WILLIAMSON, HOLLY SMITH, Ed.D. Using an MTSS Framework for School Improvement: The Implementation Experiences and Perspectives of Educators, Administrators, and District Leaders. (2019)
Directed by Dr. Craig Peck. 251 pp.

The reauthorization of the Elementary and Secondary Education Act (ESSA, 2015) expanded district and school focus on Multi-Tiered Systems of Support (MTSS) as a school improvement framework. MTSS is intended to improve the quality of instructional practices and provide effective, targeted interventions to students with varying degrees of need. Educators across the state of North Carolina have previously implemented three-tiered frameworks such as Response to Instruction and Positive Behavioral Interventions and Supports to address academic and behavioral difficulties for at least a decade. In 2015, the North Carolina Department of Public Instruction mandated that all public districts and schools adopt and implement MTSS by July 1, 2020. This mandate required that schools utilize data to identify students at risk and proactively provide instruction and supports to address student needs across areas of concern, including academics, behavior, attendance, and social-emotional wellness. This mandate was aligned with updated policy that specified that North Carolina public schools would no longer allow the use of the discrepancy model for the identification of students with Specific Learning Disabilities (SLD), instead requiring teams to examine multiple sources of data to determine eligibility for special education services.

Though educational policymakers in North Carolina consider MTSS a promising program, existing scholarship has shown that the implementation of any school reform initiative is a complex process that requires changes to school culture, structures, procedures, and instructional practices. Previous research has also demonstrated that large-scale school change initiatives, in the absence of carefully planned implementation, may overburden school resources, create confusion and stress for stakeholders, and ultimately provide little to no benefit to schools

and students. Given this existing scholarship, it is important to conduct research examining factors that facilitate or hinder MTSS implementation in the practical setting. Additionally, since MTSS requires the committed effort of educators across levels of implementation, it is critical that educational leaders understand the experiences and viewpoints of stakeholders directly involved in the work.

My purpose in conducting this research study was to examine MTSS implementation in North Carolina via the perspectives of district-level leaders and school-based educators. In this qualitative case study, I investigated the MTSS implementation experiences of 14 stakeholders who represent 1 North Carolina Public School District and 3 schools within that district. I collected data through observations of school-level MTSS meetings and through semi-structured interviews with district leaders, principals, school-based instructional support staff, and teachers. Using the framework of Implementation Science for organizing data and analyzing my findings, I examined (a) how stakeholders perceived MTSS implementation, (b) obstacles and barriers administrators, district leaders, and school staff faced during MTSS installation and implementation, (c) beneficial strategies stakeholders used to address implementation challenges, and (d) how the findings of this study relate to the "6 Critical Components" of North Carolina MTSS.

My case study provides insight into a North Carolina Public School District that is making significant progress toward the full implementation of MTSS as a framework for school improvement. The findings of my study illustrate the complexities associated with the installation of educational reform initiatives, such as MTSS. My study also confirms the significance of the following components in promoting effective implementation practices: leadership, teaming structures, communication and collaboration, resource allocation, professional development, and data analysis. Although participants in my study were required to

navigate implementation challenges, these stakeholders celebrated their successes and ultimately perceived MTSS as a proactive way to address the needs of students across areas of concern and intensity of need. My dissertation provides information regarding factors that facilitate and hinder MTSS implementation and offers suggestions to guide future practices. By providing the rich, detailed narratives of stakeholders from multiple schools and educational roles, this study extends upon prior research and provides a distinctly comprehensive illustration of MTSS implementation in a practical context.

# USING AN MTSS FRAMEWORK FOR SCHOOL IMPROVEMENT: THE IMPLEMENTATION EXPERIENCES AND PERSPECTIVES OF EDUCATORS, ADMINISTRATORS, AND DISTRICT LEADERS

by

Holly Smith Williamson

A Dissertation Submitted to
the Faculty of The Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

Greensboro
2019

Approved by

_____
Committee Chair

This dissertation is dedicated to Ava Grace and Zackery.
Thank you for bringing so much joy to my life. You inspire me to try harder, live better, and enjoy each and every moment to its fullest.

APPROVAL PAGE

This dissertation, written by Holly Smith Williamson, has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

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Date of Final Oral Examination

ACKNOWLEDGMENTS

I would like to convey my sincere appreciation to my dissertation committee members, Dr. Craig Peck, Dr. Kathy Hytten, and Dr. Carl Lashley. Thank you for helping this former middle-distance runner complete this academic marathon! I have learned so much from each one of you and thoroughly enjoyed this challenging experience!

I would especially like to recognize Dr. Peck, my dissertation chair, for being such an amazing coach! Thank you for pointing me in the right direction and talking me through each and every hurdle. I am grateful for your guidance and your wisdom.

I would also like to thank my precious family and friends. Your support and encouragement gave me the strength to keep running toward the finish line, even when I began to doubt my own abilities! Thank you for cheering me on from the sidelines and for always being my biggest fans!

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# CHAPTER I

# INTRODUCTION

## Introduction to Multi-Tiered Systems of Support

With the enactment of federal initiatives and legislation such as the Individuals with Disabilities Act of 1990, the IDEA reauthorizations of 1997 and 2004, and the Elementary and Secondary Education Act (ESEA) amendments of 1994 and 2001 (also referred to as the No Child Left Behind Act or NCLB), educators in the United States face continuous pressure to demonstrate higher levels of accountability for student educational performances, including those with disabilities, non-English speakers, and students from diverse socioeconomic or cultural environments. District and school leaders must focus on identifying methods for providing high-quality, effective instruction and supports to all students (Harn, Basaraba, Chard, & Fritz, 2015). Additionally, school districts face the arduous task of providing educational equity through the thoughtful allocation of resources and persistent collection and utilization of educational data for effective problem-solving (Sugai, Simonsen, Freeman, & La Salle, 2016). Educational leaders must strategically consider the impact of the learning environment, instructional practices, and curriculum on the learner's ability to acquire skills and successfully engage in his/her education (Sailor, 2014). While teachers identify ways to incorporate research-based instructional practices into classroom and intervention curriculum to improve student achievement, staff also seek to create a positive school climate, develop social competencies, and ensure safe learning environments. Educators are now obligated to communicate and collaborate with families and community stakeholders to remove barriers that hinder or deny children appropriate access to educational opportunities. Efforts of this nature require school-wide participation and district

support to shift belief sets and bring about cultural change for the installation and sustainability of inclusive school reform practices.

In 2004, the Individuals with Disabilities Act (IDEA) was reauthorized, prompting educators and policymakers to focus their work on identifying methods for providing high-quality, effective instruction and supports for students of all levels of need (Harn et al., 2015). IDEA 2004 recommended that schools adopt a model to use in the general education setting that would preventatively address the needs of at-risk students and increase academic performances. This new legislation urged educators to carefully examine the quality of core instruction and interventions before considering eligibility for special education services (Bender & Shores, 2007; Fuchs & Fuchs, 2006). Response to Intervention (RTI), a model that utilizes an implementation science framework and research-based interventions to address student academic needs, was explicitly mentioned in the 2004 federal reauthorization of IDEA, giving this approach the promotion it needed for implementation on a larger scale. With the push to ensure that all students, including those with disabilities, receive quality educational services and instructional supports designed to meet the unique needs of the student in the least restrictive environment, researchers and educational practitioners began to voice concern regarding the U.S. Department of Education's guidelines for using a discrepancy model (comparing the differences between the student's performance on achievement and ability measures on psychological and educational evaluations) to determine Specific Learning Disabilities (Fuchs & Fuchs, 2006; Vaughn & Fuchs, 2003).

Using the discrepancy model, educators and researchers noted issues with inconsistent intervention practices and delayed or inaccurate special education referrals. Furthermore, many researchers attributed the over-identification of specific learning disabilities to the use of the discrepancy model (Fuchs & Fuchs, 2007; Wanzek & Vaughn, 2011). Therefore, the

reauthorization of IDEA in 2004 added a provision allowing states alternative methods for determining specific learning disabilities. According to IDEA (2004), states may no longer require the discrepancy model to determine specific learning disabilities. IDEA 2004 regulations mandated that states provide school districts with a means of implementing research-based interventions designed to determine student response and growth toward educational standards. The regulation further stipulated the utilization of this framework to provide appropriate education before the need for the provision of special education services (Batsche et al., 2005; Fuchs & Fuchs, 2006).

Since 2004, many states and school districts have investigated and adopted various educational initiatives in the attempt to proactively meet the academic, behavioral, and social needs of students, while also examining better methods for determining special education eligibility for students with specific learning disabilities. Three-tiered models of support are designed to provide this framework through the establishment of data-driven problem-solving teams that work to universally screen students and respond using evidence-based instruction and intervention practices matched to specific skill deficits and intensity of student need (McIntosh & Goodman, 2016).

## Definition of Terms and Explanation of Key Concepts

Response to Instruction (RTI) and Positive Behavior Interventions and Supports (PBIS) are two examples of the school-improvement frameworks utilized by schools to accomplish this task. Specifically, RTI is an approach that aims to increase student academic success while reducing the need for special education referrals (Vaughn, Linan-Thompson, & Hickman, 2003; Walker & Shinn, 2002). PBIS, on the other hand, focuses on developing a school climate that promotes student success through explicitly teaching social skills to decrease inappropriate behaviors (Sugai & Horner, 2009, 2019). Both of these three-tiered models are designed to

provide this framework through the establishment of data-driven problem-solving teams that work to universally screen students, identify needs, and provide effective core instruction in the general education setting. Additionally, school teams monitor progress and tailor evidence-based intervention practices to match student skill deficits and intensity of need (Batsche et al., 2005; Fuchs & Fuchs, 2006; McIntosh & Goodman, 2016). The following paragraphs provide clear definitions of each of these systematic approaches to academic and behavioral support (McIntosh & Goodman, 2016):

> Academic response to intervention (RTI)
> Academic RTI is a preventive systems approach to improving school wide and individual achievement through high-quality universal instruction and additional tiered supports provided in response to student need. It includes collaborative teaming across general and special education. Decisions in academic RTI are based on the data from validated screening and progress monitoring tools. These data may be used as part of the special education eligibility determination process, but academic RTI includes all academic instruction systems, including core classroom instruction. (p. 6)
>
> Schoolwide Positive Behavioral Interventions and Supports (PBIS)
> Schoolwide PBIS is a framework for implementing evidence-based practices, providing three-tiered continuum of support for students, using systems to support staff in implementation, and using data for decision making. As such, PBIS emphasizes an instructional approach to behavior support, prevention through environmental change, adaptation to the local context, and using the science of applied behavior analysis to achieve outcomes that are valued by staff, students, and families. (p. 6)

The adoption of these two approaches as school reform initiatives has been widespread in recent years with over 26,000 schools, or approximately 20% (Horner, Sugai, & Fixsen, 2017; Sugai & Horner, 2019) in the United States formally reporting the utilization of PBIS (McIntosh & Goodman, 2016). In a separate survey, The Response to Intervention Adoption Survey, researchers reported that 68% of schools participated in district-wide RTI implementation to address academic concerns (Global Scholar, 2011). Also, 88% of state education agencies reported that they are actively providing RTI or MTSS professional development to their districts and schools (Charlton, Dawson, Pyle, Lund, & Ross, 2018). Reduced disruptive behavior,

increased social competence, and decreased bullying are reported with consistently applied and monitored Positive Behavioral Interventions and Supports (Bradshaw, Mitchell, & Leaf, 2010; Bradshaw, Waasdorp, & Leaf, 2012; Horner, Sugai, & Anderson, 2010; Horner et al., 2009; McIntosh, Kim, Mercer, Strickland-Cohen, & Horner, 2015). Also, positive changes in schools' climate and organization of school structures have been shown (Horner et al., 2009; McIntosh et al., 2011). Likewise, increases in overall academic achievement and decreases in special education referrals and eligibility are reported with devoted RTI implementation (Bradshaw et al., 2010; Horner et al., 2009; McIntosh et al., 2013; Shaywitz & Shaywitz, 2005; VanderHeyden, Witt, & Gilberson, 2007).

Over the last decade, schools have adopted and applied these two practices separately. While these initiatives continue to gain momentum, and some studies provide evidence to support the effectiveness of these three-tiered models, educators and researchers question the "viability of maintaining two similar yet separate distinct tiered approaches because of the potential for redundancy in PD, burden on human resources, and the associated costs of supporting separate initiatives" (Charlton et al., 2018; p. 2). Given the similarities of the philosophies, goals, and basic components of the two systems, conversations regarding the integration of the two approaches naturally emerged. Three primary assumptions were the foundation for these conversations. First, researchers asserted that separate systems might not be as effective as a combined system due to the intertwined relationship between academic performances and behavior/social skills (Stewart, Benner, Martella, & Marchand-Martella, 2007). When academic information and behavioral information are analyzed in silos, teams may fail to identify student risk indicators or take responsibility for the provision of interventions. Also, interventions that work well for students in one system may negatively impact supports assigned in the other system. Finally, researchers assert that the use of an integrated system of academic and behavior

supports may lead to more efficient use of school and district resources, decreasing competition for resources, and creating the structural capacity to sustain the effort of support (McIntosh & Goodman, 2016; McIntosh, Horner, & Sugai, 2009). With these assumptions in mind, educators began to design models in which a single, integrated framework could be used to support students across areas of concern. In many state and local education agencies, this framework has been named Multi-Tiered Systems of Support or MTSS. McIntosh and Goodman (2016) present the following definition to clarify the function of MTSS as an integrated framework for school wide improvement:

> Integrated Multi-Tiered Systems of Support (MTSS)
> An integrated MTSS model provides all students with the best opportunities to succeed both academically and behaviorally in school. MTSS focuses on providing high-quality instruction and intervention matched to student needs across domains and monitoring progress frequently to make decisions about changes in instructional goals. It is not simply the implementation of both academic RTI and PBIS systems. There is a systematic and careful integration of these systems to enhance the efficiency and effectiveness of all school systems. (p. 6)

## Problem Statement

Recently, the reauthorization of the Elementary and Secondary Education Act (ESSA, 2015) built on previous federal legislation that endorsed tiered service delivery models by directly referencing the use of MTSS as a means of improving instructional practices and providing targeted interventions to students with needs. In many states, including North Carolina, MTSS has been formally adopted as a school improvement framework to support all students by providing a comprehensive, integrated approach to address academic, social-emotional, and behavioral needs (J. Freeman et al., 2016; McIntosh & Goodman, 2016; NCDPI, 2015b). Additionally, MTSS is intended to reduce the number of students in need of special education services by meeting the needs of students in the general education setting (NCDPI, 2015b; Stewart et al., 2007).

In 2015, the North Carolina Department of Public Instruction (NCDPI) mandated that all public schools and districts adopt a Multi-Tiered Systems of Support framework as a means of school improvement (MTSS) by July 1, 2020 (NCDPI, 2016b). This mandate requires that schools utilize data to identify students at risk and proactively determine student needs in academics, behavior, attendance, and social-emotional wellness. Furthermore, the mandate specifies that North Carolina will no longer allow the use of the discrepancy model for the identification of students with Specific Learning Disabilities (SLD). Moving forward, educators will use the MTSS framework as a means of determining student response to evidence-based interventions. Also, MTSS problem-solving teams will determine SLD eligibility through the review of multiple sources of data including diagnostic assessment and progress monitoring data collected during the provision of tiered interventions. Tiered support systems for academics (RTI) or behavior (PBIS) have the most potential for improving student outcomes when implemented specifically as intended (Fuchs & Fuchs, 2006). However, a gap between theory and practice has been demonstrated in previous attempts to apply these models in North Carolina.

Although three-tiered support models appear simplistic from a theoretical perspective, previous attempts to implement RTI and PBIS have shown that effective implementation is a complex endeavor that requires strategic consideration (Meyer & Behar-Horenstein, 2015). Without appropriate planning, the implementation of a change initiative, such as MTSS, may cause undue conflict and confusion, burden school and district resources, and ultimately provide little or no benefit to school improvement (Greenfield, Rinaldi, Proctor, & Cardarelli, 2010; McIntosh & Goodman, 2016; Sugai & Horner, 2019).

## Purpose of the Research

The implementation of MTSS requires structural, political, and cultural changes that may be stressful for stakeholders (R. Freeman, Miller, & Newcomer, 2015). Successful installation and sustainability of MTSS require that educators and school leadership understand the rationale for required changes and believe in the model's ability to create school improvement. Changes to school leadership, teaming structures, communication efforts, and instructional practices must be implemented. Also, educators must carefully assess and distribute resources with the overall needs of the school and the students it serves in mind.

In many cases, staff members will be inconvenienced or asked to make sacrifices in the best interest of providing students opportunities to grow. The successful installation and implementation of MTSS requires a commitment on the part of educators at various levels—district, school administrators, and staff. Since the investment of these stakeholders is critical for successful implementation, it is essential to fully understand the experiences of these educators from each of their unique perspectives (Regan, Berkeley, Hughes, & Brady, 2015; Rinaldi, Higgins Averill, & Stuart, 2011). Even though some researchers have shown that tiered support frameworks can be an effective and sustainable approach to addressing student needs, there is very little research that examines policies, practices, and other factors that may facilitate or hinder MTSS implementation (Charlton et al., 2018; Sugai & Horner, 2019). The purpose of this research is to examine MTSS implementation in a practical setting and ultimately provide strategies or guidance for effectively integrating RTI and PBIS (Stewart et al., 2007).

## Methodology

In this research study, I seek to describe the experiences of school and district stakeholders in a North Carolina Public School district following the state-mandated adoption and installation of the MTSS framework for school improvement. To accomplish this goal, I use a

qualitative case study design in which I investigate MTSS installation at three schools in one district. I conducted a series of semi-structured interviews and observations to gain insight into the unique perspectives of MTSS district leaders, administrators, and school staff regarding the MTSS installation and implementation process, including implementation barriers and success stories in their schools and districts. In this dissertation, I provide a detailed narrative of stakeholder attempts to problem-solve through the barriers they encountered as they experience the changes associated with enacting a new educational initiative.

I conducted this research in a North Carolina School District and three public schools within that district, which allowed me to examine MTSS experiences across stakeholders (district staff, administrators, and school-level staff) and levels of implementation. I provide analysis of the study findings and outline suggestions for more effective MTSS implementation and overall school improvement.

## Research Questions

I designed this research study in an attempt to provide information to address the following research questions:

1. How is the implementation of MTSS perceived by administrators, district leaders, and school staff?
2. What obstacles and barriers do administrators, district leaders, and school staff face during MTSS installation and implementation?
3. What strategies do schools and districts use to address challenges in a way that administrators, district leaders, and school staff perceive as beneficial to MTSS implementation and overall school improvement?
4. How do the findings of this research study relate to the NC MTSS Six Critical Components?

## Conceptual Framework: Implementation Science

Conceptual frameworks allow researchers to structure their research projects and guide data analysis. Using conceptual frameworks, researchers develop expectations and make predictions regarding future events and interactions (Merriam & Tisdell, 2016). In my research study, I examine my findings using the lens of implementation science. Specifically, I focus on the North Carolina Six Critical Components of MTSS, a framework utilized by the North Carolina Department of Public Instruction (NCDPI) to guide district and school installation and implementation of Multi-Tiered Systems of Support.

Implementation Science is the study of how systems and practices are adopted, implemented, and sustained (B. Cook & Odom, 2013; McIntosh & Goodman, 2016). Implementation science provides a foundation for the acquisition of knowledge, development of structures, and action steps necessary for guiding the adoption and implementation of a new initiative. However, schools and districts often incorporate new initiatives without adequate attention to prerequisite exploration and preparation work (McIntosh & Goodman, 2016; Sugai & Horner, 2019). Also, educators rarely invest the time and effort necessary to maintain implementation practices that enable the initiative to remain effective and efficient beyond the initial installation phase. Initiative failures may be due to inadequate planning or directly related to the organization's inability to explore and address implementation obstacles and barriers. Examples of those barriers may include lack of stakeholder buy-in, inadequate resources to implement the initiative fully, lack of collaboration and team problem-solving, or the presence of competing initiatives (McIntosh & Goodman, 2016). Schools and districts that strategically consider research-based stages of implementation are more likely to engage in more effective practices and ultimately find more successful implementation outcomes (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; McIntosh & Goodman, 2016; Sugai & Horner, 2019).

Five primary stages of implementation provide an outline of the considerations and activities necessary for the implementation of an initiative such as RTI, PBIS, or MTSS (Fixsen et al., 2005; Sugai & Horner, 2006, 2019).

1. Exploration/Adoption: This stage describes the process by which a school or district decides to select a given practice or initiative. During this stage, school districts must slowly move as they determine whether the initiative is a good fit for their organization and stakeholders. Teams must take time to create an implementation plan, carefully examining the alignment of the initiative to current district initiatives and goals and investigating the resources available to carry out the work required. Furthermore, leaders must determine the capacity of the district or school to effectively implement the initiative by examining stakeholder perceptions, including beliefs and attitudes, readiness for change, and understanding of the proposed initiative.
2. Installation: Installation practices require that teams create and utilize the necessary structures needed for effective implementation. Teaming structures and communication pathways must be developed to provide information and receive feedback from stakeholders. These teams, from district to school to grade level, will be responsible for examining resources and information to plan and problem-solving through implementation barriers. Teams will create implementation plans that address training and professional development, data collection, coaching, and assessment needs.
3. Initial Implementation: Initial implementation should begin on a small scale to ensure future success. For example, a school may install PBIS or MTSS in only one grade level or tier before launching into full implementation. Districts may also choose to

begin implementation in only one or two schools, expanding over time. The process for selecting sites or grade levels for initial implementation is important work, as it is essential to establishing readiness (ensuring that the stakeholders that will carry out the work have the resources, mindset, and collaboration/communication structures in place to facilitate implementation). Coaching and training is an essential component of this stage. Also, school leaders at each pilot site must work together to identify and problem-solve through implementation barriers. Districts and schools must establish a two-way communication process that enables stakeholders to provide feedback regarding the implementation process. The data obtained from pilot implementation groups will allow leaders to identify the most effective and efficient means for implementation and apply this information to support future implementation sites.

4. Elaboration: Following initial implementation, teams will expand training efforts and practices as they move toward full implementation. Districts may bring on more schools or schools may bring on more grade levels, while efforts are made to improve and expand understanding of the content, structures, communication, and problem-solving efforts necessary to promote implementation fidelity. Leadership teams then adjust methods and practices based on the results of the initial implementation pilot. Coaching supports and opportunities for stakeholders to provide feedback remain important as schools or districts continue to refine implementation practices. To promote continued stakeholder engagement, teams must implement in planned and sequential stages. Leaders must ensure that resources and professional development are available to continue the work with the same commitment and attention provided during initial implementation steps.

5. Continuous Regeneration: This stage is also called continuous improvement of sustainability. At this stage, districts or schools must continue to review current practices, while also revising and updating to promote efficiency and effectiveness. Teams must consider internal and external obstacles and adjust as needed to keep implementation momentum going. It is important at this stage to continue to communicate the purpose of the work, the reason for the work, and to highlight the connection to the district or school's vision and strategic plan. As new ideas and activities are introduced, leaders need to incorporate and align action steps with the original initiative to avoid issues with competing initiatives. Teams must be cognizant of the adverse effects that come with neglecting an initiative by providing ways for ongoing professional development for new and existing stakeholders. By this stage, systems for data collection, documentation, and sharing of information should be well-established. Teams should be reviewing implementation and fidelity data on an ongoing basis. The initiative should not only be a part of the everyday practice but should now also be clearly outlined and ingrained in school and district policy.

The order of these stages is critical; however, schools may move through these stages at variable speeds and may even find it necessary to go back to certain stages as challenges in implementation are faced (Sugai & Horner, 2019). Some of the challenges that lead to stage revisits include access to resources, staff redistribution or attrition, or loss of momentum or stakeholder buy-in. Schools and districts that strategically consider the following research-based stages of implementation are more likely to engage in more effective practices and ultimately find more successful implementation outcomes (McIntosh & Goodman, 2016; Sugai & Horner, 2019). Effective implementation and sustainability of change initiatives require leaders to design and

install the systems and technical supports that provide clear direction for the change, motivate stakeholders to engage in change, and shape the path to allow for smooth progress toward the end goal.

In order to gain a more comprehensive understanding of the experiences and impressions of stakeholders involved in MTSS implementation, I reference North Carolina's Six Critical Components of MTSS, a derivative of implementation science that specifically examines the essential elements required for the installation and sustainability of MTSS in North Carolina schools and districts. I outline and define the NC MTSS Six Critical Components in detail in Chapter II, and interweave references to this framework throughout this dissertation. In the literature review, I use the NC MTSS Six Critical Components to organize my discussion around previous research regarding three-tiered models of support (e.g., PBIS, RTI, MTSS). In the methodology, I explain how I used the NC MTSS Six Critical Components to design the interview protocol and observation rubric. I also used the NC MTSS Six Critical Components as a tool to code and categorize stakeholder responses. Finally, in Chapter VI, I use the NC MTSS Six Critical Components to analyze my findings, and examine the extent to which implementation practices in the Green Pastures School District align with the policy outcomes intended by the state mandate.

## Researcher Reflection

As the Director of Student Support Programs for my school district, one of my primary roles is to serve as the MTSS Coordinator. As a researcher and educator, I hope to bring alignment to the theoretical foundations and practical applications of MTSS. Education is an ongoing process of knowledge creation and acquisition, lived experiences, interaction with others, and conscious reflection. I chose to study MTSS as a dissertation topic in order to expand my knowledge about the work that I am doing every day. As a school leader, I often am exposed to

conflicting and competing educational priorities, as federal, state, and district mandates are pushed down to schools and often fail to align with a school's resources or potential to carry out educational initiatives. Therefore, many theoretically sound suggestions for school improvement fail to thrive, are pushed aside, and are ultimately unsuccessful. One of the primary goals of educational leaders should be to promote equitable educational opportunities for all children, provide a rigorous and meaningful curriculum, and develop supports to address the needs of the whole child. With that goal in mind, as a district leader, I feel that it is my responsibility to critically examine the educational practices within our schools, including those that are mandated, and advocate for initiatives that ultimately promote better outcomes for all students and educators.

I believe the theoretical foundations of MTSS are grounded in a desire to foster educational equity. By providing support across areas of need (academic, social-emotional, behavioral) and intensity of need, this initiative aims to honor individual differences by meeting children where they are. By employing MTSS, educators attempt to proactively provide the right intervention, to the right students, at the right time, in order to positively influence student outcomes. The MTSS framework also promotes stakeholder engagement and feedback, with educators, students, parents, and communities coming together to support a child. It is about building connections that transform societies. These are all efforts that directly align with overall school improvement and whole child wellness.

However, as an educational leader, I must recognize the disparity between educational theory and practice. As I reflect on the past 4 years that I have worked to deliver information to schools regarding MTSS expectations, procedures, and implementation practices, I evaluate the work on an ongoing basis, each time coming back to the question, "How do you make a mandated initiative successful?" Each time that I provide professional development sessions to

new MTSS cohorts, educators initially respond with hesitancy or resistance as they worry that this will be "just one more thing on their plates" or "just another passing initiative." In order to promote the successful installation and implementation of MTSS, educators need to shift their thinking from "this is just one more thing to do" to "this is the right thing to do for children."

I believe that this dissertation will provide a better understanding of how educators perceive MTSS, given their experiences in their schools and districts. I want to know what does and does not work about MTSS implementation and what can be done to make this effort more successful in not only my district but in others as well. I see the possibilities for MTSS, but recognize that we must have stakeholder buy-in for MTSS to function as intended. To achieve consensus, educational leaders must thoughtfully consider the strengths and weaknesses of the framework and proactively address structural deficits before applying the approach in a practical setting. Leaders must believe in the work. The goal and aim of MTSS are to remove barriers for children, but to do so, we first must remove implementation barriers for educators. I believe that the information obtained through this research study can guide future implementation practices and prevent MTSS from becoming an unsuccessful and quickly-replaced initiative.

## Significance of the Study

The North Carolina Department of Public Instruction (NCDPI) mandated that all North Carolina Public Schools adopt Multi-Tiered Systems of Support as a school improvement framework by the 2020-2021 school year. This initiative applies to all students in grades Pre-K through 12, in both regular and special education settings. Although many educators in North Carolina were familiar with Response to Intervention as an initiative to provide academic intervention and progress monitoring for individual students, some viewed RTI as a special education initiative that served as a process or pathway for identifying students with learning disabilities. Federal law supported the use of RTI as a means of addressing student academic

needs. However, North Carolina public schools did not consistently adopt or appropriately utilize RTI. Also, many North Carolina school districts have used PBIS for years, but the fidelity of application of this tiered-supports model varied both across and within school districts.

Just recently, school teams began to problem-solve around student needs in the areas of academics, behavior, social-emotional issues, and chronic absenteeism in an integrated way using the MTSS framework. To ensure the success of this NC mandated policy, educators must understand the reason behind the MTSS initiative and support and value the work. It is also vital that educational leaders and policymakers understand the impact that this initiative has on educators and students as efforts are made to install and implement MTSS in their districts and schools. My study of the experiences of district leaders, school administrators, and teachers can provide information regarding the practical application of MTSS in schools, including implementation obstacles and celebrations. Since I examine the perspectives of various stakeholders, I can provide additional information regarding how educator beliefs, school resources, teaming and communication structures, data use, problem-solving skills, and leadership impact the success of this school improvement (reform) initiative. Finally, based on the findings of this study, I propose suggested implementation strategies for future consideration.

I hope that this dissertation will continue the conversation regarding MTSS implementation, informing the implementation efforts of this and other educational reform initiatives. Through the continued exploration of stakeholder perceptions and current practices regarding implementation, educational leaders may better examine factors that facilitate and hinder the implementation of school improvement frameworks, and use this information to design structures for teaming, communication, and problem-solving to build school and district capacity to promote and sustain efforts. According to Lane, Carter, Jenkins, Dwiggins, and Germer (2015), by better understanding the degree to which elements of tiered systems of support are in

place and the specific area in which school sites may benefit from professional development or resources to support them in this area, technical assistance providers can align services and interventions with the actual needs of schools to support students behaviorally, academically and socially, thus resulting in improved effectiveness, efficiency, sustainability, and stakeholder satisfaction.

## Organization of the Dissertation

In this chapter, I provided a brief introduction to Multi-Tiered Systems of Support, and two related school improvement initiatives—Response to Intervention (RTI) and Positive Behavioral Interventions and Supports (PBIS). I defined these terms and discussed their relevance to improved student outcomes. I also reviewed the purpose and significance of the study. I concluded with a personal reflection and an introduction to the research questions that I used to guide this qualitative, multi-site case study.

In Chapter II, I provide a more in-depth exploration of background information related to MTSS and existing research related to my study. Specifically, I provide a historical overview and a detailed summary of the educational policies and initiatives that gave rise to the development of MTSS as a school improvement initiative. Also, in Chapter II, I more thoroughly describe RTI and PBIS to provide a clearer understanding of how these two structures, that separately address academics and behavior, were merged to create Multi-Tiered Systems of Support. Finally, I outline and describe the NC MTSS 6 Critical Components and provide a review of relevant literature using this theoretical framework.

In Chapter III, I provide a detailed outline of this study's methodology and procedures, including how I used a preliminary pilot study to refine the research questions and methods. In this chapter, I also explain how I selected participants for this study and outline how I collected and analyzed data to identify research themes.

In Chapters IV and V, I share the findings of this study through the presentation of district and school profiles. In Chapter IV, I offer a detailed narrative of the experiences and perceptions of three district-level stakeholders in one NC school district, Green Pastures Public Schools. In Chapter V, I capture the MTSS implementation stories of 11 school-based educators from three separate schools within the Green Pastures School District.

In Chapter VI, I present an overview and analysis of this district-case study using the NC MTSS Six Critical Component framework to guide my discussion. Also, I answer each of the study's four research questions, provide a summary of stakeholder perceptions of MTSS, review obstacles and barriers experienced during MTSS implementation, and conclude with suggestions for future implementation strategies. I conclude in Chapter VII with a discussion of study implications and limitations.

# CHAPTER II

# LITERATURE REVIEW

## Overview

My purpose in conducting this qualitative study was to examine the perceptions and experiences of district and school-level stakeholders in the State of North Carolina following the adoption of Multi-Tiered Systems of Support. Through this research, I also seek to further the understanding of issues stakeholders faced during the MTSS implementation process and explain how they worked on problem-solving through these obstacles. In this chapter, I use existing research, educational policies, and legislation to provide a historical overview of the development of the MTSS model over time. Also, I examine the fundamental components of MTSS in detail, expanding on the role of implementation science as a critical factor in the North Carolina installation of the MTSS framework. Finally, I share examples of research studies that examine the practical application of MTSS as a school improvement initiative.

## Historical Overview of Special Education Policy

Multi-Tiered Systems of Support (MTSS) is a model that attempts to provide an integrated framework for overall school improvement by focusing on improved instructional practices in the general education setting while offering a continuum of supports for students for whom traditional instructional approaches have not proven effective (McIntosh & Goodman, 2016; Sailor, 2014). Although MTSS itself is a relatively new initiative, RTI (Response to Intervention) and PBIS (Positive Behavior Interventions and Supports), the two cornerstone models on which MTSS was built, have been independently adopted and implemented for many years (Jimerson, Burns, & VanDerHeyden, 2016; Sugai & Horner, 2019). Over 13 years have

passed since the federal reauthorization of the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA, 2004) recommended that the Response to Intervention model be used in the general education setting to preventatively address the needs of at-risk students and increase academic performances. This new legislation urged educators to carefully examine the quality of instruction and utilize evidence-based interventions to make the most appropriate educational determinations for all students, including students considered for special education services (Bender & Shores, 2007; Fuchs & Fuchs, 2006). The inclusion of RTI in this 2004 legislation gave this tiered approach for improving academic outcomes the promotion needed for implementation on a larger scale in the United States. This proposal also resulted in additional funding opportunities for RTI research. Meanwhile, The National Research Council, along with other researchers and educators, proposed the use of the RTI model as an alternative method for identifying specific learning disabilities (Fuchs & Fuchs, 2007).

Researchers and educational practitioners, concerned that the current discrepancy model ineffectively followed a "wait-to-fail" approach, advocated for students to have access to instructional interventions and services in a timely and proactive manner to prevent more significant gaps in development and academic performance (McIntosh, Chard, Boland, & Horner, 2006). In the 2001 U.S. Office of Special Education Program's Learning and Disability Summit, stakeholders proposed the incorporation of RTI into educational policy through special education law (McIntosh & Goodman, 2016). Educators and scholars argued that RTI could be used to identify the presence of disability given the following criteria: 1) adequate intervention was provided to support the student's learning and 2) the student failed to demonstrate progress despite the use of effective research-based intervention strategies (Fuchs & Fuchs, 2006).

Although the tiered system of support became the hot topic of educational conversation in the early 2000s, this approach has long been part of other fields such as behavioral psychology

and public health. The implementation of a treatment (intervention), followed by detailed data collection and analysis (progress monitoring), is nothing new to behavior analysts. Medical professionals use triage to identify the needs of patients, offering the appropriate services and support based on intensity of need. Educators modified these ideas and practices overtime through the application of RTI and PBIS (McIntosh & Goodman, 2016), and expanded supports to include prevention and intervention strategies to address school climate, school safety, social-emotional learning, bullying prevention, and mental health needs (Sugai & Horner, 2019).

In 2000, The U.S. Office of Special Education Programs (OSEP) requested proposals for models focused on improving school-wide behavior and reading intervention practices for grades Kindergarten through third grade. Four grants were awarded to fund these projects in Oregon, Michigan, and Pennsylvania. In 2001, the University of North Carolina at Charlotte and The University of Kansas established two research centers for reading and behavior. From these two centers generated new research and created educational conferences, stimulating grant funding for RTI and PBIS research. Eventually, this work lead to the development of the integrated behavior and academic model now called Multi-Tiered Systems of Support (McIntosh & Goodman, 2016).

Since the authorization of the *Education for All Handicapped Children Act of 1975* and public law 94-142, which ensured student rights to a free and appropriate education, several significant pieces of legislation have challenged states to adopt educational practices and accountability measures geared toward increasing academic outcomes for students in low- or under-performing schools. The *Elementary and Secondary Education Act* (ESEA), which included Title I, and the No *Child Left Behind Act* (NCLB), were enacted to close the gaps in reading and math for children in low-income and minority populations. These amendments provided funding sources for schools to provide intervention services for students in need, including students in special education programs. Most recently, the ESEA was reauthorized by

Every Student Succeeds Act (ESSA). This law, replacing No Child Left Behind, provides funding for special education and district instructional interventions contingent upon compliance with specific accountability measures. ESSA provides states with the flexibility to determine educational practices and service delivery models to improve educational outcomes for students, specifically mentioning a school-wide tiered model focused on behavior and Multi-Tiered Systems of Support (ESSA, 2015).

The *Individuals with Disabilities Act (IDEA) of 1990*, renewed the *Education for All Handicapped Children Act of 1975*, further requiring that students with disabilities receive educational services in the least restrictive environment possible, with instructional supports designed to meet their unique needs. This act provided students with disabilities with educational services in the general education setting comparable to those services received by their peers. At this time, the U.S. Department of Education provided guidelines for determining Specific Learning Disabilities using a discrepancy model that examined the differences between the student's performance on achievement and ability measures on psychological and educational evaluations. Subsequently, educators and researchers voiced concerns regarding the use of the discrepancy model, arguing that this method of evaluation did not provide for timely or accurate identification of learning disabilities. Specifically, opponents asserted that the discrepancy model led to the overidentification of learning disabilities as the application of this model did not allow for the differentiation of slowly developing learners from those with true learning disabilities (Fuchs & Fuchs, 2006; McIntosh & Goodman, 2016). Therefore, the reauthorization of IDEA in 2004 allowed states alternative methods for determining specific learning disabilities. RTI was one of the methods quickly adopted by SEAs as a means of identifying student needs, determining intervention, and ultimately providing data to inform special education eligibility decisions (Fuchs & Fuchs, 2006). Although RTI was initially considered a general education

initiative, many argue that educators misuse RTI as a documentation pathway for special education referrals (McIntosh & Goodman, 2016).

According to IDEA (2004), states may no longer require the use of the discrepancy model to determine specific learning disabilities. As previously noted, IDEA 2004 regulations mandate that states provide school districts with a means of implementing research-based interventions designed to determine student response and growth toward educational standards. The regulation further stipulates that educators utilize the RTI framework to provide appropriate instruction in the general education setting before recommending referrals for special education services.

Although states must work toward closing academic gaps through research-based instructional and intervention strategies, IDEA (2004) provides states with the flexibility to select implementation models and create procedures for determining SLD eligibility. Many states, such as North Carolina, historically examined discrepancies between achievement and ability and the student's response to intervention in combination to determine SLD eligibility (Martin, 2016). As a result, there is a great deal of variation in the implementation of tiered supports and SLD identification from state to state and LEA to LEA. Educators and researchers have noted inconsistencies in the quality and promptness of interventions provided to students. Differences in the provision of instructional interventions, in turn, impact determinations of eligibility for Specific Learning Disabilities (Shapiro, 2016).

## MTSS as a School Reform Initiative in North Carolina

The state of North Carolina began to formally pilot RTI in 2005, following the 2004 Reauthorization of IDEA, which recommended the use of the RTI model to address eligibility for specific learning disabilities. NCDPI's Exceptional Children's Division initially lead the work, with RTI specifically housed and isolated in the Learning Disabilities Department. Over time,

additional staff were assigned to help promote RTI implementation in partnership with the Department of Curriculum and Instruction. RTI began to expand randomly, as districts voluntarily came on board. NCDPI hired a team of three contracted professionals to perform full-time RTI consultation duties across the state, providing professional development for RTI implementation.

