughout the presentation included easily implemented strategies that were data-driven, and research-based techniques used to implement interventions consistently and with fidelity. The presentation closed with a plan for the next steps. Following the presentations, the AR team was formed and began designing the implementation plan. The administration served as the guiding members. The team analyzed data, reviewed research, and collaborated in drafting the method. This study's primary intervention took the form of small group professional development comprised of three primary and two upper-grade teachers, a Student Support Teacher, an assistant principal, and a principal. The group's focus was to design professional development that focused on best practices of instructions, analyzing data, the processes, procedures, and expectations of MTSS. The principal and the assistant principals who served on the action research team began in the field of education as classroom teachers and later progressed as academic coaches.

Both principals provided supports and job-embedded professional development to teachers and later pursued positions as building level leaders with a wealth of background in effective instructional practices. The school’s principal brings four years as assistant principal to grades Kindergarten through second before becoming principal at the current school location. This principal’s experience as a previous teacher and academic coach guided the work of the implementation team. The assistant principal brings ten plus years as a classroom teacher and three as an academic coach. The other team member was the student support teacher who brought ten years as a classroom teacher. The members of the action research team are detailed

in Table 1 and the members of the implementation team are detailed in Table 2, along with chief duties allotted at school and official job titles.

Table 1

Explanation and Description of Implementation Team Members

Team Member	Primary Role at Panhandle Elementary School	Action Research Role
Primary Researcher	Title 1, Academic Coach	Leads and conducts all research with the action research team, for the purpose of data analysis. Brings eight years of previous student support experience to the team.
Principal – Ms. Marsha Braxton	Principal of Panhandle Elementary School	Provides a framework and control for the school-wide student support team and an outlook for research-based instructional practices in the classroom. Brings 20 previous years as a classroom teacher and coach, including three as an assistant principal and five years as a principal.
Dr. Wakeshia Jenkins	Assistant Principal for Panhandle Elementary School	Provides critical connections to assessment results as they relate to instructional practices and teacher pedagogy as well as perspective for action research.
Mrs. Kenyatta Jacobs	Teacher-Early Intervention Grades 1-3	Provides experience from over seven years working as the student support teacher leader and early intervention specialist.

Table 2

Explanation and Description of Implementation Team Members

Team Member	Primary Role at Panhandle Elementary School	Implementation Team Role
Tanika Wallace	Kindergarten Teacher	Serves as the grade level lead teacher and provides guidance to children in their development so they have the foundation to succeed in elementary school.
Judy Edwards	First Grade Teacher	Serves as grade level lead and teach assigned subjects to first grade students according to curriculum plan. Coordinate with other first grade teachers to maintain consistency in curriculum.
Deandra Kelley	Second Grade Teacher	Serves as grade level lead and develops learning materials, teaching, answering student inquiries, assigning homework, and managing classroom supplies.
Nicki Tyler	Fourth Grade Teacher	Serves as grade level lead providing opportunities for collaboration, lesson planning, and developing project-based learning.
Donna Peterson	Fifth Grade Teacher	Serves as grade level lead developing curriculum, planning lessons, teaching various subjects, and using a variety of teaching methods.

Interviews

Seidman (2006) stated that interviews in qualitative research are the most suitable data collection method if we are to understand the experiences of others and the meaning, they make of them. Among qualitative research methods, in-depth interviewing is the most commonly known and is widely employed (Patton 2002; Kvale 2007; Minichiello et al. 2008; King & Horrocks 2010; Bryman 2012; Gubrium et al. 2012; Liamputtong 2013). The researcher employed interviews with the members of the implementation team that took 30 to 60 minutes. The interviews took place after their view of research-based best practices. They were in-depth, semi-structured telephone or virtual Zoom interviews. Participants received a brief overview of the interview, along with the interview questions that were going to be asked.

The project data collection began in August and concluded the first week of December 2021. Virtual group sessions lasted 45 to 90 minutes. Some of these activities took place even if I was not conducting this research. These considered changes in teachers' instructional practices, intervention implementation, knowledge of progress monitoring, and conferences around data. The action research implementation team included:

- Three primary and four upper-grade teachers.
- The primary researcher.

The assistant principal conducted professional development focusing on analyzing data. With assistance from the SST, primary and upper-grade teachers and the primary researcher conducted small group and individual sessions on disaggregating data. The remaining action research implementation team provided professional development on the best practices of instructions, processes, procedures, and expectations of the MTSS, administered and analyzed pre-and post-survey responses, led focus group discussions, and created schedules for informal

walkthroughs. Staff members and volunteers received a presentation and a call to participate was made and those interested electronically signed an informed consent. The Action Research Team completed a perception survey at the start and close of the study. Some staff members participated in designing the plan of action to support the students, and some took part in the implementation of the drafted plan.

After consent forms were collected, participants were assigned a pseudonym for research purposes to ensure confidentiality. No personal or identifiable information was used to identify an adult in the study. These measures protected the anonymity of the participants. Data collected including identifying characteristics (such as the name of school or district) were redacted. Data was stored digitally on a password-protected desktop computer by the investigator listed on this IRB. Any identifying information existing in hard copy or on the flash drive was held at the school's secure data room. All recorded (audio) information was used for transcription only and retained for a minimum of three years. After three years of completing the study, the hard drive will be erased, physically destroyed, and disposed of immediately. After completing the survey, documents will be erased from the computer and the hard drive will be defragmented to remove all the study's participants' electronic information. I will shred and recycle all hard copy documents. This research involved the transmission of data over the Internet. Every reasonable effort was taken to ensure the effective use of available technology.

Research Plan and Timeline

The timeline for the research followed what Kolar (2017) refers to as a visual guide or map for how the study will progress. He suggests that he timeline is a schedule or work plan for the completion of the research. The plan includes all the research activities to be completed, the predicted length of time that each activity will take to complete and when it will be performed (Morse & Field, 1996:42-43). The timeline in Table 4 outlines the cycles of reflection and action that were used in the study.

Table 3

Research Plan & Timeline

Date	Action Research Activity
July 2021	Action Research Team Meetings/ (Initial consent to participate in research explained by the researcher)
August 2021	Pre-survey administered to the action research and implementation team
September 2021	Individual teacher interviews conducted: Action research team focus group conducted
November-December 2021	Weekly Action Research Team Meeting/ walk-throughs and observations
January 2022	Weekly Action Research Team meeting/Focus group conducted/Follow-up as needed.

Trustworthiness of Data

It is important to remember that trustworthiness is "a thorough reporting of the process and the results of qualitative data collection and analysis are the key to justifying and assuring that trustworthiness exists in the study" (Henderson, 2006 cited Veal, 2011, p.3). Multiple data sources were composed and evaluated to improve the reliability of the research. To ensure the credibility of the study, the following strategies were used.

1. Triangulation: The use of multiple methods or data sources in qualitative research to develop a comprehensive understanding of phenomena (Patton, 1999). This study's various methods or data sources included interviews, reflections, and AR team meeting notes.
2. Surveys: Any instrument used to assess attitudes or views of respondents. All adult participants in this study took a perception survey at the close of the study.

3. Observations: Studies that measure the behavior of an individual or group of individuals by directly watching them and reporting what you see in some numerical way (Glanz, 2014). Table 3 includes the triangulation of the research methods

Table 4

Triangulation of Research Methods

Research Question	Data Collected and Reviewed	Analysis Approach	Timeline
Q1. How can professional development aid teachers and school personnel with the appropriate student movement through the Multi-Tiered System of Support (MTSS) in one urban public elementary school?	Semi-structured interviews audio-recorded via Zoom platform and transcribed Perception Survey (Pre- and -post)	Coded for Themes	September 2021
Q2. How does enhancing the existing MTSS school support structures for teacher's impact implementing the Multi-Tiered System of Supports (MTSS)?	Semi-structured interviews audio-recorded via Zoom platform and transcribed Perception Survey (Pre-and -post) Reflections	Coded for Themes Coded for Themes	September 2021-January 2022 September 2021-January 2022
Q3. How does the action research team describe the process of developing and implementing an enhanced delivery model for the Multi-Tiered System of Support (MTSS)?	Semi-structured interviews audio-recorded transcribed Perception Survey (Pre- and -post) Reflections Action Research Design Team Meeting Notes Researcher's Journal	Coded for Themes Coded for Themes Reflection Reflection	January 2022 Ongoing August 2021-January 2022

Data Analysis

Evidence from the semi-structured interviews and focus groups was analyzed based on similarities to the research questions. In order to ensure that participant responses would provide input on the research questions, the researcher connected the interview to the research questions. Research question one is discussed first in this section and the data is clarified and analyzed.

Triangulation refers to the use of multiple methods or data sources in qualitative research to develop a comprehensive understanding of phenomena (Patton, 1999). The researcher employed hand coding as the method of coding data. Codes were created through the use of the data from the semi-structure interview, focus group discussions, and pre-post surveys. In qualitative research, coding is "how you define what the data you are analyzing are about" (Gibbs, 2007).

The researcher first converted the recorded interview and survey results format into a Google Document in the data analysis process. This allowed the researcher to view results in a document to allow for coding. The researcher coded based on words, phrases, or connection and determined appropriate based at least 69% (approximately nine out of thirteen) of the responses. The researcher was able to calculate the number of similar responses as various themes were recorded. Themes were decided as a result of the identification of key words. The number of mutual responses were calculated which resulted in an emerging theme. The researcher created a theme for each research question based on the common responses from at least 69% or nine out of thirteen participants.

Limitations of Study

A case study was an appropriate way for the researcher to gather the necessary data to respond to this study's research questions. According to Stake (1995), a case study is the study of an "integrated system," a "specific, complex, functioning thing" (p. 2). A case can be a person, program, organization, or group (Yin, 2009). The case in this study was how Panhandle Elementary School could support teachers at the Tier I level of supports to decrease movement from Tier I to Tier III. The participants volunteered and ranged from classroom teachers to building leaders. This study was predicated on the findings of the district's bi-yearly audit of effective instructional practices at the Tier I level of supports. In previous audits, PHSEA school was criticized due to the increase in Tier III students that were on the verge of possible referral for special education services.