At the same time, PBIS began to emerge in NC as a separate initiative that grew at a pace that rapidly accelerated past RTI. The North Carolina Department of Public Instruction assigned eight consultants to promote PBIS installation and implementation in school districts across North Carolina, and housed the work of PBIS under the Department of Behavior. The Office of Special Education Programs, also called OSEP, provided funding to NCDPI to facilitate the adoption and expansion of PBIS in North Carolina. This funding provided the monies for the positions and training required to push out PBIS to school districts.

In 2013, leaders at NCDPI held formal problem-solving sessions to discuss and plan for the potential integration of RTI and PBIS. The teams compared the structures, belief systems, communication and collaboration systems, and data collection models for each initiative, and began planning for the future installation of MTSS. In 2013, the state of North Carolina designated an MTSS director within the Curriculum and Instruction Division and later added four MTSS regional consultants to support efforts to transition to Multi-Tiered Systems of Support on a statewide level. In 2014, NCDPI established a leadership and policy team with membership from each key division to establish the vision for MTSS implementation and problem-solve through barriers that may face districts as they begin the transition to MTSS.

In the Fall of 2014, the NCDPI Division of Curriculum and Instruction, in partnership with the Division of Exceptional Children, sent a memo to school district personnel explaining that NC would be moving toward implementation of MTSS. The memo described the use of a

cohort model for MTSS implementation and training for the 2015-2016 school year. Concurrently, policy change for the identification and determination of eligibility for students with specific learning disabilities was proposed in 2014 and passed in 2015. Under the new policy, the North Carolina Department of Public Instruction mandated the adoption of Multi-Tiered Systems of Support as a school improvement framework by all public schools (NCDPI, 2015b). Under this mandate, all NC public schools would participate in MTSS implementation and discontinue the use of the discrepancy model for determining specific learning disabilities by July 1, 2020 (NCDPI, 2015b). To determine SLD eligibility in accordance with the new policy, educators examine multiple sources of data including the progress-monitoring documentation gathered from the implementation of MTSS interventions and supports.

The 2015 NCDPI SLD Policy Announcement outlined the following vision and mission statements:

- ***Vision***: Every NC Pre-K-12 public education system implemented and sustains all components of Multi-Tiered Systems of Support to ensure college and career readiness for all students.

- ***Mission***: NCDPI will prepare and support LEAs to implement a Multi-Tiered Systems of Support for total school improvement by providing professional development, coaching and technical assistance, research and evaluation, and communication and visibility that results in college and career readiness for all students. NCPDI believes that MTSS is the most effective and efficient approach to improving school outcomes and student performances, thereby ensuring equitable access to sound basic instruction.

- ***North Carolina MTSS Fundamental Beliefs***:

    - All subgroups can reach proficiency with current academic and behavior standards
    - Core Instruction (Tier 1) in reading, math, and behavior can be effective for the majority of our students
    - Supplemental Instruction (Tier 2) can ensure students achieve grade-level benchmarks
    - Intensive Instruction (Tier 3) can ensure students are growing toward achieving grade-level benchmarks

- ***MTSS implementation requires that schools and districts ensure:***
    - A system of high-quality evidence-based and research-based core instructional practices
    - Multiple tiers of instruction that vary in intensity to match student need
    - A systematic process for problem-solving and data-based decision-making regarding student academic, behavioral, and functional needs
    - A comprehensive assessment system that includes universal screeners to identify students with academic risk, common formative assessments, benchmark assessments, student outcome measures, diagnostic assessments, and ongoing progress-monitoring (NCDPI, 2015b)

NCDPI supplemented the state-level MTSS team with additional state consultants. These professionals designed tools, teaming structures, communication systems, and professional development content for NC school districts. Using a blended model of face-to-face and online module instruction, this group guided district-level teams as they began to prepare for MTSS installation. State consultants also offered professional development via a cohort model, with 15 traditional public schools and two charter schools included in the first cohort. In the winter of 2016, Cohort 2 began with 30 districts. Cohort 3 and 4 followed in the Fall of 2016. In 2017, the fifth and final cohort, composed primarily of charter schools, began training sessions.

As MTSS implementation grew across the state of North Carolina, NCDPI reorganized several times to build capacity for the work. In 2016-2017, NCDPI leaders created the Division of Integrated Academic and Behavior Systems, and appointed a director to lead the new division. Organizational changes were made to ensure that a support person was assigned for each region of the state to provide technical assistance and coaching to each of the five cohorts.

**What is MTSS? (Background and Historical Information)**

As defined by the North Carolina Department of Public Instruction, NC MTSS is "a multi-tiered framework which promotes school improvement through engaging, research-based academic and behavioral practices. NC MTSS employs a systems approach using data-driven problem-solving to maximize growth for all" (NCDPI, 2015b, p. 5). MTSS offers an integrated

continuum of evidence-based system-wide practices to support a rapid response to both academic and behavioral needs, with frequent data-based monitoring for instructional decision making (Harn et al., 2015; McIntosh & Goodman, 2016).

Specifically, MTSS is generally composed of six essential elements used to promote collaborative processes to promote the identification of student needs and provide preventative supports, research-based intervention, and data-driven decision-making (Sugai & Horner, 2009). These six essential elements include (a) systematic screening procedures for the early identification of student needs, (b) supplemental evidence-based interventions provided by trained personnel, (c) a continuum of instructional supports and interventions designed to address student needs across areas of concern, (d) structured problem-solving protocols, tools for diagnostic assessment, and data-driven criteria for decision making, (e) the use of progress monitoring for determining need for instructional or intervention changes, and (f) evaluation of implementation integrity by examining fidelity, consistency, and student outcomes (Sugai & Horner, 2009).

Based on past efforts and research, many educators and researchers recognize the importance of following a comprehensive approach to supporting students as they work with students increasingly presented with real-life obstacles that deter their academic success. These barriers extend beyond the school setting to include poverty, hunger, homelessness, language barriers, single-parent homes, and situations of abuse. Along with learning differences, learning disabilities, physical and medical issues, and other disabilities, some students are faced with the disproportionate application of discipline, adverse school climates, harassment, bullying, and psychological issues (J. Freeman, Sugai, Simonsen, & Averette, 2017; Choi, Meisenheimer, McCart, & Sailor, 2017; Sugai & Horner, 2019; Sugai et al., 2016). Educators now realize that these problems must be tackled to engage students in the classroom effectively. MTSS is

intended to provide a system of supports that address academic, social-emotional, and behavioral needs along with issues with attendance/truancy (J. Freeman et al., 2016; NCDPI, 2015b).

Although MTSS implementation is a newly introduced initiative, the conceptual framework behind it has developed over time with principles taken from other models such as PBIS (Positive Behavioral Interventions and Supports) and RTI (Response to Instruction) (McIntosh & Goodman, 2016). Thus, the examination of these approaches aids in understanding the history, philosophy, and evolution of MTSS. However, generalizations from one approach to another should be made with caution until research-based evidence is available to support the success and sustainability of each approach independently (Sugai & Horner, 2019).

**Positive Behavioral Supports and Interventions (PBIS).** Positive Behavioral Interventions and Supports (PBIS) is a multi-tiered prevention plan designed to support the social, emotional, and behavioral needs of students through systematic, proactive, and data-driven methods (Sugai, Horner, & Gresham, 2002). Educators implementing PBIS seek to promote positive behaviors by providing clearly defined expectations for behavior across school settings. School teams establish structures to collaboratively identify frequently demonstrated disciplinary incidents and respond to those behaviors using research-based instruction and interventions (McIntosh & Goodman, 2016).

PBIS provides a continuum of supports of increasing intensity based on the social, emotional, and behavioral needs of the students (Sugai et al., 2016). At the school-wide (CORE) level of instruction, educators teach and model clearly-stated, positive expectations for behavior. Additionally, teachers and staff provide students with positive reinforcement for the demonstration of appropriate behavior and social skills. Teachers and administrators are expected to fairly apply clear and consistent consequences and corrective feedback for students who do not demonstrate expected behaviors (Sugai & Horner, 2019)

Students who continue to demonstrate difficulty with behavioral and social skills, despite appropriate instruction in the general setting, are provided with additional supports (Tier 2) that target the needs of small groups of students with similar needs (Sugai & Horner, 2009). Approximately 10-15% of students in a school will benefit from Tier 2 interventions such as the assignment of peer buddies, an adult mentor, daily or weekly check-in, check-out procedures, or small group social/behavioral skill instructional sessions. Students identified at highest risk for behavioral and social-emotional difficulties or those who do not demonstrate a response to Tier 2 interventions may receive intensified support which provides more frequent and individualized intervention in addition to primary and secondary supports (Sugai & Horner, 2009). Students receiving this level of support often work with a specialized team to develop appropriate strategies to meet the needs of the individual. This team may include student support staff such as behavioral specialists, psychologists or counselors, nurses, or school social workers. This level of support requires parent involvement. Schools may also work with community agencies to facilitate appropriate interventions which may include in-depth data review and collection, comprehensive assessments such as a Functional Behavioral Assessment (FBA), the creation of individualized behavior plans, and more frequent progress-monitoring (McIntosh & Goodman, 2016). Approximately 1-5% of students will receive this level of behavioral/social-emotional support.

Many studies have documented the impact of PBIS in the school setting with regard to establishment of positive school climate, decreased bullying behaviors, reduced disciplinary referrals, suspensions, and exclusion, and increased pro-social behaviors (Bradshaw et al., 2010, 2012; Horner et al., 2010; Horner et al., 2009; McIntosh et al., 2015; McIntosh et al., 2011). However, previous research examining the impact of PBIS implementation on academic outcomes has yielded mixed results. Although several studies have demonstrated a link between

PBIS and improved behavioral and attendance outcomes, little evidence has been shown supporting a relationship between behavioral interventions and positive academic growth (J. Freeman et al., 2016). Variations in school and district implementation concerning implementation readiness, resources, and fidelity of practice impact the success of the implementation and sustainability of multi-tiered practices (Sugai & Horner, 2019).

**Response to Intervention (RTI).** Like PBIS, Response to Intervention (RTI) integrates assessment and intervention within a multi-level prevention system to maximize student achievement and reduce behavioral problems (Shapiro, 2016). According to the RTI model, schools develop specific criteria to determine which students are at the greatest risk for reduced academic achievement. Data are systematically and frequently collected and analyzed to identify students who meet the criteria for academic risk. Educators provide these students with research-based instructional practices and interventions. They also collect screening and diagnostic data to make appropriate decisions regarding the type and intensity of interventions provided to each student. The student's response to the interventions provided, as indicated by frequently and consistently collected progress-monitoring data, is also used to identify students who may need specialized instruction or special education services for disabilities that adversely impact their educational performance (such as specific learning disabilities). Like PBIS, RTI supports are generally provided using a tiered system, with three to four tiers of instructional supports and interventions utilized following the individual needs of students (Fuchs & Fuchs, 2006).

RTI was introduced in North Carolina schools in 2004 when four pilot schools began implementation of RTI and discontinued the use of the discrepancy method for identifying students with specific learning disabilities. In 2010, the Exceptional Children's Division partnered with other NCDPI divisions and school districts to expand RTI efforts (NCDPI, 2015b).

**MTSS: Integrating PBIS and RTI to Meet the Needs of All Students.** In the past, PBIS and RTI have been used in schools to address the behavioral and academic needs of students, but the two models have often been used in isolation from one another (Stewart et al., 2007). Some schools chose to actively apply only one model, ignoring the intertwined relationship between academic and behavioral performances. MTSS, however, combines the behavioral, social-emotional, and academic components of these two models to provide an integrated approach to problem-solving around the needs of students (McIntosh & Goodman, 2016; NCDPI, 2015b). MTSS offers a structured framework for using data to identify struggling students and provides specific intervention protocols in the general education setting to proactively address needs to promote better outcomes for all students (Sugai & Horner, 2009).

All students participate in core instruction for behavior and academics, while tiered supports are available to provide supplemental (Tier 2) and intensive (Tier 3) interventions for any student who demonstrates need per ongoing screening and progress-monitoring efforts (Sugai et al., 2016). Educators offer multi-tiered supports to all children in order to prevent future achievement gaps and learning deficits. While RTI may have been viewed as a documentation pathway to identify students as eligible for services in the Exceptional Children's Program, MTSS seeks to reduce the number of students in need of special education services by meeting the needs of students in the general education setting (Fuchs & Fuchs, 2006; NCDPI, 2015b; Sugai & Horner, 2009). The MTSS framework is intended to promote data-based problem-solving, identification of targeted student needs, provision of instructional supports and interventions, and student progress monitoring to ensure student growth across areas of concern. By combining behavioral supports with effective academic instruction and intervention, schools aim to increase the chances that all students will succeed (Stewart et al., 2007).

## Three-Tiered Approaches to School Reform: Existing Research

There are very few currently published, empirical and peer-reviewed studies that directly examine the implementation of Multi-Tiered Systems of Support as a school improvement initiative. There are even fewer studies that examine MTSS from a daily practice perspective in the school setting (Charlton et al., 2018). Since MTSS is an integration of PBIS and RTI, I have assumed that research in these areas may be generalized to MTSS. Therefore, I expanded my literature review to include RTI and PBIS. In this discussion, I include articles that examine issues related to the implementation of new practices and programs at a systems level. Guided by implementation science, which seeks to address the challenges associated with moving a theoretical research model or approach to successful implementation in a practical setting, RTI and PBIS attempt to provide general frameworks that describe how to achieve school improvement. Both RTI and PBIS, as three-tiered models of support, follow several critical features or components for implementation. These components include (a) the formation of leadership and teaming structures to create the capacity in schools to carry out the work of school-wide, grade-level, and child-specific problem-solving, (b) the use of universal or regular screening of all students, (c) the use of multiple sources of data to identify students in need and make decisions for the school and students to support those needs, (d) the use of evidence-based intervention at all tiers (core, supplemental, intensive), (e) monitoring of student progress, and (f) evaluation of fidelity in order to determine if strategies and interventions are provided with designated consistency and frequency to support student and school needs. Additionally, both models require the installation of communication and collaboration structures to facilitate the exchange of information to and from stakeholders. Using three-tiered models, educators attempt to deliver effective and efficient professional development opportunities that are aligned with school improvement goals (Lane et al., 2015).

Researchers examining RTI, PBIS, or MTSS use the components listed above to critically investigate school and district implementation practices. Existing studies reveal considerable variability in implementation efforts and the subsequent outcomes of the initiatives (Berkeley, Bender, Gregg Peaster, & Saunders, 2009; Braun et al., 2018; Fuchs & Vaughn, 2012; Meyer & Behar-Horenstein, 2015; Rinaldi et al., 2011). Additionally, detailed guidance for best implementation practices is limited. Many variables impact school implementation efforts including: (a) resource acquisition and allocation, (b) the effectiveness of leadership practices, (c) the quality of professional development and coaching supports, (d) staff belief systems, and (e) external pressures from states and districts regarding educational accountability (McIntosh et al., 2015).

Historically, mandated, top-down school reform initiatives have had little impact on student achievement (Tyack & Cuban, 1995). Three-tiered models offer theoretically appealing approaches for school improvement; however, districts and states often report a lack of adequate guidance and funding to support implementation. Therefore, schools must develop procedures, interventions and supports, and data evaluation criteria on their own, given the resources available locally. Although implementation science research suggests that districts and schools invest significant time in preparation and readiness work before introducing educational change, many educators have voiced that RTI, PBIS, and MTSS installation feels like "building the plane while it is flying."

Even though educators actively participate in these school change initiatives and can offer firsthand accounts of the reality of implementation in the school setting, the research literature regarding the perspectives of educators in the field is incomplete. Several studies, using a critical incident framework, list factors that enable or deter effective implementation, but few studies dig deeper to explore how to implement these models successfully in a practical setting.

Research findings convey that teachers want more specific guidance on how to implement these school improvement models. Specifically, they desire effective professional development and on-going coaching and administrative support, and allocated time for collaboration (e.g., Regan et al., 2015; Rinaldi et al., 2011). According to Horner et al. (2017), for evidence-based practices to produce socially significant outcomes, formal protocols and evidence of effectiveness must be "described with precision" (p. 26). These researchers go on to say, "too often practices are proposed without attention to the breadth of system variables and implementation tools needed to facilitate adoption, reliable use, sustainability over time, and generalization across settings and staff" (p. 26).

Preparation work is important, but districts must also consider how to integrate the new initiative with current practices and policy. This includes examining professional development plans, coaching, and leadership structures. For a practice to produce desired outcomes, leaders must be able to clearly outline "what the practice involves, where it should be used, by whom and with whom it should be used, and for what purpose" (Horner et al., 2017, p. 26). Many school reform initiatives come up short by failing to define and clarify the roles and responsibilities of staff. Enabling educators to be agents of change requires that educators know what to do and how. By investigating the perspectives of educators who have experienced the installation of a three-tiered school improvement framework, researchers can gain a better understanding of factors that may improve the scale-up and sustainability of these initiatives.

## Literature Review Using MTSS Six Critical Components Framework

In 2016, The North Carolina Department of Public Instruction outlined the following six critical components as necessary for efficient and effective MTSS implementation (NC MTSS Implementation Guide; NCDPI, 2016b). Educational leaders constructed these six critical

components using a similar framework generated for RTI and MTSS implementation in Florida (NCDPI, 2019):

**Leadership**
Leadership is key to the successful implementation of any large-scale innovation. The building principal, assistant principal(s), and school leadership team are critical to implementing MTSS at the school level. They engage staff in ongoing professional development for implementing MTSS, plan strategically for MTSS implementation, and model a problem-solving process for school improvement. The school principal also supports the implementation of MTSS by communicating a vision and mission to school staff, providing resources for planning and implementing instruction and intervention, and ensuring that staff has the data needed for data-based problem-solving.

**Building the Capacity/Infrastructure for Implementation**
School-wide capacity and infrastructure are required in order to implement and sustain MTSS. This capacity and infrastructure usually include ongoing professional development and coaching with an emphasis on data-based problem-solving and multi-tiered instruction and intervention, scheduling that allows staff to plan and implement instruction and intervention, and processes and procedures for engaging in data-based problem-solving.

**Communication and Collaboration**
Ongoing communication and collaboration are essential for the successful implementation of MTSS. Many innovations fail due to a lack of consensus, lack of feedback to implementers to support continuous improvement, and not involving stakeholders in planning. In addition to including stakeholders in planning and providing continuous feedback, it is also important to build the infrastructure to communicate and work with families and other community partners. These practices increase the likelihood that innovative practices will be implemented and sustained.

**Data-Based problem Solving**
The use of data-based problem-solving to make education decisions is a critical element of MTSS implementation; this includes the use of data-based problem-solving for student outcomes across content areas, grade levels, and tiers, as well as the use of problem-solving to address barriers to school wide implementation of MTSS. While several models for data-based problem-solving exist, the four step problem-solving approach includes 1) defining the goals and objectives to be attained, 2) identifying possible reasons why the desired goals are not being attained, 3) developing a plan for implementing evidence-based strategies to attain goals, and 4) evaluating the effectiveness of the plan.

**Three Tiered Instructional/Intervention Model**
The three-tiered instructional/intervention model is another critical element of MTSS implementation. In a typical system, Core (Tier 1) includes the instruction all students receive; Supplemental (Tier 2) includes additional instruction or intervention provided to students not meeting benchmarks; and Intensive (Tier 3) includes intense, small group, or

> individual interventions for students showing significant barriers to learning the skills required for school success. It is important to consider both academic and social-emotional/behavioral instruction and interventions when examining this domain.
>
> **Data-Evaluation**
> Given the importance of data-based problem-solving within an MTSS model, the need for a data and evaluation system is clear. In order to do data-based problem-solving, school staff needs to understand and have access to data sources that address the purposes of assessment. Procedures and protocols for administering assessments and data use allow school staff to use student data to make educational decisions. In addition to student data, data on the fidelity of MTSS implementation allow school leadership to examine the current practices and make changes for improving MTSS implementation. (p. 1)

As I reviewed the available literature regarding the implementation of three-tiered school improvement models and attempted to identify commonalities in the research, I found myself consistently making connections to the MTSS implementation work in my own district. I found that the themes identified in the literature categorically align with the NC MTSS Six Critical Components. Therefore, I use this framework to organize and present the key themes associated with my dissertation topic. In this section, I have provided the NCDPI definition of each of the MTSS Six Critical Components, followed by a summary of relevant research.

**Leadership**

It is the responsibility of district and school leaders to promote the planning necessary for MTSS installation (R. Freeman et al., 2015). To effectively implement and sustain complex school change initiatives such as MTSS, quality school and district leadership are required. Researchers have examined the relationship between school leadership and MTSS implementation, finding that meaningful educational change may not be possible in the absence of high-quality leadership (Choi, McCart, Hicks, & Sailor, 2019). Effective leaders are trusted to guide stakeholders through changes to systems, policies, and practices to support the implementation of a new initiative. Crucial leadership activities include connecting stakeholders through a shared mission and vision, developing pathways for effective communication, creating

teaming structures to promote collaboration, and providing procedural guidance. Leaders must also acquire the resources needed to support implementation (including fiscal resources, materials, programs, professional development, curriculum, and personnel). Finally, district and school leaders must ensure staff access to the data needed to inform practices (Choi et al., 2019).

Leaders of each state, district, and school are responsible for implementing and sustaining MTSS efforts (Charlton et al., 2018; Horner et al., 2017). This requires commitment and strategic planning on the part of district leaders and school-level leadership. District and school leaders must install the structures necessary to support implementation including the establishment of leadership teams to facilitate the work (Arden, Gandhi, Zumeta Edmonds, & Danielson, 2017; McIntosh & Goodman, 2016). These leadership teams, composed of multi-disciplinary members, are designed to effectively plan MTSS implementation, communicate information, promote collaborative problem-solving, develop and provide professional development, assess and allocate resources, and ensure that staff have the data needed to problem-solve effectively (Choi et al., 2019; Horner et al., 2017; McIntosh et al., 2015). Educational leaders must carefully consider teaming structures, strategically selecting individuals with expertise, influence, a positive work ethic, and excellent communication skills (R. Freeman et al., 2015).

Leadership structures vary across school districts; however, the presence of fundamental leadership teams is essential for creating the infrastructure necessary to support MTSS implementation. Table 1 shows typical district and school MTSS teaming structures. As an instructional leader, the school principal's participation in the installation and implementation of MTSS is essential for positive implementation outcomes (Charlton et al., 2018; Choi et al., 2019). As you will notice in Table 1, principals are included in every level of school-based teaming, as it is the job of the principal to communicate the vision of the work and promote school improvement.

Table 1

Typical MTSS Teaming Structures (District and School Levels)

| Team | Function | Stakeholders |
|---|---|---|
| **District-Level MTSS team** | District-level problem solving, implementation readiness, installation of structural supports, provide professional development, resource acquisition and allocation, share information from state | Stakeholder representation from across district departments including Curriculum and Instruction, Testing and Accountability, Student Support Services, and a district-level MTSS Coordinator |
| **District MTSS Coordinator** | Coordinate/facilitate MTSS implementation efforts for district | Designated by school district leadership such as District Superintendent or designee |
| **School-based MTSS leadership team**<br><br>**(Tier 1: Core)** | Focus on school-wide improvement goals, installation of structures to promote MTSS implementation, review of school-wide academic, behavioral, social-emotional data, school resource acquisition and allocation, create master schedule to support MTSS, attend district PD sessions, provide school trainings, evaluate overall effectiveness of tiered interventions & MTSS efforts | School principal, the school MTSS coach, teacher representatives from across grade levels, instructional coaches, school counselor, school psychologist, special education teacher, interventionists, and student support staff, and others assigned by the administrator |
| **School MTSS Coach** | Coordinate/facilitate MTSS implementation efforts for school sites | Typically instructional coach and/or school counselor |
| **Professional Learning Committees (PLCs)**<br><br>**(Tier 1: Core and Tier 2 Supplemental)** | Review, coordinate, & implement classroom and grade level instructional plans; strengthen core instructional practices; examine grade level and classroom data; revise pacing guides, update lesson plans, examine universal screening data, determine students at-risk across domains, determine intervention needs, assign staff to intervention groups, progress monitor students in intervention groups | Grade-level or department representatives including principal, teachers, instructional coach, interventionists, administrator, support service staff at relevant meetings |

Table 1

Cont.

| Team | Function | Stakeholders |
|---|---|---|
| **Individual Problem-Solving Teams**<br><br>**(Tier 3 Intensive)** | Address the needs of specific children in need of intensive supports for academics, behavioral, social-emotional, attendance | Teachers or staff with direct knowledge of students including support services staff, behavioral specialists, special education teachers, interventionists, parents, relevant community support agencies. Principal participation also recommended |

The principal is also responsible for establishing the structures necessary to promote effective problem-solving and communication; this includes creating a master schedule that protects time for instruction and collaboration (e.g., regular meeting schedules, common planning time, built-in intervention time). The principal must clearly communicate school improvement goals to staff and ensure that action steps are purposefully aligned with these goals. Furthermore, the principal is responsible for evaluating the overall effectiveness of MTSS implementation (Choi et al., 2019; McIntosh & Goodman, 2016). Since school administrators play a crucial role in determining instructional priorities, professional development, and resource allocation at their schools, their contribution to school change initiatives is of utmost importance (Lane et al., 2015).

Staff perceive school administrators as having the ability to develop a supportive organizational environment for MTSS (Forman & Crystal, 2015); however, most of the research in this area suggests the need for more support from the state, district, and school administrators. In one study, participants expressed the need for greater administrator support, participation, and facilitation of the implementation effort (Feuerborn, Wallace, & Tyre, 2016; Pinkelman, McIntosh, Rasplica, Berg, & Strickland-Cohen, 2015). As one participant stated, “Teachers need

to feel that they (administrators) have our back" (Feuerborn et al., 2016, p. 225). Thus, school leaders must consistently communicate with stakeholders, build trust and relationships with their staff, obtain resources to support them, and engage educators in school decision-making (Choi et al., 2019).

Both district-level and school-level MTSS leadership teams are responsible for conducting frequent evaluations of resources in order to identify needs. These teams should examine funding sources, staffing, materials and curriculum, intervention programs, and technology. By identifying disparities in resources, educational leaders may then acquire and distribute resources in correspondence with district and school needs (McIntosh & Goodman, 2016; Sugai et al., 2016). The need for professional development and coaching to support MTSS implementation (and other three-tiered models such as RTI and PBIS) is well documented (Castro-Villarreal, Rodriguez, & Moore, 2014; Feuerborn et al., 2016; Meyer & Behar-Horenstein, 2015; Regan et al., 2015). It is the responsibility of leadership teams to determine the types of training needed to support staff in alignment with MTSS implementation efforts. Stakeholder perception studies demonstrate that staff lack a clear procedural understanding of MTSS (and similar three-tiered frameworks) and require more specific guidance on how to implement MTSS practically in the classroom (Horner et al., 2017; Regan et al., 2015). Effective leadership teams recognize the need for specific training and provide professional development to promote more effective practices. School leadership must consider the importance of the context, process, and content variables surrounding the professional development needed not only to achieve changes in knowledge and skills of their staff, but also the impact on student performance (Lane et al., 2015).

School and district leaders must address stakeholder beliefs to promote successful implementation (McIntosh et al., 2015). Several researchers have noted that stakeholders

participating in a school change initiative did not fully understand the moral intent of the change or agree with why the change was happening (Andreou, McIntosh, Ross, & Kahn, 2015; Cavendish, Harry, Menda, Espinosa, & Mahotiere, 2016; Forman, Olin, Hoagwodd, Crowe, & Saka, 2009; McIntosh et al., 2015). According to Systems of Change Theory (Fullan, Cuttress, & Kilcher, 2005; Levin & Fullan, 2008), all stakeholders must understand the change process, be collectively involved in the change for a moral purpose, and be provided with the system and organizational capacity to implement change. However, a study of staff perceptions of RTI implementation in a large, urban Florida school district revealed staff assumptions and beliefs that undermined the RTI implementation effort (Cavendish et al., 2016). Specifically, teachers in this district expressed concern that student needs were outside of the scope of the general education classroom, even with supports and interventions, and attributed student academic and behavioral performances to the innate deficits of the learner.

Furthermore, the staff expressed the belief that family and cultural influences were variables that directly impacted student learning and justified placing a student into special education. Some educators questioned whether low performing students were capable of demonstrating growth in the regular education setting, even with RTI supports in place (Cavendish et al., 2016). To promote and sustain effective implementation of MTSS (or similar educational reform), district and school leaders must invest time in developing attitudes and belief sets that align with the work ahead (Horner et al., 2017; Pinkelman et al., 2015). This requires that leaders examine cultural components and belief systems at the onset of MTSS installation to determine needs and engage in practices to build a positive climate, target belief systems, and attain buy-in of stakeholders (C. R. Cook, Lyon, Kubergovic, Browning, & Zhang, 2015; Feuerborn et al., 2016). Some research has shown that staff support may evolve and improve with time, as school staff begins to experience positive outcomes as the result of the change

initiative (Horner et al., 2017; Pinkelman et al., 2015). One must consider communication and teaming structures when establishing the climate necessary for promoting change.

**Building Capacity/Infrastructure**

The installation of MTSS requires that educational leaders design efficient structures to manage communications, professional development and coaching, data-systems, and problem-solving efforts (R. Freeman et al., 2015; Sugai et al., 2016). Effective teaming structures must be in place, and a master schedule must be constructed to allow for the installation of planning time, effective core instructional practices and tiered support systems (Horner et al., 2017; NCDPI, 2015a). Additionally, MTSS teams should develop systematic procedures for gathering and utilizing data and assessing resources.

To identify the systemic changes needed to support implementation, researchers examine the challenges and successes faced by schools and districts during the large-scale implementation of school change initiatives (Cavendish et al., 2016; Charlton et al., 2018). Building capacity and infrastructure involves modifying policies, planning strategies, acquiring resources, and taking action (Fullan et al., 2005). These studies revealed the challenges and complexities of implementation as districts and schools sought to integrate existing practices with a newly mandated initiative such as RTI, PBIS, or MTSS (Charlton et al., 2018; Horner et al., 2017).

Stakeholders were quick to point out the confusion created by implementation (Cavendish et al., 2016), indicating that states often failed to provide the resources needed to carry out the work, such as fiscal support, professional development and coaching, or instructional materials. Additionally, school and district staff declared that they did not understand the change process or its purpose. Many felt that they were not provided with enough time to prepare for and implement the initiative and were required to "figure it out on their own" despite limited knowledge or resources (Cavendish et al., 2016; Swanson, Solis, Ciullo, &

McKenna, 2012). According to Fullan's System Change Theory (2005), understanding the change process must take place before large-scale change. Others noted how pressure from the state or district to implement the change strained local resources at a time when human, financial, and material resources were already very limited (Swanson et al., 2012). Each of these factors resulted in resistance to implementation by staff or the lack of full implementation (Feuerborn et al., 2016; Lane et al., 2015).

Other research studies demonstrated that competing priorities, philosophies, or practices within a state or district often undermined the implementation of MTSS or similar initiatives (Feuerborn et al., 2016; McIntosh et al., 2015; Pinkelman et al., 2015). When school leadership teams fail to carefully align the implementation of a new initiative with current programs or policies, educators are forced to compete with one another for resources including staffing, funding, time, training opportunities, and leadership support (Charlton et al., 2018; Feuerborn et al., 2016). To fully implement a new initiative, leaders must strategically prepare for implementation readiness and determine how to either integrate two or more initiatives, or plan for the abandonment and replacement of an old initiative with a new one (Horner et al., 2017). This preparation requires a clearly developed mission and vision for the work. Stakeholder must also fully understand the critical components of implementation. Leaders must strategically identify key individuals to guide implementation efforts and assign personnel with knowledge and expertise to leadership, planning, and coaching positions (Horner et al., 2017).

Inadequate funding from states, districts, local agencies, and schools prevents scale-up of MTSS and similar initiatives (Pinkelman et al., 2015). Several studies confirmed that stakeholders felt unable to fully participate in RTI or MTSS due to a lack of financial support for the mandate, with some reporting no direct financial planning for the work by state agencies.

Districts also reported reliance on grant funds that were only temporarily sustainable (Cavendish et al., 2016; Charlton et al., 2018).

Carefully developed and facilitated professional development is also essential for the successful implementation of tiered models (McIntosh et al., 2015; McIntosh et al., 2013). Despite previous research showing that stakeholders were not comfortable with the components of RTI or PBIS (Cavendish et al., 2016; Lane et al., 2015), there is little in the literature describing how to best teach and coach the specific features of the model (Lane et al., 2015; Regan et al., 2015). The design, implementation, and evaluation of MTSS requires a continuum of high-quality professional development (Lane et al., 2015; McIntosh et al., 2015). Considerations for providing professional development include addressing the readiness of school faculty, a plan to tackle the impact of educator turnover, and administrative support for ongoing professional development activities (Feuerborn et al., 2016; Lane et al., 2015). Many districts find professional development insufficient for implementing large-scale change, with some districts reporting a lack of training opportunities, limited funding for professional development, and frustration with the format of training (Regan et al., 2015). Educators need time to attend trainings to support implementation, paired with time to reflect and process what they have learned in collaboration with teammates (Cavendish et al., 2016; Feuerborn et al., 2016).

It is also interesting to examine the stages of capacity-building. Many times, districts begin RTI or MTSS implementation on a small scale, by selecting a few focus-schools at a time. However, to expand the initiative, organizational structures must change over time as more schools begin to adopt and implement. Small-scale implementation can be accomplished with only a few coaches or trainers. However, the practical implementation of MTSS becomes logistically complicated when subsequent cohorts are added, requiring additional coaching personnel to maintain the quality of training and attention to supports (Horner et al., 2017).

Therefore, many states and districts adopt a cohort model for coaching and technical assistance, in which groups of schools or districts, sequentially train and implement over a period of time.

Pinkelman et al. (2015) explored enablers and barriers regarding the sustainability of PBIS in over 860 schools using an implementation science framework. This qualitative study utilized an open-ended survey to gather information to examine critically why many implementation efforts fail in practice. Researchers identified 13 common factors that aid or impede PBIS implementation efforts. Facilitating factors included school administrator support, staff buy-in, continued professional development and technical assistance, alignment of school goals and resources with implementation effort, and development and utilization of effective teaming structures. These researchers documented the following implementation barriers: Lack of resources, lack of parent engagement, logistical barriers, competing priorities and initiatives, lack of administrator support, and lack of staff support.

**Communication and Collaboration**

According to Forman et al. (2009), "Implementation is a complex process consisting of distinct stages affected by personal, organizational, and systems factors" (p. 27). The installation of intentional and effective communication pathways is vital to MTSS success. Stakeholders must engage in continuous communication, planning, and decision-making for successful school improvement. Districts and schools should prepare methods for delivering information to staff while also opening avenues for feedback. Reciprocal communication is crucial for achieving stakeholder buy-in (Fixsen et al., 2005.) District and school leadership teams must use stakeholder feedback in determining school needs and resource allocation. In order to best address barriers that inhibit the success of students, educators extend communication efforts to reach support personnel, families, and community agencies. Effective MTSS communication

pathways allow staff and administrators to easily access information while also guaranteeing that feedback from stakeholders is frequently and easily acquired.

With the implementation of three-tiered frameworks, stakeholders noted increased collaboration demands (Cavendish et al., 2016). Many referred to dramatic shifts in roles and responsibilities that caused confusion in their schools and placed heavy demands on certain individuals (Regan et al., 2015; Werts, Lambert, & Carpenter, 2009). Others noted frustration regarding the conflict between the requirements for collaborative meetings and lack of designated time in the master schedule to review data, coordinate interventions, and plan instruction (Cavendish et al., 2016; Feuerborn et al., 2016).

In order to support positive communication and collaboration, it is important to develop and communicate a consistent vision of the work through the use of common language (Pinkelman et al., 2015). In other words, teams must use common definitions and terms to label and describe expected practices, procedures, and measurements. This language must be consistently utilized within a given school site, but also across the LEA and SEA (Charlton et al., 2018). Designated team meeting times and scheduled common planning are necessary on school sites, but consultation with external partners is also important (Pinkelman et al., 2015). Leadership teams need support to plan, create professional development, monitor implementation, develop tools and assessments, and evaluate the project (Charlton et al., 2018). Collaboration with district-level staff, other LEAs, and regional and state consultants is essential for implementation success (Regan et al., 2015).

**Data-based Problem-solving**

In order to promote positive outcomes for students and ensure the fidelity of MTSS implementation, school improvement teams must have data readily available for analysis and problem-solving (NCDPI, 2015a). Teams are required to use multiple sources of data to

formulate decisions about school structures, resources, instructional practices, and student needs. These data sources may include universal screening data, benchmark assessment, diagnostic information, discipline data such as office referrals and suspensions, attendance data, student outcome data, and implementation fidelity data (R. Freeman et al., 2015). School staff also need specific training to understand the purpose of data, how to interpret datasets, and how data can be used to address student needs effectively.

Some research findings indicate that the implementation of three-tiered models such as RTI contribute to the increased use of data in educational decision-making. Teams using these frameworks intentionally designated time to review data together (Cavendish et al., 2016). During these meetings, team members examined student performance and outcome data to identify student needs and plan for instructional modifications and interventions. However, in other studies, stakeholders expressed concerns regarding the introduction of new assessments such as diagnostic measures, universal screeners, and progress monitoring tools. Since staff were unfamiliar with the purpose of the new assessments, they experienced anxiety and frustration when required to use the instruments. Some stakeholders expressed confusion regarding how to appropriately use the new measures and assessment tools (Regan et al., 2015). Others expressed confusion with the interpretation of the data generated by the assessment, stating that they had not received appropriate training before being required to utilize the tool. Stakeholders also discussed concerns as they transitioned to new paperwork and progress-monitoring procedures (Cavendish et al., 2016).

**Three-Tiered Instructional/Intervention Model**

The three-tiered design is a critical component of MTSS in which school improvement teams examine, define, and facilitate academic, behavioral, social-emotional needs, and interventions (NCDPI, 2015a). Tier 1 includes CORE instructional and intervention practices

that all students receive in the general education setting. Tier 2 includes supplemental instruction and intervention for those students not meeting expectations or benchmark standards. These interventions are applied using a standard treatment protocol which provides students with similar educational needs supplemental instruction and progress monitoring in small groups. Tier 3 includes intensive instruction and individualized interventions designed for very small groups or individual students who continue to need support despite ongoing Tier 1 and Tier 2 intervention efforts. These students have often experienced significant obstacles that interfere with their ability to acquire the skills necessary for success in the school setting. These barriers may include problems with learning, behavior, or social-emotional issues. Researchers examining the benefits of three-tiered frameworks, such as RTI, have noted teacher perceptions of the benefits of the framework to include positive collaboration opportunities, the identification of early warning signs, and the ability to address student needs proactively (Swanson et al., 2012).

Although the basic framework of RTI, PBIS, and MTSS are straight forward, the literature shows that schools and districts struggle with designing and implementing the support framework due to a lack of training and coaching, or a lack of personnel to carry out the effort (McIntosh et al., 2015; Regan et al., 2015). Due to limited resources, school leaders must be creative and resourceful to build tiered intervention systems (Cavendish et al., 2016). Some educators expressed confusion regarding the procedures used for determining student needs and how to deliver instruction and intervention using the tiered model. Other researcher findings indicate that school staff lacked the training necessary to group students to receive appropriate interventions, facilitate the intervention programs or progress monitor student outcomes (Cavendish et al., 2016; Feuerborn et al., 2016).

**Data Evaluation**

Leadership teams must engage in reflective practices to ensure that MTSS is implemented with fidelity and consistency over time. MTSS teams collect and review student outcome and fidelity data to monitor the impact of MTSS implementation across tiers, across grade levels, and across areas of concern. This is best achieved when comprehensive assessment systems are in place, including universal screening, diagnostic data to determine why students are at risk, and progress monitoring data to examine student growth toward benchmarks. Additionally, leadership teams must complete fidelity checks to ensure that instructional plans and interventions are provided as prescribed (McIntosh & Goodman, 2016).