Researcher's Subjectivity

The researcher’s subjectivity is an individual’s world view and the position he or she adopts about a research task and its social and political context (Foote & Bartell 2011, Savin-Baden & Major, 2013 and Rowe, 2014). Essentially, a researcher’s subjectivity refers to an individual's feelings, opinions, or preferences. It says that researchers develop subjectivity statements in different ways and that the content of subjectivity statements varies. The researcher is a new hire (2020-2021) was serving as a member of the Student Support Team at the time of the research. She brought from her previous school district three years of student support team experience in addition to twenty-plus years of exceptional, general, and gifted education. Essentially, the researcher was in a new school, a new position as a teacher leader, and a school district, where she held a limited position of power or influence at the school. As a new hire, the researcher's perspective was welcomed and viewed as a viable source from a well-respected

neighboring district. The researcher experienced a great deal of success in decreasing student movement through the MTSS process. The researcher provided a viewpoint of how teachers can effectively implement Tier I instructions and prevent the movement through the MTSS process. The researcher utilized a researcher's journal during and after every AR design team meeting to reflect. The researcher collected numerous data sources to increase the data outcomes' reliability to address the research questions.

Chapter Summary

This chapter detailed data collection methods and examination for this action research study. The researcher used pre/post surveys, focus group responses, semi-structured interviews, and researcher's reflections. The purpose of this study was to assess the impact of professional development on teachers' instructional practices at the Tier I level of supports and involve support staff in the implementation of Tier II level of supports. Participant interviews were fundamentally used to gather perspectives of higher-level education preparation programs. The focus group's purpose was to gather viewpoints of the building level leaders' role of support with providing sound instructional practices. The ongoing data analysis practices were captured with the researcher journal. As it related to data collections, coding and the analyzing of themes and patterns in the supports and professional development needed for student achievement. The next chapter presents the findings of the study at Panhandle STEM Elementary Academy.

CHAPTER 4

The Case

This action research study examined the Multi-Tiered System of Supports (MTSS) structures and processes in an urban elementary school. Teachers had an opportunity to be involved in decisions, gain access to resources and professional development, and gain a better understanding of the overall context of inclusive educational placements for students. The following research questions guided this study:

1. How can professional development aid teachers and school personnel with the appropriate student movement through the Multi-Tiered System of Supports (MTSS) in one public elementary school?
2. How does enhancing the existing MTSS school support structures for teachers impact their implementation of the Multi-Tiered System of Supports (MTSS)?
3. How does the action research team describe the process of developing and implementing an enhanced delivery model for the Multi-Tiered System of Supports (MTSS)?

This chapter includes the description of the context, problem-framing in the context, problem framing based on the site, the story and the outcomes, the initial data collection, cycles of action research, and reflections.

The Context

This action research case study took place at Panhandle STEM Elementary Academy (PHSEA) (this and all proper nouns related to the context of the problem are pseudonyms),

which had its grand opening in July of 2021. PHSEA was one of 35+ traditional elementary schools in the White County School District and was developed from the Panhandle Academy (PHSEA) K-8. Due to the overcrowding at PHA K-8, PHSEA was created with the intent to accommodate the growing number of students. PHSEA placed a focus on Science, Technology, Engineering, and Math (STEM), and was the only STEM-focused school in the surrounding school cluster. As a public school with a STEM focus, students were not required to apply for admission. Ultimately, PHSEA intended to obtain STEM certification which focused on nontraditional student participation through outreach to groups often underrepresented in STEM program areas.

The White County cluster of schools included seven other schools, three elementary, two middle, and one high school. PHSEA was developed to accommodate up to 1200 students which is the same capacity as the previous school that is now serving only middle school students and a feeder school for rising 6th graders from PHSEA. For comparison purposes, the maximum capacity of PHSEA was 1200 students and at the time of the research enrollment was steady at 903. This was an increase of over 200 students since May 2021. The projected number of students in year two was well over 900 students which prompted an increase of at least two additional classrooms per grade level.

A key purpose for this identification was the district's and school's commitment to high performance. As the student population grew and changed at PHSEA, there was a continuous focus on sound instructional practices that are equitable and accessible to all students. PHSEA's continuous improvement plan focuses on closing the achievement gaps, meeting the needs of diverse learners, and preparing educators to use research-based, evidence-based instructional practices. Essentially, research has shown student-teacher ratio mirrors the teacher's workload

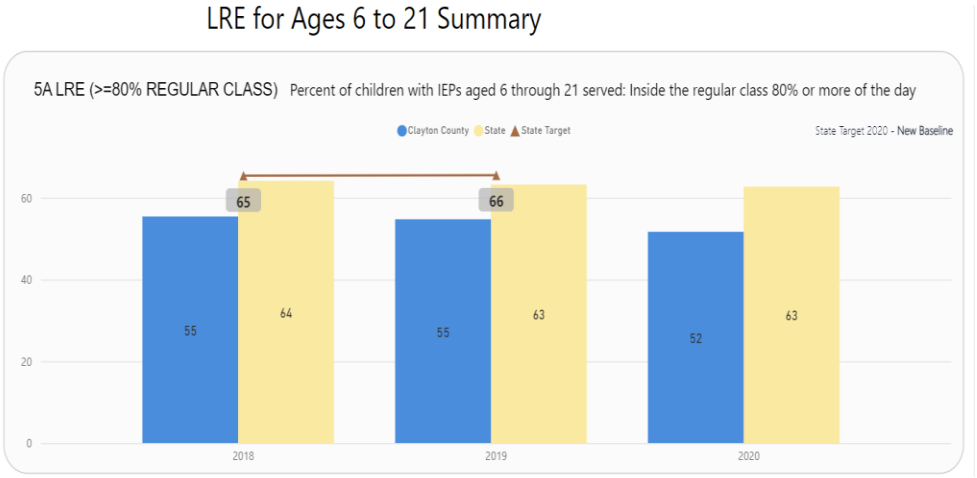
and how they are accessible to offer services and care to their students (Marzano, 2001). Many students and teachers find that the lower the number, the better the educational process and learning will be and eventually prevents movement through the MTSS process and the need for an Individualized Education Plan (IEP). Since the district is responsible for ensuring the needs of all students are met and must consider the full range of supplementary services, a look at the overall percentage of children with IEPs is obligatory.

An IEP is the last resort when looking at student movement through the tiered system of supports. However, in the case of an IEP, it does not mean a teacher did not exhaust all means to ensure academic success or achievement for that student. When that is in question, there is a Least Restrictive Environment (LRE), according to [20 United States Code (U.S.C.) Sec. 1412(a)(5)(A); 34 Code of Federal Regulations (C.F.R.) Sec. 300.114.], which requires that students with disabilities receive their education, to the maximum extent appropriate, with nondisabled peers and that special education student are removed from regular classes unless, even with supplemental aids and services, education in regular classes cannot be achieved satisfactorily.

The following chart exhibits White County Schools' students' ages 6 to 21 inside the regular class at least 80% of the day over three years from 2018 to 2020. In 2018, the state's targeted percentage rate of students ages 6-21 in the regular class was 65%. The state exceeded that target by 1%. The district underperformed by 9%. In 2019, the state's targeted rate was 66%. The state continued to underperform by 3% and the district remained the same for two years at 55% of students ages 6-21 remaining in the classroom for at least 80% of the day. Lastly, in 2020, due to the global pandemic, the state did not issue a target. However, it reached 63% of

students and the district showed a decrease of 3% from the previous two years as seen in Figure 11.

Figure 11



Adapted from Georgia Department of Education, Special Education Annual Report, 2020

The researcher serves as a Title I, Academic Coach at the research site. This title included an overabundance of duties and shared commitments as in providing instructional support strategies and job-embedded professional development. Additionally, the researcher collaborated with the student support specialist throughout the previous school year to create an MTSS support team which consisted of the principal, assistant principal, upper and lower grade level leads, gifted support teacher, and instructional lead teacher. The next section forms the problem in the context of the school and the study.

The Action Research (AR) design team was comprised of teacher leaders, support teachers, and building-level leaders. The DT core team included upper and lower-grade-level teacher leaders.

Problem Framing in the Context

During the time of this study, 11.4% of PHSEA's student population was receiving Tier II level of support and 4% were receiving Tier III level of support which includes psychological assessments and other procedural steps that would result in an IEP. These data depicted how the school began in August of 2021. As the student populations increased, both numbers grew substantially. Regrettably, PHSEA was understaffed due to a shortage of qualified and certified personnel. The hiring process had reached its maximum number of non-certified or beginning teacher preparation program candidates and began to open positions but also overcrowding classrooms with vacant or non-teacher of record teachers. Since all students are considered Tier I at the start of the school year, the teachers were tasked with ensuring instructions were data-driven with the differentiation of students to meet individual student needs. Sometimes these needs are overlooked and misconstrued as disabilities, particularly in the case of overcrowding. This is where the supplemental resources from the Early Intervention team are pivotal which is depicted in the following tables (Table 5 depicts the percentage and number of students receiving Tier II level of supports and Table 6, depicts the percentage and number of students receiving Tier III level of supports.

Table 5

Percentage and Number of Students Receiving Tier II Levels of Supports

Grade	Percent of Students Receiving Tier II Support (2021)	Number
5th	13.6%	17
4th	9.6%	12
3rd	12.8%	16
2nd	19.2%	24
1st	0	0
Kindergarten	4.8%	6

Table 6

Percentage and Number of Students Receiving Tier III Levels of Supports

Grade	Percent of Students Receiving Tier III Support (2021)	Number
5th	4.8%	6
4th	6.4%	8
3rd	8.8%	11
2nd	5.6%	7
1st	3.2%	4
Kindergarten	1.6%	2

Problem Framing Based on the Site

As a new Title Academic Coach at PHSEA, professional development is one of my many responsibilities. I noticed a greater request from teachers for job-embedded, one on one PD sessions focusing on research-based instructional practices. As I conducted beginning of the year pre-conversations and side-by-side sessions, teachers expressed a lack of preparedness and training in the area of MTSS on the Tier I level of support due to the varying needs of struggling learners. The essential goal was to provide specific, targeted professional development on the origin and importance of the Multi-Tiered System of Supports and the advantages of providing sound evidence-based instructional practices at the Tier I level of supports to avoid movement from Tier I to Tier III level of supports. The Action Research team was comprised of support teachers and upper leadership staff members (See Table 7).