To successfully implement MTSS, educators need access to data sources, procedures, and protocols for problem-solving, including assessment and diagnostic data, student outcome data, and MTSS implementation fidelity data. Educators also need to know how to appropriately and independently use data tools to guide decision-making. Additionally, technical assistance is necessary for staff to develop an understanding of the implications of the data regarding instructional practice and curricular alignment (Bohanon, Gilman, Parker, Amell, & Sortino, 2016).

To use educational data most effectively for problem-solving around the needs of all students, school leadership teams must ensure that procedures are in place for administering assessments and screeners and that this data is collected and analyzed with fidelity (NCDPI, 2015a). Along with the examination of student outcome information, data should be collected on adult behaviors and instructional practices that directly relate to MTSS implementation (Bohanan et al., 2016). Using implementation data, school leadership teams can reach decisions focused on overall school improvement, appropriate utilization of resources, and better allocation of professional development to align with MTSS goals (NCDPI, 2016b). According to Sugai and

Horner (2019), “The establishment and use of effective, efficient, and relevant data decision making systems are vitally important to the designation of expected outcomes” (p. 11).

According to the research study conducted by Charlton et al. (2018), districts across the United States reported positive advances in the collection of student outcome data from all students, including those in minority subgroups, and special education. Participants used this data to examine student academic performances, absences, and disciplinary incidents. Participants also reported efforts to design data systems which enabled immediate staff access to needed information. In contrast, other studies have found logistical barriers to implementation, such as the lack of adequate data systems (McIntosh et al., 2015).

Educational leaders strategically align MTSS (or PBIS and RTI) to existing policies and practices to efficiently build the capacity to support the initiative. By integrating structures and eliminating competition among initiatives or programs, leadership can ensure opportunities for collaboration and professional development and shared resources for optimal benefit (Horner et al., 2017).

**Stakeholder Perceptions**

The implementation of three-tiered models is a complex endeavor, requiring intensive work on the part of a variety of stakeholders, including school administrators, leadership teams, and teachers. Implementation of these models is often viewed as a top-down initiative, mandated by state or district leaders. However, it is school-based educators who carry out the work. Since PBIS, RTI, and MTSS frameworks are intended to benefit all students, educators deliver these supports in the general education setting. Classroom teachers are held responsible for differentiated core instruction and student-tailored intervention groups. Teachers must utilize their professional judgment to make determinations regarding systems and practices and instructional planning. It is the role of leadership to provide teachers and other support staff with

the training necessary to accurately identify student needs, determine appropriate instructional supports, provide interventions, and progress monitor student responses to instruction (Greenfield et al., 2010). Also, educators must understand the protocol and procedures associated with the three-tiered model, be able to collect and analyze data to make decisions in the best interest of students, and modify instructional practices accordingly.

Given these roles and responsibilities, it is important to consider the perceptions of the stakeholders directly involved in the implementation of three-tiered support models. However, few studies have considered the perspectives of teachers and other educators, when examining PBIS, RTI, or MTSS implementation or sustainablility (Castro-Villarreal et al., 2014; Reynolds & Shaywitz, 2009; Rinaldi et al., 2011). The following paragraphs provide a brief review of a few of recent studies that examine stakeholder attitudes, beliefs, and perceptions of PBIS, RTI, and MTSS implementation practices.

In 2011, researchers examined the effectiveness of the Response to Intervention model in an urban elementary school setting, via the lens of teachers (Rinaldi et al., 2011). Through a school and university partnership to implement RTI, researchers were able to study teachers' perceptions following the adoption and implementation of RTI for reading instruction over 3 years. Eight teachers participated in the study—four general education teachers, three special education teachers, and one reading specialist. The researchers collected data through a blend of surveys, focus groups, and individual interview sessions.

Teachers in this study expressed concerns regarding RTI at the onset of installation, but after 3 years of implementation experiences, the school's educators demonstrated a shift in perspectives. Specifically, researchers noticed increased collaboration, shared accountability for student outcomes, and improvements in the delivery of core instruction and interventions. By the third year of implementation, special education referrals decreased as special education and

general education teachers engaged in co-teaching and co-planning efforts to support all students. Initially, participants in focus groups expressed frustration over the general lack of procedural understanding of the RTI framework. However, by the third year of implementation, educators voiced a higher level of comfort with the use of data for problem-solving and modifying instruction following student needs during this time. Overall, educators participating in this longitudinal study expressed positive feelings around RTI implementation for reading instruction and began to see themselves as invested stakeholders in the implementation process. Researchers attributed the gradual shift in educator perspectives to strategic leadership, carefully planned implementation, and opportunities for professional development and collaboration.

In a qualitative study by Castro-Villarreal et al. (2014), teachers in a large, urban, Southwestern city were asked to complete a survey with open-ended questions regarding perceived barriers and facilitators for RTI implementation. Researchers invited teachers to respond to questions to gather their understanding of RTI practices. They were also asked to list implementation barriers and facilitators and suggestions for improvement of RTI.

The findings of this study revealed that the majority of the teachers surveyed did not demonstrate a solid understanding of the essential components of RTI systems and procedures. Some teachers perceived RTI as a series of required steps to obtain an evaluation for special education services. This study suggested the importance of professional development and coaching to promote a better understanding of RTI implementation. Teachers listed inadequate training as their primary barrier to successful RTI implementation. The teachers surveyed conveyed that they needed additional training on the provision of evidence-based interventions, data collection and progress monitoring methods, and guidance around decision-criteria for moving students from one tier to the next.

Teachers listed lack of time to plan, gather data, and implement RTI and lack of resources (strategies, intervention materials, staff to support intervention) as barriers. Additionally, teachers relayed their frustrations regarding the complexity of the RTI process, describing RTI implementation as overwhelming. They also shared that the documentation required for RTI was time-consuming and too difficult to manage and requested streamlined paperwork. Teachers suggested the use of a data management system to organize data and promote better analysis efforts. Those participants surveyed also recommended a more structured, organized approach to improving RTI in their school. They voiced the need for better communication and collaboration systems, with specific time set aside for teachers to plan and problem-solve together. This study conveyed issues with RTI implementation as perceived by teachers directly involved in implementation. Through an examination of these concerns, these researchers suggested that it may be possible to better address implementation barriers in order to create more effective systems.

A 2015 study by Meyer and Behar-Horenstein examined the experiences of first-grade teachers during their second year of RTI implementation in a rural, southeastern Title I school to better understand how administrators can support and sustain implementation of RTI. Six teachers participated in the study through group interview sessions, individual interviews, principal interview, and review of RTI documentation. Researchers explored school-level implementation practices, the roles of teachers in implementation, the availability of resources to support RTI, and decision-making processes.

Researchers found that after two years of RTI implementation, collaborative problem-solving efforts had increased. However, teachers continued to struggle with data analysis and interpretation. They expressed frustration regarding logistical obstacles such as planning, organization, procedural understanding, and having enough time to implement RTI well.

Teachers also expressed confusion around their newly acquired roles and responsibilities. They noted limited resources, a need for professional development, and lacking the skills to support intervention decisions as barriers to effective implementation.

Interestingly, teachers in this study perceived their school leader as unsupportive. Several teachers mentioned that the school principal was not actively involved in implementation, failed to offer clear procedural guidance and direction, and did not provide adequate resources to support the work. One teacher shared, "RTI looks good on paper and makes you more aware, but in reality, it's very challenging and frustrating, but it makes you want to be a better teacher" (p. 393).

Participants expressed understanding that collaboration was necessary for improving student outcomes, but noted a disconnect between the special education department and general education staff concerning RTI expectations and protocols. The school principal attributed this lack of consistency to issues with turnover, personnel conflicts, and role changes at the district-level offices. This study emphasized the teacher-perceived need for leadership support to promote effective RTI implementation.

A more recent study by Braun et al. (2018) is one of the few research projects to specifically examine the perceptions of educators engaged in MTSS implementation. In this study, researchers noted the necessity of stakeholders understanding implementation systems, structures, and roles (Greenfield et al., 2010). However, many educators do not have the preparation, knowledge, or skills needed to implement MTSS effectively (Sugai & Horner, 2009). In this study, 19 teachers in an urban Midwestern school district were interviewed to investigate their perceptions regarding the MTSS process in their schools. Specifically, researchers examined teacher understanding of interventions, student movement among levels of tiered support, data interpretation, and personal opinions regarding MTSS.

Researchers found that educators experienced general confusion around MTSS processes and struggled to know how to appropriately intervene when students required more intensive interventions. Participants expressed frustration with frequently changing systems and processes, intervention tools, curriculum, and staff changes. They conveyed that inadequate communication between staff and administrators contributed to confusion around implementation roles. They also complained that changes in paperwork without proper training resulted in inadequate data collection and documentation efforts. Many of the educators noted issues with the provision of services for students with the most severe needs, emphasizing that there was no clarity regarding the required contributions of special education teachers in MTSS implementation. Teachers interviewed desired better communication and collaboration across educators, as well as clearer implementation guidelines. This study highlighted the need for adequate professional development to prepare teachers for implementation. Also, communication of procedures, the collaboration between staff, and clearly defined roles and protocols are needed to support effective implementation practices.

**Summary of Existing Research into Three-Tiered Approaches to School Reform**

The available research examines the implementation of school change initiatives, such as RTI, PBIS, and MTSS, in a few basic ways. First, some studies identify specific events, resources, and supports that are fundamental for promoting or sustaining the educational initiative by conducting case studies of specific schools or districts. Many of these studies refer to this as the "work of scaling up" implementation efforts (Charlton et al., 2018). Through extensive interviews and observations, researchers were able to illustrate the practical reality of implementation in contrast to the theoretical ideals of the three-tiered models by examining stakeholder reports. For example, in a study by Lane et al. (2015), the views of school administrators were assessed to analyze the current status of MTSS implementation in their

respective schools and to determine the professional development and resources needed to support implementation efforts.

Other studies highlight the challenges experienced by schools and districts as they attempt to implement an educational change such as moving schools from traditional special education eligibility procedures to RTI or MTSS (e.g., Feuerborn et al., 2016; Pinkleman et al., 2015; Regan et al., 2015). These studies provide guidance to practitioners seeking to identify the systemic change factors needed to support large scale implementation of an educational initiative such as RTI, PBIS, and MTSS.

More recently, a few studies have begun to examine the role of the educator in the implementation process. By better understanding the perceptions and insights of educators directly involved in implementation efforts, researchers and practitioners may offer guidance to better support implementers. These supports may include appropriate resource allocation, professional development and coaching, collaboration opportunities, and procedural assistance.

As conveyed by previously-mentioned studies, educational change is difficult at best. Top-down models of roll-out are often unsuccessful, especially when leaders do not appropriately prepare stakeholders for the upcoming change or adequately convey the purpose of the change. According to Orosoco and Klingners (2010), successful implementation of RTI (and similar models) depends on changed attitudes and beliefs, appropriate assessment and instructional methods, intensive and long-term PD opportunities, and adequate resources. Per my literature review, many of these features appear to be lacking. Strong professional development opportunities include follow-up, collaborative problem-solving, and ongoing professional support needed during the early stages of implementation. Furthermore, the capacity to install, implement, and sustain an educational reform initiative requires access to appropriate resources. These include human resources, financial support, instructional and professional development

resources, and adequate time to plan (implementation readiness). Too often, implementation barriers arise when states and districts administer multiple changes simultaneously without the proper resources to support the work. The combination of time, resources, and stakeholder engagement are required for meaningful change (Cavendish et al., 2016; Feuerborn et al., 2016; Fullan et al., 2005). To address barriers to implementation best, educational leaders must attempt to understand the impact of school reform on stakeholders. Research regarding the perceptions and experiences of educators participating in a change initiative may provide the means for improving the structures, practices, and policies necessary for successful implementation and sustainability (Feuerborn et al., 2016).

## Conclusion: Extending the Current Literature

My research study adds to the currently limited database of MTSS implementation research and expands on previous qualitative studies of three-tiered frameworks. In my study, I provide a rich description of the experiences and perceptions of stakeholders who have participated in MTSS installation and implementation for several years as part of a mandated adoption of the three-tiered school improvement framework in the state of North Carolina. I examine the impact of educational change due to the implementation of a large-scale initiative that affects different types of stakeholders. Through this case study, I provide a glimpse into the beliefs, attitudes, experiences, and practices of educators from a district perspective and in multiple schools in one North Carolina school district. Specifically, I examine the perceptions of district leaders, school administrators, and school-based staff, allowing for the identification of specific challenges and successful experiences in each role.

This work continues conversations regarding large scale implementation of change initiatives by exploring key differences or parallels in experiences at each level and school. Although MTSS is mandated for all North Carolina schools by 2020 and NCDPI has created

professional development and coaching structures to support implementation efforts, do all districts and schools experience the changes in the same way? How do the implementation experiences of district-level and school-based educational leaders compare and contrast across different levels of implementation? Through my research, I provide insight into one school district's MTSS implementation efforts in rich detail. I organize my information into thematic categories that align with the NCDPI MTSS 6 Critical Components in order to enhance understanding of the experiences of multiple stakeholders. I hope that this dissertation, by exploring challenges and successes from the perspective of real stakeholders invested in the work, will help inform district and school-based personnel who are seeking to improve implementation.

# CHAPTER III

# METHODOLOGY

## Purpose of Study

In this qualitative case study, I examined the experiences of school and district stakeholders in a North Carolina Public School district following the adoption and installation of the Multi-Tiered Systems of Support (MTSS). Through a detailed narrative of their experiences and perspectives, participants identified the obstacles faced during the implementation process and described how they worked on problem-solving through those barriers. I selected a total of 14 educators to participate in this study—three district-level leaders and 11 school-based administrators and school-based personnel—from three schools within the Green Pastures Public School District. This study provides the implementation stories of these educators, their overall perceptions of MTSS implementation in their schools and district, and suggestions for future best practices and implementation considerations.

## Research Questions

The general methodology of this qualitative study began with the exploration of the following questions regarding MTSS implementation:

- How is MTSS implementation perceived by administrators, district leaders, and school staff?
- What obstacles and barriers do administrators, district leaders, and school staff face during MTSS installation and implementation?

- What strategies do schools and districts use to address challenges in a way that administrators, district leaders, and school staff perceive as beneficial to MTSS implementation and overall school improvement?
- How do the findings of this research study relate to the NC MTSS Six Critical Components?

## Qualitative Research and Studying MTSS

Qualitative researchers are interested in the experiences, stories, perceptions, and voices of people in their natural settings (Creswell, 2016; Merriam & Tisdell, 2016). Qualitative research provides information on how people use social constructs to make sense of their experiences and determine meaning in a particular context (Creswell, 2016; Merriam & Tisdell, 2016). Qualitative researchers seek to provide rich descriptions or narratives of people, events, activities, and environments (Merriam & Tisdell, 2016). In my literature review I shared relevant research that outlined implementation factors that may enhance school change outcomes. These researchers were interested in specific events that contributed to the failures or successes of three-tiered models such as RTI, PBIS, or MTSS. In order to gain meaning from this information, it is necessary to understand the change process experienced by schools and the district as they navigated these approaches to school improvement. Therefore, it is important to consider the perceptions of educators directly involved in the implementation effort.

Qualitative research provides a means for researchers to intensely explore the complexities of the experiences of its participants while allowing for meaningful analysis and understanding of a phenomenon (Creswell, 2009; Yin, 2014). In qualitative studies, the researcher can interact with the participants through open-ended interviews, field studies, and direct observation (Creswell, 2009; Merriam & Tisdell, 2016). This interaction enables researchers to collect unique information by placing themselves directly in the research. In

addition, qualitative study allows for the development of theoretical and conceptual frameworks within the context of the research, as codes and themes emerge from the collected data.

Several of the research studies included in my literature review also used case studies to examine PBIS, RTI, or MTSS implementation. A case study is a qualitative research method that provides an intensive description of a social phenomenon, system, or event (Yin, 2014). Case studies provide the researcher insight into a specific context, for a limited time, in the authentic setting (also referred to as a single, bounded unit) via the subjective experiences of the participants (Merriam & Tisdell, 2016; Yin, 2014). This research method uses multiple sources of data to answer general research questions that are continually refined to reveal common themes through the interaction with the participants (Yin, 2014). In a case study, researchers usually collect data from interviews, field observations, and document reviews (Creswell, 2009, 2016; Merriam & Tisdell, 2016). This type of data collection allows researchers to more directly address how and why questions (Yin, 2014).

## Researcher Positionality/Role

Since 2015, I have served as the MTSS Coordinator for Rockingham County Schools, a small, rural district located in the Piedmont Triad of North Carolina. NCDPI selected our district as an initial implementer of MTSS. As part of NCDPI's Cohort 1, Rockingham County Schools was selected as one of seven school districts in North Carolina to pilot the MTSS initiative. RCS is now in the fifth year of MTSS training and implementation. As the MTSS Coordinator, I have attended all NCDPI MTSS trainings, completed required online MTSS module trainings, and attended various MTSS professional development opportunities. In turn, I am responsible for organizing and facilitating the roll-out of MTSS for our district. In partnership with other departments at Central Office, such as Curriculum and Instruction and Testing and Accountability, I designed the structures necessary for MTSS installation and implementation in

our district. This infrastructure includes the teaming structures, communication pathways, professional development and coaching infrastructure, and data collection/analysis systems.

MTSS implementation occupies a substantial portion of my daily work-life. I feel that the knowledge that I have gained through my work in Rockingham County Schools is extremely valuable to me as I further investigate MTSS through this research study. I have direct insight into the development of MTSS as I have been involved in this project from the ground up. In my position as MTSS Coordinator and Director of Student Support Services, I have developed valuable working relationships with a variety of MTSS stakeholders and have direct communication with state, district, and school-level teams. I also have access to all MTSS and school improvement data including student outcome data, progress monitoring data, intervention data, universal screeners, implementation fidelity data, MTSS self-assessment, and staff survey data. My involvement with this project allows me to directly assess and work through barriers faced when adopting new school reform policies and procedures. I have directly observed strengths and weaknesses in the MTSS implementation effort at all levels of installation. I have noted areas for growth and opportunity along the way.

I believe that these experiences have benefitted me tremendously while conducting this research. However, I am aware that my personal experiences and observations in the MTSS implementation process may bias my viewpoint of MTSS as an implemented program in both positive and negative ways. Although I initially contemplated conducting this study in my school district, I felt that it was necessary to look outside of my district to present more opportunities for objective investigation and analysis. I also felt that research in another district would provide me with valuable information and working implementation models to guide future MTSS implementation efforts in my home district. Therefore, I determined that I would conduct a pilot study in my district to assist me in preparing for my dissertation research and allow me to refine

my research methods. The dissertation study itself, however, was conducted in another district currently implementing MTSS as part of NC DPI MTSS Cohorts 1 or 2.

## Historical Review and Document Analysis

To prepare for the research study and provide a deeper understanding of MTSS installation in North Carolina, I conducted a thorough document review. I studied communications from NCDPI to district stakeholders that reference MTSS policy, procedures, and recommendations. The documents included memoranda issued from the State Director of Special Education regarding the adoption of MTSS as a state-mandated initiative and policy statements on the use of the MTSS framework to support eligibility decisions for specific learning disabilities. I also examined NCDPI MTSS training materials, online modules, and various communications from the Department of Integrated Academics and Behavior. I used the information gathered from the document review to help construct the historical overview in Chapter II and to shape my interview protocol.

## The Pilot Project—Goals and Methodology

In order to refine the methodology for my dissertation research project, I conducted a preliminary study within my school district, Rockingham County Schools. For this initial study, I asked a variety of stakeholders to participate in a practice research study that examined the perceptions of staff members currently involved in the implementation of Multi-Tiered Systems of Support (MTSS) in a North Carolina Public School. These stakeholders included district-level administrators and MTSS district team members, school principals, and school-based staff such as classroom teachers, MTSS coaches, and support service staff. For purposes of this limited pilot study, four principals and one school-based staff member agreed to participate. These participants were selected because they had actively participated in MTSS implementation in their schools for at least 3 years, and had attended district-level and state-level MTSS training.

Each of these educators participated in an interview session of approximately 45 minutes to one hour in duration, in which they were asked to respond to questions regarding their school's current level of implementation. Guided by a series of questions, pilot study participants described teaming structure organization, communication systems, core instructional practices, tiered interventions and supports, data used for decision-making, and staff beliefs regarding MTSS implementation. Each participant described how school teams have worked to overcome implementation challenges. The conversation ended with an exploration of the participant's personal experience with MTSS—how the installation of this new school improvement framework has impacted them on a professional and personal level and their overall perception of the experience.

Although this dissertation does not include the data obtained from this pilot study, through the completion of the pilot project, I was able to refine my research questions and the instruments I used to collect and analyze my research data. Specifically, this work allowed me to narrow down my research questions and refine the interview and observation protocols (see Appendix A and B). This preliminary research also provided me with the opportunity to refine my methodology for document analysis further.

In Chapter II, I defined and reviewed the North Carolina Six Critical Components of MTSS: (a) Leadership, (b) Building Capacity/Infrastructure, (c) Communication and Collaboration, (d) Data-based Problem-solving, (e) Three-Tiered Instructional/Intervention Model, and (e) Data Evaluation. As I began to code my pilot-study interview transcripts, it occurred to me that many of the common codes and themes identified in my interviews align with these essential implementation steps and practices. The six critical components also serve as the basis for the Self-Assessment of MTSS (SAM), a tool that schools are using to determine the fidelity of their implementation efforts. Therefore, I used the MTSS Six Critical Components as

a conceptual framework for organizing, analyzing, and discussing the information obtained from interviewing stakeholders involved in MTSS implementation in the Green Pastures Schools District and three schools within that district.

## Overview of the Research

My dissertation research was completed using a qualitative case study design (Merriam & Tisdell, 2016; Yin, 2014). Through a series of semi-structured interviews and observations, I attempted to capture the unique perspectives of district leaders, school-based administrators, teachers, and school staff as they described the process of MTSS implementation in three schools in one district. As a researcher conducting a qualitative case study, I explored stakeholder viewpoints to reveal the complexities of their personal experiences as they navigated changes associated with the implementation of a new school reform initiative in a school district (Creswell, 2009). In reporting this case study, I used techniques from narrative inquiry to detail and analyze the participants' experiences to better explain the dynamics of MTSS implementation in its natural, practical setting (Merriam & Tisdell, 2016; Yin, 2014). The use of a multiple-site case study of one district allowed me to examine implementation dynamics across different schools and stakeholders.

## Specific Methodology

### Access to Site

To determine districts most appropriate for participation in this study, I consulted with several directors and regional consultants from the North Carolina Department of Public Instruction as well as members of the NC MTSS Consortium. I sought the advice of these professionals as they work directly with each school district, providing MTSS training and consultation services, and have a good understanding of the implementation progress of each district. I needed the district of study to be actively participating in MTSS and far enough along

in training and implementation to provide appropriate insight and reflection of its journey. I communicated with MTSS consortium members and NCDPI regional consultants through email, phone calls, or in person. During these communications, I explained the purpose of my dissertation research and provided them with the criteria that I would use for district and school selection. I used the following criteria in the district selection process:

1. The North Carolina School district participated in Cohort I or Cohort 2 MTSS professional development offerings provided by the North Carolina Department of Public Instruction (NCDPI),
2. The district received training at state level MTSS training sessions, and completed NCDPI MTSS Online module courses,
3. The district established a district-level MTSS team
4. The district designated an MTSS Coordinator, and
5. The district is actively participating in MTSS installation planning and is currently implementing in at least two tiers.

Each NCDPI or MTSS consortium representative provided me with a list of 3-5 districts that they felt met the participation criteria. I then consolidated these lists and looked for common suggestions, narrowing the final list down to three suggested districts, ranked in order by the number of referrals received.

I then began to initiate contact with districts, one at a time. Although the first district on my list initially appeared to be a good match for my study, I was unable to secure permission from the district's Superintendent to conduct my research due to conflicting events in the district at that time. By happenstance, I was able to connect with the MTSS coordinator from another district on the participant list at a mutual professional development session. I spoke to her briefly regarding my dissertation research and she provided the appropriate contact information for the

Superintendent and Assistant Superintendent in her district. Through a follow-up contact the next week, I secured a sited to conduct my case study. In order to obtain final approval from the Institutional Review Board, I was required to submit documentation showing the district's permission to conduct research. I sent a formal invitation to participate in the research study via an emailed letter to the District MTSS Coordinator. The Assistant Superintendent of the district approved my study proposal and consented to data collection from district leaders, principals, and other school personnel through interviews and observations.

**Setting/Sample Population**

The target population for this study included district-level and school-level administrators and school-based educators actively participating in the installation of MTSS in a North Carolina Public School setting. The following criteria were utilized to guide participant selection:

1. The person interviewed serves as an educator in a North Carolina Public School,
2. The person interviewed or surveyed serves as a teacher, school administrator, or district-level staff person participating in MTSS implementation,
3. The person interviewed or surveyed works in a school district in North Carolina that has participated in Cohort 1 or Cohort 2 MTSS professional development offerings provided by the North Carolina Department of Public Instruction (NCDPI),
4. The participant has received training at district or state level MTSS training sessions, and
5. The participant's school or district is actively participating in MTSS installation planning and/or implementation.

I invited educators to participate in this study based on the selection criteria detailed above. Participation in this study was voluntary. Participants were provided with general study

information and written consent to act as a human participant following IRB requirements for the University of North Carolina at Greensboro.

**Stage 1 (1): District-Level Interviews**

Once the District Assistant Superintendent provided study clearance, the MTSS coordinator for the district reached out to a variety of district-level stakeholders. The district MTSS coordinator recommended the names of potential district-level leaders who were willing to contribute their time to the research study. I then contacted these volunteers via email and phone to schedule face-to-face interviews. Three stakeholders, including the MTSS coordinator, the Director of Student Support Services, and the District Behavior Consultant, agreed to participate in the initial interview session. Before each interview, I provided participants with a summary of the study and written consent forms.

During Stage 1, I spoke to district leaders about their MTSS installation experiences from a district perspective. I conducted interview sessions at the Green Pastures District central office. I completed three district-level participant interviews in a single visit to the district in the winter of 2019. Interview sessions were guided using a series of questions from the interview protocol (see Appendix A). However, I maintained a flexible conversation format throughout the interview so that participants could freely expand on specific themes, or pose their own discussion topics. Participants completed their interview sessions in 60-90 minutes.

During the conversation, district-level leaders detailed the MTSS installation and implementation process in their district detailing their experiences concerning the three primary research questions. District stakeholders discussed their efforts to build the structures necessary to support MTSS implementation, including the development of teaming structures, creation of professional development opportunities to promote understanding of MTSS efforts and gathering of needed resources for core and tiered instruction. They also discussed their efforts to align

stakeholder beliefs and attitudes with MTSS practices to support the district's school improvement goals. Each participant detailed examples of successful MTSS implementation and described team efforts to problem-solve through obstacles encountered during the implementation process.

**Stage 1 (2): Selection of Schools for Case Study**

After each district-level interview, I asked participants to provide a list of three to five schools for further case study. District-level staff suggested a total of 12 schools. After discussion with the MTSS coordinator, using the participant selection criteria, I narrowed school selections down to three schools for future study. In order to provide a more consistent comparison, and considering each school's current level of MTSS implementation (each school selected had actively participated in MTSS implementation for more than 3 years), all schools selected for this study were elementary schools. The schools selected were Deep Well, Whistlestop, and Mulberry.

The MTSS coordinator provided contact information for each school, including the names and emails of the MTSS coaches. The district MTSS coordinator also provided each school with an emailed letter, introducing me as the researcher and the purpose of my research, so that they would be aware that the district had approved the research project. Following the receipt of the introduction email from the District MTSS Coordinator, I emailed the MTSS Coach at each school, briefly introducing myself as the researcher. In this email, I provided additional information regarding the purpose and methods of the study and linked a form to schedule a time and date for the interview sessions. Each selected school chose one date from a list of available research dates and an alternative (backup date). I distributed this form to the staff members recommended for participation in the research study so that they could select an interview time.

**Stage 2 (1): School-based Interviews**

During Stage 2, I conducted interviews with school-based stakeholders in each of the three schools selected for further study. I completed three school visits in the winter and spring of 2019, with one day devoted to interviews at each of the three school sites. I conducted three to four interviews each day, with interview slots offered every 90 minutes. Similar to district-level interviews, I used a series of questions from the interview protocol (see Appendix A) to guide school-based interview sessions, providing participants with the flexibility to freely expand on specific topics or convey information that they felt was important to the study. Participants completed their interview sessions in 60-90 minutes.

I used the data obtained from these interviews to create a consolidated profile of three separate schools within the Green Pastures School District, illustrating the experiences and perceptions of staff in each of the three schools. I interviewed three to five staff members in each school. Participants included school principals, instructional coaches, MTSS coaches, school counselors, reading specialists, and classroom teachers. Each of the participants had direct experience with RTI and MTSS implementation within their respective schools. Some of the participants received training or RTI/MTSS experience from previous work assignments at other schools both within and/or outside of the Green Pastures School District. Each of these participants served in an MTSS leadership capacity in their school, either as part of the school improvement team, an MTSS tiered support team, or through their grade level PLCs and participate in ongoing district level and school-based MTSS training sessions. During the interviews, participants explored their experiences with MTSS implementation, sharing success stories, defining obstacles faced during implementation, and describing the structures and practices developed to problem-solve through challenging issues.

**Stage 2 (2): Observations**

As a final step in the study, I conducted a site visit at one of the selected schools. I emailed all three schools asking for the opportunity to conduct observations. Two of the schools responded in agreement, but due to scheduling conflicts, only Whistlestop Elementary was able to participate in this portion of my study. Once I obtained consent, I attended two MTSS problem-solving sessions to conduct formal observations. During these observations, the MTSS school leadership team (principal, instructional coach, counselor, reading specialist, social worker, etc.) met with all grade-level teachers for "data team" meetings. The meetings were specific to grade-level clusters, with kindergarten through second-grade teachers in the first meeting and third- through fifth-grade teachers in the second meeting. During these meetings, I observed team members as they reviewed school-wide student outcome and fidelity data and discussed ways to refine school improvement planning. They also discussed the effectiveness of core instructional practices by grade level and identified students at-risk across areas of concern (academics, behavior, attendance, social-emotional needs). Additionally, they determined intervention groups and reviewed the progress of students already receiving supports. Table 2 illustrates the methodological design for my study and provides a list of study participants per research site.

Table 2

Methodological Design

| Data Collection Design | | | | |
|---|---|---|---|---|
| **Research Site (pseudonym)** | **Participant(s) Name (pseudonym)** | **Position** | **Method of Data Collection/ Dates** | **Number of Interviews/ Observations** |
| **STAGE 1 DISTRICT LEVEL INTERVIEWS** | | | | |
| **District Office** | Ms. Smith | District MTSS Coordinator | Interview 2/15/19 | 3 |
| | Ms. Aubrey | Director of Student Support Services | | |
| | Ms. Harper | District Behavioral Specialist | | |
| **STAGE 2 SCHOOL-BASED INTERVIEWS (I conducted interviews in three schools within the district)** | | | | |
| **Deep Well Elementary** | Ms. Stewart | Math Teacher grades 3-5 | Interview 2/22/19 | 4 |
| | Ms. Davis | Instructional Coach/ MTSS Coach/Testing Coordinator | | |
| | Ms. Simmons | Reading Teacher grades K-2 | | |
| | Mr. Terry | School Principal | | |
| **Whistlestop Elementary** | Ms. Peters | Instructional Coach/ MTSS Co-Chair/Testing Coordinator | Interview 3/01/19 | 3 |
| | Ms. Rose | Reading Specialist | | |
| | Ms. Grayson | School Counselor/ MTSS Co-Chair | | |
| **Mulberry Elementary** | Ms. Wilson | Instructional Coach/ MTSS Coach/Testing Coordinator | Interview 3/12/19 | 4 |
| | Ms. Mitchell | School Principal | | |
| | Ms. Hawkins | School Counselor | | |
| | Ms. Slater | Reading Specialist | | |

Table 2

Cont.

| Data Collection Design | | | | |
|---|---|---|---|---|
| **Research Site (pseudonym)** | **Participant(s) Name (pseudonym)** | **Position** | **Method of Data Collection/ Dates** | **Number of Interviews/ Observations** |
| **STAGE 2 OBSERVATIONS** | | | | |
| **Whistlestop Elementary** | MTSS school teams and all teachers<br>Data review sessions by grade level clusters (k-2, 3-5) | | Observation 3/27/19 | 2 |

## Data Collection Methods

I gathered research data using three methods: semi-structured interviews, and observation, and document review. I conducted the interviews using a semi-structured format, guided by a set of prepared questions, allowing the participant the flexibility to expand upon the given question or elaborate in detail to more fully and clearly express the experiences and perceptions of the participant as related to MTSS implementation in their school or district (Creswell, 2016).

Since I served as a participant researcher and interviewer, I was required to balance the tasks of presenting discussion questions, actively listening to responses, and recording participant responses. I also had to remain aware of other factors, such as subtle gestures, pauses, and environmental influences (Kvale & Brinkman, 2009; Parker & Tritter, 2006). Due to the multi-tasking required during this process, I recorded research data using two methods. An application on my cell phone was used to collect an audio-recording of the conversations obtained in interviews and observations. Additionally, I recorded brief field notes in my research notebook. These notes contained information regarding the setting and observations noted about the social interactions and exchanges of participants not captured through audio-recording (Guest, Namey,

& Mitchell, 2013; Hoppey & McLeskey, 2013). Furthermore, I captured key points and essential quotes in my field notes. I recorded observations in writing using a brief observation protocol (see Appendix B).

I transcribed each form of recorded data verbatim (audio and written field notes) and reviewed the transcriptions shortly after each interview or observation to ensure accurate interpretation of the data gathered (Guest et al., 2013). I reviewed audio recordings, and created written notes about key points, themes, and interesting comments for later analysis.

Following the completion of interviews and observations, the district MTSS coordinator and MTSS coaches at each school provided me with evidence of MTSS implementation by sharing printed MTSS documents and online information sources. MTSS implementation evidences included universal screening spreadsheets, tiered intervention spreadsheets, other tiered MTSS paperwork, the district MTSS handbook/website, staff and parent MTSS brochures, and the most recent MTSS self-assessment data (SAM or FAM-S).

Although I do not separately describe individual observation sessions or provide detail regarding specific MTSS implementation documents, these observations and evidences served as items of reference during my data analysis and provided confirmation of the implementation efforts discussed during interview sessions. The data obtained from educator interviews, observations of MTSS meetings, and from document review are integrated into the consolidated findings outlined in Chapters IV and V.

## Data Analysis Strategies

### Critical Incident Technique

Critical Incident Technique (Flanaghan,1954), also referred to at CIT, is a method by which the researcher uses systematic, structured interviews to identify specific events related to the outcome of interest (Butterfield, Borgen, Amundson, & Maglio, 2005). Many researchers

explore RTI and PBIS implementation by applying CIT to identify concrete, discrete, observable events that directly impact implementation and sustainability. Using CIT, researchers identify commonalities across incidents and creating categories to organize those incidents for analysis and interpretation (Andreou et al., 2015; McIntosh, Kelm, & Delabra, 2016). Critical Incident Technique has been used by researchers to identify practices that hindered or helped facilitate the development of MTSS projects. Specifically, researchers have investigated critical events, practices, and resources that were reported by educational leaders to aid or interfere with the establishment and sustainability of MTSS (Charlton et al., 2018). Studies of this type provide implementers with a better understanding of practices that may accelerate efforts while also helping states and districts to avoid implementation pitfalls.

The Critical Incident Technique is an especially useful framework for exploring events that specifically enhance or diminish outcomes (Butterfield et al., 2005), but is not as helpful for researchers seeking more subjective information such as impressions or feelings about a specific event. I used Critical Incident Theory (CIT) to sort and categorize participant responses to identify events, activities, and practices that were perceived by stakeholders as facilitators or barriers to MTSS implementation. I also used CIT to identify and compile strategies that have been utilized by schools and districts to address these challenges.

Transcripts from interviews and observation field notes were analyzed using a coding process that allows for a progression from concrete to more abstract levels of organization, analysis, and interpretation of the data. Coding provides a researcher with a lens for analyzing and interpreting data. Coding is a way of assigning meaning to sections of qualitative data. Frequently, researchers assign codes to portions of data that stand out or seem essential to the research in some way (Savin-Baden & Major, 2013; Charmaz, 2006). Coding allows the researcher to identify patterns in data, group data according to similar classes, and organize data

in a meaningful way for further analysis (Charmaz, 2006; Creswell, 2009; Saldana, 2015). After I transcribed the interviews, I coded the transcripts and written field notes, following the procedures outlined by Saldana (2015):

1. I reviewed each transcript and written field notes several times. Using a color-coded system, I assigned codes to identify recurrent words and phrases (Creswell, 2009; Saldana, 2015).
2. I grouped color-coded labels into categories so that I could compared, organize, and analyze the data (Saldana, 2015).
3. I further organized codes and categories into themes or central ideas until saturation (Savin-Baden & Major, 2013; Creswell, 2009). These themes allowed me to examine patterns across sets of data and directly relate to the theoretical framework that guided my research study.
4. Presenting and supporting these themes allowed me to interpret the data in a meaningful way, providing a detailed, descriptive narration of the experiences and perceptions of district and school-level stakeholders as they navigated through the installation of MTSS as a school improvement initiative (Charmaz, 2006; Saldana, 2015).

For organizational purposes, I aligned the common themes identified in my research data to the NC MTSS 6 Critical Components. This method provides a clear and concise way to outline my dissertation research findings and a good structure for discussion and analysis. Additionally, the six critical components align nicely with implementation science research.

## Trustworthiness/ Ethical Considerations

Qualitative researchers must ensure that their written representations accurately reflect the observations, interviews, or other forms of data collected, while ethically representing the

voice and actions of the participant by practicing care reflexivity (Creswell, 2009; Rallis, 2010). I used the following strategies in this qualitative study to ensure that this research provides high quality and meaningful information. These strategies also ensure that the study was conducted ethically, maintaining a balance between credibility and a reflexive sensitivity for the participants, the schools, and the districts studied (Creswell, 2016).

**Triangulation**

To ensure trustworthiness, I determined the conclusions of this study using multiple sources of data. I included sources such as participant interviews, and observations of MTSS problem-solving meetings, MTSS document review. The various sources of data I used provided the basis for the determination of connections, themes, relationships, and meaning (Creswell, 2016; Yin, 2014).

**Informed Consent**

I informed participants of their participation rights, including the right to refuse participation or withdraw at any point during the study without penalty. Furthermore, I informed participants of the risks and benefits that they could incur as participants in the study per IRB guidelines.

**Confidentiality of Data**

I held and will continue to hold the details of the interviews, surveys, or observations confidential. I did not disclose participant names or other personal information and removed participant names from all study data, summaries, and printed materials. Moreover, I assigned all participants, schools, and districts a pseudonym to further protect them and maintain confidentiality.

In this study, I used an audio recording device as a means of data collection during interviews and observations. I then transcribed the recorded conversation obtained from

participant interviews and observations for documentation and subsequent data analysis. I maintained the confidentiality of these recordings by limiting access to the recordings and removing the participants' names from all transcribed documents and written materials. Direct quotes obtained from observations and interviews, included in the final written report or my future dissertation, do not directly reference the participants' names.