Table 7

Members of the AR Team

Members[5]	Role/Title
Ms. Wallace	Kindergarten Teacher
Ms. Edwards	First Teacher
Ms. Keli	Second Teacher
Ms. Tyler	Fourth Teacher
Ms. Pearson	Fifth Grade Teacher
Ms. Braxton	Principal
Ms. Jenkins	Assistant Principal
Ms. Jacobs	Student Support Teacher

[5]Pseudonyms

The Story and Outcomes

This action research timeline began in July of 2021 and concluded in January 2022. During the summer of 2021, I reached out via email to all grade level lead teachers, school support teachers, and the building administrators. In preparation for the initial meeting, I gathered the school's MTSS/RTI data per grade level with a focus on the number of Tiers I, II, and III students, the number of teachers with three or more years of experience implementing interventions at the Tier II level of supports, and effective instructional resources provided by the district. I also shared a PowerPoint presentation of the research study, prospects for the AR team and disseminated two copies of the AR consent form. The school's Student Support Lead attended a one-on-one meeting with the researcher. She was moved by the efforts that had been made to initiate this study and instantly became a member of the team as it aligned to the ongoing work and supports that are provided school-wide. The researcher received all consent forms from teachers (classroom and support) and from the administrator who attended. A summary of the AR core team members is provided in Table 8. All names are pseudonyms.

Ms. Wallace was a Kindergarten grade-lead teacher in her tenth year of teaching. She began her teaching career in her current school with a traditional teaching certificate. She obtained her master's degree in general education recently and seeks a degree in Educational Leadership with a focus on Curriculum Development. Ms. Wallace has taught at PHSEA since the beginning of her teaching career with previous experience in Pre-Kindergarten education. Ms. Wallace indicated that she had little to no formal training with implementing the MTSS process with fidelity but has gained a considerable amount of knowledge from the school's Student Support Teacher, Ms. Jacobs. The second teacher participant, Ms. Edwards, was also a grade-lead teacher who taught 1st grade. This marked her third full year of teaching, and all of her teaching experience was at PHSEA. She was a 4th-grade teacher before becoming a 1st-grade teacher at PHSEA.

She also indicated that the lack of formal education in implementing the MTSS process had hindered her first two years of teaching and that she was more prepared to implement with fidelity after year two. Ms. Kelli was the next participant. This school year marked her fifth-year teaching at PHSEA with no other experience but her second year as a grade-lead. Most of Ms. Keli's teaching experience was in the 1st grade before becoming a second-grade teacher. She purports that she had no previous training in implementing the MTSS process with fidelity. Another participant, Ms. Tyler, was a fourth-grade lead teacher with over 10 years of teaching experience and had the most experience implementing the MTSS process. The final member was Ms. Peterson, a veteran teacher previous fifth-grade teacher, with more than five years of experience and no formal training in implementing the MTSS process or interventions in the Tier II level of support.

Ms. Braxton, Ms. Jenkins, and Ms. Jacobs are the non-teacher participants. Ms. Braxton had fifteen years as a high school science teacher, two years as an academic coach, four years as an assistant principal, and four years as a principal. She had very little prior expertise working with elementary school MTSS/RTI. Ms. Jenkins, the assistant principal had ten years of teaching experience, two years as an academic coach, and three years as an assistant principal with a wide range of expertise in MTSS/RTI and implementing interventions across grade bands. The final participant was Ms. Jacobs, Student Support Lead an Early Interventionist. Ms. Jacobs has served as the lead student support teacher for three years and has a total of 15 years in the field of education.

Initial Steps of the AR team

The action research team employed Mertler and Charles's four phases of action research (2011). Parsons and Brown (2002) described the process as one of "observing-doing-observing-adjusting" and then doing it again (p. 8). The first step was the "observing" phase which the team set out to complete in Cycle 1 during August. The team reviewed the literature involving MTSS/RTI, implementing interventions, and research-based instructional practices in Tier I level of supports. The researcher administered a pre-survey and interview with teacher participants. The "doing" phase consisted of determining our interventions and a timeline as indicated in Table 8.

Table 8

Intervention Timeline

Intervention	Action Research Team Activities	Anticipated Outcomes	Timeline	Data Collection
Action Research Team Meetings	Monthly Meetings	Action Research Team Learning	July 2021 – January 2022	Pre-survey Focus Group Interviews
Professional Learning	Focus on MTSS/RTI process, sound evidence-based, best-practices for implementing interventions at Tier II level of supports.	Increased Teacher Efficacy	August 2021-January 2022	Focus Group Interviews Classroom Observations
Professional Learning Community	Monthly Meetings	Increased Teacher Efficacy for	July 2021 – January 2022	Post-survey Focus Group Interviews Classroom Observations

Cycles of Action Research

Cycle 1. For the first cycle, which began on August 27, 2021, the action research team focused on the origin and background of the Multi-Tiered System of Supports/Response to Interventions process in the first of several professional development sessions. This presentation identified and described the fundamental processes and procedures of the MTSS/RTI model employed by all teachers within the White County School System. During this presentation, the following questions were answered:

1.) What are RTI and the problem-solving process?

2.) What are my responsibilities as a teacher and this process?

3.) What is data collection?

4.) What is progress monitoring?

5.) Where can I find resources to help me through this process?

The Georgia Pyramid of Interventions, (Figure 5) as presented in Chapter 1 of this dissertation, is a pictorial representation of the Response to the Intervention process. The pyramid is shaded and broken into four distinct tiers. At each tier, quality instruction and classroom management procedures are expected. Within each tier, the classroom teacher provides instruction and/or specific intervention techniques to promote adequate academic, behavioral, and speech performance. Data-based decision-making drives movement through tiers. Notably, Response to Intervention (RTI) is 'an ongoing process of using student performance data to guide instructional decisions. MTSS/RTI is not designed to move children into Special Educational placement, but for enhancing the academic and behavioral performance of all students. MTSS/RTI is not just the Student Support Team. The Student Support Team is a component of the RTI process at Tier 3. Progress monitoring is a critical component of the MTSS/RTI process. Data is required to make instructional decisions and move up and down the tiers.

As mentioned in chapter one of this paper, a problem-solving approach is used during team meetings, members of Tier 2, Tier 3, or Tier 4 committees utilized a problem-solving process. The problem-solving model included five steps. Team members used very specific language to define the problem, analyze the nature of the problem, develop a plan to address the problem, strategically implement the plan, and evaluate the plan to determine if it was effective. An intervention plan was implemented for at least four weeks before a meeting was held to evaluate the progress monitoring data and determine if the plan has been effective for a student. After the training, the AR team met to discuss participant feedback and decided on the content of the next PD session.

The second PD session of Cycle I took place on September 7, 2021. It presented the teacher's responsibilities within MTSS/RTI and the problem-solving process. The teacher played a vital role in the success of the MTSS/RTI process. Teachers must identify students who are experiencing academic, behavioral, and/or speech concerns in tier 1. They are also responsible for communicating student concerns to the parent. During Step 3 of the problem-solving model – developing a plan – the teacher selects and implements appropriate interventions and accesses resources available within the school setting to address concerns. During Step 4 of the problem-solving model – implementing the plan – the teacher not only implements the intervention but also must maintain data collection.

Throughout the problem-solving process of the MTSS/RTI model, teachers are also responsible for the following: attending all meetings for students referred or assigned to their class, assisting the team in identifying target concerns, interventions, progress monitoring, and data presentation, implementing interventions, collecting and presenting the results of the intervention in chart or graph format, completing and submitting the Intervention Tracking Sheet, and providing and documenting feedback to the parent regarding SST interventions and recommendations as appropriate. The Tier 3/SST chairperson is required to cancel any scheduled SST meeting if the progress monitoring data is not complete. The SST chairperson must also notify the building level administrator of the canceled meeting.

For students who are transitioned from Tier 1 to Tier 2, the plan implementation step of the problem-solving model must be implemented for a minimum of six weeks with data collection. If data indicates insufficient progress, Tier 3/SST should be considered by consulting

with the SST chair. The SST chair will then consult with the school psychologist regarding the Tier 3 request. To transition from Tier 2 to Tier 3/SST, the following items are needed by the SST chairperson for consideration of the Tier 3 request: tier 2 meeting summary, intervention tracking sheet (the intervention must have been implemented for at least six weeks) progress monitoring data, Skills inventory, Consent for vision and hearing (pursue vision and hearing screening once the consent is received from the parent), Initial request for SST/Tier 3Parent questionnaire (if possible).

The third professional learning session of Cycle I took place on October 1, 2021 and involved a more hands-on approach for the participants. Participants were reminded that all teachers who have students in the SST process will be considered an "Intervention Provider" and will have a "Case Load. "The students on this list are considered your SST Caseload and will be students you teach, or otherwise serve.

The following sessions centered on optimizing learning for all students in/at Tier I level of supports (See Figure 12). This session also focused on simultaneously teaching and learning. The team thought it was necessary to include how to serve both virtual and in person learners since our school had to pivot as a result cluster case of COVID 19. Participants had a chance to experience strategies for lesson planning design and delivery and practice developing rigorous activities. Each participant received a letter of consent and a participated in a presentation offering an introduction to the problem of practice.

Figure 12

Cycles I Action Research

Cycle I, Intervention		
Intervention	**Date**	**Description**
Professional Learning Session #1	August 27, 2021	Overview of origin and background of the Multi-Tiered System of Supports/Response to Interventions.
Professional Learning Session #2	September 7, 2021	The teacher's role and responsibilities within the MTSS/RTI and problem-solving process
Professional Learning Session #3	October 1, 2021	Participants learned the more hands-on-approach as an interventionist.

Cycles of Action Research

Cycle 2. On October 8, 2021, participants received sample lesson plan templates to review and select in the last session. All samples included standards, learning targets, lesson tasks, activities, assessment of learning, and instructional resources sections. During this meeting, participants worked with a partner to create a lesson with three from the three plans presented. Participants selected a standard to use for the group activity. Participants were asked to share the lesson with their grade level teams and on October 13, 2021, the team scheduled a lesson plan review and observation (non-evaluative) and a look-for chart to guide the discussion. The next step included the members reviewing lesson plans and the execution of lesson plans on the identified dates. All participants received, via email, a copy of the lesson plan template prior to the meeting.

During the next AR team meeting on October 29th, the team debriefed Cycle 1. Participants discussed their experience with lesson planning to optimize learning

implementation. There were focus group questions designed to move the conversation. Participants indicated that a more streamlined lesson plan format had a positive impact on student learning and the instructional practices of the teacher

The AR team's plan for the next session was developed at the close of this meeting and all team members agreed that the development of a more streamlined lesson plan was a start but ensuring lessons were rigorous was even more important. On November 8, 2021, the team participated in the next professional learning session. This session focused on prioritizing teaching and learning as an extension of developing lesson plans and diving into the execution of research-based rigorous lessons. There was an urgency to set the stage to ensure that there is high-quality learning for the entire school year. The team decided to gauge the participants' knowledge of rigorous lessons. During this session, participants received four sample lessons of high expectation activities and tasks. Participants were asked to categorize each lesson and be prepared to execute the third week of November (19). They were also tasked with creating a teacher-made rigorous task. The team provided look fors based on Barbara R. Blackburn (2018) Rigor Check: Measuring and Improving the Rigor of Assessments. Teacher participants received copies of the instrument to provide feedback on the level of rigor present or the lack thereof in their lesson and activities.

The team met the first week of December (2nd) to debrief the implementation of the second task. The rigor check that was provided in the last session measured if the lesson was basic, developing, or rigorous. The conversation was centered on the urgency of exposing more teachers to the difference between a basic lesson and a more rigorous lesson. One teacher commented:

During this meeting, participants were given a post-survey and asked to complete it by December 10th. The results of the post-survey were compared to the pre-survey and shared with participants allowing for a comparison of data in the last and final meeting in January.

During the December 10thmeeting, the team reviewed the pre/post survey results to look at the data and ascertained that participants' level of proficiency had shifted positively from the beginning phase up to the present phase of this study. The ratings for the survey ranged from the beginning, developing, applying, to optimizing. Its gauge of participants' overall confidence in applying an MTSS framework to a level of comfortability in providing sound and effective teaching strategies in Tier I level of instructions. The last question on the survey asked participants to share professional learning ideas and desires. Some ideas shared included: defining and learning the components of the MTSS framework, Core (Tier I) instructions and interventions, cohesive school-wide lesson planning, planning and aligning instructions to the interventions across the Tiers, and implementing Tier II interventions with fidelity (See Figure 13).

The team's decision to focus on lesson planning and rigorous instructions had a major impact on participants' instructional practices. The team met to debrief and formulate focus group questions. Team members shared feedback from previous sessions and answered focus group questions developed from a previous conversation. A collaborative discussion was held and recorded

The team participated in an exit interview during this meeting. The focus of this interview was to gauge participants' involvement in this action research process. The professional learning session that covered the origin of the MTSS process was one of the focal points and seemed to have enlightened the participants. The participants also found it beneficial

to view and determine the level of rigor of various activities. The conversation was guided through the use of a pre-established questionnaire that was facilitated by the researcher. Themes were determined based on the responses collected.

Figure 13

Cycle II Action Research

Cycle 2 Intervention		
Intervention	**Date**	**Description**
Lesson planning and preparation templates	October 8, 2021	Distribution and review of lesson plan templates.
Lesson plan/Activity	October 13, 2021	Participants broke out into groups to collaborate on a targeted lesson for the group.
AR Team	October 29, 2021	Debriefing of Cycle, I
Debrief Session of Cycle I	November 8, 2021	AR team met to debrief and discuss observations and walkthroughs
Professional Learning Session #4	November 19, 2021	Focused on prioritizing teaching and learning as an extension of developing lesson plans.
AR Team	December 2, 2021	The team met to discuss the second task/Rigor in Instructions
AR Team	December 10, 2021	Review of Pre/post survey

Cycles of Action Research

Cycle 3. On December 10, 2021, the initial conclusions and observations were shared and discussed with the team based on the results of the data collected. Team members determined that the bottom line is student achievement growth and that while this study shed light on some underlying issues there is still lots of work to be done.

For this cycle, since data were used to identify trends prioritize concerns, and determine root causes, the team focused on data-driven instructions and the role of the student. After having an

opportunity to create and monitor cohesive lesson plans and employ rigorous student-centered activities in Tier I level of supports, the participants had a chance to track student data based on common formative assessments (CFA's), unit tests, and district-level achievement assessments. Data walls were created by each grade level team leader that displayed by-weekly CFA data. Participants felt a need to involve students in the tracking of individual assessment data. Their journey charting included but was not limited to the beginning of the year (BOY) and middle of the year (MOY) data.

The AR team met to discuss which district-initiated assessment would be used for further student data tracking aside from teacher-made assessments. The assessment chosen was the Measures of Academic Progress (MAP) in the areas of math and reading. The MAP assessment provides a beginning, middle, and ending snapshot of student academic progress. Participants were provided with a folder, a student progress printout, a copy of the MAP norms for each testing session, a student tracking sheet, and a plan of action document.

For each testing session, participants reviewed the purpose of goal setting and score recognition. After participants covered fall and winter student data, they were instructed to assist students with setting attainable goals for the upcoming spring (end of year, EOY) testing session.

The meeting concluded with the administration of the post-survey. Participants set a date for the next AR Team meeting to be held on December 14th.

During this meeting, the team participated in an exit interview. The researcher asked questions related to involvement in the action research process. Respondents were able to share their experiences, focusing on the impact of professional learning, participation in the PLC, and observation feedback (See Figure 14).

The researcher facilitated the conversation through the use of a set of questions to help lead the conversation. Responses were collected and analyzed to determine themes. The team set a date for a final meeting on January 7th. During this meeting, the AR team met to review the data and shared initial conclusions and observations based on the results. Team members resolved that the work would be essential to our success as a school and committed to continuing to support the effort.

Figure 14

Cycle III Action Research

Cycle III, Intervention		
Intervention	**Date**	**Description**
AR Team Meeting	December 10, 2021	Discussion of student data tracking system
AR Team Meeting	December 14, 2021	Post-interview conducted
AR Team Meeting	January 7, 2021	The team reviewed the collected data.

Interviews

The participant interview process took place during Cycle I between August 11 and August 18, 2021. This data collection was conducted using an online platform via Zoom after all consent forms were signed. The purpose was to collect data that aligned with the research questions used in this study. An online interviewing approach was used to ensure the safety of all participants in a global pandemic. The interview sought to establish the participants' level of teaching experience and skill level implementing the MTSS process. The participants were reminded of the purpose of the study, research procedures, anticipated benefits, participant rights, and the protection of human rights and confidentiality. The questions also sought to gauge the participants' perception of the administration's role in providing sound and effective

instructional practices. The interviews were recorded using the online platforms' recording system, with the participants' approval, and then later transcribed to establish the emerging themes.

The researcher identified herself as a doctoral student at the University of Georgia and an elementary Title I, Academic Coach within the district under study to establish a rapport with the participants. The researcher also gathered data with the help of a closed-ended survey via the online platform Survey Monkey. The survey was completed by both the design and implementation teams. The purpose of the survey was to address the last two research questions and gauge participants' level of comfortability in providing research-based instructional practices and implementing interventions in Tier-II level of supports. The researcher asked the participants questions that provided insights into teacher efficacy and future professional learning sessions. for the participants.

Focus Groups

Based on the respondents from the survey, focus groups were formed and the online platform Zoom was the setting for all focus group interview sessions. All participants arrived on time with genuine eagerness. The researcher examined participants' perceptions of an MTSS model of instruction and how those perceptions related to fidelity of implementation. The focus groups involved organized discussions with the selected group of individuals to gain information about their views and experiences with MTSS. The focus groups were approximately forty-five to ninety minutes long, and held virtually with me, as the moderator, and the student support teacher as the assistant moderator. The focus groups were with leaders that completed the surveys and who agreed to complete the follow-up questions and participate in the focus group.

As the moderator, I professionally facilitated the focus group discussions and provided a presented topic, guidelines, ground rules, pre-determined questions, mild and unobtrusive control, clear introductions, clear conclusions, pauses, probes, and an established permissive environment. An assistant moderator handled logistics, took careful notes, and monitored recording equipment. Different types of questions were used like an opening question, introductory question, transition questions, key questions, and ending questions. Most importantly, questions that got participants involved (reflection, examples, choices, rating scales, drawings, etc.). Questions that fostered ownership (What can you do…?) were used. Questions were sequenced from general to specific.

The focus group questions were designed to initiate a conversation with participants about some of the close-ended survey responses, to solicit leaders' knowledge, attitudes, perspectives, and experiences with implementing MTSS. I wanted to gain a deeper appreciation for how participants were trained in MTSS. I also want to know what training leaders need in MTSS and sound instructional practices. After the Informed Consent was signed and before the audiotape was started, the researcher asked if anyone had any questions; none were noted. The researcher explained she would ask a question and then allow whoever wished to speak to begin first. The researcher also stated that it was important for each participant to allow others to finish their statements and answers before his/her responding for all voices to be heard. A tape recorder was placed at one end of the oblong table and another tape recorder was placed at the opposite end. The tape recorders were then set to "record". As the questions unfolded, the dynamics of the group evolved with each question.

Researcher Notes of Participant Observations

The AR team conducted non-evaluative observations for fifteen to twenty minutes using a look-for form. The look-fors form covered items that had been previously discussed in a focus group interview. The team wanted to see consistency in classrooms in terms of lesson planning. Some of the components of the look-fors included but were not limited to learning targets, standards, student work samples with rigor, and assessment data. The responses were recorded and shared with the researcher for later review. The data from the observations rendered feedback and suggestions for the next session.

The team held debrief sessions where details were shared from observation visits. Team members noticed that students were more engaged as a result of having a more streamlined lesson planning process.