**Researcher Positionality**

As a current MTSS coordinator for my school district, I must maintain awareness of my positionality as I conduct my dissertation study. Throughout the research process, I attempted to understand how my role and prior knowledge of MTSS implementation can impact my research, as I come into this research project with my own beliefs and assumptions regarding MTSS in practice. To aid in this process of self-reflection, I kept a reflective journal as I conducted my study. I also carefully considered how I impacted others during interviews and observations and how I analyzed the data collected (Merriam & Tisdell, 2016). At times during the research, I felt that I intentionally held back from over-engaging in conversations with the participants, as I did not want to influence their perspectives of MTSS implementation or their comfort with responding freely and honestly.

**Member Checks/Expert Checks**

Qualitative research must be transparent. Sharing drafts of summary statements with participants is an example of a member check and assists in establishing construct validity (Yin, 2014). Upon completion of the interview or observation session, I provided each participant with the opportunity to review the transcript for accuracy and transparency (Creswell, 2016; Rallis, 2010). I shared a digital copy of the transcribed data with each participant. I emailed the transcripts to the address the participant provided, with a brief message explaining the purpose of the transcript review. Participants were asked to submit feedback within two weeks if they felt

the desire to provide a response, ask questions, or offer clarification regarding the contents of the interview transcript. Most participants responded that they had received the transcript for review, but only two participants offered feedback or clarification.

## Limitations of the Study

I selected districts and schools that have participated in NCDPI MTSS Cohort 1 and Cohort 2 to conduct my interviews and observations. I chose these districts and schools because of the length of time that they were involved in the MTSS installation. I considered the following factors in my district and school selection process: (a) MTSS training sessions attended and (b) implementation activities completed. Although state trainers provide all North Carolina schools participating in MTSS cohort trainings with the same content and materials, the perceptions and experiences of these groups may differ significantly from cohort to cohort and from one district to another. State leaders were building MTSS structures and supports during Cohort 1 adoption. Cohort 1 did not have immediate access to all technical and coaching supports that subsequent cohorts may have, which may have influenced their application of MTSS, implementation experiences, and interpretation of MTSS as a school improvement framework. In a study that examines the self-report of experiences and perceptions, it is essential to keep in mind that the data obtained are subjective and unique to each individual reporting; this is an important consideration when generalizing the findings of this study to the MTSS implementation efforts of other districts and states.

# CHAPTER IV

## PERCEPTIONS AND EXPERIENCES OF DISTRICT-LEVEL LEADERS

Through this research study, I sought to describe the experiences of school and district stakeholders in a North Carolina Public School district following the state-mandated adoption and installation of the Multi-Tiered Systems of Support. I intended for this study to examine MTSS implementation through the unique perspectives of district-level administrators and support staff, school principals, school-based support staff, and teachers that were directly participating in MTSS as a school improvement framework. Through a series of semi-structured interviews and observations of problem-solving team meetings in the practical setting, I was able to create an overview of MTSS implementation in one North Carolina public school district and three schools within that district.

In this chapter, I provide summaries of the experiences of district-level stakeholders. Through the analysis of district-level transcript data and MTSS implementation documents, I surfaced several themes:

- Development of Teaming and Communication Structures
- Evaluating Needs to Guide Professional Development
- Assessing Resources to Support MTSS Implementation
- Building Stakeholder Consensus Around MTSS
- Using Data to Support MTSS Implementation

Within this chapter, I provide a brief description of the district demographics, along with a thematic review of the data. I also outline how the district prepared for MTSS implementation and applied MTSS in practice. Additionally, throughout this chapter, I detail the problem-solving

strategies that stakeholders used in their efforts to overcome obstacles and improve implementation.

## Description of Green Pastures School District (Demographics)

Green Pastures School District is a public school system in central North Carolina composed of less than 20 individual schools, including multiple high schools, middle schools, elementary schools, an early college high school, and an alternative school. The Green Pastures School District currently serves a student population of fewer than 12,000 pupils. An elected school board operates the school district. Funding sources for this school district include the State of North Carolina and local county government allotments. While traditionally a rural agricultural community, because of its proximity to larger urban areas and recent industrial growth, Green Pastures has experienced a gradual population increase, bringing new students and families into the area. Despite the recent economic growth, approximately 12%-13% of families in the Green Pastures school district are considered to be below the poverty line. As of 2017 census estimates, families in Green Pastures identified as the following races/ethnicities: approximately 71.8% White, 12.7% African-American, 12.3% Hispanic or Latino, and 3.2% other. The district's Director of Student Support Services Ms. Aubrey, recognizing the variances in socioeconomic factors and resources in the county, described it as a school district that consisted of three primary community types: rural farm community, more affluent communities near the more urban regions, and pockets of newer communities with high Hispanic populations. Ms. Aubrey described the variance in socio-economic conditions across the district: "We are about 50% free/reduced lunch district-wide, but we have schools that are all the way up to 85-90% free/reduced lunch. And then we have schools that are only 20%."

## Development of Teaming and Communication Structures

Ms. Aubrey went on to describe the district's adoption of Multi-Tiered Systems of Support. Green Pastures School District participated in the state MTSS installation and adoption process as part of North Carolina's MTSS Cohort 2. Initial conversations around MTSS began in the district during the 2014-2015 school year, although Green Pastures had not officially signed on with the state to adopt and implement at that time. In preparation for what the district had been hearing about the potential state mandate for MTSS, Green Pastures began readiness activities, including conversations with district leaders regarding MTSS. The Green Pastures School District was familiar with the basic components of Multi-Tiered Systems of Support, as the district had been implementing Response to Instruction (RTI) for several years. Although Green Pastures did not complete the MTSS implementation agreement with the state of North Carolina until 2016, the district proactively created a new position for a district-level MTSS coordinator in 2014 and began the interviewing and selection process. This new position was housed under the instructional support services department of Green Pastures district offices and directly supervised by Ms. Aubrey, Director of Student Support Services. It was at this time that the district-level MTSS team was formed and Ms. Smith was hired to fill the position of District MTSS Coordinator.

### District-Level MTSS Team

In order to prepare for the implementation of MTSS in Green Pastures School District, district leaders created a district-level MTSS team. This team, which includes central office executive directors such as the Assistant Superintendent of Academic Services and Instructional Support the Director of Exceptional Children, the Director of Student Support Services, the Director of Elementary Schools, the Director of Secondary Schools, the Director of Testing and Accountability, and instructional program facilitators accepted the responsibility of installing

structural supports and resources to promote the transition from RTI to MTSS. A smaller subcommittee composed of Ms. Aubrey, the Director of Student Support Services, Ms. Smith, the district MTSS coordinator, Ms. Harper, the district behavioral specialist, and the district lead psychologist began to formally participate in NCDPI regional MTSS training sessions in the Fall of 2016. Additional to attending state-sponsored professional development offerings, the small team of four also completed the MTSS district-level online modules provided by NCDPI. Through the combination of face-to-face and online professional development, the District MTSS subcommittee acquired information from NCDPI, organized district MTSS meetings, and provided the District MTSS Team with the information that they needed in order to facilitate district-wide MTSS implementation.

**District MTSS Roll-out Plan**

Once the District MTSS Team and smaller district MTSS subcommittee were in place, Green Pastures School District began the installation of an implementation team that would bring information regarding MTSS to each school in the district. But first, the District MTSS Team had to decide how MTSS would be rolled out to each of the schools within the district. Many school districts, following the lead of NCDPI, chose also to utilize a cohort model of MTSS installation. Using this model, the state selected school districts for participation in MTSS training and implementation following specific readiness criteria. Initially, only a few, specific school districts were chosen to pilot MTSS implementation as part of NCDPI MTSS Cohort I. Subsequent cohorts were then added each semester: Cohort 2- Spring 2016, Cohort 3- Fall 2016, Cohort 4- Spring 2017, Cohort 5- Fall 2017, and then the remaining public school districts and charter Schools- Spring 2018. Instead of gradually training a few schools at a time, or designating a few model schools in the district for pilot implementation, Green Pastures School District took an all-in approach and began training all elementary schools and middle schools at

one time. The district team decided to reserve high school training and implementation until a later date when procedures and protocol were well underway in the elementary and middle school settings.

**School-based MTSS Implementation Teams**

In order to build capacity for MTSS implementation, the District MTSS Team determined that all elementary and middle schools would designate school-level MTSS teams. Each school selected an MTSS chair who would coordinate MTSS implementation efforts and lead at each site along with school MTSS teams. The principal of each school was assigned the responsibility of securing the MTSS chair. The staff members selected to fill the role of MTSS chair varied from school to school; however, instructional coaches and school counselors were typically selected. Membership for school-level MTSS teams included the school administrators (principal and assistant principal), the MTSS chair, the instructional coach, the school counselor, the school psychologist, teacher representatives, the special education teacher, and other individuals as designated by the administrator. The MTSS Chair from each school met with the District MTSS Coordinator, Ms. Smith, monthly. During these monthly meetings, Ms. Smith provided the MTSS Chairs with information obtained from the state MTSS trainings and NCDPI online training-modules. Ms. Smith then asked the MTSS Chairs to take the information back to their respective schools. MTSS coordinators completed initial readiness work including an introduction of the MTSS framework to the school's staff, updating teaming structures, and working with staff members on the school's MTSS mission and vision statements.

**School-based Teaming Structures**

One of the top priorities of the District MTSS Team was to ensure that schools possessed the structural capacity to carry out the work of MTSS. The District MTSS Coordinator, Ms. Smith, worked alongside the designated MTSS chairs to create an internal teaming structure at

each school to implement MTSS as a school improvement framework. This required that school leadership assess the school's current teaming structures, compare how previous structures had worked to support Response to Intervention (RTI) implementation, and determine any changes necessary to move forward with MTSS. Since RTI had been in place for many years in Green Pastures School District, the basic teaming structures required for MTSS existed in most schools. School improvement teams (SIT) served as an elected body of school representatives tasked with the responsibility of overall school improvement. Professional learning communities, referred to as PLCs, served as the grade-level teams responsible for reviewing, coordinating, and implementing classroom and grade-level instructional plans. Student management teams (SMT) addressed student academic concerns, designing interventions for individual students, and monitoring the progress of those students. Although these teams were meeting regularly, changes in the composition, functions, roles, and responsibilities of each team were necessary for alignment with the intention and goals of MTSS as described in the following sections.

**School Improvement Teams (Tier 1 Teams).** Although school improvement teams (SIT) were already in place to discuss the general needs of the school, the adoption of MTSS required a change in the overall function of the team. SIT teams examined school improvement, however, district leaders found that the effectiveness of these teams was often minimal, as SIT team meetings focused on identifying problems but allocated less emphasis on determining and implementing solutions. As one administrative staff member reported, "Many of those meetings were just gripe sessions—opportunities for staff to vent. Very little was actually accomplished." Additionally, although SIT teams identified areas of need and created school improvement goals, the follow-through, and monitoring of these goals was reportedly inconsistent.

In order to create more effective school leadership teams, the Green Pastures District MTSS Team recommended revised meeting structures to address issues with meeting content,

consistency, team membership, and accountability. This began with the adoption of Indistar (also referred to as NC Star), an online tool that provides a structured platform for school leadership teams to select goals using a predetermined set of indicators aligned with overall school improvement, create and assign work tasks aligned with the school improvement goal, and set timelines for monitoring completion of the tasks. Many of the Indistar indicators are directly aligned with the expectations of MTSS, and focus on the strengthening of core instructional and behavioral practices, providing tiered supports across areas of concern, and creating and monitoring data systems to support informed decision making. Ms. Aubrey, Director of Student Support Services, explained,

> What we're trying to do, using NC Star, is take the self-assessment of MTSS information and taking the components that we are using in NC Star and do a crosswalk for them to understand that we are looking at core instruction and school improvement with MTSS as a model. Your school improvement team should really be your MTSS implementation team at your school as well.

Additionally, schools have been asked to reflect on the membership of the SIT team. As an MTSS leadership team, it is important to include all appropriate stakeholders at the table for school-wide problem-solving. Ms. Aubrey stated,

> What we have done is tried to talk to them about people who need to participate, what types of roles in the school, the whole school vision, and how all that influences capacity. So they still have their elected members, but what they've done is tried to ensure that those folks are part of the team.

In order to ensure effective problem-solving and communication, Green Pastures School District suggested that additional members join the school improvement team so that discussions were not only focused around student academic needs, but also around examinations of behavioral trends, social-emotional concerns, mental health needs, and issues with chronic absenteeism/truancy. Valuing the contributions and expertise of student support services, the district encouraged

schools to adjust schedules so that the school social worker, school counselor, and behavioral specialists could attend MTSS/School leadership meetings. This proved to be a difficult endeavor for many schools as support staff is a limited resource. Several schools share social workers and nurses, and school psychologist positions are difficult to fill with the current shortage of applicants in North Carolina.

Additionally, school teams modified the frequency and content of school improvement meetings in alignment with MTSS goals and NC Star requirements. Whereas school improvement teams (SIT) were accustomed to meet monthly (or sometimes even less often), with the acquisition of NC Star and the adoption of MTSS, school leadership teams are now expected to meet twice per month. Ms. Aubrey noted, "With NC Star, you have two meetings per month that you are supposed to do for your requirement. So one is truly looking at those indicators in NC Star and the second one is to be [the meeting of] the MTSS team, where we are analyzing core." Within the context of the MTSS team meeting, the school leadership team is expected to analyze school-wide data, including student outcome data across areas of concern (academics, behavior, social-emotional, attendance) for each grade level and across grade levels, and MTSS implementation and fidelity data. The primary responsibilities of the MTSS leadership team include increasing the strength of core instructional practices, examining the effectiveness of tiered supports for Tiers 1-3, and providing staff with professional development directly related to MTSS implementation. MTSS leaders also assess and fairly allocate school resources, and design a master schedule that promotes effective core instruction and interventions/supports. In order to efficiently address each of these matters, the MTSS leadership team must ensure that meeting time is well-organized and focused and that all stakeholders have easy access to the data needed to examine and problem-solve around school-wide issues.

**Professional Learning Communities (Tier 2 Teams).** The second level of school-based teaming lies at each grade or departmental level. Professional learning communities, also called PLCs, are responsible for examining both grade level and classroom data (or departmental data for secondary schools), to assess and identify areas of concern. PLCs traditionally had the responsibility for examining student outcome data such as EOGs, benchmark, and formal or informal classroom assessments to gain a better understanding of how well students are performing on grade-level assessments as an indicator of response to classroom instruction. PLCs often work together to review curriculum, revise pacing guides, and update lesson plans to target instructional areas where student performances have been weak. With the implementation of MTSS, the role of PLCs has also changed. While PLC teams continue to analyze core instructional practices, they have also taken on the role of performing intensive data review sessions that allow educators to identify students at risk. Although teachers in Green Pastures School District, accustomed to RTI, are familiar with data review sessions to identify academic risk, with the implementation of MTSS, PLCs are now examining student risk across domains, and having conversations regarding behavioral, social-emotional, mental-health, and attendance issues within the context of these problem-solving meetings. "They are discussing supports that are needed for children who need beyond core—those who need Tier 2 types of supports," Ms. Aubrey explained. PLCs are now screening for risk, using universal screeners for literacy, math, behavior, and attendance, and identifying students that need further supports within PLCs. Following the completion of screening, PLCs conduct a detailed data analysis to target specific areas of concern before determining which interventions or supports would most appropriately match the needs of the student(s) in question. Educators then assign students to intervention groups with other students based on common needs. The PLC team is responsible for assigning

staff to provide interventions, determining the frequency and duration of the intervention, and developing procedures for assessing student progress.

**Individual Problem-solving Teams (Tier 3 Teams).** Despite the efforts of educators to deliver quality core instruction in the classroom and provide supplemental supports to students with additional needs, some students require more intensive, individualized interventions. Oftentimes, PLCs need additional data (e.g., diagnostic assessment information) and the expertise of other educators or specialists to address the specific needs of individual children. Individual problem-solving teams have been designated by the Green Pastures School District to work with students in need of this level of support. These teams are composed of teachers and other education staff with specific knowledge of the individual child, including support services staff such as nurses, social workers, counselors, behavioral specialists, special education teachers, reading specialists, and other interventionists relevant to the child. Additionally, parents and relevant community support agency representatives are invited to be part of these problem-solving sessions in an effort to engage in a whole-child approach to supporting student needs. In addition to PLCs, Ms. Aubrey mentioned the addition of regular Tier 3 team meetings:

> Schools are probably looking at monthly sessions—we call them KidTalks. They are really surveying the data, [looking] at more individual students. And as far as that team is concerned, we've encouraged them to try to have as many of those people (social workers, nurses, counselors) there as possible so that we can make sure that there's not medical needs, and make sure there's not some other social/emotional, DSS involvement, or other situation that can be affecting the learning of the students.

## Communication and Collaboration between Teams

Green Pastures district MTSS team wanted to ensure that good communication and collaboration existed between each level of school teaming (School leadership, PLCs, Tier 3 teams). The District MTSS Coordinator worked with schools to ensure the presence of appropriate stakeholders on each level of teaming and that teams were connected by a mutual

staff member that could bring information and data from one team to another. So that school MTSS teams could easily access needed resources at any time, Ms. Smith created a district MTSS website that housed all professional development and training materials. She provided professional development to guide school teams in reconfiguring their teaming structures. School leadership teams worked with the district coordinator to develop a communication plan that would include strategies for communicating within and across problem-solving teams. Furthermore, schools brainstormed together to establish procedures for communicating with all stakeholders, including families, school and district support service providers, and community support agencies.

**District-level Teaming and Communication.** Before the district could lead schools into developing effective collaborative teaming and communication structures, the district team had first to examine these factors at the district level. Because of the methods used for the state roll-out of MTSS, not all district-level leaders were receiving communication regarding MTSS installation in the initial stages of the initiative. Typically, communications from the state department to school districts were sent directly to the MTSS coordinator for that district. In some districts, the MTSS coordinator works in the Instructional Supports Department. In others, the MTSS coordinator serves in the Curriculum and Instruction Department, or elsewhere. Therefore, NCDPI depended upon the MTSS Coordinator assigned in each district to directly distribute information and coordinate action steps regarding MTSS readiness, installation, and implementation. Therefore, communication with other departments varied from district to district.

The Green Pastures Superintendent and the District MTSS Coordinator received initial communications from the state regarding MTSS. While Ms. Smith, the District MTSS Coordinator, began to work with NCDPI and the MTSS Consortium on preparing for MTSS

installation, the District Superintendent was made aware of North Carolina's July 1, 2020 mandate for the implementation of MTSS and changes to SLD eligibility policies through policy updates and memos delivered to each district's superintendent. According to several district-level staff members, although the district superintendent was supportive of the adoption of MTSS, he neither directly mandated MTSS within the district, nor did he directly manage readiness work, outline action steps, or set implementation timelines. Green Pasture's Superintendent assigned responsibilities for the work to the Assistant Superintendent and the Student Support Services Department where the District MTSS Coordinator maintained the majority of the work. Along the same lines, one staff member mentioned,

> The assistant superintendent put out an informal expectation [for MTSS implementation] at several times based on material that we have presented. This was an expectation that we work and participate in this process, but it was never directly mandated. In addition, there has been a disconnect between the leadership in general education and special education. I think it took a little while for us to really develop those relationships with curriculum and instruction. It was almost like that was a bigger struggle than getting schools to look at their interventions.

Ms. Aubrey further noted that due to multiple factors, including a focus by NCDPI to make MTSS a general education initiative, the Exceptional Children's Department was not initially involved in the work of MTSS:

> For a good while, our district team was very dysfunctional because we were working in silos. We also had some personality conflicts that prevented us from collaborating the way that we should. That was a barrier to us trying to get some things done, but now our division has changed, and there have been personnel changes. We now have more cohesion amongst the team. I think they have a better understanding of what this should look like. They have a better understanding for more integration [of the work]. They have an understanding of what the MTSS coordinator does, and they bring her to the table and plan with her. She's now being included [across district departments].

After 4 years of MTSS implementation work, district staff report that communication at the district level is continuing to improve.

### Assessing Needs to Guide Professional Development

Although Green Pastures School District did not officially sign an agreement with NCDPI to implement MTSS until 2016, they engaged in preparation work for a full year before the official adoption of the initiative. Having heard rumors of some of the MTSS work coming down the pipeline, the district MTSS coordinator reached out to other districts and contacts that at NCDPI. "We would call and say, I know that we are not in cohort I, but this is something that we are thinking about doing. Are we thinking along the same lines as you all? So we began doing trainings before we officially began participating in a state cohort," Ms. Aubrey recalled. Initial professional development began in 2014, shortly after the designation of the new MTSS coordinator. Ms. Smith, the District MTSS Coordinator, recalled,

> We basically realized that we needed to create a common language and common understanding of what MTSS is. So we developed an implementation roadmap prior to the first year. We talked about what teams would look like, we discussed roll-out, and we decided to do a 3-day PD on MTSS for school teams. We had these conversations with the principals, but we did not really mandate who had to come. We just told principals to send a team.

In general, the expected composition of that team was the administrator, the instructional coach, the counselor, and the exceptional children's teacher. This initial MTSS professional development series began with an introduction to MTSS, including common language and a detailed review of the essential components. Day two of professional development focused on building structures to support Tier 2 intervention and expectations for professional learning communities (PLCs). In the third training, the MTSS District Coordinator focused on effective instructional practices and provided the teams with suggestions for ways to improve core teaching practices.

In that first year, after a period of conducting observations in each school to assess the needs across the district, the MTSS coordinator began to provide an MTSS introduction in all

elementary and middle schools. Initial training sessions including discussions about best practices in core instruction, a review of the three-tiered model for academics and behavior, and an overview of interventions and supports available at each tier. Ms. Aubrey noted,

> Through conversations around scheduling after the first year, what we realized is that people did not have consistency in the amount of time devoted for language arts or math. So we worked on putting in expectations from our division around what a schedule should look like and how much time needs to be spent working [on math and ELA] within that, and then we said that you need to have an intervention time.

The second year (2015-2016) was dedicated to behavioral supports within the context of a multi-tiered system of support and examining intervention systems.

Green Pastures School District, in its initial roll-out of MTSS, offered professional development sessions to administrators and school-based teams. Ms. Smith, District MTSS Coordinator, would go out to schools and provide formal professional development sessions or consultation services in team meetings. Ms. Aubrey attributes the lack of a district mandate for MTSS installation and the optional approach to MTSS training sessions as a barrier to implementation:

> The principal was able to decide if they wanted to bring Ms. Smith to the table. So that meant that some schools have made more progress than others because they were willing to participate. So for a while there, you had schools at various levels of implementation based off of their motivation to do so.

In the next three sections I describe how Green Pastures School District leaders delivered professional development to MTSS Coaches, school-based teams, administrators, and support service personnel. Table 3 follows, outlining the schedules, audience, and content for MTSS training and coaching opportunities.

**Professional Development for MTSS Coaches and School-based Teams**

To effectively facilitate the work of MTSS at the school level, administrators were asked to appoint an MTSS coach for each school. Initially, the district did not mandate a specific person to fill the role of MTSS coach, and the district gave administrators the autonomy to choose a person for their school. As educators shifted from an RTI framework, many administrators were selecting a teacher or counselor who had previously lead student management team discussions to fill the role of MTSS coach. Ms. Smith, the District MTSS Coordinator, noted, "Some of the schools were sending the wrong person for the job. In their mind, MTSS was still about a referral to EC services. It was hard for these folks to make the shift away from previous practices and beliefs, and these schools had a slower implementation rate."

Moving forward, suggestions were made by the MTSS Coordinator to appoint the school's instructional coach for the role of MTSS chairperson, due to his/her specific knowledge of curriculum and instruction and because of prior experience with RTI implementation in academic areas. Although the instructional coach/MTSS coach attended school-based MTSS training sessions, the District MTSS Team felt that these coaches needed more specific guidance on MTSS implementation, especially as schools began to explore the development of intervention systems in their schools.

After the first 2 years of training, the district team recognized that in order to more effectively transition from RTI to MTSS, it was necessary to designate a team, instead of a single school representative, to participate in more regular and formal MTSS training sessions with the District MTSS Coordinator. These team meetings include instructional coaches, counselors, and interventionists that meet with the District MTSS Coordinator on at least a quarterly schedule and are separated by elementary, middle, and high school levels. At most schools, counselors were also selected to be part of the MTSS school-based team, to provide expertise in the areas of

behavioral, social-emotional, and mental health support. A typical MTSS team meeting involves an opportunity for the school to focus on a recent data set, aggregating or sorting data from recent universal screeners or benchmark assessments. Sessions are also provided to teach educators how to read and interpret the data sets and reports generated by newly acquired instructional support resources such as iReady, Star Math. Guided by the District MTSS Coordinator, school teams conduct a data analysis activity, identifying patterns or trends in the data, and determining action steps that align with their school improvement indicators in NC Star. Many of the activities intentionally model practices that the instructional coaches can replicate in their school problem-solving teams.

Additionally, Ms. Smith, the District MTSS coach, felt that instructional coaches needed in-depth training to help them better understand data collection and analysis to guide instructional practices. Therefore, Mrs. Smith would began to co-plan and co-facilitate the monthly instructional coach meetings along with the Curriculum and Instruction Director and the elementary and middle school directors. Separate from the monthly MTSS meetings, the District MTSS Coordinator co-plans and co-facilitates a monthly meeting of the instructional coaches. Furthermore, Ms. Smith is now able to meet with all reading specialists regularly.

**Professional Development for Administrators**

Within the first year of MTSS implementation in elementary and middle schools, the importance of having an administrator directly involved in MTSS professional development became obvious to the district MTSS team. According to district staff, schools whose principals actively participated in MTSS trainings began to show differences in student academic and behavioral outcomes, whereas schools that did not have regular principal involvement still struggled with MTSS implementation and student growth.

> At our schools where the administrator was coming to the meetings, there is much more understanding. Two of our schools, [where principals did not come], they did not make growth and are on support plans. One of them is our only school that is still a D grade school. So what I think everyone is starting to realize is that eight of our schools have gone up a letter grade where this work is being done.

Accessing administrators to provide professional development on MTSS implementation has proven to be a difficult endeavor.

> I think that one of our barriers is that we don't get a lot of time with principals. We're not able to pull them very much outside of their normal principal meeting times. So one of the barriers has been that MTSS coaches are getting this information, but the administrators were not. The principal has to have the understanding to be able to remove implementation barriers for schools. But I think this is improving as well.

In order to establish better principal participation in MTSS, and instill the understanding and belief systems necessary to carry out this school-improvement initiative, the District MTSS Coordinator Ms. Smith regularly provides information directly to principals through participation at monthly administrator meetings. Although there is not a standing agenda item on the monthly administrator agenda, Ms. Smith can request time as needed at each of these meetings to provide district MTSS updates or quick bursts of specific professional development topics. However, Ms. Smith noted that presenting MTSS information at administrator meetings is not the ideal means of communication with this group. "There is so much going on at administrator meetings, so what I have to say often gets buried under other things." Additionally, in the initial stages of MTSS installation, there was not good collaboration and planning between departments. "At first the district did not see MTSS as being part of school improvement, so they would plan activities for principals to do with data, but it would not always align with MTSS." After a while, the District MTSS team worked together to ensure that the departments at central office were collaborating, with an understanding that MTSS would be the framework for school improvement. Through this inter-departmental collaboration, district leaders consistently embedded information about

MTSS in all professional development and school improvement planning activities provided to administrators and educators.

**Professional Development for Support Service Personnel**

Although Green Pastures School District was very familiar with tiered support systems from an academic perspective because of their many years of experience with RTI, the implementation of MTSS required that the district and schools begin to expand their approach to professional development and make the necessary adjustments to teaming structures to address the behavioral, social-emotional needs of students. This required an intentional integration of conversations about discipline, attendance, and mental health in training sessions. The implementation of MTSS also required the participation of additional stakeholders in MTSS professional development sessions. Therefore, Ms. Smith, in collaboration with Ms. Aubrey, the Director of Student Support Services, began to offer MTSS training sessions to counselors, social workers, nurses, and other support service staff as part of their monthly student support services meetings. Through these professional development sessions, the MTSS District Coordinator is able to provide support staff a better understanding of the academic components of MTSS, such as the work that is being done to strengthen core instructional practices and how the work directly relates to school improvement planning through NC Star. Additionally, Ms. Smith can provide each support service staff member with information regarding how MTSS directly pertains to his/or her role as a nurse, counselor, or social worker and guide how their roles and responsibilities will shift and change to support MTSS implementation.

**Professional Development to Address Behavior and Social-emotional Supports**

Many of the conversations and training sessions with student support personnel are focused on addressing the behavioral, social-emotional, and attendance needs of students. For many years, Green Pastures School District has focused on behavioral problem-solving using

Positive Behavioral Interventions and Supports (PBIS). From 2010-2014, a behavioral specialist was hired using funds through Safe and Drug-Free Schools. The behavior specialist offered PBIS training sessions to all schools, but participation in PBIS was optional. In 2014, approximately two-thirds of the schools in the district were participating in PBIS, but implementation success varied from school to school. Whereas a few schools were very successful, and even earned NCDPI recognition for their implementation efforts, the program failed to thrive in other schools and implementation fidelity was inconsistent. However, exposure to the tiered structure of PBIS, in combination with the schools' RTI experiences, provided a foundation for many schools to implement MTSS as a school improvement framework. Ms. Harper, the district's Behavior Specialist, summarized the journey of integrating behavioral components within the context of the MTSS framework:

> I think that people understood that children needed to have interventions for behavior, just like when they are struggling with components of language arts or math. They understood that in terms of the tiered structures and interventions for behavior. But it has been harder to help switch to thinking about how everyone receives core instruction, and everyone is Tier 1 [for behavior]. They know the language when we say MTSS, but they tend to think more in terms of academic intervention. So the second year of implementation we focused on behavior with the school teams.

Table 3

Professional Development/Meeting Schedules for MTSS Trainings in Green Pastures School District

| Team | Meeting Frequency | Stakeholders | Content | Facilitator |
|---|---|---|---|---|
| MTSS School-Based Team Meetings | Monthly | MTSS coach, instructional coach, counselor, adminstrator<br><br>Broken into groups (k-5, k-8, middle, high) | Review of MTSS common language, belief systems, tiered supports, data analysis, interventions, progress monitoring | District MTSS Coordinator |

Table 3

Cont.

| Team | Meeting Frequency | Stakeholders | Content | Facilitator |
|---|---|---|---|---|
| Instructional Coaches Meetings | Monthly | Instructional coaches | Strengthening core instructional practices, MTSS alignment with NC Star and school improvement planning, data training & data analysis | District MTSS Coordinator and Elementary/secondary director, K-8 C&I director |
| Administrator Meetings | Monthly | School principals and district office personnel | Various areas of focus | District MTSS Coordinator provided with time on administrator meeting agenda upon request |
| School-Based Leadership Team Meetings and PLC support | Consultation based on need or request | School leadership teams, SIT | Content varies according to school needs | District MTSS Coordinator |
| Support Service Staff Trainings | As needed | School counselors, social workers, nurses | Behavior within an MTSS framework, whole child wellness, SEL instruction and data | Lead by Director of Student Services. MTSS District Coordinator attends to provided MTSS training as needed |

## Assessing Resources to Support MTSS Implementation

As the District MTSS Coordinator and members of the District MTSS Team began the work on installing structural components to implement MTSS through the development of district and school teaming structures and by providing professional development on the initial work required for MTSS readiness, it became apparent that other resources would be necessary to complete the work ahead. An assessment of overall school performances revealed that schools needed numerous forms of support to better student outcomes in academics as well as behavior.

The MTSS District Team determined that the work of MTSS should begin by making efforts to improve the strength of core instructional practices. With this in mind, the MTSS District Team constructed a strategy to bring consistency to school improvement planning across the district.

**District Guidance for School Improvement Planning**

With MTSS installation underway, the district decided to change the way schools wrote their improvement plans. Previously, the SIT team developed and submitted school-level goals each year. However, district staff noted that there was little variance in the school improvement plan submissions from year to year and that the goals did not specifically tackle the true areas of concern facing schools. Additionally, the goals did not align with the district's current work in MTSS. Therefore, Green Pastures District MTSS Team decided to adopt Indistar, also referenced in North Carolina as NC Star, as a platform for documenting school improvement efforts. The district team was familiar with NC Star, as schools that were identified by NCDPI as underperforming or priority schools used the platform for school improvement planning and progress monitoring in the 2017 school year.

Using NC Star, schools were required to select from a set of pre-determined school improvement indicators, and use those indicators as an area of focus for the school year. The online platform provided through NC Star, allowed district officials and schools to conduct self-assessments of school needs across areas of concern (e.g., school safety, academics, discipline, support services, parent engagement) and assign timelines and action steps to meet those goals. Furthermore, the platform provided a structured way for school and district teams to progress-monitor efforts made toward meeting each indicator. Through the implementation of NC Star, school teams were required to meet twice per month to regularly conduct problem-solving sessions in which areas of concern were discussed utilizing collected data in a formal and structured manner. These bi-weekly meetings were composed of stakeholders from the

traditional school improvement team (SIT) with a few additional members, such as the MTSS coach, support service representatives, and behavioral or PBIS coach, to complete the comprehensive MTSS school leadership team and meet the suggested criteria for MTSS teaming structures.

The use of NC Star helped district and school teams strategically and intentionally align school improvement efforts with the vision of the MTSS framework. Explaining the rationale behind the adoption of NC Star, Ms. Aubrey the Director of Student Support Services states,

> We consciously focused [on adopting NC Star]. We needed something different for school improvement planning. I mean, [previously] everyone made the same two goals about increasing their math and reading scores. Our federal programs person started to see along with our District MTSS Coordinator, how NC Star could fit with MTSS and we were hearing more about it from the state level too. I think in general, we have gotten far using this kind of systematic approach to school improvement. I think that people believe that this is how we should be looking at things and I think they are doing so. They now believe that if core instruction is really providing what it should be providing, that our kids will be successful. I think that is across the board [in this district].

The following NC Star Key Indicators provide examples of school improvement goals adopted by Green Pastures School District that directly align with the implementation of Multi-Tiered Systems of Support:

- A1.07: All teachers employ effective classroom management and reinforce classroom rules and procedures by positively teaching them.
- A4.01: The school implements a tiered instructional system that allows teachers to deliver evidence-based instruction aligned with the individual needs of students across tiers.
- A4.06: All teachers are attentive to students' emotional states, guide students in managing their emotions, and arrange for supports and interventions.

- B1.03: A leadership team, consisting of the principal, the teachers who lead the instructional teams, and other professional staff meets regularly (at least twice monthly) to review the implementation of effective practices.
- B2.03: The school has established a team structure among teachers with specific duties and time for instructional planning.
- B3.03: The principal monitors curriculum and classroom instruction regularly and provides timely, clear, and constructive feedback for teachers.
- C2.01: The LEA/School regularly looks at school performance data and aggregated classroom observation data and uses that data to make decisions about school improvement and professional development needs.
- E1.06: The school regularly communicates with parents/guardians about its expectations of them and the importance of the curriculum of the home (what parents can do at home to support their children's learning).

**Focus on Strengthening Core Instructional Practices**

With the adoption of NC Star, schools were now more intentional with their school improvement efforts. By reviewing school-wide and grade-level student outcome data such as universal screeners, benchmark assessments, diagnostic assessments, and EOG performances, district leadership and schools within the district quickly identified a need to improve core instructional practices. With years of RTI under their belts, teachers were adept in identifying student academic concerns and brainstorming to develop interventions to address the needs of individual students. However, with the abundance of student needs, the district MTSS coordinator recognized that schools were focusing their energies to support students in the wrong direction.

Given the current resources, schools could not provide Tier 2 and 3 interventions to every student that demonstrated need. Instead, the district team determined that it was necessary to begin to focus on preventative measures to improve instructional practices in the classroom for all students. Ms. Aubrey spoke about the challenges that accompanied this shift in instructional expectations: "I think that schools were having a hard time understanding [what to do] when you have 60% of students not on grade level. I think this was hard for them. The resistance came in the form of them not understanding. They just did not know how to make it happen."

With this understanding, the district came in to support effective core instructional practices through professional development, consultative support, and the acquisition of resources to support core instruction. Moreover, a core walkthrough tool was developed to gather information regarding current educational practices in schools. With the development of a district core walkthrough tool, administrators conducted regular classroom observations to examine the quality of instructional practices in their school. School and district leadership teams, using the data gathered from these walkthroughs, were able to more effectively plan for professional development and coaching needs, improve the selection of curriculum and educational programming, and tailor lesson planning to meet the needs of students.

**Resources to Support Core Instruction, Intervention, and Screening**

Focused on strengthening core instructional practices, the Green Pastures District MTSS Leadership began to engage in conversations to purposefully evaluate the resources needed to build and maintain core and tiered intervention systems. By conducting the core walkthrough in each school in the district, it became apparent to district leaders that curriculum and intervention resources were not consistently available at all school sites. Over the years, some schools had accumulated a variety of programs and intervention materials with their own funds. With some schools designated as Title I schools while others were not, there was significant variance across

the district in a school's access to funds to support the purchase of educational resources. With limited funds available, many schools had pieced together free or inexpensive online resources such as MobyMax or Scholastic online to supplement student learning opportunities in the classroom. However, with the implementation of MTSS, the district recognized the need for consistency in resources and began to acquire and provide programming to support intervention systems across tiers.

Through the use of Read to Achieve components for literacy such as Amplify, mClass, and What Next, provided by NCDPI, all schools in the district had foundation resources that could be used to screen and progress monitor student performances in literacy. The Green Pastures School District also added to K-8 literacy resources by investing in programs such as Classworks and Freckle Reading (an online tool). However, the state did not provide similar resources to support math instruction. In effort to fill this resource gap, Green Pastures School District leadership began with the acquisition of STAR math, an online program that offered online tutorials for supporting core and tiered interventions, along with screeners and diagnostics that provided reports on student performance and progress and also acquired Ready Math and iReady Math online programming.

Although additional resources have been acquired to support the implementation of core, supplemental, and intensive supports for academics, district-level staff reports that there continue to be gaps in resources and variance in the use of the programs from school to school and even within schools, across grade levels and departments. According to Ms. Harper, the District MTSS team has not mandated a specific protocol for intervention programming and continues to provide schools autonomy in the selection and use of resources:

> Some schools were able to acquire Aimsweb, some schools have iReady for reading or math. We've purchased some *Do the Math* kits for math intervention, but not every school wanted to use those. They have had a lot of autonomy in putting those things in.

> We have not said, here is what you are going to use and here is how you do it. Instead, our MTSS Coordinator will go in and work with the schools to provide them guidance for what it should look like with the resources that they have. Right now we are still having a conversation where we are looking at something more prescriptive. We do not have a standard treatment protocol for interventions from a district perspective. Schools are creating those on their own at this point in time. And I think there is some desire to continue to let schools have autonomy because each of the schools are so different. But more and more principals are starting to ask, "What can I use? I need something that I can give my teachers?" So I think we are at a point now where we really have to start thinking about a more prescriptive approach.

As schools began to acquire resources to support core instruction and interventions, the district team intentionally communicated their vision for quality instructional practices. The district provides many of the resources in a digital format, which aligns with digital learning competency goals and preparing students for 21st Century learning. However, Ms. Smith, and others from the district-level team, have expressed concerns that these resources, if used inappropriately, may negatively impact student learning:

> Schools have to understand that these resources are to help support core differentiation. They also allow us to collect data on specific student skills and needs. However, putting kids on a computer [as a substitute for direct instruction from a teacher] cannot be accepted as a strong educational model. There has to be a balance.

**Staff to Support MTSS Implementation**

Educators are a valuable and necessary resource for promoting the implementation of a new school improvement initiative. Installing Multi-Tiered Systems of Support requires the creation of an infrastructure for providing effective core instruction and interventions that address the academic and behavioral needs of all students while also supporting school attendance, physical health needs, social-emotional needs, and students with disabilities. Teachers, student support service personnel, instructional coaches, administrators, and teaching assistants are necessary to carry out this work but are a limited resource in most public schools. Green Pastures

School District strives to most effectively distribute the available staff based on student and school needs data.