Researcher Journal Notes

Monthly meetings were held beginning in July of the time of the study. Each meeting was preceded by an agenda and a list of to-dos. Items included on each agenda centered on interventions that cultivated sound instructional practices. The interventions offered professional learning opportunities for participants that included but were not limited to the origin and significance of the MTSS process. These opportunities included direct training which included a revisit of the online platform, Infinite Campus, where teachers are tasked with flagging students for tiered services, effective lesson planning, creating lessons with rigor, and implementing tiered II level of support with fidelity.

The AR team participated in scheduled monthly meetings in a safe environment where discussions were held in confidence. Items of discussion included grade level meeting agendas, scheduling of support teachers, data-driven instructions, and effective lesson planning. The

researcher recorded notes for each meeting. The initial feedback was shared on each strategy, focusing on what execution would involve and if any modifications were needed for classroom use. Strategies were shared in the AR team's Google Drive folder for easy access. The team set dates for implementation and observation during this meeting. We also agreed upon the date for the next AR team meeting.

Chapter Summary

This chapter detailed this action research by defining the context and case. It also described the problem framing in the context and problem framing based on the site. The story and outcome were described in detail. The AR team designed and executed specific, targeted professional learning to address the needs of content area teachers in the areas of lesson planning and recognizing and creating lessons with rigor to address the needs of all students. The team sought to develop capacity with teachers through the use of professional learning, observations, and PLCs. Items such as surveys that gauged participants' level of planning, acting, developing, and reflecting, focus groups, interviews, and observations were used to evaluate the efficiency of the interventions. The next chapter presents the findings of this action research as it relates to each of the research questions and research cycles.

CHAPTER 5

Findings

Introduction

This action research study examined the Multi-Tiered System of Supports (MTSS) structures and processes in an urban elementary school. Teachers had an opportunity to be involved in decisions, gain access to resources and professional development, and gain a better understanding of the overall context of inclusive educational placements for students. The following research questions guided this study:

1. How can professional development aid teachers and school personnel with the appropriate strategies to decrease student movement through the Multi-Tiered System of Supports (MTSS) in one public elementary school?
2. How does enhancing the existing MTSS school support structures for teachers impact their implementing the Multi-Tiered System of Supports (MTSS)?
3. What does an AR team ascertain as members cooperate to prepare teachers with research-based instructional practices and strategies-professional development?

This chapter includes a description of data collected from various sources to establish findings for each research question. Responses to focus group questionnaires, interviews and pre-/post- survey assigned to a research question and summarized into themes. Table 10 exhibits the themes that emerged for each question. This chapter presents the key findings for each research question as determined throughout the action research process.

Table 9

Summary of Research Findings

Research Question	Findings
Q1: How do teachers perceive the effectiveness of professional development in aiding teachers and school personnel with the appropriate student movement through the Multi-Tiered System of Support (MTSS) in one public elementary school??	Theme 1- Identification of MTSS training at the university level is needed Theme 2 – Identification of Tier I level of supports professional development needed
Q2: How does enhancing the existing MTSS school support structures for teachers impact their implementing the Multi-Tiered System of Supports (MTSS)?	Theme 1 – – Identification for building leaders' ongoing modeling and support with instructional strategies Theme 2 – Identification of the necessity to implement Tier II interventions with fidelity and consistency.
Q3: How does the action research team describe the process of developing and implementing an enhanced delivery model with professional development and supports for the Multi-Tiered System of Support (MTSS)?	Theme 1 – Provide an "all hands-on deck" approach to address student achievement through professional development Theme 2 –Address the ongoing need for discussions about procedures and logistics regarding MTSS

Data Collection Connected to Research Questions

Research Question 1: Perceived Effectiveness of Professional Development

Professional Development Needs of Teachers. To determine what professional development needs were necessary to provide effective instruction in Tier I level of supports pre-post surveys and a focus group questionnaire were used. In order to have a pre, interim, and post facet of action research, these measures were executed. The initial measure used and analyzed stemmed from data from the pre-survey and focus group where four major themes emerged. Teachers described areas of professional development needed in order to be more effective decreasing the movement from Tier I level of supports to Tier III:

1. Need for formal training at the university level.
2. Need for Tier I level of supports research-based instructional strategies

Theme 1-Lack of formal training at the university level. All teacher participants identified a lack of formal preparation at the university level as it related to purpose and origin of the implementation of the Multi-Tiered System of Supports. It was also communicated that most of what they learned began in the early years of teaching. Responses from item 1of the pre-survey (I would say my formal preparation and undergraduate studies did not prepare me for implementing MTSS. That was something I had to learn on my own once I was a school teacher in the classroom.) Another participant responded that:

> *She began teaching general education and understood it as the foundation and where it all begins. Also, that her initial experience came just being a classroom teacher with 11 students in the process in a first-grade classroom. She was not familiar with the process at that time but she knew she had to 11 students to serve in the process. That's when she decided to learn more about it through an endorsement program. She went on to say prior to that it was just mostly following the procedure of the district.*

One teacher with the most amount of experience in the group reverberated the same views:

> *I don't think I received any formal preparation during my college courses especially as an undergrad student. I honestly don't think it (MTSS/RTI) was around when getting my bachelor's degree in 1994. I'm almost certain when I received my Master's Degree I still didn't receive any formal training which I do believe it was around 2009.*

Another teacher could not recall training or courses in her early university education experience but was able to provide some feedback based on her latter university experience:

I will definitely say that the professional development sessions that I have attended within this school district and local building has helped me to be more prepared to provide research-based and sound instructional practices. I do recall more MTSS/RTI training in the Master's program that I attended than the Bachelor's program.

Teacher participants' responses indicated that they did not feel university courses adequately prepared them for the general education classroom and implementing the MTSS/RTI process with fidelity in their early years of teaching.

Theme 2-Need for relevant and student-centered professional development.

When asked if there were any professional development needs, all participants responded yes and provided examples of what they thought would benefit all stakeholders. The areas of focus directly affected Tier I level instructional practices. They included but not limited to lesson planning and rigorous activities for all students.

One participant shared that sound and effective instructional practices at the Tier I level of supports should not be "another" thing but executed with ease.

I would encourage teachers to be honest and vocal about what they need in professional development sessions. I would ensure that teachers understand that while this is a formal, documented process of student support, they are most likely already implementing many of the strategies that would be recommended by a member of the student support team. With this in mind, I would attempt to encourage teachers to not view this as "extra" work, along with explaining how it's a repeating, sort of a cyclical process.

Another participant gave an in-depth overview and features of effective professional development sessions:

I expect PD sessions to be specific and student-centered. The focus should be narrowed down to 1-2 goals per session with collaborative opportunities and hands-on experiences. They should provide support throughout the implementation process and be revisited with a goal tracking element. Most have realistic expectations.

Participants were very adamant in sharing disgust in school-based or district level PD sessions. One participant shared her experience from a recent PD that she deemed "a waste of time". The majority of the participants agreed that professional development should be designed to allow participants an opportunity to collaborate with other teachers with knowledge of student needs and faculty with knowledge and experience in areas of critical need.

Research Question 2: Enhancing the Existing MTSS Structures for Optimal Impact on Student Learning.

Qualitative actions were applied to determine targeted professional learning needs of teachers during the Tier I level of supports. These actions included pre and post surveys, focus group discussions, and an interview. The triangulation of the data was made possible by using the pre and post survey results, focus group discussions, and interview responses in one the AR team meetings. The two themes that emerged from the analyzing the data sources provided insight in enhancing the current model of MTSS and its impact on teacher's instructional practices:

1. Need for building-level leaders intentional support/ research-based instructional practices.
2. Implementing Tier II interventions with fidelity and consistency.

Theme 1- Need for building-level leaders intentional support/ research-based instructional practices. Based on the participant responses regarding the need for

building leader's display of instructional support, most participants shared the same sentiment; that building leaders are reactive in terms of the intentional support extended to teachers. One participant shared:

> *Building level leaders should provide support by offering teachers suggestions on best practices for instruction and support as well as provide modeling when they see necessary or requested from a teacher.*

Another participant regarded the assistant principal as the instructional leader of the building and suggested that:

> *Assistant principals should be ready and willing to jump into a lesson to support their teacher's instructionally and help get the best results from and for students.*

Another participant shared:

> *Building level leaders have a responsibility to be approachable and available when teachers express their need for support and allow/schedule time for professional development. Teachers may also feel supported when an administrator attends MTSS/RTI meetings in support of the curriculum.*

An examination of survey data, focus group discussions, and interview responses specified a need for more intentional and recurrent opportunities for sound instructional support for building level leaders such as the principal and the assistant principal. As a result of participating in the AR team, participants gathered useful strategies and methods of communicating to administrators their instructional needs, professional development ideas, and established coherent approach to expressing their needs appropriately.

Theme 2-Implementing Tier II interventions with fidelity and consistency.

Interview question responses indicated the need for the implementation of

interventions in the Tier II level of supports to be more consistent with fluidity and fidelity. Participants shared that there is not enough time in the school day to effectively address the needs of Tier II level supports. One participant shared: *By the time students arrive to school and the day starts, there is barely enough time to spend on standards-based instructions.* When asked what are some suggestions in making sure we are following the district and state guidelines, the participant shared that participation in this study provided clear and appropriate solutions to implementing interventions. Another participant stated that: *As a result of my participation in this study, I am intentional about carving out time of the day to implement interventions. For instance, I take my letter recognition cards with me as students are standing in the hall to use the restroom.*

Collaboration across all education professionals in the building is one of the key aspects of successfully implementing Tier-II level of supports. Participants were able to engage in discussions about the impact of mixing general education, remedial education, and special education teachers during tier time. Another participant shared: *This is not typical of most school structures to involve all support staff in providing tiered interventions.*

Research Question 3: AR Team's Perception of an Enhanced Delivery Model of MTSS.