Like many school districts, limited budgets mean that Green Pastures Public Schools are required to share educators. This is especially true for teachers of enhancement classes such as art, music, and PE, as well as student support positions such as school social workers, school nurses, and school psychologists. Specialty positions such as AIG (academically and intellectually gifted) teachers, ESL (English as a Second Language) teachers, and Title I reading specialists are also shared. In these situations, these educators are assigned to work at two or more schools, and their schedules are allocated to these schools one to three times per week during specific times. Although each school is grateful for the time provided by each of these educators to their schools, sharing a staff person with other schools across the district presents logistical and scheduling difficulties. Sharing staff also prevents these educators from being immediately available to address specific student needs or to participate in collaborative meetings and professional development sessions.

Understanding these barriers, the Green Pastures School District attempted to provide some relief to schools by assigning a full-time instructional coach at each school. Additionally, all elementary schools now have a reading specialist. The Instructional Support Services Department is also working through grants and other funding sources to acquire additional support service personnel (social workers, psychologists, and nurses) in the future to better provide wraparound services for students in need of support.

Although the appropriate staffing of teachers and instructional support staff is a prerequisite for MTSS installation and sustainability, the implementers in Green Pastures School District noted that the problem-solving discussions in each school leadership team determine the number of educators needed. Whereas staff were previously quite vocal about the lack of human

resources in their buildings for carrying out the work of MTSS, the worry has reportedly minimized as the focus of school problem-solving teams shifted from providing individualized intervention for all students that were below grade level to determining ways to strengthen core instructional practices. With guidance from the District MTSS Coordinator, school teams were able to identify grade levels or specific classrooms where a higher than expected percentage of students were not meeting grade-level expectations according to benchmark and diagnostic assessments. To support these grades or classes, the MTSS leadership teams decided to provide additional focused professional development and coaching to optimize instructional practices in core areas of concern, and push supports and interventionists into reading and math classes for all students, instead of utilizing those support persons to provide intervention via pull-out services to a select group of students. With this model of intervention in place, fewer people were required for supplemental and intensive supports as students were more likely to obtain the differentiated instruction they needed in the regular classroom setting.

**Building Stakeholder Consensus Around MTSS**

One of the most important resources necessary for successful implementation is the educational staff to support the work. Without funding sources directly allocated to MTSS, and with school and support staffs limited by budgeting issues, it was very important to the District MTSS Team that schools in Green Pastures School District be provided with the flexibility and autonomy to utilize staff in creative ways to most effectively address their school improvement needs. But even more importantly, the district team had to ensure that the staff available to implement MTSS fully understood the intention of the work and possessed the beliefs, attitudes, and skills necessary to carry out the initiative, while building the capacity to sustain the work in the future. District staff pointed out that they did not feel an active resistance to initial MTSS

implementation from school-based personnel, but did perceive confusion as schools began to make the shift away from RTI.

Several district staff noted that the district's prior implementation of Response to Intervention over the past 10-12 years was not considered successful in Green Pastures Public schools and may have negatively impacted the adoption and installation of MTSS. As noted by one district MTSS implementation team member, "I feel like we have been working backwards and it has taken a long time to get to appropriate understanding of MTSS because of how we started with RTI."

According to district staff, although RTI intended to thoughtfully examine the progress of students using data to guide academic instruction provided to students along a path of tiered interventions, RTI fell short in several ways. First, there was a lack of focus on core instruction, as summarized by the district MTSS coach:

> Instead of reflecting upon our teaching practices—our curriculum, pacing, differentiation of instruction, and our presentation of material in the general education classroom--our understanding of RTI at that time placed us in a position where we were instead solely focusing on the progress of each individual learner. Unfortunately, this meant that we often attributed academic concerns directly to the child and our conversations were often very student deficit driven.

Secondly, RTI focused only on the academic needs of children, discounting the impact of attendance, behavior, and social-emotional needs on the academic performance of a child. "When conversations regarding behavior or absenteeism did take place, these conversations occurred in silos. We were addressing each problem individually, but not connecting the dots in terms of looking at the whole child," noted Ms. Harper, district behavior specialist.

Thirdly, Ms. Smith described how stakeholders previously viewed RTI as a pathway to eligibility for special education programming:

> Many of us just saw RTI as a series of steps that we needed to complete to get a child Exceptional Children's services. We thought about it in terms of paperwork and the documentation needed to get our kid to qualify for special education. RTI was like a checklist for us. If we checked all the boxes, we could then assign an EC teacher to help this student get what they needed.

Shifting from RTI to MTSS, the MTSS Coordinator for Green Pastures School District began MTSS installation with a focus on readiness work which included building common MTSS language, helping schools to understand the basic components of MTSS and the reason behind the work, and painting a vision for the work over time. This required that educators "unlearn" current beliefs and practices, and tear down current structures and procedures in order to make space for MTSS implementation. Ms. Aubrey described the experience of shifting from one educational initiative to another:

> I don't think anyone resisted what we were saying in the sense that they did not think that it should be happening. I think they just did not know how to make it happen and they were confused by what we were talking about. So I do not think that it was disagreement, just the need for clarification. I think that sometimes you just have to be there in the trenches with your staff and you just keep using the same language over and over and over until eventually, you start to hear it back. I believe you have to support people through the process to help them see the benefits.

In other efforts to improve and sustain buy-in for this new school improvement initiative, MTSS district team leaders intentionally communicated the successes of schools that were already involved in MTSS implementation. As several of the initial schools involved in MTSS installation began to make strides toward implementation as evidenced by new effective and efficient teaming structures, master schedules that promoted collaboration & planning time, designated data review and problem-solving sessions, and structured core and tiered support systems, the District MTSS Coordinator shared the stories of their work efforts with other schools. School staff and administrators began to talk with one another at district MTSS monthly meetings and administrator meetings, regarding action steps to ensure more successful MTSS

implementation efforts. As noted by the Director of Student Support Services, "Organically, by word of mouth, people sought out understanding and collaborated with one another to make sense of the work ahead." Out of that, the District MTSS Coordinator approached schools that were doing well and asked them to present their work at district meetings so that other schools could benefit from their experiences.

### Using Data to Support District MTSS Implementation

When Green Pastures Public Schools first adopted and began the installation of MTSS, there was little data available to guide MTSS implementation. The school district began with some initial readiness work in which data was collected through surveys to examine the perceptions and beliefs of school and district staff. Using this information, school and district teams could identify beliefs and attitudes that may negatively impact MTSS implementation efforts. Using this information, the MTSS district coordinator was better able to tailor professional development to increase staff understanding and buy-in of the new school improvement initiative. As time passed, and more schools began initial MTSS steps, Ms. Smith collected implementation data from participating schools. The SAM, or Self-Assessment of MTSS, was one of the primary tools used to examine schools' progress toward MTSS implementation. When used in conjunction with student outcome data such as universal screeners, diagnostic assessments, benchmark data, and other student performance data, schools were more readily able to determine future action steps for school improvement. The SAM is a 38-item tool that provided discussion items directly aligned with the six critical components of MTSS. By reviewing the SAM as a school team, school leadership teams could determine a self-rating on each item, and in turn, develop action steps for the work ahead. Additionally, with training, school teams were taught to align SAM items with the NC Star indicators and create school improvement plans that correspond to MTSS implementation steps.

It was through the evaluation of the SAM, EVAAS data, student outcome data, and implementation fidelity data that the Green Pastures Public School district staff engaged in informed conversations around the needs of schools and students, including the identification of resource gaps and needs for strengthening of instructional and intervention practices. By reviewing school self-reports on MTSS implementation as a district summary, the Green Pastures District MTSS Team more effectively planned for professional development, resource selection, and resource distribution to support the MTSS school improvement initiative.

Table 4

Data Sources Used to Assess School and District-level Growth and the Effectiveness of MTSS Implementation in Green Pastures School District

| Data Source | Description |
|---|---|
| SAM (self-assessment of MTSS)<br>• Completed at least once per year by school leadership teams | This self-assessment tool is utilized by all schools in Green Pastures School District to provide an indicator of MTSS implementation as measured by school responses to 38 questions. School leadership teams complete the self-assessment together, noting responses to each item as 0-not implementing, 1-emerging/developing, 2-operationalizing, 3-optimizing. Responses may be used to lead MTSS implementation action steps and overall school improvement planning. |
| PBIS TFI (tiered fidelity inventory) | This self-assessment tool is used by school PBIS teams to examine positive behavioral interventions and supports. This document, divided into sections for Tiers 1, 2, and 3, helps schools determine strengths and needs for developing behavioral expectations and procedures for all students and staff as well as providing supports and interventions for students who need supplemental and intensive level supports for behavioral and social-emotional competencies. |

Table 4

Cont.

| Data Source | Description |
|---|---|
| FAM-S (facilitated assessment of MTSS for school teams)<br>• Completed at least once per year by school leadership teams | This self-assessment tool is the updated version of the SAM, implemented in the 2018-2019 school year. This tool combines the PBIS tiered fidelity inventory with the SAM and examines an integrated combination of academics, behavior, social-emotional, and attendance supports for students. This assessment now has 42 items. The FAM-S is typically administered once per year with the guidance of the district MTSS coordinator or other individuals trained to facilitate self- assessment using this tool. Results are used by MTSS teams to drive school improvement work. |
| NC Star Documentation<br>• Plan created yearly<br>• Updated/monitored twice per month | The Indistar platform is used by schools to house school improvement planning and to document progress toward school improvement goals. Many educators in North Carolina also refer to this tool as NC Star. School improvement teams create yearly goals and by selecting from a menu of school improvement indicators within the platform and creating and assigning tasks or action steps. SIT teams meet twice per month to monitor progress on these goals and tasks. An NC Star/MTSS crosswalk document is used to assist school teams with aligning school improvement work to the MTSS framework. |
| PLC agendas and minutes | Professional Learning Communities (PLCs) meet regularly to evaluate grade-level instruction and review the progress of students on grade-level standards. PLC members maintain agendas and minutes for each meeting via running google documents, spreadsheets. |
| Student Universal Screening Spreadsheets | Master spreadsheets are used to document student risk across areas of concern (behavior, academic core content, social-emotional) and grade levels. Universal screening spreadsheets indicate students that fail to meet grade-level benchmarks or that demonstrate risk through early warning systems screening (failing courses, history of poor performance on grade-level end of course testing, chronic absenteeism as indicated by 10% or more days missed) |

Table 4

Cont.

| Data Source | Description |
|---|---|
| Tier 2 and 3 Intervention Progress Monitoring Sheets | This documentation tracks the progress of small groups or individual students in intervention, indicating intervention selected and response to the intervention over time. This information may be used to examine the effectiveness and fidelity of intervention provided. Data are reviewed by Tier 2/3 teams on a regular and ongoing basis to allow MTSS teams to make decisions regarding future instructional strategies and interventions. |
| Tier 3 Student Intervention Plans and Progress Monitoring | Students in need of Tier 3 (intensive supports) receive Tier 3 plans that outline specific instructional strategies, curriculum, learning environment, data collection methods. Progress monitoring data is collected two to four times per month on specific targeted skills in order to determine the impact of the intervention on student learning. |
| Belief Survey/ Mind shift Data | MTSS leadership teams collect information regarding the attitudes, beliefs, and mindsets of their staff to assist with the creation of professional development and support staff buy-in and engagement. Many schools use the NC MTSS Beliefs survey to gather initial staff perception data. |
| Intervention Fidelity Tracking Data | School teams collect information to ensure that interventions are provided as planned as a means of determining the effectiveness of an intervention. Teams may examine the frequency of intervention, duration of the intervention, student attendance in intervention session, and adherence to instructional plan/intervention program. |
| Core Observation Walkthrough Tools | Allows MTSS teams to examine the quality and rigor of core instructional practices for academics, behavior, and social-emotional learning. Teams may look for expected components of academic instruction, classroom behavior management, or differentiation within the classroom. |
| Visual progress reminder activity- “Where we were, where we are now” | Activity conducted with school teams in which schools list and describe significant events in MTSS readiness, adoption, and implementation steps. A two-column table is used to compare and contrast the status of school over the course of 5 years—in 2014 vs. 2019. |

Table 4

Cont.

| Data Source | Description |
|---|---|
| Student Outcome Data | EOGs, benchmark scores |
| School Report Card Grades | The state provides schools with a letter grade according to school growth and expectations. Many schools in Green Pastures have seen an increase in letter grade since the implementation of MTSS over a few years. |

## Stakeholder Perceptions

Having spent the past 3 years actively preparing for and implementing MTSS, district-level stakeholders have reported a great deal of progress. All three district staff members interviewed reported that they associated positive feelings with Multi-Tiered Systems of Support. The Director of Student Support Services conveyed this attitude, stating,

> MTSS is a good thing. The structures, the way of looking at things, having a protocol- this is the way we should do this work. I would really love it if we got to a place where this is just the way that we do our work. If we didn't even need a name for it anymore, if this was just how we do business. I would love it if we didn't even say MTSS anymore, that it becomes such a part of our practice, that this is just the way we do things.

The MTSS District Coordinator agreed: "I feel like we are in just really good shape. Personally, I have seen all the progress that we have made, especially in grades k-8. This just makes sense to me. I feel like everything is doable and manageable."

The district-level leaders interviewed expressed pride in their growth, but cautioned that implementation success is incremental and takes patience, time, and an abundance of planning. They reiterated the importance of providing schools with guidance, while also offering some autonomy in decision-making in order to increase stakeholder buy-in and cultivate the attitudes necessary to promote and sustain MTSS implementation over time. When asked about points of

pride, district-level leaders mentioned the positive growth that schools have demonstrated in their efforts to strengthen core instructional practices, the intentional consideration given to the development of teaming structures and master schedules to support MTSS, and the improved communication pathways. Additionally, district staff noted an improvement in school-based staff's ability to collect, organize, analyze, and interpret data to make educational decisions.

Although district-level participants were optimistic about the current state of implementation, they recognize that there is still work to do. This specific study focused on elementary school implementation; however, the Green Pastures District MTSS team has listed secondary school implementation as their next action step in the overall district implementation plan. Additionally, in preparation for the July 2020 policy change in which schools will use the MTSS framework for the identification and evaluation of students for specific learning disabilities, the district team is working with the Exceptional Children's Department to increase communication and collaboration between general education and special education services. As summarized by the district's behavior specialist Ms. Smith,

> I would like to see a unified approach to tiered instruction, where all of the right people are at the table to problem-solving together in support of students. We are here to help kids, help schools. We need to look at this with a new lens to see if education is equitable for all kids and ensure that all kids are getting the help that they need.

## Summary

The following five themes emerged from the transcript data resulting from interview sessions with district-level leaders in Green Pastures Public Schools:

**1) Development of Teaming and Communication Structures.** In order to establish readiness for MTSS installation and build capacity for ongoing implementation, district leaders in Green Pastures Public Schools designated educators to lead the work at both district and school levels. District leaders appointed a District MTSS Coordinator, assigned MTSS Coaches to

schools, and formed district and school-based implementation teams. District leaders updated teaming structures to ensure collaborative problem-solving across tiers and areas of concern. Modifications to team composition and function were required to increase the effectiveness of teaming structures. Additionally, district and school leaders installed communication loops to provide all stakeholders with opportunities to receive MTSS information and provide feedback from the field. Connecting the work of various district-level departments was initially challenging, but with time, organizational revisions, and some personnel changes, district collaboration efforts began to improve, resulting in more cohesive MTSS implementation efforts.

**2) Evaluating Needs to Guide Professional Development.** Educators in Green Pastures Public Schools had a foundation understanding of three-tiered models of support given their previous experiences with RTI implementation. However, district leaders understood the importance of professional development and coaching in effectively leading a school change initiative such as MTSS. District leaders ensured that all professional development was aligned with the work of MTSS and provided various stakeholders with information regarding how MTSS directly pertains to their roles as teachers, administrators, or student support personnel. District leaders offered professional development through a blended model of face-to-face trainings, online modules, and embedded coaching supports to enhance the effectiveness of training opportunities. The District MTSS Coordinator assisted school-based teams with a general understanding of the MTSS model, methods for problem-solving, and technical assistance to support data analysis and interpretation.

**3) Assessing Resources to Support MTSS Implementation.** Green Pastures district leaders recognized that resources were needed to support academic, behavioral, and social-emotional components of MTSS implementation. They began by adopting the NC Star portal as a tool to help align MTSS with school improvement goals and provide a means for documenting

implementation progress. Furthermore, the district preventatively focused on strengthening core instructional practices to reduce needs for supplemental and intensive supports. Upon conducting a district-wide evaluation of needs, district leaders identified inconsistencies in resources such as universal screeners, diagnostic tools, and curriculum and intervention programs. School-based staff requested additional personnel to support MTSS implementation. The district began to acquire resources to fill gaps, but also offered schools autonomy to utilize resources and staff in ways that most effectively addressed the unique needs of their schools.

**4) Building Stakeholder Consensus Around MTSS.** Green Pastures District Leaders helped stakeholders to understand the intention of MTSS, but learned that educator beliefs, attitudes, and skills impacted their ability to install and sustain this new school initiative. Staff transitioning from RTI to MTSS encountered challenges as they experienced confusion regarding procedures, roles and responsibilities, and understanding of data analysis to guide educational decision-making. With the support of the District MTSS Coordinator, educators learned new language, new structures, and new ways of thinking in alignment with MTSS.

**5) Using Data to Support MTSS Implementation.** Green Pastures district leaders gained a better understanding of school needs by having schools complete MTSS belief surveys and self-assessments of MTSS implementation. These data, along with student outcome data, universal screening data, and EVAAS data identified resource gaps, planned for professional development, and informed instructional practices. Each of these themes aligns well with the NC MTSS Six Critical Components. A detailed discussion connecting MTSS implementation in Green Pastures Public Schools with the NC MTSS Six Critical Components is offered in Chapter VI as I answer each research question.

# CHAPTER V

## PERCEPTIONS AND EXPERIENCES OF SCHOOL-BASED EDUCATORS

In Chapter V, I provide a summary of the MTSS implementation experiences shared by school-based educators from three schools within the Green Pastures Public School District. I have outlined the consolidated results of 11 interviews and two observations. Additionally, this chapter contains a brief demographic overview of each school participating in the research study. I have identified several themes through the analysis of the school-based interview transcripts, observation data, and the review of MTSS implementation documents:

- Establishing Readiness for MTSS Implementation
- Development of Teaming and Communication Structures
- Analyzing Core Instructional Practices
- Building Intervention Systems
- Assessing MTSS Implementation Efforts

The remainder of the chapter provides a narrative of my discussions with the educators interviewed and includes information obtained through my observations of MTSS team meetings in one school. Each section describes the perceptions and experiences of staff members concerning MTSS installation and implementation in their respective schools, within the context of these five underlying themes.

### School Demographic Profiles

I selected three schools for study from the recommendations provided by district-level leadership. These schools are small, traditional schools that serve elementary school children in grades kindergarten through fifth grade. The state of North Carolina categorizes both Deep Well

Elementary and Whistlestop Elementary schools as Title I schools due to a high percentage of students experiencing poverty. Although Mulberry Elementary was formally a Title I school, the percentage of students receiving free and reduced lunch recently dropped below 40%. Therefore, Title I funds and services will not be provided in the 2019-2020 school year.

The majority of students in these schools are from rural, white communities. These schools have experienced a great deal of change over the past 10-12 years. Traditionally regarded as schools of middle-class families, the population in this rural area decreased by approximately 20% when one of the leading local employers closed due to bankruptcy. Many families had to relocate to other towns in order to obtain jobs at that time. Now, approximately 70% of the students at Whistlestop Elementary qualify for free or reduced lunch. Deep Well Elementary is described by staff as "a low-income school with children living in poverty." One teacher elaborated, stating,

> We have many students living in broken homes, kids that are being raised by grandparents or great grandparents or siblings. We have a lot of students on free and reduced lunch. We also have a great deal of students that have not been in a preschool setting, or even in daycare, so they have not been exposed to peers before arrival for kindergarten.

However, in the last few years, the number of minority students has gradually increased. Interestingly, the percentage of Hispanic students has approximately doubled in the last 2-3 years as an emerging local industry has gradually brought new families back to the community. In terms of racial and ethnic distribution, Deep Well Elementary students are identified by parents in the following categories: approximately 65% Caucasian, 14.5% Hispanic, 13% African American, 7.5% Other or Multi-Racial. The demographic composition of Whistlestop Elementary is approximately 68% Caucasian, 20% Hispanic, 9% African American, 3% Other or Multi-Racial. The current demographics for the Mulberry Elementary school population is

approximately 74% white, 12.5% Hispanic, 5% African American, and 8.5% Other or Multi-racial.

Participants interviewed noted that staff maintain a high sense of loyalty to schools in the area and typically spend the majority of their teaching careers at each of these schools. Retirements account for the small amount of staff attrition. Table 5 provides a summary of demographic information regarding each of the schools in my research study for the 2017-2018 school year.

Table 5

Demographics of Schools Under Study

| | School | | | |
|---|---|---|---|---|
| Demographic | Deep Well | Whistlestop | Mulberry | State Average |
| Title I | Yes | Yes | No | |
| Number of students | 255 | 324 | 328 | |
| Economically disadvantaged students | 47.8% | 52.5% | 38.9% | 44.3% |
| Teacher turnover rate | 12.8% | 4.2% | 7.3% | 13.0% |
| Highly qualified teachers | 94.9% | 97.0% | 96.4% | 88.9% |
| Teachers with more than 10 years of experience | 65.0% | 83.3% | 59.3% | 49.8% |
| School performance score | B/71 | C/66 | B/71 | |
| Growth | 83.3/Met | 85.7/Exceeded | 81.3/Met | |

## Establishing Readiness for MTSS Implementation

Each of the schools participating in this study explored their readiness for the adoption of multi-tiered systems of support during the 2015-2016 school year as part of a district-level roll-out that involved all elementary schools within the Green Pastures School District. During their first year of MTSS exploration, the district hired an MTSS Coordinator to lead the efforts toward MTSS implementation. Before this, these schools, like other schools in Green Pastures Public

Schools, implemented RTI (response to instruction) as a framework for identifying student academic concerns and providing instruction to address student needs. According to the participants interviewed, many school-based educators perceived RTI implementation as an unsuccessful educational initiative. Therefore, educators responded with mixed reactions when the district initially communicated messages regarding the replacement of RTI with MTSS. Expressing dissatisfaction with RTI implementation, some educators were reluctant to implement a new educational change initiative based on the same three-tiered model as RTI, while others were excited to abandon RTI in its current form and try something new. One Deep Well Elementary educator commented,

> When I arrived, they were doing RTI and there was a nightmare of folders that were passed from teacher to teacher. Any child that was below grade level had a folder [for monitoring student interventions and progress]. Everyone was so wrapped in the paperwork that they forgot the big picture of things. So with MTSS, we kind of came in with a clean slate. We should have just had a bonfire and just started all from scratch!

Despite the perception of RTI as an unsuccessful initiative, previous experiences with RTI and PBIS (a three-tiered approach to behavioral problem-solving and intervention) provided school-based staff with an understanding of the three-tiered framework and the essential components of MTSS. This knowledge served as a springboard for propelling forward the work of MTSS. The following paragraphs describe the experiences of school-based staff as they shifted from an RTI framework to using MTSS as an overall school improvement framework.

**Professional Development**

With the acquisition of a district-level MTSS coordinator, members of Deep Well, Whistlestop, and Mulberry Elementary participated in structured professional development sessions. Using a combination of face-to-face trainings, online training modules, and professional development mini-sessions embedded within PLCs, educators learned more about

the installation of MTSS in their schools. The principal of Mulberry Elementary, Ms. Mitchell, recalled her school's initial training experiences:

> Ms. Smith [the district MTSS Coordinator] was added as a new position. That was huge for us because it made someone in our district the expert, someone with a focus on MTSS. And she trained us, and then we came back and trained our school to a degree. But she was also largely involved from school to school, with [in-house] trainings.

According to school staff interviewed, as schools prepared for MTSS installation, they identified the need for a school level MTSS coordinator/coach. District-level leaders provided schools the autonomy to determine a staff member to serve as the MTSS Coach for each site. Each of the schools selected their instructional coach to serve as the school-based MTSS Coach and to attend MTSS training sessions. Over time, the district shifted away from providing MTSS professional development to only MTSS coaches and expanded training sessions to include other school stakeholders. MTSS team trainings included the schools' instructional coach, counselor, reading specialist, and school principal. Ms. Mitchell noted how professional development evolved, stating,

> It started off with just MTSS coaches from each school, and then it evolved into MTSS teams. At this point, we have MTSS teams that participate in training sessions with Ms. Smith. Now that we have the basics under our belt, we have specialized into teams—elementary, middle, k-8, and high school teams.

MTSS coaches and team members from each participating school met with Ms. Smith monthly. Ms. Smith provided MTSS school teams with general information about the MTSS framework, including recommendations for creating teaming structures to support MTSS, building a master schedule to incorporate a three-tiered framework for school improvement, and suggestions for examining the effectiveness of core instructional practices. She also provided schools with technical assistance and coaching specifically focused on data collection and

analysis to support MTSS problem-solving efforts. Ms. Smith led MTSS coaches through a series of three training modules developed by NCDPI which guided schools on establishing readiness and sustainability for implementation of MTSS, building intervention systems, and the evaluation/identification of specific learning disabilities. School teams also completed online coaching modules prepared by Ms. Smith. School-based implementation team members were deemed responsible for carrying information back to their respective schools and replicating the professional development with their staff through activity-based instruction and modeling.

Additional to MTSS team training sessions, Ms. Smith, MTSS District Coordinator, offered technical support through consultative services. According to staff interviewed, Ms. Smith frequently attended meetings with school leadership team members to facilitate MTSS readiness and installation. Through these integrated sessions, Ms. Smith would provide teams with the opportunity to reflect on current practices while generating a vision and plan for MTSS implementation. School-based leaders engaged in discussions to promote a better understanding of the significance of MTSS. They then discussed ideas for revising teaming structures as they moved from the implementation of an academic-based RTI focus, to an integrated framework of supports that included instruction and intervention for academics, behavior, attendance, physical health, and social-emotional wellness. Ms. Smith provided suggestions for setting up effective teaming structures and guidance on how to best facilitate problem-solving conversations. She assisted school leadership teams in examining data to identify concerns and developing focus areas for school-wide improvement. Ms. Smith also coached staff as they explored effective methods for identifying student needs, determining appropriate intervention strategies, and documenting student progress. She assisted teams with using this data to inform educational decision-making for grade-level and individual student needs. Under Ms. Smith's leadership, school-based problem-solving teams focused on ways to improve core and tiered instructional

practices and interventions for various areas of concern, including academics, behavior, and attendance. The school counselor at Whistlestop, Ms. Grayson, commented on Ms. Smith's support as they problem-solved around non-academic issues:

> In the beginning, Ms. Smith would model for us how to talk through a tiered plan. She would show us how to lead a problem-solving meeting. She modeled how to work with our school based MTSS core team. Now we are doing a lot of work with social-emotional health, and behavioral intervention processes, so we have shifted our focus a bit this year. A lot of our meetings have been about defining Tier 3 behavior, how to refer a child for Tier 3 behavior, and when do you need a behavior specialist. Recently we were lucky to receive the DESSA screener. So she has been working with us a little bit on that too.

As schools became more comfortable with these problem-solving sessions, Ms. Smith gradually decreased on-site training sessions, offering coaching supports on a consultation basis. In turn, school-based leadership teams embraced the responsibility of providing school-level coaching. MTSS Coaches and other MTSS team members communicated the information acquired through these blended PD opportunities to all school-based staff through formal professional development sessions and via integrated conversations in leadership teams, PLC meetings, and staff meetings. Deep Well's MTSS coach, Ms. Davis, describes the integration of MTSS into school-wide improvement efforts,

> To discuss MTSS has just become second nature to us. In our leadership team meetings, we use the NC Star Platform to record our school improvement goals and progress, so that keeps MTSS at the forefront of our conversations. We also talk about it at staff meetings, although it is not a separate agenda item. It is just built into what we do. Ms. Smith also created an MTSS canvas course for us that everyone completed and we can reference for resources when needed. She is always looking for ways to make professional development and our understanding of MTSS more manageable.

In addition to attending the monthly MTSS team meetings, MTSS/instructional coaches also participated in monthly instructional coach meetings. These all-day sessions provided professional development and coaching that embedded best practices for MTSS implementation

including methods for strengthening core instructional practices. Many of these sessions focused on promoting growth in reading and also included trainings on the use of technology to support classroom instruction. According to those interviewed, the new Director of Curriculum and Instruction leads these meetings and makes a concerted effort to bring alignment between MTSS implementation practices and the work of the Curriculum and Instruction Department. Interviewees noted that the C&I Director also collaborates with the MTSS Coordinator to increase communication between departments at the district office and to consistently promote the work of MTSS. "He has gotten feedback from multiple coaches and asked us what changes were needed to support MTSS," stated Ms. Wilson, the Mulberry MTSS Coach. With this effort, the District MTSS Coordinator is also included in the instructional coach meetings and holds a standing spot on the meeting agenda to share information with all instructional coaches. Furthermore, to better support schools within the MTSS framework, the professional development offered during these sessions is now differentiated based on the similar needs of schools and by school level (i.e., PD includes elementary, middle, and high school breakout sessions).

**Changing Mindsets, Beliefs, and Attitudes**

As part of the evaluation of each school's resources and needs, MTSS leadership teams determined that work was needed to promote school-wide readiness for MTSS implementation. MTSS requires a sense of shared responsibility for all students and the belief that all students are capable of growing toward academic, behavioral, and social-emotional expectations. Deep Wells, Whistlestop, and Mulberry Elementary Schools surveyed all staff members using the NC MTSS Beliefs survey to gain better understanding of the attitudes of the educators in their buildings.

Given the results of the survey, at least one participant from each school voiced concern that the beliefs and attitudes of some staff members may hinder their ability to fully implement MTSS. Additionally, a few participants recalled situations in which their leadership team members worried that previous undesirable experiences with RTI may undermine the use of the MTSS framework. According to Ms. Davis, MTSS Coach at Deep Well Elementary, implementing MTSS required that school staff understand why MTSS was essential to their school and possess beliefs and attitudes that aligned with the work:

> We had to de-program a lot. We had to unlearn things. When I first came here, we were doing RTI. Most of the people in the room saw RTI as a pathway to EC services. That has been the biggest shift for us and we are still working on that. We're a lot better than we were, but still, sometimes people do not want to come to the core MTSS team unless they think a kid is going to be referred to EC. I have to remind them that is not what MTSS is for. It is not about testing. It is about problem-solving to support student needs.

Some participants shared examples of the adverse impact of staff members who adopted a deficit-based approach to understanding the gaps in student performances. Ms. Davis further described how MTSS implementation also required teachers to self-reflect on their instructional practices and move toward effectively using data to examine student needs:

> Many teachers used to focus on the shortcomings of the struggling learner or the child's home environment when a child was not performing well in the classroom instead of examining their role as the instructor or facilitator. When we would present data on a student in our teams, many times we would see a teacher respond defensively. We would see panic if a student was below grade level. Teachers would take it personally if a student was not making growth. I feel like MTSS has helped us to shift away from that. We are now looking at the whole picture. We are reflecting on how we might refine our teaching practices, where we are as a school, and where we need to go in terms of identifying [student] needs and tailoring interventions. We are trying to make reflection a part of our daily practice.

School leadership teams used the results of the NC MTSS Beliefs Survey to determine the current state of school climate and teacher mindsets, and tailor professional development accordingly. The following paragraphs provide a detailed example of how school leadership used professional development activities to promote the mindsets necessary for MTSS installation in one of the schools studied.

**Building Stakeholder Buy-in: Mulberry Elementary.** In order to gain better buy-in, the school-based MTSS team at Mulberry Elementary decided to bring in professionals from outside of the school to conduct activities to build the climate necessary for promoting effective MTSS implementation. With the assistance of an external RTI/MTSS expert and a school psychologist, an anonymous perception survey was created and distributed to school staff. The PD facilitators separated individual survey responses into sealed envelopes. At the MTSS training session, staff members took turns opening envelopes and reading the anonymous responses to the group, allowing the reader and the audience to respond. This activity highlighted the beliefs and attitudes of staff members, and served as a conversation starter, opening up discussions that revealed why the new school initiative was needed to support students and how a shift in mindset would be required for MTSS implementation to be successful.

A follow-up activity was conducted in classrooms across grade-levels at Mulberry Elementary. To develop better intervention strategies for addressing the needs of students, the instructional coach provided teachers with opportunities to video students in their classrooms. Teachers had previously identified these students as those with behavioral difficulties or students who failed to engage during instruction and class activities. Following the video, the facilitators asked teachers to complete a three-part activity. During the first part of the activity, they were to focus directly on the child and describe behaviors. The second part of the activity focused on examining the curriculum, instruction, and environment surrounding the child. This led to a final

self-reflection activity, in which the teacher was asked to view themselves in the video and discuss how their teaching practices may impact the performance and behaviors of the child.

Those participating in this research study referred to the perceptions activity and video analysis as being "powerful" and a "game-changer for our school." Additionally, participants from Mulberry Elementary report that they perceive beliefs and attitudes to have improved a great deal since the facilitation of these activities. One participant estimated that approximately 2/3 of the Mulberry Staff now have solid understanding of the reasons for MTSS implementation and are working diligently to acquire the skills necessary to promote MTSS as the school-wide framework for meeting the needs of students.

**Building Connections between Staff and Students.** The Mulberry Elementary leadership team also emphasized the importance of building direct connections between staff and students. A final professional development activity was conducted with staff to identify students in need of adult support. This activity was completed in two separate portions and required student participation. All students in specific grade levels were asked to identify the name of an adult in the school building with whom they felt a positive connection or relationship. Examples of question prompts included: (a) "What adult in the building do you feel that you can count on?"; (b) "If you had a problem, who in the school would you talk to?"; and (c) "Who at Mulberry Elementary do you feel that you can count on?"

After collecting student responses, the school administrator printed photos of every child in the grade level and posted the photos across the walls of the staff development room. Facilitators placed a pink sticker on the back of the photos of students who reported feelings of connection to staff members. During the professional development session, the facilitators gave staff green stickers and asked them to place a green dot on the photo of each child with whom they felt that they had built a positive relationship. Examples of prompts included: (a) Which

students do you feel that you know well and have an established relationship with?; and (b) Which students do you think would come to you if they needed assistance with an academic or personal problem?

Facilitators then instructed teachers to conduct a silent walkthrough, examining the dots on each side of the photos. Following the gallery walk, teachers engaged in group discussions and identified students that had no pink or green dots (meaning neither the student nor teachers reported having an in-school connection). This activity led teachers to discuss the needs of their students in terms of educational equity. Teachers reported that many of the students with no dots were students considered by staff to exhibit behavioral or social-emotional needs. Teachers were then asked to generate action steps to address the lack of connection between some students and staff. The educators participating in the activity decided to select a focus student and work during the school year to get to know that student better and create an in-school relationship for that child.

The instructional coach, Ms. Wilson, shared the emotional impact of this activity with me, stating, "There were tears. People cried. It was so powerful. This activity brought awareness to the staff." Not only did the activity shift the attitudes of teachers during the session, but over time, the school began to feel the impact on students. As students and teachers began to form relationships, students began to open up conversations with teachers more freely. As a result, students were confiding personal information about their circumstances, feelings, and mental health with staff. According to Ms. Wilson, with increased awareness around student needs, the number of risk assessments conducted began to increase:

> We had an onslaught of risk assessments because it brought awareness. The kids recognized that the adults in the building cared about them. They began to talk about the things that had happened to them or their desire to harm themselves. All of these crazy things were happening. We realized that sometimes things may get worse before they get better. The kids were coming to us and we had to do something. We had to train staff

> about being a mandated reporter. In the end, it was all worth it, because we were able to discover things that we did not know about the children that we work with every day. We identified kids that needed help.

This activity precipitated the organization of structures and development of curriculum to support students with social-emotional and behavioral needs. Teachers and staff also needed guidance and training for working with students experiencing trauma or mental health issues. With input from the school's leadership team, the principal at Mulberry Elementary vetted resources for addressing the social-emotional needs of students. The team decided that teachers should deliver a core social-emotional curriculum to all students at Mulberry Elementary instead of focusing solely on individual students in need of intervention. Therefore, the team adopted a program called Second Steps to be utilized by teachers in all classrooms. Furthermore, a universal screener to examine the behavioral, emotional, and mental health needs of all students in the school was adopted. This screener, called the DESSA, is used as a comprehensive system for social-emotional learning and provides educators with assessments and progress monitoring tools to examine the needs of students. Additionally, teachers use the program as a resource for social emotional instruction and intervention strategies.

### Development of Teaming and Communication Structures

As part of initial MTSS training sessions, Ms. Smith, district-level MTSS Coordinator, challenged school-based MTSS coaches and other educators to consider the infrastructure required to build the capacity in their schools to install, implement, and sustain MTSS. Through consultation services from Ms. Smith and with guidance from school principals and MTSS coaches, school leadership teams developed and staffed the teaming structures required to support MTSS problem-solving. School leaders reviewed the teams that were currently in place at their respective schools and updated the existing structures to support each tier of MTSS problem-solving (core, supplemental, and intensive needs). These basic teaming structures allowed for

communication, collaboration, and problem-solving across areas of concern, tiers, and grade levels.

**Tier 1 Teams**

**School Improvement Teams (SIT).** The State of North Carolina law requires (G.S. §115C-105.27) that all public schools have a team in place to develop annual plans for school improvement. This team, often referred to as the SIT (school improvement team), is composed of peer-elected representatives that include the school administrators, instructional personnel, teacher representatives from each grade level, student support staff, teacher assistants, and parents. By law, school improvement teams are responsible for creating and monitoring school improvement goals. With the implementation of MTSS, all schools chose to use NC Star as a platform for structuring school improvement meetings and as a database for recording progress on school improvement goals and action-steps. As part of the requirements of NC Star, school leadership teams meet two times per month to review school improvement goals, also called indicators. All three schools chose to use their SIT team as a part of their MTSS Tier 1 or Core Problem-Solving Team. However, the composition and function of the SIT changed slightly in alignment with the MTSS framework and the adoption of NC Star. Several stakeholders were added to ensure that the MTSS coach, school counselor, math specialist, and reading specialist participated in school-wide problem-solving sessions. With these changes in mind, schools chose to rename SIT and now refer to this team as the School Leadership Team or SLT.

**School Leadership Teams (SLT).** The School Leadership Team focuses on school-wide improvement practices for attendance, academics, behavior, and social-emotional needs. This team examines school wide performance data (EVAAS, climate surveys), school-wide discipline summaries (ODRs, OSS, ISS), attendance data, universal screening data, and student outcome measures (NC check-in, EOGs) to assess progress on goals in the NC Star portal. School

leadership teams also develop the master schedule based on student outcome information, create the structures to support intervention and enrichment opportunities, and provide professional development to staff specific to their roles and responsibilities in the context of MTSS. Additionally, the SLT is responsible for evaluating the resources needs of their schools, and effectively allocating MTSS funds, distributing staff, and acquiring curriculum and programs.

**Unique Teams to Support MTSS.** Due to the formal responsibilities of the SLT team (e.g., SIT requirements, NC Star reporting, elected membership), all three of the schools studied felt it necessary to create other teams or subcommittees to specifically focus on the development of MTSS procedures and acquisition of needed resources. Each school approached the creation of their MTSS Tier 1 teaming structures in slightly different ways.

Deep Well Elementary created a small administrative team consisting of the principal, assistant principal, and instructional coach. This "admin" team meets weekly to discuss specific staff and student issues, behavior, and school-wide implementation needs. Additionally, the administrative team keeps an eye on the progress of the school improvement indicators in the NC Star platform and generates agenda items for the upcoming SLT meetings.

Mulberry Elementary created two separate teams specifically chosen to focus on MTSS installation and implementation. The primary goal of the first team, referred to as the MTSS team, is to create structures to propel the framework forward in upcoming years. The team began last year with work to better the quality of classroom academic instruction. This year, the MTSS team focused on building Tier 2 intervention systems. Additionally, this team examines lists of students identified as "at-risk" and generates ideas for action steps to support them. Representatives on the MTSS team research discussion items prior to the MTSS team meetings, then share information and data with grade-level peers to further problem-solving conversations.

A second team at Mulberry Elementary, referred to as the "Spokespeople," is composed of non-elected staff and meets bi-weekly. The instructional coach, school counselor, reading specialist, AIG teacher, EC teacher, Speech therapist, ESL teacher, and administrator make up this team. According to the instructional coach, Ms. Wilson, the name Spokespeople has significance to school improvement planning: "So I pulled them together and said, you are the spokes of the wheel at our school. If any of you are not informed, aware, or feeling supported, then we get a flat tire. So they named themselves the Spokespeople."

According to Ms. Wilson, this group supports teachers with core instruction, while also developing the infrastructure for tiered interventions, data collection and analysis, and problem-solving teams:

> The purpose of this team was multi-fold, but I wanted them to be aware of what other people were doing in the school instead of working in silos. With that awareness, they can support classroom teachers with core instruction. For example, we pull up classroom lesson plans and break into partners. For 8 minutes we talk about how we could provide additional supports for this lesson. What would we do for our EC students? How would we scaffold that? We add these adapted lessons to a bank of resources. The idea is that they go in, share it with the classroom teacher, and do some embedded professional development in the classroom rather than pulling kids out of the core class. They also help with observations.

**Quarterly Data Dive Teams**

Each of the participating schools created a separate team to examine school-wide and grade-level data to determine core instructional needs and identify students at-risk in various areas of concern (academics, behavior, attendance) using universal screening data. These quarterly data team meetings are scheduled with grade bands. K-2 teachers, followed by 3-5 teachers, meet with their principal, MTSS/instructional coach, and support service staff (e.g. social worker, school counselor, and reading interventionist). At quarterly data review sessions, the team begins by examining classroom and grade-level proficiency data. The MTSS Coach

compiles the data on a spreadsheet and presents it to the group so that each grade level can track student performance on grade-level screeners, benchmark assessments, and common assessments. Additionally, the team reviews trends in class attendance and behavior. When the majority of students in the classroom appear to meet benchmark proficiency and show growth as expected (greater than or equal to 80% of students showing response to the current instruction), the data team then shifts focus to identifying students that need supplemental or intensive interventions.

**Professional Learning Communities (PLCs).** At each of the schools studied, PLCs also serve as a Tier 1 team, examining the effectiveness of core instructional practices specific to each grade level. These small grade-level teams are composed of the instructional coach, the principal, reading and math specialists, and teachers from their respective grade levels. PLCs, which meet on a weekly schedule, collect and analyze data regarding the performance of students on student outcome measures such as classroom common and formative assessments, benchmark assessments, state check-ins, and end-of-course testing (EOGs). Each of these assessments provides the PLC team with information on student progress toward state-determined standards for core academic areas such as literacy, math, science, and social studies. The PLC teams disaggregate assessment data to determine specific standards which are particularly problematic for students across a grade level, and then adjust curriculum, classroom instruction, and pacing to promote student growth on that standard better. Additionally, this weekly PLC time is used for collaborative planning and as an opportunity for the instructional coach to provide professional development or coaching. These sessions may include training on differentiation techniques, the use of technology tools to support instruction, and mini-lessons on data analysis.

**Tier 2 Teams**

With the introduction of MTSS, the PLC has taken on new responsibilities aligned with Tier 2 problem-solving. In addition to refining instructional practices, the grade-level PLC also

uses universal screening information to develop instructional/intervention plans for students. When the team identifies performance gaps across a classroom or grade level, they discuss methods for modifying the classroom instruction, curriculum, or environment to improve student performances. The team may also discuss plans for pushing additional supports into the classroom or grade-level.

The PLC seeks to identify any students that demonstrate patterns of difficulty with grade-level standards and determine the foundation skills necessary to promote student understanding of core content. This team conducts a data review specific to each student of concern, examining grades, current and historical academic data, behavioral data, attendance data, and previous interventions attempted. Once the team can pinpoint the priority area of concern and specific target skill deficits, the data team will refer students for Tier 2 (supplemental) or Tier 3 (intensive) supports. Using information from multiple sources of data, such as diagnostic assessments, staff assign students to interventions groups based on specific skill-based needs.

The PLC then develops an instructional/intervention plan for the students in each group, explicitly outlining the intervention curriculum to be used and specific intervention schedule including the number of minutes per session and number of sessions per week. The PLC assigns a specific staff person to provide the instruction following the group intervention plan. The PLC Tier 2 Team is also responsible for monitoring the progress of the students within the intervention group and determining if instructional plans should be modified based on the response of each student to the intervention. For students who are receiving interventions, but are not making adequate progress, the PLC may recommend referrals for more detailed diagnostic assessment or intensified (Tier 3) interventions.

**Kid Talk Teams**

School leaders reserved a separate meeting date for discussing the needs and progress of students assigned to individualized or group interventions. Participants refer to these meetings as Kid Talk days or Data Talks. Kid Talk Days are held once per month instead of a regular PLC meeting or during a separate teacher planning time. In general, this team is composed of the MTSS coach(s), the reading interventionist, and grade-level teachers, but may also include student support staff such as the counselor or social worker. Although these are typically grade-level meetings, they are sometimes organized into k-2 and 3-5 teams. This combination of horizontal and vertical problem-solving promotes shared responsibility for instruction and intervention among grade levels.

During this meeting, team members review student benchmark, diagnostic, and progress monitoring data of students receiving tiered supports for academics and behavior. In addition to examining individual student progress, the teams compare the student's progress to the progress of his/her peers in the class and intervention group. This session provides educators an opportunity to review student intervention plans and use data to determine if interventions are working appropriately to improve student growth. This team may ask for additional screening (e.g., hearing and vision) or the collection of diagnostic assessment, and may problem-solve for potential instructional changes to address the student needs. The team will determine whether interventions should be continued, modified, or if more intensive levels of instruction are necessary to support the learner. This team is also responsible for partnering and communicating with parents, psychologists, district support personnel, and community agencies as they work to make effective educational decisions to address student needs.

**Tier 3 Teams**

The final component of the MTSS problem-solving continuum is the Tier 3 Team. At Deep Well Elementary, this team is called the MTSS Core Team. At Whistlestop Elementary, educators call the group the Individual Problem-Solving Team. MTSS coaches schedule Tier 3 team meetings every 4-6 weeks or as needed. Although the name and meeting frequency for the Tier 3 Team varies from school to school, the function is the same. The Tier 3 team serves as the problem-solving team for students in need of intensive levels of instruction and intervention support. During this meeting, educators and support staff directly relevant to the child and specific to the area of concern, discuss the needs of individual students and monitor the progress of the student over time. Team members may include the child's classroom teacher, the MTSS coach, EC teacher, and any relevant district support persons such as the behavior specialist, nurse, psychologist, and social worker. Additionally, parent participation is essential. This team is responsible for partnering and communicating with community support agencies such as physicians or mental health providers as they work together to make effective educational decisions to address individual student needs.

Tier 3 team discussions focus on students receiving Tier 3 interventions but not making progress sufficient to close instructional gaps and not responding in a way that demonstrates adequate growth as evidenced by progress monitoring data. During these team meetings, stakeholders review the specific needs of the child using recent progress monitoring or diagnostic data and provide individualized support in the form of academic, behavioral, or social-emotional intervention. If this team feels that the student needs support beyond those offered through the provision of Tier 3 services, the team may elect to make a referral for consideration of Section 504 or Special Education eligibility.

**Communication Pathways**

School leaders continually assess the strengths and needs of the school to ensure the utilization of the most effective instructional practices. They also must confirm that staff consistently follow MTSS procedures for providing tiered supports and analyzing data. In the three schools studied, school staff meetings provide one venue for shared communication between the administrator, school leaders, and other educators. Staff meetings provide time for school and district updates, mini-professional development sessions, and collaboration time for staff across grade levels. However, participating stakeholders noted that staff meeting agendas fill quickly with large amounts of information, and there is little time for in-depth discussions. Furthermore, many educators do not feel comfortable providing feedback in this large group setting. Therefore, participants noted that smaller, school-based teams were the most effective means for communicating and receiving information.

School-level MTSS teams are composed of multidisciplinary stakeholders with representation from across grade levels and departments to ensure effective communication between each teaming structure. Members of the school leadership team share staff feedback in their grade-level or department PLCs and also bring appropriate data to facilitate problem-solving discussions. Some team members, such as the MTSS coach, serve on all three levels of teaming (Tiers 1-3) and can provide each team with updates from other problem-solving sessions. Also, team members store meeting minutes and agendas in shared applications such as Google documents and the NC Star portal, which provide shared access.

Ms. Peters, Whistlestop Elementary Instructional Coach, commented on the importance of effective communication systems:

> I think one thing that has been very helpful is reporting back to the staff. The members of the leadership team are responsible for carrying information back out to the school. We share walkthrough data, school summary data. It is important for them to see the big

> picture so that we can have common conversations. I'm trying to keep teachers informed from the school-wide level, instead of just from their classrooms, so that they can have access to the big picture.

Although school leadership teams have worked diligently since the initiation of MTSS to install the structures necessary to sustain this school improvement effort in the upcoming years, some participants perceive the need for improved communication at the school level. For example, some participants reported that teaming structures are always in the process of refinement. According to these participants, there remains some confusion among staff regarding the roles and responsibilities of each team. Some teams serve multiple functions, while the activities and discussions of the various teams may also overlap at times. Additionally, stakeholders noticed that some staff members are more engaged and participatory than others, with a few team members taking on the bulk of the work load.

With concerns that particular stakeholders may burn out from carrying the majority of team responsibilities, the school leadership team at Mulberry Elementary discussed plans to better define the functions of each team and assign specific roles and responsibilities to team members. Moving forward, MTSS teams plan to refine these roles by designating particular staff members to collect and analyze data and assigning staff to implement and progress monitor specific NC Star indicators and tasks. Once the roles and responsibilities are determined, MTSS leadership teams plan to create a teaming map to illustrate teaming structures and the functions of each team.

Although all schools noted open and direct lines of communication with central office via the MTSS District Coordinator, several participants mentioned perceived issues with communication between departments at the district level. Noticing considerable changes in district departmental structure and turnover with district leaders, participants worried that resource acquisition, professional development roll-out, and other decisions were not always in

alignment with the goals of MTSS. One instructional coach, Ms. Davis, described the impact of the lack of communication between central office personnel, saying,

> We are given the opportunity to provide input, which I value, but sometimes our feedback gets lost. We may advocate for a certain program over another for MTSS intervention support or progress monitoring tracking, but it may be taken off the table because of cost or the person making the decision is not looking at the whole picture. Communication between departments and a joint focus on the use of the MTSS framework for school improvement is essential for successful implementation.

### Analyzing Core Instructional Practices

Early into MTSS implementation, leadership in Deep Wells, Whistlestop, and Mulberry Elementary schools recognized that the number of students identified as "at-risk" through universal screening was higher than current intervention structures could support. Initially, educators were concerned that there were not enough resources to provide interventions to students in need. However, after engaging in conversation with the District MTSS Coordinator, school-based MTSS teams determined that screening numbers were inaccurately high due to issues with core instructional practices. With this in mind, MTSS coaches redefined guidelines for core instructional practices to create consistent expectations across grade levels and classrooms. Ms. Mitchell, Mulberry Elementary Principal summarized the effort by saying,

> Let's make sure that we have solid instructional practices, then let's see who is not responding to those solid instructional practices. We have to fix that first. And until we fix core instruction, then we can't really meaningfully and thoughtfully be providing interventions to individual students because what they are getting in the classroom is not quality instruction. In the past with RTI, we focused on interventions when we really needed to be looking at our core instruction.

#### Addressing Core Instructional Issues

For over a year, instructional coaches within each school engaged teachers and support staff in research and discussions around the components necessary for quality core instructional

practices. To promote teacher buy-in and implementation fidelity, teachers at Whistlestop Elementary were tasked with designing instructional expectations for the school. The principal and instructional coach then delivered a series of professional development opportunities, providing teachers with direct training on the essential components of quality core instruction. The instructional coach modeled these components for teachers in the classroom and through mini-lessons in PLC meetings. Additionally, the instructional coach, along with other educators, provided coaching sessions that illustrated the use of co-teaching to increase the strength of core instruction and promote differentiation in the classroom.

**Assessing the Quality of Core Instruction**

In addition to identifying the essential components of effective instruction, MTSS leadership teams in each school developed a Core Walk Through tool which could be used to assess the quality of core instruction in the classroom. This tool was created with input from staff and is used by the principal and instructional coach, to conduct brief classroom observations and provide feedback to teachers. School leaders collect the data from the walkthrough observation into a spreadsheet and generate graphs that illustrate the staff implementation of the core expectations by examining focus areas such as differentiation and effective utilization of technology in the classroom.

Committed to strengthening core instructional practices, the school leadership teams share the core walkthrough data with staff regularly and document progress in the NC Star platform to ensure accountability and implementation fidelity. School leadership teams use the summary information collected in NC Star to inform professional development selection, resource distribution, and decisions around the master schedule and staffing. With a focus on strengthening core instruction, school MTSS teams hope to reduce the number of students identified in need of supplemental and intensive level supports and more accurately identify truly

at-risk students. Ms. Peters, the instructional coach from Whistlestop Elementary, commented on the effectiveness of the refinement of core instructional expectations, declaring,

> Now if you walk into a K-2 class in ELA, you're going to see the required components very clearly every day. This has helped us tremendously with MTSS because now we can focus on our core proficiency levels. In some instances, we went from identifying over 60% of students at-risk, to now we are hovering around 18-20% in most classes, which was the magic number that we are looking for.

**Changes to the Master Schedule to Support Core Instruction and Interventions**

Limited staffing resources required school leadership teams at Deep Well, Whistlestop, and Mulberry to creatively develop a master schedule that maximized instructional time for all students. This master schedule included protected time for core literacy and math instruction, allocated intervention and enrichment opportunities, and designated times for the provision of title I, ESL, and EC services. Additionally, new enhancement classes, such as Spanish and Freckle Lab (an opportunity for children to use an online tool for supplemental literacy support) were added to the weekly rotation to free up time for interventions.

MTSS leadership utilized the expertise of the staff in the school buildings to promote student growth. For example, Mr. Terry, principal at Deep Well Elementary, created teacher specialist positions for both core instruction and intervention supports. Staff members now teach a specific content area (e.g., math, literacy, science, or social studies) across grade levels. For example, one teacher may teach reading for grades k-2, while another teacher only teaches math to grades 3-5. To support the need for small group instruction, social studies and science teachers integrated with literacy and math classes to provide maintenance and enrichment activities to students that did not require intervention supports. These changes to teaching roles and schedules allowed for blocked core instructional time with the teacher or specialist, but also allowed for the

sharing of students across grade levels for specific skill intervention groupings for each content area and tier.

### Evaluation of Resources to Support Core Instruction

To support overall school improvement and quality instruction across tiers, school leadership teams conducted resource assessments, identifying gaps in resources and disparities in the distribution of staff, programs, and coaching supports. From this resource evaluation, school principals initiated the acquisition of new programs to support staff and students. The programs selected included core and supplemental instructional tools such as STAR Reading and STAR Math. These two resources provide individualized, computer-based instruction to students while also serving as a tool for diagnostic assessment and progress monitoring. Implementation of these technology-based learning tools required that all students have access to a computer; therefore, school leaders acquired enough laptops and iPads to provide 1:1 technology supports for students.

## Building Intervention Systems

In the 2017-2018 school year, MTSS leaders in Deep Well, Whistlestop, and Mulberry Elementary began to develop tiered instructional supports and intervention systems. According to staff, the district MTSS Coordinator Ms. Smith clarified the distinction between standards-based remediation for students within the context of core instruction versus skill-based intervention for students that need supplemental and intensive support to close learning gaps. Additionally, she provided practical systems for evaluating data to help staff gain a better understanding of student needs and growth. Through biweekly data review sessions in PLCs and monthly Core MTSS meetings, educators now more consistently identify student challenges across areas of concern, target specific skills to align with intervention assignments, and monitor the progress of the students participating in small groups or individualized tiered instruction.

Through these consultation sessions with Ms. Smith school teams identified and problem-solved through numerous implementation obstacles as described in the following sections.

**Using Data to Inform Decision-making**

Although educators at each of the three schools had previous experience with RTI, MTSS leadership teams noticed, through observation and facilitation of problem-solving meetings, that some teachers required additional technical assistance to support the analysis and interpretation of data for instructional and intervention planning. Staff needed to understand the importance of data-based decision-making in the classroom. The instructional coach at Mulberry Elementary, Ms. Wilson, captured the intent of data collection and analysis using a medical analogy:

> So when we come in, we are going to diagnose a child (identify the specific area of concern) and determine what medicine (educational intervention) they will need. They will take that medicine for 4-6 weeks. It is just like at the doctor's office. If you don't give the medicine every day, or you miss a day, or you change it in the middle of the treatment, then when they come back for their checkup, I cannot say whether the medicine did or did not work. I'm going to tell you to go back and try again. In PLCs, we are teaching them to diagnose an educational problem. When we look at mClass data, you don't just look at the composite score, you dig all the way down and you don't stop there. You dig even deeper until you are able to identify the real problem. This has been a big hurdle here at this school, because that's not how it had been done before.

Multiple stakeholders noted that teachers initially did not have clearly defined decision-making criteria in place for determining if a student needed supplemental interventions. With guidance from the MTSS coaches at their respective schools, staff constructed decision-rules to facilitate the identification of students indeed in need of supports beyond core instruction. First, each classroom teacher verified the overall percentage of students making progress toward grade-level standards for academics using classroom summary data for common assessments and benchmark testing. If greater than 20% of students in the classroom did not meet the standards, the PLC team redirected the conversation to focus on changes to strengthen core instruction within the content area of concern. Instead of assigning students to Tier 2 intervention small

groups, teachers re-addressed material that was difficult for students using differentiated core instruction in the classroom. Reading specialists and other staff members also supported core instruction through co-teaching and facilitation of differentiated instruction for grade-level content.

The 80-20% decision rule also applied to other areas of concern such as behavior, attendance, or social-emotional needs. If more than 20% of students in the classroom demonstrated the need for supports, as evidenced by attendance data, number of office referrals for discipline, or number of risk assessments, grade-level teachers established supports for all students in the class instead of singling out small groups or individual students. For example, teachers in classrooms with an abundance of behavioral issues revisited, updated, and retaught behavioral expectations for the entire classroom, while peers or behavior specialists conducted classroom observations to determine underlying issues with student engagement, teaching practices, or environmental factors. Classrooms plagued with chronic absenteeism made additional efforts to contact parents regularly and provide student incentives for attendance.

Mulberry MTSS leadership went one step further, determining a sequence for the provision of supports. According to their decision rules, problem-solving teams must address attendance before behavior, behavior before academics, and literacy before math. Once the number of students stabilizes with approximately 80% of students meeting proficiency, and teams can confidently say that core instructional practices are adequately meeting the needs of most children in the classroom, then teachers identify students that may require supplemental or intensive levels of support. The master schedule includes these supports during daily Intervention and Enrichment time.

**Installation of Intervention and Enrichment Time**

After creating decision rules for determining student placement in instructional groups, school-based MTSS teams continued the installation of tiered instruction and intervention systems. They created protected time in the master schedule, specifically allocated for the provision of tiered interventions. The schools established unique names for intervention time, with specific meaning for their schools (e.g., STAR time, DIVE time, RIME time). The scheduling of intervention and enrichment time (I&E) varied from school to school and ranged from 30-45 minutes of instruction. At each school, I&E time is staggered across the day, with each grade level assigned to a different block of time, so that additional staff can support each grade level. Teachers and specialists provide intervention groups across grade levels so that students may access off-level supports when necessary. For example, a second-grade student requiring extra assistance with a reading fluency skill offered by a first-grade teacher may transition to the first-grade reading intervention group during STAR TIME. In other words, intervention groups are assigned to students based on student need, not by grade level.

Within this instructional period, the majority of students work on core literacy and math curriculum through computer-based learning modules or complete enrichment activities for literacy or math. Teachers place students into intervention groups based on skill needs (e.g., sight word reading, reading fluency, or phonemic awareness). They then develop small group or individualized instructional plans for all students receiving Tier 2 or 3 supports. Since teachers share responsibility for interventions, students may receive this instruction with their own teachers or they may move to another teacher or interventionist, to work on those skills in a separate classroom or grade level. Additionally, the reading specialist may pull students from across grade levels to provide Tier 3 intensive literacy support groups using comprehensive reading programs such as Hillrap or HELPS.

Students assigned to these intervention groups typically work on specific skills for 4-6 weeks with the designated teacher or interventionist. Educators monitor student progress on a set schedule (e.g., monthly for Tier 1, every two weeks for Tier 2, or weekly for Tier 3), so that they can better determine instructional pathways to meet the student(s) needs. However, intervention and progress monitoring schedules may vary from school to school. For example, at Deep Well, interventions are typically provided for approximately 16-18 weeks (beginning of year, mid-year, end of year). This intervention duration is much longer than the state-recommended 10-week intervention, but Deep Well staff voiced the opinion that a longer duration is required to provide students time to demonstrate a response to the intervention and overall-growth. Staff review student progress at least monthly and modify the intervention plan of any student not showing adequate progress.

Although all three schools now implement I&E time across all grade levels, the installation of this time in the master schedule was logistically challenging. I&E is provided to grade levels at staggered times throughout the school day (morning and afternoon sessions) so that additional support personnel can access more than one grade or classroom throughout the day. This is especially important since these schools share most of their support staff (e.g. art teacher, Spanish teacher, AIG, ESL, Speech Therapist, and reading specialist) with other schools. Additionally, the number of teaching assistants available to supports classrooms is minimal. With the staggered I&E schedules, support personnel push into classrooms during the instructional block to support enrichment, remediation, and intervention groups. During this time, both classroom teachers and interventionists facilitate tiered intervention groups, with reading and math interventionists typically providing services to students with the most intensive (Tier 3) needs. Given the limited time in a school day, limited human resources, and the demand of meeting the service delivery guidelines outlined in each specific student's instructional/

intervention plan, staff members describe the master scheduling process as "putting together a puzzle without having all of the pieces in the box." In general, Tier 2 interventions are provided 2-3 days per week, while Tier 3 groups meet 4-5 days per week. With limited staff, it was difficult for students to access intervention groups following the service delivery guidelines. Therefore, MTSS teams allocated additional times in the master schedule for tiered instructional supports. For example, a student may be pulled from options such as music, art, library, or computer lab on a rotating basis once per week to obtain the intervention time.

Staff did not immediately support the designation of an intervention block. In fact, some staff expressed resistance when the idea was initially proposed. According to Ms. Stewart, a teacher at Deep Well,

> They are mostly on board now, but it required that they completely change their class schedules. Many had to give up planning time to make this work. They want their planning time. I want my planning time. So we decided to begin it on a voluntary basis. A few folks volunteered to give up time to lead intervention groups. After a while, when others began to see the benefit to children, they volunteered as well. It eventually caught on.

Those interviewed also noted that staff members were initially resistant to a structured intervention block because it required some educators to work outside of their traditional roles and responsibilities. To support all students during the intervention block—providing enrichment, maintenance, and remediation—schools engaged in an "all hands on deck" approach, pulling in every staff member to support intervention time. For example, the music teacher may push into a third-grade math group with the third-grade math teacher. Deep Well leadership quickly noted the discomfort caused by asking a teacher to teach a subject outside of their area of expertise, and adjusted intervention block expectations to alleviate this discomfort. The leadership team developing the master schedule began to strategically assign staff to provide intervention based on their preferences and strengths in order to gain buy-in. Instead of requiring

a resource teacher to provide a supplemental or intensive intervention outside of their area of comfort, that person would provide support to students engaging in self-guided instruction or computer-based lessons while the teacher certified in math provided the small group or individualized math instruction.

For many teachers, the implementation of an intervention block also required additional preparation and planning as a prescriptive intervention program was not available for all academic domains. However, one teacher noted that shared responsibility for all students helps to decrease the amount of prep time required for intervention planning. Ms. Stewart stated,

> Obviously, sharing kids is what it takes to make this work. As a teacher, I only have so much time. If I have 12 students needing 12 different interventions, there is no way that I can do it all alone. By sharing students across classrooms and grade levels, I only have to do one intervention group in my area of expertise and those students are getting exactly what they need. Some of my other students may go across the hall to get additional instructional support from another teacher on specific skills that they need. Getting to a place where teachers feel comfortable sharing students has taken time at Deep Well. It was probably one of our biggest hurdles. Three years ago, we would not even think of sharing kids. We felt that we were held accountable for the success of the students in our classrooms. Due to pressures from end of grade testing, EVAAS scores, my evaluation as a teacher, I felt that I solely was responsible for their learning. It made me panic. But we gave it a try, and then we looked at the data and the outcome was phenomenal. But it all ties back to the belief system—shared kids, shared resources.

When asked about shared responsibility for students through intervention groupings, the staff interviewed at Whistlestop Elementary described a different experience in which teachers worked collaboratively at quarterly cross-grade meetings to review student data and create groupings that best meet the needs of students. Although educators in some schools expressed a reluctance to share students with other teachers, those interviewed at Whistlestop Elementary report that there was very little hesitancy on the part of teachers to share students. There was never a formal decision or mandate for teachers to provide vertical intervention groups. Instead, teachers saw the need and volunteered to take students from other classrooms to work on skills

covered in their own intervention groups. Ms. Peters, Whistlestop's instructional coach, described the evolution toward shared accountability, saying,

> SLT did not initially start that. It was started naturally by the teachers in the middle of intervention discussions for students. I think the teachers saw that there were so many needs, in so many different areas. I think that they realized there was too much for one person to do so they decided to divide and conquer. So through the problem-solving process and conversations in that context, it just developed on its own. I think teachers were relieved when they realized they did not have to tackle all of this by themselves. It really is a collaborative effort and they are supporting one another.

Participants interviewed at Mulberry Elementary noted that I&E time is a work in progress, but appears to be helping students. Staff members report that after spending a year establishing expectations, the number of students in need of Tier 2 and Tier 3 interventions has decreased given the quality and intensity of the work to strengthen core instructional practices. Staff report that they feel more confident that students identified for supplemental and intensive supports are getting what they need in the classroom and that staff is better equipped to manage the number of students in need of intervention. Now they are focusing on improving the quality of the instruction provided in intervention groups, providing direct and explicit instruction with immediate feedback, and monitoring student growth and progress across time.

**Acquisition of Intervention Resources to Support Standard Treatment Protocol**

The installation of tiered intervention systems requires the strategic development of a complicated schedule and staff willingness to re-allocate instructional and planning time. Staff access to intervention resources to support specific skill instruction for small groups and individual students is also essential. Professional development sessions offered through NCDPI outline the need for the development of a standard treatment protocol for tiered interventions and supports. According to this recommendation, schools and districts should develop a prescriptive instructional guideline (or matrix) for each potential area of concern in core academics,

behavioral, attendance, and social-emotional learning. This standard treatment protocol matrix guides teachers in implementing supports, and includes a description of the curriculum to be used, instructional practices and strategies, environmental considerations, and data evaluation procedures.

With a general understanding of the MTSS intervention model in mind, school-based MTSS teams initiated the development of a guidance document that they call "the Go-To Guide." The Go-To Guide outlines the curriculum and resources that should be utilized by teachers and interventionists when providing small group and individualized instruction for each tier and specific area of academic concern. The school designed these guides in an attempt to add structure to I&E time and provide teachers with suggestions for research-based intervention options.

General guidelines specify that Tier 2 interventions should be provided 2-3 days per week for at least 20 minutes per day. For students in need of Tier 3 supports, the frequency of intervention increases to 4-5 times per week, but the amount of time provided for the intervention varies depending upon the selected intervention program. (e.g., HELPS and HillRap). Interventionists do their best to adhere to the program's prescribed instructional time requirements in order to provide the most effective intervention. Only a small number of students can receive this intervention since very few staff members are specifically trained in its use; therefore, it is reserved for students in Tier 3 with intensive needs.

The school MTSS Coaches offer embedded lessons on the use of standard treatment protocol for intervention matching during PLC time to strengthen teacher understanding of MTSS procedures. By collecting feedback from teachers across grade levels, the MTSS leadership team works to fill resource gaps to further support I&E time through the acquisition of research-based curriculum, materials, and programs.

In Green Pastures School District, schools are in various stages of progress concerning implementing a standard treatment protocol across domains. Some schools have not designed or implemented a clearly defined protocol, although school leadership has engaged in discussions regarding the acquisition of curriculum, programs, and tools needed to fill instructional gaps. In other schools, standard treatment protocols are in initial implementation phases for academic intervention, but MTSS leaders have not yet created guidance matrices for behavior, attendance, or social-emotional instruction. According to Ms. Davis, MTSS Coach at Deep Well Elementary, this is still a work in progress:

> I know that we are behind on that. We are supposed to be creating a matrix. It will be pretty easy to do it for K-2, but it gets blurrier at the upper grade levels. This is something that we are working on. We do Recipe for Reading for phonics. It is basically a second dose of the skill that they are needing. We do not do a lot for reading comprehension at the K-2 level. Reading comprehension intervention for Tier 2 starts at third to fifth grades. We have a couple of things that we are doing such as using graphic organizers and working through comprehension skills, but we do not have a system for comprehension at this time. [The interventionist] has identified a set of skills that the students need work on and she is doing the Tier 2 groups based off of the skills and then she designs the intervention to address those skills.

Unlike some school districts, Green Pastures Public Schools did not mandate a specific standard treatment protocol for literacy or math. Instead, the district created a pre-approved list of research-based intervention options, provided those lists to schools through training, and listed them on the district website. Ms. Smith, the District MTSS Coordinator, provided MTSS leadership with training and suggestions for developing their Go-To Guides; however, all schools in the district were given autonomy to create the standard treatment protocol that best aligned with the needs and goals of their respective schools. Each school selects from the menu of intervention options to develop a standard treatment protocol and then submits the matrix to the District MTSS Coordinator for approval.

The autonomy to create protocols unique to each school was especially important to schools since curriculum and resources to support core instruction and intervention vary across the district. For example, instructional resources to address phonemic awareness included Fundations, Recipe for Reading, and Letterland. However, non-Title I schools did not have access to funds to acquire these resources. Some staff, like Ms. Davis, instructional coach at Deep Well Elementary, expressed appreciation for the flexibility to design their own intervention protocol:

> I think that one of the reasons behind the way that we are doing this is that across this county, schools are just so different. It is a huge county, from rural to urban, so our needs are so diverse. I appreciate them allowing this autonomy, be we still have to be accountable and [justify] why our selection works for our school.

Given limited budgets and resources, educators understood the need for flexibility in designing their standard treatment protocol; however, some of the staff members whom I interviewed voiced concerns about the impact of the resource discrepancies on students across the district. Ms. Wilson, instructional coach, summarized these concerns:

> Unfortunately, not all schools are doing core literacy instruction the same way. What is bothersome to me is that you may have a student at one school that has been using Recipe for Reading, then they move to another area of the county, which happens often due to their parents relocating for jobs, and that program is not available in the new school. They may then be getting Double-Dose Fundations. It is not going to match their intervention experiences here.

However, staff members speculate that the district is looking to create consistency in curriculum and resources across the county moving forward. That idea also creates feelings of apprehension for staff, according to the Ms. Wilson,

> I think it is hard because schools have invested their own money and title I money in trainings. We wrote a grant for Orton Gillingham training for our teachers. We have invested so much money in Fundations materials and trainings. So schools are

> wondering, what will we do now? Will we now have to pay again to have everyone in the district have the same resources and training?

Although intervention resources are lacking in specific areas of reading, one educator expressed that they felt intervention time was functioning quite well due to the expertise of their staff. "We have a masterful ELA teacher in third to fifth grades, so each time we get ready to do interventions, she and the other ELA teacher at that level come up with good, solid interventions for each group." However, this educator understands that by relying on one or two teachers to create unique interventions, that the ability to sustain the supports over time is limited. "Susan will retire soon. It's going to be an issue. We have to think about that. We definitely need to get something more structured in place soon."

Concerning math intervention, staff noted that they were better resourced, with one instructional coach saying, "We've built up more math materials. We have 'Do the Math' kits that we have purchased and Ms. Smith bought some for us as well. So we have a little more in math resources than we do in reading."

**Issues with Intervention Planning and Progress Monitoring**

As staff worked to create the Go-To Guide for core instruction and intervention, they recognized the need for diagnostic assessment tools, progress monitoring tools, educational programs, and intervention resources. Teachers in grades kindergarten through third are currently using NCDPI provided Amplify resources, also referred to as mClass, to assess student performance in literacy. These resources contain curriculum-based measures and assessments to estimate reading levels. Administered three times per year (Fall, Winter, Spring), mClass is currently used by teachers and staff as a universal screener to identify students at-risk in reading and as a progress monitoring tool for students in Tier 2 and Tier 3 literacy intervention groups. However, the state does not provide Amplify resources for all students in grades 4 and above.

Additionally, during the 2018-2019 school year, the textbooks used for reading assessments were changed along with assessment leveling.

Therefore, educators in Green Pastures Public Schools, and other schools across the state, must acquire other resources to fill the gaps for universal literacy screening and progress monitoring across grade levels. The schools studied in this research project used a combination of old favorites and newly purchased programs such as Recipe for Reading, Star Reading, LLI, and HELPs as standard treatment protocol options for literacy assessment and intervention support. Star Math and the newly obtained iReady Math online system and textbooks are used for grades K-5 to support students in core math instruction and for supplemental supports.

Fortunately, district-level directors recognized the needs of schools across the county and began to procure tools to help schools fill in resource gaps. However, between district acquisition of new programs and tools and individual school purchases, teachers experienced a year in which they learned how to use a large variety of new curriculum and technology-based educational programs. Ms. Mitchell, Mulberry's principal, described the situation created in schools when presented with multiple resources to implement in a short time:

> A lot of new tools were introduced this year, and again, we are very thankful that the district has purchased some of them, but we are also trying to use each of these with fidelity. We had some things in place that we were accustomed to, and now we are not using those. We are waiting to see what is working and what is not working. Also, I think it has caused a lot of angst with some of our teachers who are trying to figure out what we are going to do. Again, we are thankful to have the resources, but with them all coming at the same time we are overwhelmed navigating through it all.

School staff also reported concerns regarding documentation procedures for MTSS implementation. Stakeholders in these schools were required to gather and organize data prior to problem-solving sessions since they did not have a central data platform for accessing student universal screening, benchmark, diagnostic, and progress monitoring data. Additionally, teachers

reported that the paperwork previously used for RTI documentation, which included tiered individualized intervention plans for every student performing below grade level, was overwhelming and tedious. According to Ms. Davis, instructional coach at Deep Well, the progress-monitoring and documentation process was not manageable for teachers due to the high number of students receiving Tier 2 interventions,

> The paperwork we used was a nightmare. Every single student that was below grade level in an area or struggling with a standard was provided with an intervention plan. Every one of them had a folder of documentation. We did not want paperwork to be intimidating. We did not want for teachers to be so bogged down in documentation that it prevented us from having effective conversations about the needs of children. Instead, we would like for them to collect and use data in a way that shows that they know the child. When Ms. Smith came in, she said, 'Let's get rid of this tedious paperwork.' We have changed the paperwork many, many times now, and may tweak it more before it is over, but it is all in an effort to make things better.

As noted by Ms. Davis, the District MTSS Coordinator, Ms. Smith, worked with these schools to design procedures and paperwork that promoted more efficient documentation of supports and more effective problem-solving sessions. Instead of requiring separate documentation packets for every student receiving supports, Ms. Smith, with feedback from school-based stakeholders, developed intervention spreadsheets to document the progress of students in intervention groups, making the paperwork more manageable for teachers and staff. Despite the changes, a few staff members reported that documentation still takes a great deal of time and some staff members require training on the use of Google documents and spreadsheets so that they will feel more comfortable with recording data.

### MTSS and Special Education Services

In 2016, NCDPI announced a revision to policy and legislation that would change the evaluation process for identifying students with learning disabilities. Under this policy change, the state of North Carolina would no longer use the traditional 15-point discrepancy model, in

which a student's performance on ability and achievement testing were compared, as criteria for eligibility for special education services under the category of specific learning disability. Instead, teachers collect multiple sources of data including information on student progress in response to core instruction and interventions. These data, in combination with other sources of information, will be provided as evidence to support a student's lack of response to instruction. The state delivered this new policy in alignment with the roll-out of the MTSS framework. The NCDPI provided professional development on evaluation and identification of specific learning disabilities as the last module in the training series, but full implementation of the new SLD policy is expected by July 1, 2020.

At this point, the schools participating in this research study have not fully transitioned away from the discrepancy model. Instead, these schools run a parallel process using both the MTSS framework and the discrepancy model at the same time. Although not fully implemented, staff report that they are excited about moving away from a discrepancy model for SLD identification and using the MTSS framework to document student needs. Using this approach, educators implement interventions at all tiers along the continuum, actively attempting to meet the student's needs at any point in time. Along the way, teachers collect progress monitoring data document student growth and response to the instruction provided. Therefore, if despite adequate instruction and intervention educators still suspected a potential learning disability, the data would already be available to examine for eligibility for Section 504 or special education services if necessary. One teacher summarized her experience with the new SLD policy,

> I was kind of worried about what I would have to do, what kind of hurdles I have to jump through to get a specific child qualified for EC math. But once we sat down, looked at everything, it was a simple as looking at all of these different sources of data that had already been collected. It was a quick meeting and then that child started receiving EC math services. It was a quick, painless process, but also getting that child the immediate help they needed. So that was one thing I did notice this year and I really liked it.

Other educators have expressed that they feel that the movement away from the discrepancy model promotes fairer, more accurate identification of student need:

> I am absolutely a fan. Unfortunately, in years past, we would have a child who had received intense interventions week after week, and still was not making the progress that they needed, but we were told they could not get services because they did not meet the 15-point discrepancy. So there was nothing that we can do. And that is heartbreaking. I want them to get what they need.

Those interviewed explained that they feel that MTSS has helped teachers gain a better understanding of which students need a referral for special education services. "I feel really confident when we send a kid for referral [for EC services]—that there is a true need. It is not so subjective anymore." Teachers also feel that MTSS procedures protect students with disabilities by ensuring their inclusion in core instruction. One teacher shared, "This really helped us with our EC students not being pulled out of core. We allocated specific times that students could be pulled for Tier 2, Tier 3, or other services, so that they would not miss teacher-lead core instruction."

To prepare for full use of the MTSS model to support the new NC SLD policy, leadership reports the need for creating better connections between general education staff and the Exceptional Children's Department. As staff try to shift away from the mentality of seeing RTI as a pathway to special education services, they focus on how to best provide supports in regular education settings. Staff mentioned that the exceptional children's teachers were not initially included in MTSS discussions or teaming structures, causing a disconnect in collaboration between general educators and special educators. Stakeholders would like to see efforts made in the future to intentionally bridge these departments so that students in both general education and EC services will receive better supports. Ms. Wilson, instructional coach at Mulberry Elementary, affirmed this position, stating,

> We will all have to work together to ensure that students receive appropriate interventions across tiers of support, with their responses to those interventions well documented, in the event that the student does not make adequate progress and one day may need services outside of the general education realm. In addition, regular education teachers and special ed teachers will have to work together to keep parents informed of their child's educational needs all along the way so that we can all work together to support the child.