To determine how the AR team perceived an enhanced delivery model of MTSS, the results from a post interview was utilized. This allowed the researcher to observe the interaction of the AR team as they created professional development that would increase student academic achievement and the movement from Tier I level of supports to Tier III level of supports. Transcripts from the interview were linked to the notes from the focus groups. Results were coded and themes were identified and shared. Overall, the participants felt that enhancing the

implementation of MTSS through upper leadership-led professional development would improve student achievement and teacher by-in with:

1. A "all hands-on deck" approach to address student achievement through professional development.
2. Continuing conversation of measures and logistics regarding MTSS

Theme 1. An "all hands-on deck" approach to address student achievement through professional development. Based on the respondents from the survey and focus group discussion, implementation of MTSS with fidelity posed issues in the past. Building level leaders have faced a myriad of challenges in ensuring schools are complying and are providing sound and research-based instructions and implementing Tier II level supports with trustworthiness. Essentially, to address the overwhelming shortage of staff, a revamping of the schedule took place that freed up paraprofessionals and support staff. This method was executed, observed, and was determined to work.

One participant commented:

> *I believe administrative approval is an important first step in securing support staff, followed by embedding intervention implementation and progress monitoring within the master instructional schedule. Subsequently, developing a plan which includes the integration of support staff should easily follow. Currently, I am proud to share that many teachers are making the effort to comply. Particularly this academic year, information collected from a survey of teachers cites technical issues and student attendance in the virtual environment as major barriers to compliance, among others.*

Another participant shared:

> *Collaboration between teams is necessary as all students and staff are involved. It is*

imperative that classroom teachers are key players in MTSS as they provide an abundance of information on students and are often times implementing the necessary accommodations suggested by the MTSS team.

The researcher noticed the majority of the participants had an unclear understanding of who should be included in the MTSS process. When asked this particular question, one participant asked: *When will elective teachers have time to be involved in the MTSS process?* This was an opportunity to share the origin and purpose of the MTSS process and allowed participants to discuss this matter further. One participant was eager to share: *We are all responsible in one way or another for the implementation of the MTSS process. The assistance of the teacher, administrators and all support teachers working together will benefit the academic success of all students.*

Theme 2-AR team's continuing conversation of measures and logistics regarding MTSS. This action research sought to involve all stakeholders in the MTSS framework that comprises management of important documentation. In order for the process to be successful there needs to be an urgency in ensuring that planning, meetings, and staffing are in place. However, the foundation of an effective and operational MTSS framework is the embedded in the actual implementation, teaching, and real-time work done with students. One participant shared these sentiments: *Staff buy-in is necessary for a successful framework and can be tainted with the misconceptions that are floating around regarding the responsible parties*.

General education teachers expressed a need for more time in order to implement MTSS successfully and with fidelity. Overall, general education teachers understood the importance of ensuring success at the Tier I level of support and implement interventions at the Tier II level of supports no matter what. An administrator participant stated: *Even if you have to come in early*

or stay late, implementing interventions is a nonnegotiable item and should be carried out with fidelity.

The student support team member offered this advice to participants: *I would encourage teachers to be honest and vocal about what they need. I would ensure that teachers understand that while this is a formal, documented process of student support, they are most likely already implementing many of the strategies that would be recommended by a member of the SST. With this in mind, I would attempt to encourage teachers to not view this as "extra" work, along with explaining how it's a repeating, cyclical process.*

Based on this discussion of logistics and procedures as it involves MTSS, there is a need for additional monthly training sessions related to implementing research-based strategies, implementing interventions and ongoing educational opportunities for students and teachers especially during this very difficult time that we face. There was a lack of responses as it related to the needs of students directly and not indirectly as it relates to the paperwork that is attached to such a framework. Streamlining the MTSS process is a sure way of see true success from MTSS implementation.

Results from Action Research Cycle 1

Results from action research Cycle 1 indicated a need to define the components of MTSS thoroughly and provide a platform were participants felt safe during discussions. This data is based on question number one of the presurvey. Participants were asked to rate their overall confidence level in applying a MTSS framework. Based on the results, 30% (4 out of 13) participants were at a developing stage while the remaining were at a beginning level of understanding.

One participant commented: *My formal education program was only concerned with*

preparing me to become a teacher. This did not include preparation did not include the MTSS framework. Another participant was eager to share: *If it had not been for our school's MTSS team's concerted efforts to comply with district and state mandates, I wouldn't have the minimum knowledge regarding MTSS that I have now.*

Cycle 1 provided much needed awareness and insight concerning the implementation of the MTSS framework. I noticed teacher participants were engaged and partaking in the professional development offered during in Cycle 1.

Results from Action Research Cycle 2

During research Cycle 2, focus group and pre-survey data indicated a need for core (Tier I) level of supports, more specifically in lesson planning and preparation (rigor in activities). The results were based on the pre-survey question number nine where participants had an opportunity to decide the area of professional development useful in ensuring student academic success. The survey results for this question suggested that 53% (7 out of 13) participants agreed that "the bang for our buck" would be to focus on areas that concerned teachers the most, lesson planning and preparation in the form of rigorous activities. One participant commented:

> *I have a different perspective on the developing and use of lesson plans since participation in this study. I no longer feel like I am spinning my wheels when planning daily lessons as a result of having the autonomy to use various lesson plan templates.*

Another participant elaborated:

> *Developing lessons and activities going forward will be seamless as there will be consistency across grade bands. Having access to the resources presented in this professional development will strengthen my teaching techniques and has caused me to be more intentional about what I write in my plans. I will ask myself; Are all students*

engaged? What is the depth of knowledge (DOK) of this lesson? Most importantly, how will I gauge students' understanding of the lesson or activity?

Results from Action Research Cycle 3

Action research Cycle 3 results stemmed from in-depth conversations from focus groups as it relates to the relevance of research-based instructional practices. The team determined a sense of confidence from the participants in regards to student achievement and accountability and were able to conclude that students can be held accountable by tracking their own data. One participant shared:

> *Students being held responsible for tracking his/her data will help them in middle and high school as well. This practice keeps the students informed and cognizant that they track their progress to achieve their academic achievement.*

Another participant reflected:

> *I think students should be held responsible for reviewing and tracking data because it gives them ownership of their own learning. It also helps them to set goals and monitor their own progress. I will use the tools and printouts that were provided as a participant as well as create a checkoff system going forward.*

Essentially, the participants appreciated the safe and nonintimidating feedback from building level leaders and peers. After utilizing the student data tracker, one participant shared:

> *The benefits help the student with knowing and understanding what data is relevant with a professional outlook towards gaining entry-level jobs after graduation. Another is the collegiate aspirations of attending a college or university of his/her choice. Also, there is keeping an educational track with student's expectation towards graduating from high school on-time, and taking advantage of applying for scholarships, internships, and on-*

the-job- training fellowships.

Participants were eager to continue the use of the strategies from cycles two and three as indicated in the post survey and supported by the focus group discussions. The one strategy participants felt culminated the study was student data tracking. One participant said:

> *My students were excited to see and understand his and her growth and what is needed to increase their scores and achievement. The form that was created was user friendly to compare data from Fall, Winter, and now Spring's growth. Some of my students were excited to know how well they have done and now what they have to do to meet his/her goals toward academic achievement.*

Another participant explained:

> *As a result of my participation, I feel I am an authority on what's best for my students. Also, as I continue to grow in this profession it behooves me to realize that students will be better able to identify their strengths and areas where they need to work harder in. They will be able to know at all times where they are and be able to set goals, as well as help with devising a plan of improvement.*

Chapter Summary

This chapter charted the findings from the action research that took place at an urban elementary school where teacher leaders made up the implementation team and building level leaders made up the action research team. The use of data collected from focus group discussions, pre-/post surveys, and semi-structured interviews were analyzed and hand coded for themes. Participating in professional development sessions enabled participants to share their sentiments concerning the importance and the origin of the MTSS process, lesson planning and preparation, and student data tracking. The following chapter will summarize the findings,

highlight the major findings related to the literature and research questions, and acknowledge the implications and recommendations for practitioners, researchers, and policy makers.

CHAPTER 6

Discussion of the Findings

This action research study examined the Multi-Tiered System of Supports (MTSS) structures and processes in an urban elementary school. Teachers had an opportunity to be involved in decisions, gain access to resources and professional development, and gain a better understanding of the overall context of inclusive educational placements for students. The following research questions guided this study:

1. How can professional development aid teachers and school personnel with the appropriate strategies to decrease student movement through the Multi-Tiered System of Supports (MTSS) in one public elementary school?
2. How does enhancing the existing MTSS school support structures for teachers impact their implementing the Multi-Tiered System of Supports (MTSS)?
3. How does the action research team describe the process of developing and implementing an enhanced delivery model for the Multi-Tiered System of Support (MTSS)?

Summary of the Findings

This study focused on elementary school teacher's professional development and instructional practices at the Tier-I level of supports related to the Multi-Tiered System of Supports. The purpose was to determine what impact professional development would have on student academic achievement. This study sought to provide schools and districts with research, strategies, and information regarding the importance of providing teachers with research-based

instructional strategies and professional development for Tier-I level of supports through the MTSS process in an elementary school.

Major Findings Related to the Literature Reviewed

The findings in this study related to the professional development and available supports for teachers as they implement the MTSS process with fidelity. Desimone (2009), holds that effective professional development possesses a robust content focus, features active learning, is collaborative and aligned with relevant curriculum and policies. The provision of intentional professional development as it relates to the origin and legal ramifications of the MTSS process prompted teacher responsiveness. This action research sought to address the needs of teachers in the areas of lesson planning and preparation, creating activities with rigor, and student data tracking.

Finding 1- Teacher Perception of the Implementation of the MTSS Process Embraces the Possibility to Impact Student Academic Growth

The way in which teachers perceive the MTSS framework is directly related to the implementation. Areas such as professional development, collaboration, and assessment needs are referenced as areas in which teachers feel their input should be gathered (Wilcox et al. 2015). Additionally, Donnell and Gethinger (2015) found that teacher performance had a connection to their perception of the MTSS process. Student academic achievement is directly related to the specific instructional practices in the Tier-I level of supports.

Finding 2- Collaboration of All Stakeholders in the MTSS Process Could Be the Key to Student Academic Achievement

The overall effective functioning of the MTSS program and distribution of research-based instructional practices is contingent on the effective delivery to all stakeholders. All staff

members must be provided with the necessary professional development that focuses on understanding the tiers of the MTSS process. Ensuring that an established leadership team is in place to oversee, encourage collaboration and ensure proper time for collaboration is provided is imperative (Harlacher & Siler, 2011, Sugai, Simonsen, Freeman & La Salle 2016).