### Assessing MTSS Implementation Efforts

Participants described how school teams in each of their respective schools used multiple tools to document and measure implementation progress in order to evaluate the effectiveness of MTSS implementation. Using the NC Star Portal, school leadership teams examined overall school improvement and monitored core and tiered instructional practices. Participants explained how NC Star documentation is updated and reviewed by school leadership at least monthly and is used to guide decisions for overall school improvement, including resource allocation and professional development. School teams are also responsible for examining implementation practices across tiers of support and domains. Through regular team meetings and problem-solving sessions, MTSS leaders in each school examine behavior, attendance, classroom observation, and other data sources to ensure that educators are correctly implementing grade-level and student instructional plans. Additionally, MTSS teams monitor the fidelity of intervention practices via the examination of student intervention attendance data, peer-to-peer comparison data, intervention observations, and Tier 2 and 3 problem-solving session minutes.

Stakeholders in Deep Well, Whistlestop, and Mulberry Elementary schools also described how self-assessment tools were used to monitor progress toward full MTSS implementation and guide goal-setting and planning efforts. To do this, the school leadership teams, along with Ms. Smith, Green Pastures District MTSS Coach, completed the Self-Assessment of MTSS, also known as the SAM. This tool provided by NCDPI allows schools to examine the six essential components of MTSS using a Likert rating scale to describe your

school's current level of implementation (0=not implementing, 1=emerging/developing, 2=operationalizing, 3=optimizing) on 38 items that describe best practices in MTSS implementation. The school leadership team shared the results of the SAM with school staff and collected feedback from educators regarding which items should be of focus for the upcoming school year. The school improvement team then analyzed their responses to the SAM, and prioritized items concerning the need, implementation timelines, and resources available for implementation. The leadership identified approximately five focus items, aligned the action steps for those items with school improvement goals, and presented the school improvement goals for staff vote.

Table 6 summarizes common MTSS implementation fidelity measures collected in Deep Well, Whistlestop, and Mulberry Elementary Schools.

Table 6

Fidelity Measure Collected in the Three Schools

| **Fidelity Area of Concern** | **Fidelity Measures** |
|---|---|
| Overall School Improvement | ● NC Star indicators and progress monitoring |
| Core (Tier 1) | ● School-wide behavioral data including ODRs, ISS, OSS<br>● School-wide attendance data<br>● Parent contact logs<br>● Administrator Core Walk Through Tool<br>● Instructional Coach Core Walk Through Tool<br>● Core Instructional Observations<br>● Instructional Program Specific Fidelity Measures<br>● Leadership Team meeting agendas/ minutes |
| Supplemental (Tier 2) | ● Student attendance rosters for intervention groups<br>● Peer to Peer comparisons<br>● Intervention observations<br>● Intervention Program Specific Fidelity Measures<br>● Student progress-monitoring data<br>● Tier 2 team meeting agendas/ minutes |

Table 6

Cont.

| Fidelity Area of Concern | Fidelity Measures |
|---|---|
| Intensive (Tier 3) | ● Student attendance rosters for Tier 3 individualized intervention sessions<br>● Intervention observations<br>● Intervention Program Specific Fidelity Measures<br>● Student progress-monitoring data<br>● Tier 3 team meeting agendas/ minutes |
| MTSS Implementation | ● Tiered Fidelity Instrument (PBIS self-assessment)<br>● SAM or FAM-S (Self-Assessment of MTSS) |

## Stakeholder Perceptions of MTSS

### Deep Well Elementary

In general, these participants voiced a positive perception of MTSS as a school improvement framework. "When we try something new, of course you are uncertain about it. But as the years have rolled by, we have become more comfortable with it. My feelings are now very positive," stated Ms. Simmons, a teacher at Deep Well. However, another teacher, Ms. Stewart, cautioned that MTSS implementation involves hard work over many years:

> We had to figure this all out ourselves as we went along. It would have been nice to have it all laid out from the start. Getting it all done is sometimes difficult. There was a great deal of planning and it seems that there is not enough time in the school day. Now we are trying [to] stay on top of it all with progress monitoring, reviewing data, examining student needs.

Staff members also expressed that they are excited about the gradual shift in beliefs and attitudes revealed by the educators in their buildings as they examine student needs from a whole-child perspective. Participants perceived that the majority of educators in their schools now held a sense of shared responsibility for students. All of the participants interviewed discussed the

teaming structures that are currently in place at Deep Well Elementary and described how all staff has come together to examine student needs and implement supports within classrooms and across grade levels. Ms. Davis, the instructional coach, summarized the shift in practices derived from MTSS implementation:

> Educators have historically been reactive to student issues. We look for hotspots in our data, such as how students performed on end-of-grade assessments or the number of discipline referrals we had. But oftentimes, that is too late. What I like about MTSS is that it provides us with the lens to preventatively and proactively, approach student learning by addressing all of the barriers that may stand in the way of a student's education. I also like that the focus starts with core instruction. We really have to dig in and reflect on our instructional practices before assuming that the learning issue is with the child.

Participants at Deep Well Elementary were also positive about the changes that they are seeing regarding problem-solving around the needs of students. Ms. Davis also noted, "Teachers are better at owning their data and looking at progress monitoring to help understand the student and the effectiveness of intervention. I feel like we are not just doing this for the sake of compliance anymore." Another teacher, Ms. Simmons, added, "I like that we are now really taking the time to get to know our students, to move them, grow them, and ultimately help to close the gaps."

Staff at Deep Well Elementary attributed the progress made with MTSS implementation to the guidance and support provided by both school-level and district-level leadership. Our [leadership] was very positive. They said, 'We will get this. I know it's tough. It's going to take some time, but we are going to help you. We are going to guide you.'

Staff members also attributed a great deal of their success to the District MTSS Coordinator, Ms. Smith. Ms. Davis, the instructional coach, credited Ms. Smith for her ability to provide structured professional development in combination with less formal consultation-type support: "Ms. Smith is there as a resource and comes to meetings and is always visible in our

schools and comes out to help. That has helped us so much. I do not know how other districts could do it without someone like her leading." Other participants noted that Ms. Smith helped them with MTSS implementation by facilitating reflection and goal-setting sessions. Ms. Smith used the SAM (Self-Assessment of MTSS) as a tool to help Deep Well Elementary leadership examine their progress over time. According to Ms. Stewart, "This was especially important when we were feeling that we were drowning or we were not doing enough. She helped us to see all that we had already accomplished and where we were heading next." Another teacher noted, "Ms. Smith helps us to understand why we are doing MTSS. She shows us how through examples. She makes it practical and approachable."

**Whistlestop Elementary**

The implementation of MTSS required a change in the attitudes and beliefs of current Whistlestop Elementary educators. As previously mentioned, teacher turnover is minimal at Whistlestop. Educators in this school are veteran teachers who have spent the majority of their educational careers at Whistlestop. However, this small rural town has experienced a great deal of change in recent years. Historically, the town has been a small, rural agricultural community with a few textile and manufacturing companies serving as business anchors. In recent years, farming in the area has declined and companies have closed, leaving residents without work. Thus, families have relocated to find work. The socioeconomic status of the families that have stayed has changed over time, with higher numbers of students experiencing poverty. In the past 2-3 years, however, new industries have emerged and new families have transitioned into the area. A large number of these families are Hispanic, and for many, English is not the primary language for the family.

The changes seen in the Whistlestop community have impacted educational practices. Teachers at Whistlestop, accustomed to teaching to a primarily white, middle-class population of

students, are now required to shift instructional practices as the student and family population that they serve has changed. Ms. Peters described how these changes had impacted the students and teachers of Whistlestop:

> It has taken some very careful planning on our part to get buy-in from teachers as we implemented MTSS. Our teachers have been successful for so many years, but all of a sudden, the way that they are teaching is no longer working for our current students. I don't think that what we were doing with RTI was extremely effective. It was very informal—that is why I feel that some students were falling through the cracks.

Those interviewed discussed how the installation of MTSS has required that teachers use a more structured approach to examining student needs instead of a gut-based approach. Teachers now collect and analyze student data in order to make decisions for tailoring instructional practices. Additionally, the implementation of MTSS required staff to moved away from previously established RTI procedures. According to the school's instructional coach, the school staff viewed their experience with RTI as confusing and disorganized:

> To be honest, with RTI, there was a bit of a negative connotation. I think what has been instrumental with the success of MTSS here is that it has been rolled out more efficiently to allow teacher and support staff time to become confident with pieces and just keep layering. It was not too much as one time. It took some time for teachers to wrap their mind around the process and unlearn previous processes. I think that was the hardest think. Not that it was bad, it was just saying, 'oh wait, I've got to look at this differently.' Which is why I think the slower implementation was a much better process. I think that if [MTSS] has been sat on top of us all at one time, I don't know that we would be implementing effectively. We would just be complying and not really implementing.

The staff I interviewed at Whistlestop Elementary described how the implementation of MTSS impacted educators' perceptions of their roles as general educators versus the roles of special education teachers. The school's counselor, Ms. Grayson, describes how RTI implementation negatively impacted staff perceptions of accountability for students:

> With RTI, special education was seen as completely separate in many ways. I don't know that it was intentional on anyone's part, but it was structurally created. We had to move away from the mindset of pulling kids out of the core classroom to another person to provide services. Teachers did not have the confidence in themselves to believe that they could handle a student with special needs in their own classrooms. They thought they a special education teacher had to be the one to address the problem. They thought, 'Well, these are the experts in that field, I need to let them handle this kid because obviously I do not know what to do.' They will be able to figure out what to do, they can fix this kid, then they will send them back to me.'

With the implementation of MTSS well underway, study participants noted shifts in beliefs and attitudes that positively align with the MTSS mission and vision. Those interviewed described how teachers are beginning to take more control over problem-solving and decision making as they become more comfortable with data collection and analysis to support instruction. Problem-solving teams are now meeting with consistency and purpose. According to those interviewed, core instruction is more robust than it has ever been due to the communication of clear expectations for core academics and behavioral practices. Staff also report a decreased number of students requiring tiered supports. Teachers are now facilitating conversations around student needs and are engaging in shared responsibility for student performance and overall well-being.

**Mulberry Elementary**

Each of the participants interviewed at Mulberry Elementary spoke about the growth demonstrated in classroom instruction since beginning MTSS. They attribute that growth to strategically designed professional development and the use of data to drive instruction. Moving forward, Mulberry staff wants to continue to refine core instructional practices and procedures for the provision of interventions and supports. According to Ms. Mitchell, the school principal,

> It makes sense that we are starting MTSS by focusing on core instruction. We will see how children are responding. If they are not responding, we're going to provide interventions. If they are not responding to the interventions, we will make changes or

> provide a more intense intervention. I think it all makes sense, but making it happen is sometimes difficult.

Staff at Mulberry noted the importance of making sure that interventions are provided with consistency so that it is possible to understand if the child is learning the skills needed to make growth in the classroom. MTSS leaders are working with staff to develop an intervention protocol with specific details outlining the provision of instruction (e.g., who, when, where, how), along with information about the student groupings, number of intervention sessions per week, length of the intervention, and how to monitor student progress. Staff at Mulberry Elementary, including the school's principal, recognize the need for following this prescriptive model, but also see the logistical difficulties that come with putting the model to practice:

> The stage that we are in now is our focus and struggle with intervention fidelity. I think we have worked the last several years making sure that we have a strong core. So now it is making sure that we have good interventions in place and that those interventions are provided with fidelity. And that is a little more challenging. We are committed to doing this right, it just may require that we make tweaks and changes as we go.

Those changes may include refining the requirements for documentation of student intervention. Although the school has tried many documentation formats, including collecting and organizing data into a spreadsheet and individualized student tiered intervention plans, they have not been able to find a method that is working well for everyone. "Documentation is an issue because it is impeding our ability to problem-solve around the needs of the child," stated Ms. Wilson. According to the reading specialist, Ms. Slater, "The paperwork is much better now, but I know that people still complain about it. The tiered plans were enormous, and asked very difficult questions. So it became more about compliance with the paperwork as opposed to supporting kids."

When asked about barriers to successful MTSS implementation, Mulberry staff members mentioned competing initiatives as an obstacle. More specifically, staff discussed how the NCDPI-mandated roll-out of a digital literacy requirement has interfered with the work of MTSS by dispersing teacher focus across multiple initiatives. Ms. Wilson described the situation, saying,

> Instead of focusing on the way that PLCs should operate, the way that we are looking at standards and core instruction, we are focused on these digital tools. And while the tool is great, it is an interactive tool that teachers can use to present lessons and students can use to draw, video, and write, the delivery has been confusing. There has been a lot of emphasis on the tool itself and a lot of professional development devoted to it, but in some ways the technology focus has taken away from the most important piece which should be high quality teaching.

When asked about actions by the district or school that helped to facilitate the implementation of MTSS in Mulberry Elementary, those interviewed unanimously listed the importance of having a person designated responsible for overseeing MTSS implementation in the district. Individually, each person interviewed referenced the support of the District MTSS Coordinator. Ms. Mitchell conveyed the sentiment, stating,

> Ms. Smith has been phenomenal. She has really helped administrators, coaches, and individual teachers in understanding the process. She has helped provide resources and created tools to bridge the gap between the expectations coming from the state level and what is happening in our schools. She is also the liaison between departments. She is under the student support services umbrella, but works closely with the elementary and middle school directors and the EC department. She has really brought those departments together. The best professional development that we have is when Ms. Smith comes in and works directly with our team. Because then you are talking about real kids, real data and real processes to help problem-solve. That has really helped us to grow.

As previously discussed, the shift from RTI to an MTSS framework has required that the staff at Mulberry Elementary participate in professional development to promote a mind shift in beliefs and attitudes. According to staff interviewed, the work required for implementation

readiness was a difficult and emotional experience, but perceived as well worthwhile, as it has led to an increased awareness of student needs and more intentional problem-solving efforts. "Our focus now is student success, not just procedural compliance," stated Ms. Wilson, instructional coach. However, the staff expressed that their overall perceptions and experiences with MTSS implementation have been positive. Ms. Wilson summarized her perceptions of MTSS, stating, "Yes, it has been good. To me, it is definitely a moral imperative. It is just what we should do. It can be hard, it can be stressful, but it is just the right thing to do for kids."

## Summary

The following five themes emerged from the transcript data resulting from interview sessions with school-based educators in Green Pastures Public Schools:

**1) Establishing Readiness for MTSS Implementation.** Deep Well, Whistlestop, and Mulberry Elementary Schools began preparation work for MTSS implementation during the 2015-16 school year, following what was perceived by stakeholders as an unsuccessful RTI effort. Although initially hesitant, educators engaged in activities to develop the knowledge and skills necessary for unlearning RTI procedures while installing MTSS structures. The District MTSS Coordinator provided professional development and coaching supports, helping educators understand why MTSS was important, how MTSS would be implemented, and what MTSS would look like regarding staff roles and responsibilities. The district MTSS Coordinator, Ms. Smith, taught teams how to analyze data to inform instruction and intervention planning, modeled appropriate problem-solving conversations, and assisted school leaders with examining core instructional practices. As school leadership teams became more comfortable with MTSS facilitation, they began work in their schools to address implementation barriers, including staff beliefs and attitudes. School leaders gathered feedback from stakeholders that was used to tailor

professional development to the needs of the school, including work to build connections between staff and students.

**2) Development of Teaming and Communication Structures.** Participants in this study described how school leadership teams modified existing school-based teams to build the structures necessary to initiate and sustain MTSS implementation. Educators in these schools provided details regarding each level of teaming, outlining the function of each team and the responsibilities of team members. Teaming structures include school-wide problem-solving teams such as SIT and SLT, grade-level teams (PLCs), and support teams for students receiving Tier 2 or 3 interventions (Kid Talk, Tier 3 Team). Participants also discussed structures for ongoing data analysis and communication.

**3) Analyzing Core Instructional Practices.** Participants in this study shared how their schools problem-solved to reduce the number of students requiring tiered interventions and supports. Through collaboration work, staff redefined core expectations and outlined the necessary components for quality instruction. Educators collected core walkthrough data and NC Star documentation on classroom instructional practices to ensure the alignment of professional development offerings and resource allocation with MTSS and overall school improvement.

**4) Building Intervention Systems.** Participants in this study shared how they learned to collect and analyze data for instructional decision-making. Although many educators were initially uncomfortable with data-based problem-solving, over time they learned how to use universal screening information, student outcome data, diagnostic information, and progress monitoring data to determine student needs for intervention and monitor instructional growth. Participants discussed how the installation of Intervention and Enrichment time (I&E) at their schools offered protected time in the master schedule for students to receive the supports that they needed across tiers and areas of concern (attendance, behavior, academics, social-emotional

needs). However, the implementation of I&E revealed the need for resources to support instructional groups, including staff, to provide the intervention, instructional programs and curriculum, and tools to monitor student progress. Staff reported inadequate resources as a barrier to MTSS implementation that school and district leaders are addressing through problem-solving teams.

**5) Assessing MTSS Implementation Efforts.** Study participants described how school teams in each of their respective schools used tools to document and measure the effectiveness and fidelity of MTSS implementation. Using the NC Star Portal, school leadership teams track overall school improvement practices. School leadership teams are responsible for ensuring that quality instruction is provided in the classroom and during intervention blocks. Multiple data sources are evaluated to determine student growth and adult fidelity to implementation plans, including observation data, peer-to-peer intervention progress data, and intervention program measures. Additionally, school leadership teams monitor their progress toward full MTSS implementation using self-assessment tools such as the SAM of FAM-S. These tools are used by teams to determine a baseline of current implementation practices and to set goals for future implementation action steps.

In the next chapter, I use the findings of my study to answer four primary research questions. Specifically, I examine the perceptions of stakeholders directly involved in MTSS implementation by relating their experiences to previous literature, summarizing challenges experienced by these educators, and outlining strategies used to promote more successful implementation practices. Finally, I present analysis of the findings by making connections to the NC MTSS Six Critical Components framework.

# CHAPTER VI

# ANALYSIS

To produce better educational outcomes, federal and state governments and educational leaders have focused in recent years on identifying effective instructional practices to support all students (Harn et al., 2015; IDEA 2004). Three-tiered models of support such as Response to Instruction (RTI), Positive Behavior Interventions and Supports, and most recently Multi-Tiered Systems of Support (MTSS) are examples of frameworks utilized by schools to achieve school improvement (Charlton et al., 2018; Horner et al., 2017; McIntosh & Goodman, 2016). Each of these models, based on implementation science, require that installation efforts begin with an examination of the components required for building the capacity and infrastructure to support and sustain implementation. District and school leaders must strategically consider and plan for the establishment of teaming structures to support ongoing communication, collaboration, and problem-solving, a systematic methodology for screening students to identify need, and the collection and analysis of multi-sources of school-wide and student-specific data to inform educational decision-making (R. Freeman et al., 2015; McIntosh & Goodman, 2016). Additionally, district and school teams must also continually monitor school and student growth and evaluate the effectiveness of evidence-based instructional interventions (Sugai & Horner, 2019).

In 2015, the state of North Carolina formally adopted the use of MTSS as a school improvement framework in an attempt to address the academic, behavioral, and social-emotional needs of students in an integrated way. Additionally, North Carolina policies and procedures for the evaluation and identification of students with learning disabilities were revised, as North

Carolina moved away from the use of a discrepancy model for special education eligibility. The North Carolina Department of Public Instruction mandated that all public schools and districts implement MTSS by July 1, 2020 in order to proactively identify and address the needs of students at risk and as a means of collecting multiple sources of data for determining eligibility for services for specific learning disabilities through the Exceptional Children's Program (NCDPI, 2015b, 2016a).

Although Multi-Tiered Systems of Support is a fairly recent school improvement initiative, research regarding the implementation of other three-tiered frameworks such as RTI and PBIS have featured mixed results in terms of sustainable implementation efforts and outcomes (Horner et al., 2010; McIntosh & Goodman, 2016; Sugai & Horner, 2019). From a perspective of implementation science, the success of a school reform initiative is dependent upon a systematic installation, with careful attention to implementation readiness, coaching and technical support, data-based problem solving, and implementation fidelity (Bohanon et al., 2016; Horner et al., 2017; McIntosh & Goodman, 2016). Although theoretically simplistic, the implementation of MTSS is complicated, requiring a commitment of time and thoughtful planning on the part of various stakeholders at both the district and school level. At this time, research outlining best practice strategies for MTSS implementation in the educational setting is limited (Charlton et al., 2018).

My purpose for this research study was to examine MTSS implementation in a practical setting from the perspective of the educators directly involved in the work. In executing a qualitative case study of MTSS implementation in three schools in one North Carolina school district, I conducted a series of semi-structured interviews and observations. In Chapters IV and V, I reported my findings as detailed narratives of the MTSS installation and implementation experiences of district leaders and school-level implementers. In this chapter, I analyze my

research findings by stating each of my research questions, answering them with key themes from my findings, and connecting my findings to existing research.

## Analysis

### Research Question 1: How is the Implementation of MTSS Perceived by Administrators, District Leaders, and School Staff?

Fourteen educators participated in interview sessions for this research study. These educators represented various stakeholders across district-level leadership—the District MTSS Coordinator, the Director of Student Support Programs, and the District Behavior Specialist. At the school level, administrators, instructional coaches, intervention specialists, counselors, and classroom teachers participated. As a researcher, it was surprising to me that there was little variance in the responses from participants across levels of implementation (district leaders, school administration, and school-based support staff and educators) when asked about their perceptions of MTSS. Interestingly, all 14 participants expressed overall positive perceptions of MTSS implementation in their schools and district. Conducting this research was an enjoyable and informative experience for me as the researcher due to the willingness of the participants to engage in conversations regarding MTSS implementation in their district and schools. Every participant interviewed appeared eager to provide their unique viewpoints and describe their experiences of their journey through the process of MTSS installation. During these interviews, participants spoke freely, and the conversations were lively as discussed their MTSS implementation accomplishments and the stumbling blocks they experienced along the way. The following sections outline and describe the collective perspective of educators in Green Pastures Public School District regarding MTSS implementation.

**MTSS is School Improvement.** Participants in various roles shared the importance of approaching MTSS implementation as a school improvement framework. Participants discussed how the work in their schools and at the district level is now intentionally aligned with MTSS

implementation and school improvement planning. Consistent with the recommendations of existing research, leaders in the Green Pastures School District monitored implementation goals and documented progress using self-assessment tools like the SAM and NC Star platform to maintain implementation fidelity and accountability to MTSS in practice (Choi et al., 2019; McIntosh & Goodman, 2016). School leadership teams are now structured to guide educators as they use multiple sources of data to engage in district, school-wide, and grade-level problem-solving to address the academic, behavioral, and social-emotional needs of students in a comprehensive and integrated way. As expressed by one school counselor at Whistlestop Elementary, "This is just how we should do school." Other participants shared how they appreciated the proactive approach of MTSS as schools use the MTSS framework to examine the master schedule, resources, professional development, staffing, curriculum, and instructional practices. As summarized by Ms. Mitchell, principal at Mulberry Elementary,

> With MTSS, all of the decisions that we make are made to benefit the school as a whole, but also each and every child. With our teaming structures and problem-solving teams in place, we are ready to tackle any issue that comes our way and provide the supports that our teachers and students need.

**Shifts in Beliefs, Attitudes, and Practices.** Previous research has shown the importance of investing time in developing attitudes and belief sets that align with the work ahead (Cavendish et al., 2016; C. R. Cook et al., 2015; Horner et al., 2017; Pinkelman et al., 2015). Many of the participants whom I interviewed shared that the perception that MTSS implementation was gradually bringing about positive shifts in the beliefs, attitudes, and practices of the educators in their schools. As stated by one school counselor, "The involvement of the staff has now changed, core instruction is better, the conversations around students have changed, and teachers are taking more shared responsibility for all of the students in our building."

Participants described examples of professional development opportunities that were provided to improve school climate and enrich relationships with students and families. As a result, some participants feel that these professional development opportunities are helping to develop connections within the school and with families and community, while also promoting stakeholder buy-in and understanding around the intended purpose of MTSS.

Other educators noted how MTSS implementation is reshaping the way that student needs are addressed and examined. According to those interviewed, RTI implementation inadvertently created mindsets and attitudes that negatively impacted the provision of instruction and services to students. First, RTI focused solely on the academic needs of children instead of using a whole-child approach that considered the impact of school attendance, behavior, and social-emotional factors. Secondly, RTI focused on the progress of individual learners, discounting the impact of inadequate core instructional practices. Finally, as similarly noted by other researchers (McIntosh & Goodman, 2016), many educators in Green Pastures considered RTI as a pathway to obtain special education eligibility. Educators were going through the steps to document student need for EC services, without considering the provision of needed supports in the general education setting. Consistent with research-based recommendations for MTSS implementation (Sugai & Horner, 2009; Sugai et al., 2016), educators reframed their thinking around instruction and intervention, working in teams to determine student needs, and creating proactive structures to support students at risk within the context of the general education. According to study participants, the MTSS framework provided educators with the beliefs necessary to move away from a deficit-based mentality where educators were attributing academic concerns directly to the student. Educators began to engage in reflection around core instructional practices and intentionally consider other factors (such as environment, attendance, social-emotional needs) when designing supports for students. Additionally, through professional

development, educators were provided with the skills and confidence needed to support students who were not responding successfully to traditional classroom instruction and moved away from relying on support staff or special education teachers to provide services to students in need.

**Team Approach to Problem-solving.** Participants communicated the benefit of structured teaming in district, school, grade-level, and individual problem-solving. Participants noted that newly designed MTSS teaming structures promoted collaboration between stakeholders, more effective means for communicating information and receiving feedback, and better utilization of data to inform educational decision-making. Participants also noted that with MTSS implementation, team meetings had become more consistent regarding scheduling, and problem-solving sessions were more effective overall as the content of meetings was more focused with the use of set meeting norms and agendas. Additionally, stakeholders noted that regular problem-solving sessions also allowed embedded professional development and coaching in a practical context.

Despite the overall effectiveness of current MTSS teaming structures, study participants discussed the need to continually refine team meetings. As part of MTSS, it is important to assess the function, stakeholder makeup, and problem-solving process used by each team. Similar to the findings of previous research (e.g., Braun et al., 2018; Regan et al., 2015), the participants whom I interviewed discussed how team member roles and responsibilities are potentially confusing since the purpose and function of teams sometimes overlap. Additionally, team members should always consider what type of data is necessary to promote discussions in the context of each meeting type.

**Using Data to Inform Educational Decisions.** With the implementation of MTSS in Green Pastures School District, educators are required to collect, organize, analyze, and interpret data in order to inform decisions around district, school, and student needs (Sugai & Horner,

2019). Many of the participants that I interviewed recalled the initial challenges associated with data-based problem-solving in the educational setting. Participants shared stories of teachers who indicated that they were intimidated by data analysis or were unsure how to make sense of the available data. Some educators explained that the abundance of data available in their schools made data review sessions cumbersome. Others noted that some educators relied on a "gut-based" approach to determining student needs and felt defensive when data demonstrated student performances that were not in line with expected proficiencies. As summarized by a school counselor, "Using an implementation science process was a huge shift for teachers. They tend to be more nurturing and emotionally oriented. Shifting to data-driven decision-making was a challenge for many of our staff." However, consistent with the research of Rinaldi et al. (2011), MTSS implementers in the Green Pastures School District perceive growth in this area of concern. Several study participants shared that educators in their buildings are beginning to actively engage with data to inform school improvement, core instruction, and intervention. As they acquire a better understanding of data analysis through professional development and coaching opportunities with their MTSS coaches and the District MTSS Coordinator, teachers are now facilitating data review sessions themselves and using data to guide decisions around instructional practices and student needs.

**Professional Development and Coaching is Key.** Unlike previous research in which stakeholders indicated the need for greater administrator support and facilitation of the implementation effort (Feuerborn et al., 2016; Pinkelman et al., 2015), participants in this study reported that they felt supported by district and school-level leadership during MTSS implementation. Professional development and coaching opportunities provided by the District MTSS Coordinator and by MTSS Coaches have assisted educators in acquiring a better understanding of the systems, resources, and procedures necessary to support MTSS.

Implementers noted the role of the MTSS District Coordinator in providing professional development in a way that was meaningful and manageable for schools. In addition to formal MTSS training sessions offered to school teams and MTSS Coaches, Ms. Smith provides professional development via online training modules and through coaching sessions embedded in school team meetings. Stakeholders perceived this blended model for professional development as beneficial for promoting understanding of MTSS.

**Summary.** Overall, participants expressed general satisfaction with MTSS implementation and reported that MTSS was a valuable initiative for their district, especially in contrast to their previous experiences with RTI implementation which stakeholders reportedly perceived as unstructured, informal, and vague. When asked about the NCDPI requirement for full MTSS implementation in all public schools by July 1, 2020, many of the participants interviewed stated that this mandate did not concern them. They felt confident in the efforts of the educators in their schools, and would committed themselves to spending the remaining time refining and expanding current practices and structures to promote the overall successful implementation of MTSS. However, a few participants expressed concern as to whether NCDPI will continue to promote MTSS as a school improvement framework as a sustainable endeavor. In line with the concerns of implementers in previous research studies that examined the impact on funding and resources on implementation (Cavendish et al., 2018; Pinkelman et al., 2015), educators in the Green Pastures School District, who have seen school reform initiatives come and go throughout their careers, were apprehensive about the ability of MTSS to reach larger scale implementation as a non-funded state initiative reliant on the resources of districts and schools. Despite those fears, Green Pastures district leaders and several school-based leaders commented that they would continue to promote MTSS implementation even if state leadership decided to change course. Ms. Grayson, a school counselor, stated,

> At this point, I would not want to be at a school that was not doing this [MTSS]. There is such great school improvement work happening because of MTSS, because we are problem-solving because we are sitting here looking at our core instruction, and having really explicit talks about interventions, instruction, and curriculum. I feel like it is what you should be doing for kids anyway.

**Research Question 2: What Obstacles and Barriers Do Administrators, District Leaders, and School Staff Face during MTSS Installation and Implementation?**

According to Sugai and Horner (2019), schools and districts experience a variety of challenges that impact their ability to effectively implement and scale-up implementation of three-tiered support models such as MTSS. Although all of the staff interviewed in this study expressed positive feelings regarding the current state of MTSS implementation, many noted that the journey to get to where they are today was not without obstacles. Consistent with systems change and implementation science research (Castro-Villarreal et al., 2014; McIntosh & Goodman, 2016; Sugai et al., 2016), successful implementation is an ongoing effort and takes a tremendous amount of time, according to stakeholders in Green Pastures Public Schools. The following sections outline factors that hindered MTSS implementation Green Pastures School District as described by district and school-level stakeholders.

**Time.** When asked about barriers to successful MTSS implementation, several district-level staff listed time as a barrier. With multiple initiatives coming from the state, such as personalized learning, digital learning competencies, whole child wellness, mental health support, and school safety, educators are feeling the crunch as they attempt to address so many demands. Administrators and coaches are overwhelmed with information at meetings and professional development sessions, and this information is passed down to the school-level staff. Additionally, with efforts toward school improvement, districts are attempting to secure instructional resources to support students and teachers. However, with each new resource or new initiative that is acquired, additional professional development must be offered to staff. With

an effort to maximize the instructional day, limit interruptions to core instruction, but also protect time for collaboration and problem-solving meetings, there is little to no time left for educators to learn about each initiative/resource or follow-through with effective implementation. Educators are pulled in many different directions each day, making it difficult to designate and protect time for collaboration and problem-solving (Castro-Villareal et al., 2014).

**Collaboration between Stakeholders.** In order for any school or district to successfully implement MTSS, all stakeholders must be active participants in MTSS readiness and implementation activities. Effective district-level teams require that representatives from every department be engaged in implementation discussions and problem-solving sessions, with the opportunity to provide the perspective of their department when making decisions, and feedback on the effectiveness of implementation steps (Charlton et al., 2018). As noted by stakeholders in Green Pastures School District, effective communication and collaboration among district-level departments can take time to develop. Stakeholders described experiences in which the district-level MTSS team lacked cohesiveness and had difficulty with communication.

> At one point in time, we were a District MTSS Team in name only. We were not using the same MTSS language across departments. We were not connecting the work that was being done in each area to our MTSS efforts. On paper, we had all of the required stakeholder representation, but due to a variety of factors, oftentimes, it was still only a very few people doing the majority of the work.

Those interviewed described various reasons for the disconnect between departments at the district-level including: (a) lack of understanding of the significance of MTSS implementation, (b) prioritization of other competing initiatives or goals within specific departments, (c) difficulty with aligning schedule and committing time for MTSS District Team meetings, and (d) personality conflicts with particular individual stakeholders.

For example, several individuals described communication and collaboration with the exceptional children's department as a barrier faced at the school and district level. As previously mentioned, although an effort was made to ensure that MTSS was considered a school improvement framework focused in general education, special educators in the exceptional children's department did not have the opportunity to access initial MTSS training sessions offered by the state and district. "By the time that EC folks were brought on board with MTSS, there was already a disconnect. It was like the work was being done in two different worlds and these people were not talking to each other," noted Ms. Aubrey. Interestingly, a similar disconnect between district-level general education departments and the exceptional children's program was noted by Meyer and Behar-Horenstein (2015). Ms. Aubrey continued by saying, "However, it is starting to get better. We are starting to see efforts from the state to integrate the behavioral and academic departments as well. This connection at the state level is helping us to make that connection here in the district also."

**Turnover.** In order to facilitate effective MTSS implementation and sustain the effort over time, stakeholders in each level of teaming must be prepared for the work ahead, be engaged in professional development and coaching to support MTSS, and be active participants in problem-solving and planning (Castro-Villareal et al., 2014; Feuerborn et al., 2016). Staff turnover, at any level, can make MTSS implementation a challenging endeavor. According to one Green Pastures district-level staff member, turnover has been both an asset and a hindrance.

> In a few particular instances, there were stakeholders who were not engaged in the work, or were actually an obstacle due to personality conflicts. When those individuals left, we were able to regroup and move forward more easily. However, in other cases, turnover made implementation very difficult.

For example, in one year, Green Pastures had seven principals to move to other schools or leave the district. This required schools to regroup as they acclimated to a new school

administrator, and district leaders had to make adjustments in district level MTSS planning to accommodate changes in leadership and needs for school support and professional development.

**Connecting All the Pieces.** The installation of MTSS requires changes to the overall school improvement structure, and the scope of the work is multi-faceted, requiring connection and alignment across district-level departments, schools, and grade levels (Horner et al., 2017). Along with changing teaming structures and creating protocols to promote data-based problem-solving, schools must also examine the quality of their core instructional practices, build intervention systems, and develop the means for monitoring the growth of all students (NCDPI, 2019). This requires the acquisition of new resources and technical supports for staff. It is not unusual for pieces of this work to be delegated by a district team to different departments. For example, the curriculum and instruction department in Green Pastures Public Schools took on the responsibility for working with schools to create a core instructional framework to strengthen teaching practices across grade levels, while the Student Services Department worked with schools to install effective systems to address behavior and mental health needs. Other departments worked to gather resources to support interventions such as iReady Math and HELPS reading. Since trainings on these programs and resources were provided by different departments, educators perceived each as a separate initiative, occurring in isolation. Without the use of a common language or framework, educators had difficulty understanding how these school improvement activities integrated as components of a multi-tiered system of supports. When viewed as separate, competing initiatives, the action steps required for MTSS installation can be overwhelming to school administrators and staff (McIntosh & Goodman, 2016). The district MTSS leaders in Green Pastures are now intentionally working together to interweave programs and activities so that staff members understand that each piece is part of the MTSS basket.

**Data-based Problem-solving.** At this time, school-based teams are working toward an integrated approach to problem-solving around academic, behavioral, and social-emotional needs. However, many of these conversations are still occurring in silos. When asked about MTSS implementation in schools, the majority of participants focused their conversations on changes to academic problem-solving, core academic instructional practices, and tiered academic interventions. Although behavior and social-emotional needs were briefly discussed, these interview sessions provided evidence that schools are just beginning to approach the evaluation of school and student needs from a more comprehensive perspective that includes consideration of factors beyond academic performance.

The implementation of MTSS requires that educators consistently collect, organize, and utilize data to make educational decisions to align with school-wide improvement and to benefit children (R. Freeman et al., 2015; Sugai & Horner, 2019). For many teachers, data analysis may feel unnatural or uncomfortable. The shift to MTSS as a school improvement initiative required many staff members to transition from a subjective or "gut-based" response to student performances in the classroom to a data-based way of thinking and problem-solving. In some cases, district staff noted that teachers presented with student outcome data during problem-solving sessions responded defensively when confronted with data that showed student performances that were below grade-level expectations and felt that it negatively and personally reflected on their teaching practices. The District MTSS Coordinator noted the importance of providing staff with specific data analysis training to develop a level of comfort with interpreting data to determine specific student needs. She further asserted that the best training for data-based problem-solving is integrated and embedded in school PLCs and other natural educational settings, where the staff members are allowed to model and practice data-based problem-solving.

She stressed the importance of finding a balance between validating the feelings of the teacher and holding educators accountable for the data.

**Adjusting to New Expectations, Roles, and Responsibilities.** With the introduction of any school reform, educators must adjust to meet new expectations. This often requires changes to roles and responsibilities (Braun et al., 2018; Cavendish et al., 2016; Meyer & Behar-Horenstein, 2015). With the adoption of MTSS, educators across levels of implementation (district office, support staff, and school-based administrators) participated in new training sessions, learned new skills, adapted practices in schools, and served in different capacities in leadership and problem-solving. Instructional coaches and counselors took on new roles as MTSS Coaches for academic and social-emotional learning. Teachers learned how to become data-analysts and provided tiered interventions and supports. Additionally, educators shared joint responsibility for the educational outcomes of all students in their schools, beyond the walls of their classrooms. As the school leadership team transitioned to an MTSS framework for school improvement, they learned to navigate NC Star for monitoring school growth and accountability and created a more effective format for team meetings. School administrators also assumed a new role in instructional leadership, logistically organizating MTSS implementation steps, evaluating school resources, and aligning professional development with the required components of MTSS. Adjustment to these new roles and responsibilities was difficult for some educators and welcomed by others, but required time and patience in all cases.

**Confusion around Implementation Procedures.** Clear and consistent procedures and protocols are necessary for successful MTSS implementation (Braun et al., 2018; Meyer & Behar-Horenstein, 2015; Regan et al., 2015). However, educators are often placed in situations where they are asked to implement instructional changes or interventions without having adequate knowledge, skills, or guidance (Braun et al., 2018). As educators in Green Pastures

School District transitioned from previous RTI procedures and documentation methods, school staff members struggled to learn new protocols for MTSS implementation. School-level stakeholders participating in this study recalled the initial feelings of stress precipitated by adjustments in teaming structures and modified requirements for data review.

Without a comprehensive data warehouse to store and organize the vast amounts of data available, access to important student outcome, universal screening, benchmark, diagnostic, and progress monitoring data was reportedly challenging and made problem-solving more arduous. Additionally, the previous paperwork required for documentation of student progress under the RTI model was grueling, according to study participants. Teachers documented the progress of all students who performed below grade level and received any type of tiered intervention using individualized instructional plans. With numerous students identified for intervention, educators perceived the required paperwork as unmanageable and believed that it negatively impacted teachers' ability to engage in problem-solving conversations around student needs. With these problems in mind, the District MTSS Coordinator worked with schools to formulate ways to organize information and improve access to data. Additionally, Ms. Smith made significant alterations to the paperwork used for documenting student intervention plans and progress monitoring.