Finding 3- Student Data Tracking Hold the Potential to Increase Student Academic Achievement

Teachers are in a constant cycle of data collection to guide instruction and increase student achievement (Poag, 2020). Student data tracking is when students take ownership of their own learning data. This data can include but not limited to district and state assessments, teacher-made tests, and common formative assessments just to name a few. Locke and Latham (2002) suggested that reducing the ambiguity of what is expected and giving someone clear goals to aim towards improves performance. Student data tracking training allowed the student to know what is expected, what has been mastered, and where they need to continue to work towards mastery. When students set and achieve academic goals, it "gives students and teachers a sense of ownership and pride over their work" (Newman, 2012. P.15).

Major Findings Related to the Research Questions

RQ 1-How do teachers perceive professional development aid teachers and school personnel with the appropriate strategies to decrease student movement through the Multi-Tiered System of Support (MTSS) in one public elementary school?

Finding 1- Teachers Identified a Deficiency of Professional Development Focusing on Appropriate Strategies to Decrease Movement in the MTSS Process

Based on survey results and interview responses, teachers indicated a deficiency of job-embedded professional development that offered research-based instructional strategies.

Additionally, participants of this study also acknowledged the importance of administrative support and participation in the implementation of the MTSS process. A lack of administrative support, insufficient funding, and lack of training can also contribute to the challenge of MTSS implementation with fidelity (Avant & Swerdlik, 2016). Participants in this study indicated that while there are district-led PD sessions focusing on MTSS, as the student population at the research site continues to increase, so does the need for more frequent local PD sessions. All participants had a clearer outlook and level of comfortability utilizing and implementing new strategies in Tier-I and Tier II level of supports.

RQ 2-How does enhancing the existing MTSS school support structures for teachers impact their implementing the Multi-Tiered System of Supports (MTSS)?

Finding 2- Teachers Asked Specifically for School Support Structures to Focus on A Deep Dive into the Origin and Logistics of MTSS, Lesson Planning/Preparation, Rigor in Lessons, and Student Data Tracking

As indicated in the pre-survey results, participants indicated ten instructional strategies of importance and deemed top priority. General education teachers play a vital role in MTSS implementation at all Tiered-level of supports; therefore, their input in professional development must be taken into consideration (Castro-Villarreal, 2014). Of the ten, the team selected the top four requested strategies. Participants saw a need to focus on the flowchart of the MTSS process, effective lesson planning with a focus on rigorous activities, and student data tracking. The team focused on professional development that met these needs and observed a positive impact on student academic achievement and growth as it related to assignment completion rate.

RQ 3-How does the action research team describe the process of developing and implementing an enhanced delivery model for the Multi-Tiered System of Support (MTSS)?

Finding 3- The AR Team Understood the Need for Teachers and Staff to Collaborate and Communicate During this Study

The team was comprised of the researcher, one principal, one assistant principal, one student support teacher, one instructional support teacher, one literacy coach, and one gifted support teacher. "Action research (undertaken by teachers) is research that occurs in conjunction with, and often concurrently with, day-to-day classroom or school activities. As an extension of instructional supervision, action research assists a teacher's inquiry into classroom practices" (Zepeda, 2016, p.13). The need for collaboration and communication between staff and teachers was indicated throughout this study. This information is key as educational leaders work to ensure that an adequate amount of professional development and planning time is extended to teachers and staff involved in the MTSS process. All team members agreed that the overall scheduling process will need to be at the top of the priority list as we plan for the next school year. Bohanon et al. (2016) discussed the importance of systematic change when implementing MTSS, which may include shifts in the current schedule. The team brought a myriad of experience and ideas to this study that contributed to teacher efficacy and student academic achievement. The team worked together to plan professional development that was relevant and engaging.

Limitations of the Current Study

One limitation noted throughout this study was the duration of this research project. Moreover, a limitation of this study was if this study were replicated, would the research findings have the identical or comparable results? The sample size of this study was also a limitation. A small number of teachers contributed to this research. It is probable that a larger sample size would have generated more variation in participant practices and responses. The honesty that participants shared with the researcher is another possible limitation that could impact the findings of this study. In exploring the perception of professional development as it relates to the MTSS process that elementary teachers received from their local school, there is no way to generalize these findings to the experience of other teachers. Lastly, the primary researcher is a Title I, Academic Coach and was responsible for monthly job-embedded professional development within the school district under investigation. Participants were encouraged to be open and candid without concern about observation, being involved in a study with upper leadership may have had some influence.

Implications and Recommendations for Practitioners

The research questions which this study explored were: (1) how can professional development aid teachers and school personnel with the appropriate strategies to decrease student movement through the Multi-Tiered System of Supports? (2) how does the existing school support structures for teachers impact their implementing the Multi-Tiered System of Supports? And (3) how does the action research team describe the process of developing and implementing an enhanced delivery model for the Multi-Tiered System of Supports? These research questions provided valuable information regarding the implementation of effective Tier-I level of supports in the MTSS process. The study design and research gained can be utilized by

future researchers to further the body of research on the implementation of MTSS with a focus on Tier-I level of supports.

The findings from this study can be useful to building leaders who desire to effectively implement MTSS and decrease the movement from Tier-I level of supports to a more intensive supports level. School officials can employ the information from this study to gain teacher and staff input on effective instructional practices and strategies. Based on the themes presented in this study, school leaders can proactively plan relevant job-embedded professional development during summer months to roll out in the upcoming school year.

When establishing the professional development sessions, it is recommended that district and school officials consider the delivery model and audience based on grade level. More precisely, future MTSS professional development should be divided into separate professional development sessions such as elementary should be one PD, middle school one PD, and high school have their own PD. This will ensure that each grade band's specific needs are addressed accordingly.

Implications and Recommendations for Researchers

This study was designed to address the need for additional research related to professional development and supports for teachers in Tier-I level of supports to decrease movement to more intense support. The researcher was able to share literature related to MTSS implementation, research-based instructional practices, and current MTSS practices at one elementary school. The findings and analysis of data validate that teacher collaboration with building level staff can be valuable when executing a district and school-wide initiative such as MTSS. It is recommended that future researchers work toward discovering teacher perception of sound instructional practices as it relates to MTSS in other schools and districts, using research-

based techniques and study design. Additionally, the future practice related to the MTSS process could benefit from the findings of this study.

This study investigated elementary school teacher and staff perception of how professional development and teacher supports could impact student academic achievement. The findings address the need for additional research to focus on Tier-I level of supports and research-based instructional practices. This study included one elementary school, including 5 teachers who chose to participate in a confidential, online open-ended interview. Furthermore, data was gathered from pre-post survey, and focus group discussions. In order to increase the sample size, future researchers could increase the number of schools included in the replication of this study.

Implications and Recommendations for Policy Makers

There is a plethora of PD sessions that have been successful in increasing student academic achievement. These sessions can help policymakers gain understanding of what quality teacher professional development learning should look like. District and state leaders can be instrumental in providing the necessary teacher supports for evidence-based PD sessions. The consideration of redesigning the use of time and schedules to increase opportunities for professional learning and collaboration. Some examples of learning opportunities include but are not limited to participation in professional learning communities, peer observations, and adequate collaborative planning time.

In addition to the use of previous PD sessions, policy makers can also utilize needs assessment surveys to discover areas of professional learning most needed and desired. There must be ongoing learning opportunities throughout the school year that will provide teachers with incentives that will ensure sustained engagement and coaching opportunities. In terms of

preparation programs, college professors could use this research to plan lessons on MTSS including topics related to possible misconceptions that occur from teachers and staff who are currently implementing MTSS. Essentially, the successful implementation of the Multi-Tiered System of Supports must be approached by being proactive and intentional in ensuring that there is a decrease from Tier-I level of supports to more intense support.

Chapter Summary and Final Thoughts

The purpose of the study was to address the wide range of resources available and to integrate the best practices into the structure of MTSS at PHSEA to mitigate the lack of common understanding from educators. Participants in this study included teachers, school leaders, an instructional coach, and the researcher. The following elements steered the study: firstly, the development of an action research design and implementation teams were created. The team implemented and described the process of developing an enhanced delivery model for the MTSS process. Secondly, professional development for teachers and school personnel in the utilization of MTSS was implemented, and thirdly, enhancing existing MTSS support structures for teachers to improve the MTSS system to effectively serve students and families.

Substantial implications can be determined from the findings of this research process. Explicit findings include:

1. Teacher perception of the implementation of the MTSS process embraces the possibility to impact student academic achievement growth.
2. Collaboration of all stakeholders in the MTSS process could be the key to student academic achievement.
3. Student data tracking hold the potential to increase student academic achievement.

This study discovered the following related to the action research:

3. An “all hands-on deck” approach has the potential to more effectively address student achievement through professional development.
4. Developing professional learning related to the implementation of the MTSS process for teachers has the potential to be operative if done through an action research study.

The information shared in this study can help school leaders discover ways to gain teacher and staff input on sound instructional practices at the Tier-I level of supports. School leaders should also explore themes built upon the interview and survey responses in order to anticipate possible discrepancies related to MTSS implementation and future professional development planning. The following recommendations may assist local school leaders in the preparation and planning of professional development for the implementation of the MTSS framework:

1. Generate and manage an action research team to create and administer needs assessment surveys with an emphasis on implementing the MTSS framework-with a focus on Tier-I level of supports.
2. Consider the redesigning and restructuring of teacher and staff schedules to include professional development in the regular school day.
3. Incentivize professional learning opportunities for teachers and staff.

In summary, to increase fidelity in using the MTSS process and inform school leaders, there must be value placed in teachers and staff. Ensuring relevant and intentional professional development is put in place and provided to teachers and staff benefits the overall

implementation of the MTSS framework. Additionally, prioritizing teacher and staff professional development to ensure teacher and staff understanding is key when implementing MTSS (Bohanon, et al., 2018, Eagle, et al., 2015, Freeman et al., 2015, Harlacher & Siler, 2011, Sugai, Simonsen, Freeman & La Salle, 2016).

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APPENDIX A

Implementing the Multi-Tiered System of Supports in an Urban Elementary School: Professional Development and Supports for Teachers

ID: PROJECT00003168

Principal Investigator:	Berry	**Contacts:**	Adams
Reviewer:	Pooser	**Review Level:**	Exempt
Funding Source:		**Approved Date:**	2/10/2021
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APPENDIX B

UNIVERSITY OF GEORGIA
CONSENT FORM
Implementing the Multi-Tiered System of Supports: Professional Development and Teacher Supports

You are being asked to take part in a research study. The information in this form will help you decide if you want to be in the study. Please ask the researcher(s) below if there is anything that is not clear or if you need more information.

Principal Investigator: Jami Berry, PhD
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The purpose of this action research study is to examine the structures and processes of the Multi-Tiered System of Supports (MTSS) in an urban elementary school. Student achievement data indicate a need for improvement in instructional strategies for students to be successful at the Tier I level of the Multi-Tiered System of Supports. The following research questions will steer the research, How can professional development aid teachers and school personnel with the appropriate student movement through the Multi-Tiered System of Support (MTSS) in one urban public elementary school? How does enhancing the existing MTSS school support structures for teachers impact the implementation of the Multi-Tiered System of Supports (MTSS)? How does the action research team describe the process of developing and implementing an enhanced delivery model for the Multi-Tiered System of Support (MTSS)?

We are doing this research study to learn more about the following: firstly, if developing an action research design and implementation team to work on an intervention of teacher structures will positively affect student achievement. The team will implement and describe the process of developing an enhanced delivery model for the Multi-Tiered System of Support (MTSS). Furthermore, professional development for teachers and school personnel in the utilization of the Multi-Tiered System of Support (MTSS), virtually enhancing existing MTSS support structures for teachers to improve the Multi-Tiered System of Support (MTSS) system effectively serve students and families. This study will address the wide range of activities available and will seek to integrate the best practice into the structures of MTSS and to mitigate the lack of common understanding from educators.

You are being invited to be in this research study because you are a certified teacher who will serve as a facilitator of students who will benefit from the structures of the Multi-Tiered System of Supports (MTSS).

If you agree to participate in this study:

- We will collect information about your knowledge and efficacy of the use of the MTSS process and what structures are needed to increase student achievement at the Tier I level of supports and decrease student movement to Tier III.
- We will ask you to participate in a pre-post survey, interview, a focus group, and professional development in virtual group sessions will last 45 to 90 minutes.
- We will follow up in 6 months by 2022.

Participation is voluntary. You can refuse to take part or stop at any time without penalty. There are questions that may make you uncomfortable. You can skip these questions if you do not wish to answer them. After consent forms are collected, participants will be assigned a pseudonym for research purposes to ensure confidentiality. No personal or identifiable information that could be used to identify an adult in the study will be used. These protective measures will help maintain the confidentiality of your information. Data collected that includes identifying characteristics (such as name of school or district) will be redacted prior to the publication of report for the district or other scholarly publication.

The study team will reduce the risk of COVID-19 infection during your participation by conducting all participation remotely or online/digitally. This research involves the transmission of data over the Internet. Every reasonable effort has been taken to ensure the effective use of available technology; however, confidentiality during online communication cannot be guaranteed.

Your responses may help us understand how gaining the necessary insight needed to address curriculum modification, learning style, assessment, behavior management techniques, achievement evaluation, home-school, communication, or study skill assistance can contribute to student achievement. All recorded (audio) information will be used for transcription only and will be retained for a minimum of three years. After three years from the completion of the study, the hard drive will be erased and physically destroyed and disposed of.

All discussions during focus groups will be kept confidential. However, participants may repeat comments outside of the group at some time in the future. We will take steps to protect your privacy, but there is a small risk that your information could be accidentally disclosed to people not connected to the research. To reduce this risk, we will securely place any documents in the vault of the school. Information from this research will be used for purposes of this research only

and will not be used in future studies or shared with other researchers outside of this specific project.

Please feel free to ask questions about this research at any time. You can contact Bonita Adams at ba16184@uga.edu, (Cell) 770-362-6630. If you have any complaints or questions about your rights as a research volunteer, contact the IRB at 706-542-3199 or by email at IRB@uga.edu.

If you agree to participate in this research study, please sign below:

_____	_____	_____
Name of Researcher	Signature	Date
_____	_____	_____
Name of Participant	Signature	Date

Please keep one copy and return the signed copy to the researcher.

APPENDIX C

INTERVIEW PROTOCOL

Research Study: **Implementing the Multi-Tiered System of Supports: Professional Development and Teacher Supports**

Online Interview Protocol

Date:_____ Script:

Greetings,

My name is Bonita Adams, and I am an elementary Title I, Academic Coach and a graduate student at the University of Georgia, conducting research for my dissertation study. This research study, entitled "*Implementing the Multi-Tiered System of Supports: Professional Development and Teacher Supports*" aims to discover teacher efficiency of implementing the Multi-Tiered System of Supports. This study further aims to examine the theory of action and seek to identify the key elements that will help develop a detailed start of the problem or situation for students, teachers, and leaders. Ultimately, student learning goals, classroom system curriculum, and professional learning systems will be the central theme.

The completion of this interview will take about 60-75 minutes, and your participation is greatly valued. The objective of this interview is to gain a more in-depth understanding of how the wide range of activities and structures are available to mitigate the lack of common understanding from educators. More specifically, this study will explore the following:

(1) The effectiveness of professional development as it is intended to aide teachers and school personnel in appropriately moving students through the Multi-Tiered System of Supports.

(2) The enhancement of the existing MTSS school support structures for teachers and the impact on the implementation of the Multi-Tiered System of Supports; and

(3) How enhancing the delivery model for the Multi-Tiered System of Supports

I would like your permission to audio record this interview so that I can ensure that I transcribe your responses accurately. All responses are confidential and will be solely used for the purposes of this dissertation study. Further, to ensure confidentiality, all participants will be given pseudonyms. If at any time you wish to withdraw from this interview session, you are free to do so. Are there any questions before we begin this interview?

APPENDIX D

MTSS Pre-Post Survey

In developing training for MTSS your input is requested.

Question Title

1. Enter Today's Date

Date:

Date

Question Title

2. Which of the following best describes your current job? (Select level and role)

- High
- Middle
- Elementary
- Center/
- Charter
- Instructional Staff (School-based)
- Instructional Staff (School-based Support)
- District Instructional Staff Support

Question Title

*** 3. Rate your overall confidence in applying a MTSS framework**

☐Beginning ☐Developing ☐Applying ☐Optimizing

Question Title

*** 4. Rate your overall confidence in applying the four-step problem-solving process**

☐Beginning ☐Developing ☐Applying ☐Optimizing

Question Title

*** 5. Rate your level of proficiency in using data to determine the effectiveness of core instructions**

☐Beginning ☐Developing ☐Applying ☐Optimizing

Question Title

*** 6. Rate your level of proficiency in generating hypothesis to identify potential reasons for students not meeting benchmarks**

☐Beginning ☐Developing ☐Applying ☐Optimizing

Question Title

*** 7. Rate your level of proficiency on how you are using data to identify interventions**

☐Beginning ☐Developing ☐Applying ☐Optimizing

Question Title

*** 8. Rate your level of proficiency in progress monitoring data to determine a student's response to intervention**

☐Beginning ☐Developing ☐Applying ☐Optimizing

Question Title

*** 9. Where do you feel you need more professional development in regards to the MTSS/RtI framework?**

- Defining the components of MTSS
- Core (Tier 1) Instruction and Intervention
- Applying the 4-Step Problem Solving Process within a Three-Tiered Model
- Data Based Problem-Solving
- Planning and Aligning Instruction and Intervention Across the Tiers
- Implementation Fidelity

APPENDIX E

FOCUS GROUP PROTOCOL

Focus Groups Guidelines/Questions

The researcher will examine educators' perceptions of an MTSS model of instruction and how staff perceptions relate to fidelity of implementation. The focus groups will involve organized discussion with the selected group of individuals to gain information about their views and experiences with MTSS.

The focus groups will be approximately forty-five to ninety minutes long, and held virtually with myself, as the moderator, and an assistant moderator. The focus groups will be done with leaders that completed the surveys and who agreed to complete the follow-up questions and participate in the focus group.

As moderator, I will professionally facilitate the focus group discussions and provide a clearly presented topic, guidelines, ground rules, pre-determined questions, mild and unobtrusive control, clear introductions, clear conclusions, pauses, probes, and an established permissive environment. An assistant moderator will handle logistics, toke careful notes, and monitor recording equipment. Different types of questions will be used like an opening question, introductory question, transition questions, key questions, and ending questions. Most importantly, questions that will get participants involved will be used (reflection, examples, choices, rating scales, drawings, etc.). Questions that fostered ownership (What can you do…?) will be used. Questions will be sequenced from general to specific.

The overarching research question guiding this study was: Participants in this study include four upper and four lower grade teachers, an instructional lead teacher, a student support lead teacher, and the building administrators.

The focus group questions have been designed to initiate a conversation with participants about some of the close-ended survey responses, to solicit leaders' knowledge, attitudes, perspectives, and experiences with implementing MTSS. I want to gain a deeper appreciation for how participants were trained in MTSS.I also want to know what training leaders need in MTSS.

The six focus group questions were:

(1) What do you think about leaders reporting high knowledge but reporting mixed levels of formal training? How are school leaders learning about MTSS?

(2) What do you think caused the mixed responses about implementing MTSS effectively? What is missing that all school leaders need to implement MTSS effectively?

(3) Why do some leaders not feel well prepared to lead universal screening, progress monitoring, and data analysis and decision-making? What training or support would they need to be well prepared?

(4) What training would the school leaders want who do not feel well prepared to implement PBIS? Should this take place in training programs? Why doesn't this training take place?

(5) What is needed to give school leaders the necessary supports to train and prepare teachers and staff to implement MTSS? Are these skills provided in leadership training programs? What should leadership training programs do to prepare school leaders to train teachers and staff?

(6) What training do you need in MTSS and what does it look like?