With the introduction of tiered supports across domains, educators in Green Pastures School District redesigned procedures for determining student needs, assigning students to interventions and supports, creating a schedule that incorporated protected time for intervention, assigning staff to provide intervention, and monitoring student progress. Similar to other studies that have illustrated stakeholder confusion as they navigated the changes associated with implementation (e.g., Braun et al., 2018; Castro-Villarreal et al., 2014; Feuerborn et al., 2016), educators in the Green Pastures School District expressed frustration with the many alterations to

structures, intervention resources, and assessment tools. Staff members learned to use these new resources to collect the data used to determine where student support needs. However, teams grappled with creating decision criteria to guide the movement of students through tiered supports. One of the most difficult transitions related to the installation of a standard treatment protocol. School teams were required to create a matrix that listed a menu of intervention options and outlined guidelines for the provision of instructional supports. This was a difficult task considering the standard treatment protocol had yet to be well-defined, and some resource gaps remained. Also, staffing these intervention sessions was challenging given limited staff resources (many schools shared support staff such as reading specialists, ESL teachers, enhancement teachers), logistical barriers, and need for training in specific instructional programs.

At this time, schools within Green Pasture School District are still in the process of learning more about the intervention options available in their schools so that they can establish clear, consistent decision criteria for determining student needs. Furthermore, these schools are enhancing standard treatment protocols to expedite student access to tiered interventions and supports.

**Research Question 3: What Strategies Do Schools and Districts Use to Address Challenges in a Way that Administrators, District Leaders, and School Staff Perceive as Beneficial to MTSS Implementation and Overall School Improvement?**

Toward the conclusion of each interview session, I asked participants one or more of the following questions:

1. If you were to meet someone from another district, what advice would you give them on MTSS in order to make it the best possible implementation effort?
2. What do you think are the major factors that can make MTSS successful?
3. What are some things that have gone well for your school or district?
4. Are there any points of pride that you would like to share?

Using educator responses to these questions, I have compiled a list of suggested best practices or strategies to promote more effective (and possibly less stressful) MTSS implementation.

**MTSS Implementation Takes Time, Strategy, and Patience.** According to implementation science experts, the implementation of any new initiative requires a 3-to 5-year commitment on the part of implementers (Castro-Villareal et al., 2014). According to Choi et al. (2018), "Operational change is a slow and arduous process in schools, requiring cultural shifts in practice" (p. 24). Stakeholders from Green Pastures Public Schools recommend that potential implementers come to the table with an open mind, be willing to listen, and trust the implementation process. They further asserted that the process of implementation is much easier if schools and districts engage in preparation or readiness steps before beginning the initial implementation. These readiness steps include evaluating the resources of the school or district, determining the makeup and function of teaming structures, and developing a formal implementation and communication plan (Bohanon et al., 2016; Horner et al., 2014). Many of the stakeholders interviewed suggest that implementers start small and move implementation along in stages. Districts may want to begin MTSS roll-out with just a few pilot sites. Schools may want to begin implementation in only one or two grade levels. By doing so, leadership can better understand factors that contribute to the effectiveness or failure of implementation efforts and then refine practices to address any shortcomings before moving implementation into other schools or grade-levels. It is also important to note that implementation is not always a sequential process. Schools may want to prioritize focus to a specific tier or specific area of concern (academic, behavioral, attendance, social-emotional) before moving to others.

**Dedicated Leadership to Facilitate MTSS.** Using a planned and systematic approach can avoid undue burden on teachers and educational systems (McIntosh & Goodman, 2016). In order to facilitate MTSS implementation efficiently and successfully, effective leadership is

essential. For school districts like Green Pastures, a district-level MTSS leadership team was needed to facilitate the work on a large scale, as they progressed toward county-wide installation. Creating a cohesive district-level team can take time, but bringing the right stakeholders to the table is worthwhile. The Green Pastures District MTSS team was composed of stakeholders from across central office departments so that they could pool resources and integrate professional development to align with the goals of the MTSS implementation.

Educators whom I interviewed for this study were quite complimentary of their District MTSS Coordinator. Many recommended that districts designate a person specifically dedicated to MTSS implementation planning and school support. Educators perceive Ms. Smith as an integral component of successful implementation in schools. Stakeholders noted that her efforts promoted buy-in and understanding around MTSS as a school improvement initiative. She served as a liaison between the state and district, and district and schools, filtering and buffering information so that it could be most effectively communicated and manageable for schools to process. School-based educators admire the District MTSS Coordinator for her skills in data analysis, organizing information, and creating efficient processes. She is also perceived as a trustworthy and approachable resource for schools. Her professional development methods, integrated coaching supports, and consultation services were highly appreciated by every stakeholder interviewed.

**The Importance of Teaming Structures.** Educators in Green Pastures Public Schools suggest that schools (and districts) examine their current teaming structures. It is oftentimes easier to refine and modify current teams to align with the functions of MTSS teaming structures before implementing new ones. Other times, it may be necessary to eliminate old teams and streamline teaming structures for efficiency. Schools in Green Pastures chose to modify the school improvement team to create MTSS leadership teams. They also used currently operational

PLCs to serve as Tier 1 and Tier 2 teams. Former RTI Tier 3 teams were tailored to encourage effective problem-solving for students with intensive needs. Adapting to the new teaming protocol has been challenging for some educators, but those interviewed conveyed the importance of clearly identifying the purpose and functions of each team. Additionally, implementers suggest that teams work together to outline and define team member roles and responsibilities to increase the efficiency and value of team meetings (Braun et al., 2018; Meyer & Behar-Horenstein, 2015; NCDPI, 2018, 2019).

**Align Efforts and Use Common Language.** District and school-level leaders in Green Pastures Public Schools emphasized the significance of collaboration and communication in successful MTSS implementation. With limited assets, it is important that educational leaders effectively allocate resources in alignment with MTSS goals (Bohanon et al., 2016). For Green Pastures, the use of a school improvement platform, like NC Star, assisted school leadership teams in creating and executing school improvement goals that target the critical components of MTSS. With progress monitoring and accountability elements built into the platform, schools were able to evaluate progress regularly and use this information to lead future MTSS implementation efforts.

**Evaluate Your Resources Regularly.** In order to realistically plan for MTSS implementation, districts and schools must inventory their assets, identifying strengths and needs (Choi et al., 2019; Horner et al., 2017; McIntosh & Goodman, 2016). These resources include funds, personnel, and time. With each stage of MTSS implementation, resource needs may change, and allocation priorities may require alteration. Implementers in Green Pastures suggest that leadership teams also regularly consider school or district-wide programming, curriculum, and professional development, to reduce the incidence of competing initiatives that may deter MTSS implementation progress.

**Clear and Consistent Communication is Essential.** Stakeholders must demonstrate stakeholder buy-in by actively engaging in the work and embracing the beliefs and attitudes necessary to move the initiative forward. According to staff perspectives in Green Pastures, buy-in is the result of open communication, trust, and understanding. This sentiment is echoed in the research of Choi et al. (2019), which suggested that educational leaders must communicate a clear vision and build trust in order to improve school and student outcomes. Deep Wells, Whistlestop, and Mulberry Elementary leadership teams worked with their staff to promote implementation by providing professional development to improve school climate, build staff and student relationships, and convey the intention of the work. The intentional development of teaming structures facilitated continuous and open lines of communication and collaboration. Strategic professional development offerings promoted understanding of the critical components of MTSS and supported the development of effective practices to boost MTSS implementation.

**Provide Structure, but Allow for Flexibility.** The implementation of MTSS in Green Pastures Public Schools was not mandated. Instead, district leaders provided recommendations, guidance, and coaching. The purpose was two-fold:

1. Schools within the district had a wide variety of needs, resources, and practices. MTSS needed to be tailored to each school to account for this variance.
2. Providing schools with autonomy in decision-making, resource acquisition, and practice promoted stakeholder buy-in.

By allowing schools to examine their own priorities and resources, schools improved their capacity for implementation and sustainability.

**Varied PD and Coaching Design.** Ongoing professional development and coaching are essential to MTSS implementation according to the NCDPI's MTSS Six Critical Components. Stakeholders in Green Pastures School District agree. All stakeholders interviewed during this

study perceived the MTSS professional development model used by Ms. Smith and MTSS coaches to be effective in their schools. These educators recommend the blended approach used, as it included face-to-face training sessions, digital learning modules and resources, embedded coaching in existing team meetings, and consultation services. Professional development was offered to an array of stakeholders, through a variety of departments in order to ensure all educators in Green Pastures had opportunities to learn more about MTSS. Training topics were specific to MTSS implementation, but also focused on strengthening core instructional practice and data collection and analysis to support educational decision-making. R. Freeman et al. (2015) emphasized the need for strategically selecting individuals with expertise, communication skills, and motivational influence to drive implementation effectively. School-level stakeholders in the Green Pastures School District recognized the benefit of having leaders who possess the knowledge and skills to plan, prepare, and facilitate effective professional development.

**Allow Data to Guide Your Decisions, But Do Not Discount the Human Perspective.** Educators in Green Pastures have come a long way with data collection and analysis to support educational decision-making, according to those interviewed. Many stakeholders attribute progress around data-based problem-solving to quality coaching and PD and frequent opportunities to practice. Additionally, stakeholders praised the MTSS Coordinator for developing accessible data collection systems and progress monitoring documentation that was more user-friendly and manageable for staff. Those interviewed discussed the value of data for identifying student needs and guiding instruction but noted that data can still be intimidating for some staff. Participants explained the necessity of finding a balance between the effective utilization of data and validating the experience, judgment, and opinions of educators. Participants recommend keeping students as the focus of the work.

**Utilize a Whole-child Approach to Problem-solving.** One school counselor, Ms. Grayson, remarked, "Remember that a child is more than the sum of his scores." That is why several participants in my study stressed the importance of using an integrated approach to problem-solving which considers academic struggles along with behavioral, social-emotional, physical, and environmental challenges. MTSS teams across the participating schools are moving toward the use of multiple sources of data to examine student needs using a whole-child approach. Integrating behavior and mental health supports under the MTSS framework requires a shift in thinking. According to study participants, not only do teams need to have the right people at the table for problem-solving, but they must also develop the right mind-sets to support the work including a focus on prevention and joint accountability for whole-child wellness. Ms. Grayson, school counselor, summarized this idea, stating, "We have to look at the big picture. We need fertile minds to understand the culture that we are in and the needs of our kids."

**Celebrate and Communicate Successes.** In order to improve and sustain MTSS implementation, both district and school-level leaders in Green Pastures Schools recommend the intentional communication and celebration of implementation successes, both large and small. By creating time for collaboration, educators in Whistlestop, Deep Wells, and Mulberry Elementary schools discussed constructive implementation steps within their schools and with other school teams—sharing ideas around successful teaming, logistical problem-solving, meaningful ways to use data, and ways to build instructional and intervention resources. Research has shown that staff support may improve with time as stakeholders begin to encounter positive experiences and outcomes as the result of the implementation of a new initiative (Horner et al., 2017; Pinkleman et al., 2015). The Director of Student Support Services confirmed this viewpoint, "Positive experiences promote positive experiences!" By sharing the experiences of educators with hands directly in the MTSS installation process, Green Pastures leadership hopes

to continue to build the beliefs, attitudes, skills, and capacity to strengthen and sustain MTSS implementation as a long-term school improvement initiative.

### Research Question 4: How Do the Findings of this Research Study Relate to the NC MTSS Six Critical Components?

As discussed in Chapter II, six critical components, derived from implementation science, were outlined by the North Carolina Department of Public Instruction as necessary for efficient and effective installation and implementation of Multi-Tiered Systems of Support in North Carolina (Bohanon et al., 2016; NCDPI, 2016b; Sugai & Horner, 2019). These six critical components, adapted from a similar framework created for RTI and MTSS implementation in Florida, provide the means for the early identification of student need through data-driven problem-solving across areas of concern (Sugai & Horner, 2009). The six critical components include the following essential elements: (a) leadership, (b) capacity and infrastructure, (c) communication and collaboration, (d) data-based problem-solving, (e) three-tiered instructional and intervention model, and (f) data evaluation. These categories were used to organize the information that I obtained from stakeholder interviews. They also provided me with the analytical framework for discussing my findings while relating the practical experiences of educators across one North Carolina school district to the theoretical expectations of the MTSS model. In the following sections, I highlight each of the critical components and outline recurrent themes that emerged from my conversations with various stakeholders across the Green Pastures Public School District.

#### Critical Component #1: Leadership.

***District-based Leadership.*** A strategic approach to implementation, including the commitment of leadership and the establishment of implementation teams, is essential to the initiation and sustainability of new educational practice (Arden et al., 2017; McIntosh & Goodman, 2016). In anticipation of the upcoming NCDPI roll-out of Multi-Tiered Systems of

Support as a new school improvement initiative, Green Pastures district office leadership proactively began steps to prepare for the adoption of MTSS, before formal onboarding as an NCDPI MTSS cohort. Composed of a variety of district-level stakeholders with cross-departmental representation, the Assistant Superintendent of Academics and Instructional Support, the Director of Student Support Services, the Director for Testing and Accountability, the EC Director, the Director of Federal Programs, and the Elementary, Middle, and High School Directors, and the District MTSS Coordinator formed the Green Pastures District MTSS team and deemed themselves responsible for installing the structures and resources necessary to transition from RTI to MTSS. Members of this district-level team attended NCDPI provided MTSS training and used this information for MTSS implementation planning (R. Freeman et al., 2015).

Research has shown that leadership is critical for communicating the mission and vision of the work to all stakeholders, providing procedural guidance and technical assistance through professional development, and providing the resources necessary to support implementation including access to data to support problem-solving (Choi et al., 2019; Horner et al., 2017; McIntosh et al., 2015). Having prior experiences with RTI implementation that many Green Pastures educators considered unsuccessful, district leaders determined it necessary to create the position of District MTSS Coordinator to lead the work in Green Pastures Public Schools.

District and school staff attribute the selection of Ms. Smith as District MTSS Coordinator as a primary contributing factor in their perceived progress with the MTSS installation and implementation process in the Green Pastures School District. As described by participants interviewed, Ms. Smith served as a crucial resource to district and school-based educators, serving as an informational link between NCDPI, Green Pastures Public Schools, and individual school sites. Many of the educators interviewed praised Ms. Smith for her leadership skills, understanding of MTSS and its practical application in schools, and her ability to

communicate effectively with all stakeholders. School and district staff reported that Ms. Smith is admired and appreciated for her knowledge of curriculum, expertise in the area of implementation science, and ability to lead schools in collecting, organizing, and analyzing data. They also noted that her approach to professional development, through a blended model of face to face and digital training, paired with school-based consultation services, played an integral part in stakeholder understanding of MTSS. Additionally, stakeholders stated that Ms. Smith was able to promote buy-in to MTSS as a school improvement initiative through her efforts to create and foster relationships with the educators at each of the school sites within this study. Those interviewed expressed that they perceived Ms. Smith as a leader whom they could rely upon and whom they could trust. She was perceived by staff as a coach or mentor who keeps the best interest of the school, students, and staff in mind when offering guidance and suggestions, and inspires two-way communication through her openness to stakeholder feedback. Mrs. Mitchell, school principal at Mulberry Elementary, summarized the efforts of the District MTSS Coordinator:

> Ms. Smith has been phenomenal at helping administrators, coaches, and teachers in understanding the process, providing, resources, and creating tools. She has really helped to bridge the gap between state and district expectation and what is happening at our schools. She is a liaison, serving under the student support services umbrella, but also closely working with our Elementary Ed Director and the EC Department to bring all of those folks together. And to have her come in and work directly with our team, talking about real kids and real data, real processes—She is helping us to problem-solve, while also asking us the hard questions that help us to grow and keep this sustainable.

***Evaluation and Acquisition of Resources.*** As part of the responsibilities of MTSS leadership, district-level stakeholders are responsible for examining district needs from a comprehensive perspective. This entails assessing district and school resources, identifying distribution gaps, and then acquiring, and allocating resources following district and school needs (McIntosh & Goodman, 2016; Sugai et al., 2016). District- and school-level leaders in Green

Pastures Public Schools have worked with staff to evaluate resource needs. Specifically, schools needed universal screening and diagnostic assessment tools to identify students at risk in academic, behavioral, and social-emotional domains. Schools also needed core instructional resources and intervention programs to support students in the classroom and in tiered supports. District leaders acquired many district-wide resources to support literacy and math, including computer-based learning programs, and intensive programs for reading instruction. Recently, Green Pastures Public Schools began the process of selecting and purchasing curriculum and screening tools as part of a pilot project to support social-emotional learning in selected schools.

However, recognizing the variety of needs across the district, and disparities in resources from school to school, Green Pasture district leaders allowed each school site-specific autonomy in selecting core and tiered instructional resources to support a standard treatment protocol of options for intervention. Staff interviewed reported mixed feelings regarding school responsibility for intervention resource selection. While educators appreciated autonomy to design intervention systems unique to their school's current resources and needs, they also expressed concern over the variances in instruction that students and staff face in the absence of resource consistency. This consideration is especially important, considering that it is not uncommon for students to transfer from school to school within the Green Pastures district. In the absence of common resources across schools within the district, the staff has voiced concerns regarding instructional practices and intervention integrity as schools move toward the use of the MTSS framework for future evaluation and eligibility for specific learning disabilities per the July 1, 2020 state-mandated policy.

***Focus on School Improvement.*** The process of adopting a new school improvement initiative, especially large-scale change similar to the implementation of Multi-Tiered Systems of Support, requires deliberately planned changes in structures, practices, monitoring, and

accountability (Fullan et al., 2005; Horner et al., 2017). To ensure that the MTSS framework aligned with overall school improvement, and to ensure a district-wide system for effective and manageable school improvement planning, Green Pastures district leaders adopted NC Star as a school improvement monitoring and accountability platform and assigned the use of NC Star in all schools within the district. This platform provided a means for schools to select pre-determined indicators aligned with overall school improvement, and consistently monitor progress on tasks associated with MTSS goals. Over the past few years, district leaders across departments have made diligent effort to work in partnership and use common language when discussing MTSS with stakeholders to stimulate understanding of the initiative and encourage staff beliefs and attitudes that support implementation. Specifically, each department has worked to provide professional development activities that facilitate staff connections between the work in their respective areas and MTSS implementation. Stakeholders must understand how policy changes, decisions made around instructional practices, curriculum and resource selection, structural changes, and communication systems all align with MTSS as a school improvement framework (Choi et al., 2019).

***School-based Leadership.*** It is important for district and school leadership to guide the implementation of teaming structures, model focused and effective problem-solving processes for school improvement, and effectively distribute resources (Sugai et al., 2016). With this in mind, the Green Pastures District MTSS team along with the District MTSS Coordinator, established the requirements for school-based leadership teams. Recognizing the need to build capacity and sustain MTSS efforts over time, the district recommended the establishment of school-level multi-disciplinary MTSS teams and designation of an MTSS Coach at each school site. The district also provided schools with guidance regarding the teaming structures required to implement MTSS as a school improvement framework. With a renewed focus on strengthening

core instructional practices and creating effective tiered intervention systems, school leaders examined the functions of current teams. They then revised teaming structures, meeting content, meeting schedules, and roles and responsibilities in alignment with MTSS goals. Additional stakeholders, such as the school counselor, social worker, psychologist, school nurse, special education teacher, and others, were asked to join MTSS leadership teams to ensure integrated conversations across domains (academics, behavior, social emotional needs, attendance).

***Principal's Role in MTSS Implementation***. In conducting my research, I interviewed two school principals. The principals reported that they did their best to attend professional development sessions to learn more about MTSS implementation. However, attendance and participation in MTSS training sessions were reportedly inconsistent due to competing responsibilities and priorities, as summarized by Mrs. Mitchell, school principal at Mulberry Elementary:

> There are MTSS chair meetings that principals are invited to attend. Not having an assistant principal, I oftentimes choose not to go. And that is a choice I make. I am taking myself out of a learning opportunity, but it is because there are other things that have to be done. There are opportunities there that I am not able to take advantage of because of other things that are on the plate.

Effective installation and maintenance of Multi-Tiered Systems of Support require that school leaders communicate and promote the mission and vision of the work to all stakeholders involved in the school improvement effort (Choi et al., 2019; McIntosh et al., 2015). Despite the difficulties with participation in district-sponsored MTSS professional development, school principals in each of the three school sites were perceived by staff as supportive leaders helping to facilitate the installation of MTSS in their schools. My interviews with school-based educators in Green Pastures School District revealed examples of school administrator attempts to promote the climate and buy-in necessary to support MTSS implementation. At Deep Well Elementary, the

principal was assigned to the school six months prior and was in the process of learning more about the school in order to best support the work. However, staff reported that the principal ensured open lines of communication to gain a better understanding of school resource gaps, professional development needs, and to address the logistical issues associated with creating an effective master schedule to support instruction and problem-solving. At Whistlestop Elementary, staff perceived the school administrator as supportive as they worked to implement MTSS. According to Mrs. Peters, instructional coach, "Our administrator is very well aware of MTSS implementation [requirements]. She comes to our MTSS meetings and trainings. We look to her for guidance with decision-making." School-based staff at Mulberry Elementary describe their principal as actively participating in the installation and implementation of MTSS and shared examples of activities completed in their school to establish the attitudes and beliefs necessary for successful MTSS implementation (e.g., perception surveys, equity trainings, relationship building activities). "Our principal promotes confidence within our staff, helps us to grow, provides us with strategies for better teaching, and helps us to better understand data to guide our instruction," noted the reading specialist at Mulberry.

Principal participation is an essential component for the installation and scale-up of a school change initiative such as MTSS (Charlton et al., 2018; Choi et al., 2019). As the driver of school-based implementation, principals are responsible for (a) communicating the vision of the work in a way that is meaningful to stakeholders, (b) creating the structures necessary to initiate and maintain implementation and communication (e.g., regular meeting schedules, teaming structures), (c) planning clear action steps for implementation, (d) delegating staff roles and responsibilities, effectively distributing resources, and (e) evaluating the effectiveness of implementation (Choi et al., 2019; McIntosh & Goodman, 2017; NCDPI, 2018). Principals in Deep Well, Whistlestop, and Mulberry Elementary Schools supported revisions to school teaming

in order to create the structures necessary for problem-solving around school-wide, grade-level, and student-specific needs. Additionally, administrators worked with staff to create master schedules that included protected time for core instruction and tiered interventions. The master schedule also designated time for common planning and staff collaboration. These administrators conducted assessments of school resources in order to identify needs, fill resource gaps, and refine the allocation of resources, including professional development, staff responsibilities, instructional curriculum or programs, and assessment or diagnostic tools. Additionally, these administrators launched a priority focus on core instruction, through the development of core expectations for academics and behavior, through the selection of MTSS aligned professional development, and by establishing data collection procedures to monitor the fidelity of core instruction (core walkthrough tool).

***Leadership Role of the School-based MTSS Coach***. Although principals are held accountable for leading educational change initiatives in their schools, the results of this research suggest that school-based instructional coaches (ICs) carry the majority of the responsibility for overseeing implementation. One principal expressed her sentiments about the instructional coach at her school, saying, I am blessed to have a very capable person that oversees MTSS for our school as our MTSS Chair, so I do not feel that I have to micromanage. But, I also feel that I need just enough understanding of what is going on so that I can help support her and the teachers." Instructional Coaches were most often selected to serve in the role of MTSS Chair due to their comprehensive perspective of the school's instructional strengths and resource needs. Additionally, the flexibility of the IC position allows the opportunity for this educator to attend district-led MTSS training sessions that classroom teachers would have difficulty accessing without classroom coverage.

I asked all participants interviewed to name educators who were most highly impacted by MTSS implementation. Unanimously, study participants named instructional coaches as staff members who carry the largest workload and most deeply feel the burden of MTSS installation. Additional to the roles indicated in their job descriptions, such as providing instructional guidance and coaching to classroom teachers, leading professional learning community meetings, and designing and presenting professional development to promote effective teaching practices, instructional coaches also serve as digital learning coaches, testing coordinators, and unofficial administrators in the absence of assistant principals. Instructional coaches are described by other staff as "educators that are greatly appreciated, but wear too many hats and are spread too thinly with responsibilities." As MTSS Coaches, ICs in Deep Well, Whistlestop, and Mulberry Elementary Schools are responsible for facilitating MTSS leadership meetings (Tier 1), as well as Professional Learning Community Meetings (Tier 1/2), kid-talk sessions (Tier 2/3), and problem-solving team meetings (Tier 3). Additionally, these staff members lead data collection and analysis efforts, often taking on the responsibility of organizing the administration of and data collection for universal school screening, benchmark assessments, diagnostic assessments, and progress monitoring. Instructional coaches provide technical assistance to staff by explaining procedures and protocol for MTSS implementation, teaching staff to analyze and interpret student data effectively, modeling problem-solving conversations, and assisting teachers in the development of classroom-based and student-specific intervention plans.

**Critical Component #2: Capacity/Infrastructure.** In order to install MTSS effectively and efficiently, district and school leaders must create structures and systems to build the capacity to implement and sustain the MTSS effort over time (R. Freeman et al., 2015; McIntosh & Goodman, 2016). Capacity development within the MTSS framework requires consideration of professional development and ongoing coaching supports, opportunities for collaboration and

problem-solving, access to data needed for decision-making, and structured practices and supports for tiered instruction and intervention (NCDPI, 2018; Sugai et al., 2016). District-level and school-based leadership teams within Green Pastures Public Schools must establish guidelines and procedures for best practice, develop content expertise, and provide coaching and technical assistance. Through cultivating stakeholder understanding, implementers work toward increasing the independent functioning of school-based structures and routines necessary for school improvement using the MTSS framework (Sugai et al., 2016).

***Professional Development.*** Adhering to recommendations of implementation science, the MTSS Coordinator for Green Pastures Public Schools designed MTSS professional development using a stage-based approach. Through district-lead and school-based professional development and coaching opportunities, the staff was provided with information to promote understanding of the essential components of MTSS. All schools were provided with training to support the development of quality core instructional practices before moving on to focus on building tiered intervention systems for students with supplemental or intensive needs. Professional development opportunities addressed the needs of schools and students from a comprehensive perspective including an examination of academic, behavioral, and social-emotional concerns along with sessions focused on utilizing data to make informed educational decisions around student needs. District leaders offered professional development in multiple formats through the provision of face-to-face training sessions, online learning modules, and through practical application sessions embedded within school team meetings. Additionally, the District MTSS Team worked together to provide professional development across departments, intentionally including a variety of stakeholders including school principals, MTSS coaches, instructional coaches and reading specialists, MTSS School-based teams, and student support service personnel.

***Development of Support Structures.*** Green Pastures Public Schools prioritized the development of leadership and teaming structures to build the infrastructure necessary to transition from RTI to MTSS implementation across the district. Central Office leaders created a District MTSS Team and selected a District MTSS Coordinator to build the structures and acquire the tools and resources to support schools. Creating a cohesive team at the district-level was not without obstacles, as scheduling constraints, personality conflicts, and competing priorities were factors that negatively impacted district-level commitment to the work. However, study participants described how communication and collaboration at both the district and school-level have continued to evolve and improve with time.

At the school level, the adoption of the NC Star platform for designing and monitoring school improvement mandated changes to school leadership team meeting schedules and membership. The District MTSS Coordinator worked with school administrators and MTSS Coaches to assess current teaming structures, and determine refinements needed in order to align with the MTSS framework and new requirements for NC Star accountability. The functions of MTSS teams, the content of team discussions, and stakeholder roles and responsibilities transformed in order to increase the efficiency and accountability of the school leadership teams. Each team worked to develop comprehensive systems for strengthening instructional practices across tiers. They used data to monitor the fidelity of instructional and intervention systems and the overall effectiveness of MTSS implementation. Grade level teams or PLCs added detailed data review sessions, screening and identifying at-risk students, and matching students to interventions based on specific needs and skills to their list of responsibilities to support core (Tier 1) and supplemental (Tier 2) instruction. Individual problem-solving teams were also designated to carefully examine the needs and design intervention plans for students requiring intensive levels of support (Tier 3). Although the stakeholder composition and overall teaming

structures varied slightly among the schools participating in this study, all three schools have updated teaming structures to meet the unique needs of their respective schools to best support MTSS implementation.

***Reduction of Competing Priorities or Practices.*** Studies have demonstrated that competing priorities, philosophies, or practices within a state or district often undermine the implementation of initiatives such as RTI or MTSS (Feuerborn et al., 2016; McIntosh et al., 2015; Pinkelman et al., 2015). When I asked participants to provide examples of competing priorities or practices within their district, participants shared that they felt the district team had done as much as possible to reduce requirements or activities that would take away from MTSS implementation except for one initiative—digital learning. With a push from the state to integrate the use of technology into instructional practices, the district-level staff has provided educators in Green Pastures with professional development around digital learning and access to new tools to support the use of technology in the classroom. Several of the educators whom I interviewed voiced that the focus on technology in the classroom was distracting for teachers and perceived as "one more thing to do."

> I feel there is a bit of competition with digital learning. That is a big push that is new to our county. It competes with instruction in general, in a way. I love digital, but you have to remember that teaching is more important than the tool. I feel teachers feel pressure right now to digitize everything and everything does not need to be digitized. I don't want kids on a computer for intervention. You just can't give your full attention and focus to instruction. If your choices are "I'm going to be a rock star digital learning instructor" or "I'm going to be very in touch with where my children are within MTSS," I would rather be the latter. Everyone has a digital goal in their PDP, but there's just not enough time to roll this all out properly.

Digital learning was identified by Green Pastures staff as the only obvious competing initiative; however, the persistence of outdated but lingering practices can also impact MTSS implementation. Having implemented RTI in the district for several years before the installation

of MTSS, school-based implementers in Green Pastures were required to engage in a period of what they describe as "unlearning" of previous practices while attempting to implement MTSS. For many, this required a shift in attitudes and beliefs around instructional practices and supports for students with academic or behavioral concerns. Staff in Green Pastures were required to move away from viewing the tiered intervention framework as a pathway to special education services. Instead, they emphasized shared responsibility and accountability for the growth of all learners. However, given the resources currently available (e.g., staff, time, instructional/intervention programs), the schools participating in this research study (and across Green Pastures School District), could not support the number of students demonstrating the need for Tier 2 and 3 instruction. Therefore, district and school leadership determined it necessary to shift focus to improving the quality of core instructional practices with the hope of eventually decreasing the number of students in need of supplemental and intensive interventions.

***Acquisition of Resources.*** MTSS is a school improvement initiative required for implementation in all North Carolina Public Schools by July 1, 2020, but thus far has not been funded by NC legislators or NCDPI. In a time when school resources are already limited, staff interviewed in Green Pastures expressed concern regarding the difficulty of implementing wide-scale school reform work, in the absence of additional funding or staffing. In previous studies, stakeholders have voiced similar concerns regarding states that have failed to provide the resources necessary to carry out the work, including fiscal support, instructional materials, allotments to support the provision of additional staff, and/or professional development (Cavendish et al., 2016). Although NCDPI has provided regular, structured professional development, and ongoing coaching to support MTSS implementation, districts such as Green Pastures have assumed responsibility for evaluating and fulfilling district and school needs. Consistent with previous research, many educators in this study spoke of the challenges

associated with an effort to fully implement MTSS despite strained resources (Cavendish et al., 2016; Charlton et al., 2018; Lane et al., 2015; Swanson et al., 2012). An assessment of resources in Green Pastures School District revealed inconsistencies in resources from school to school. Title I schools have access to additional funds where other schools have attempted to piece together resources using dated instructional kits, or through the acquisition of free or inexpensive online sources. The school district is working across departments to secure funding to support equitably distributed instructional curriculum, intervention programs, digital learning resources, and resources to address mental health and social-emotional needs. However, inadequate staffing continues to be a priority concern as schools are required to share enhancement teachers (art, music, PE) and instructional support personnel (e.g., ESL teachers, AIG teachers, social workers, nurses, and psychologists). Given this obstacle, the school district has provided an instructional coach and a reading specialist at every school to support MTSS implementation. Additionally, school-based leadership teams have focused on identifying and cultivating the skills of each staff person in their building. They also created a master schedule for instruction that most effectively utilizes the expertise of that educator in order to address student needs. Educators in Green Pastures School District spoke about the commitment of leadership teams, the importance of problem-solving and the creative distribution of resources, as they work together to evaluate existing resources and allocate those resources toward high priority needs.

**Critical Component #3: Communication/Collaboration.** Effective communication and collaboration systems are essential for the successful implementation of Multi-Tiered Systems of Support (NCDPI, 2018). To facilitate effective MTSS implementation, a common vision, language, and routine for communication must be formally established (Sugai & Horner, 2019). In keeping with this expectation, educational leaders in Green Pastures Public Schools developed multi-level teaming structures with specific functions, roles, and responsibilities and

scheduled protected time for meetings and problem-solving sessions. Teams are composed of a multi-disciplinary group of stakeholders representing administrators, teachers, support staff, and other educators with a variety of perspectives, experiences, and expertise. Strategically, these teams are connected by a mutual stakeholder who can relay information and feedback from one team to another. The creation of these teams was not without obstacles. As described by stakeholders interviewed, district-level communication between departments was initially perceived as ineffective and strained due to changes in organizational structure, personnel changes, and personality conflicts. However, with time and intentional effort, the district MTSS team worked to reconfigure teaming structures and improve communication between district-level departments. District-level stakeholders prioritized the use of common language, partnered for professional development, and communicated a consistent message concerning MTSS implementation in Green Pastures Public Schools.

The district hired a district-level MTSS coordinator to receive and communicate information regarding MTSS implementation from NCDPI to local education agencies. I interviewed stakeholders that expressed the value of this position as a liaison between the state, the district, and schools. Participants explained how Ms. Smith, the District MTSS Coordinator, filtered information from the state, spotlighting the most important information and providing communication in smaller, more manageable chunks so as not to overwhelm or overburden school administrators and staff. Participants also explained how the MTSS Coach at their schools served as a buffer between the school and district, introducing MTSS changes in stages over time to allow staff the opportunity to adapt to the change slowly. Furthermore, participants noted that their school-based MTSS coaches, in collaboration with the District MTSS Coordinator, were able to tailor information and professional development to each school in a meaningful way for practical application in the school setting.

At both the district and school level, communication plans were developed to ensure effective communication within and across problem-solving teams. These plans included communication protocols for conveying information to educators within the school and district, but also with students, families, and external community supports. Participants in this study discussed how MTSS has positively impacted family engagement efforts. Through the problem-solving process, parents and representatives from community agencies working directly with families, are invited to participate in educational decision making. By including a variety of stakeholders in student-focused conversations, educators in Green Pastures Public schools hope to proactively support student needs across areas of concern (attendance, behavior, academics, social-emotional needs, physical health, and mental health).

Another essential component of successful communication is consensus building. Green Pastures Public Schools collected belief survey data from district and school staff in order to determine how the beliefs and attitudes of stakeholders may influence MTSS installation. As documented in the consolidated school profile (Chapter V) , participants in this study described circumstances in which the beliefs or mindsets of educators in their building negatively impacted both RTI and initial MTSS implementation. They also described experiences where leadership provided professional development activities to provide stakeholders with a better understanding of the mission and vision of MTSS implementation, as they moved away from previous RTI practices that promoted deficit-based thinking. For others, mindset shifts were required to promote MTSS successfully. Schools described how conversations around equity, building relationships between students and staff, and shared responsibility for all students helped educators stimulated implementation readiness.

Educators in Green Pastures School District also discussed the importance of consistent and timely communication of information and data. Those interviewed shared that the amount of

data and information available could be overwhelming at times. They noted the significance of "sharing the right information, at the right time, with the right audience." Access to student outcome data and implementation fidelity data provided staff with a means of assessing student needs and monitoring their practices. However, those interviewed also noted the impact of sharing success stories and information about effective practices. Consistent with McIntosh and Goodman (2016), sharing information regarding successful implementation outcomes may reinforce implementation fidelity and motivate continued implementation (sustainability).

**Critical Component #4: Data-based Problem-solving.** MTSS implementation is strongly dependent upon data as a foundation for implementation and decision-making efforts (Horner et al., 2017; McIntosh & Goodman, 2016). This is true at both district and school levels. From a district perspective, data is used to guide decisions about implementation readiness, implementation planning, and as a means of evaluating the success of MTSS implementation. Schools use data within an MTSS model to (a) assess current needs, (b) universally screen students to identify children in need of supports across areas of concern, (c) diagnose specific student skill needs, (d) determine the most appropriate interventions to match student needs, (e) monitor student progress over time, and (f) assess the fidelity of MTSS implementation.

***Attitudes toward the Use of Data for Educational Decisions.*** Although the educators in this study voiced their understanding of the importance of data collection and analysis to guide educational decision making under an MTSS framework, it was noted by many of those interviewed that the shift toward a data-based approach for addressing core instructional practices and examining individual student needs was challenging for teachers. Consistent with the findings of Cavendish et al. (2016), those interviewed in Green Pastures shared stories of staff who expressed anxiety when presented with classroom or student data due to discomfort with data interpretation. Other teachers were defensive when presented with data that illustrated

below-proficiency level performances, fearful that the data reflected poorly on their teaching practices. Additionally, some teachers expressed concerns that data collection and analysis required time away from much needed instructional time. School-based educators noted that the coaching support received is promoting more positive attitudes around the use of data as teachers shift from subjective or "gut-based" approaches to data-based problem-solving to support the needs of students. As reported by one reading specialist, "I have watched the expressions of teachers go from guarded to, 'Okay, let's talk about this [data] and help me understand.'"

***Practical Approach to Data in Schools.*** Green Pastures District staff and leadership within each of the three schools participating in this research study have attempted to make data-based decision-making more manageable and comfortable for educators by offering professional development and guidance to support data collection, analysis, and interpretation. District leaders delivered formal professional development to administrators, instructional coaches, and other educators to assist them in understanding how specific data, such as mClass and iReady Math screeners, can be used to support instructional planning. They also offered supports through embedded modeling and practice opportunities during MTSS or PLC meetings. District and school MTSS leadership hope that teachers and staff will more fluently and independently use data to drive instruction and supports for students in an integrated way across domains (behavior, academics, attendance, mental health, and social-emotional wellness). With MTSS implementation, those interviewed report that they are beginning to see teachers demonstrating increased ownership and responsibility for facilitating discussions around data.

Data available in schools comes in multiple types and forms. The sheer volume of data can be overwhelming for educators. Therefore, it is important to select tools for data collection with a specific purpose in order to minimize confusion (Castro-Villarreal et al., 2014). Within an MTSS framework, data are collected and analyzed with these specific intentions in mind: (a) to

assess implementation fidelity, (b) to screen students and identify needs, (c) to determine specific needs as a diagnostic assessment, (d) to monitor the progress of students receiving instructional interventions, and (e) to evaluate overall student and school growth (McIntosh & Goodman, 2016). The leadership teams studied in this project used data with the intention of improving outcomes for students. They streamlined the type of data collected and selected assessment and diagnostic tools to make data collection more effective and efficient. Moreover, the schools developed an assessment plan outlining the application of specific assessment tools for screening, diagnostic information, and progress monitoring; when assessments would be administered; and how the data collected from these assessments would be utilized for decision-making. The analysis of attendance, behavioral, and academic data has become an embedded part of school teaming and problem-solving structures to reduce the perception that data analysis is "one more thing" on the long list of teacher responsibilities and to emphasize the value of data in educational decision-making to benefit students and overall school improvement practices.

**Critical Component #5: Three-tiered Instruction and Intervention Model.** Having previous experience with the Response to Intervention (RTI) framework provided educators in Green Pastures School District with a general understanding of the MTSS approach and the use of a three-tiered instructional and intervention model. However, MTSS implementation required educators to examine student performances with a broader lens, integrating a whole-child perspective with instructional and intervention practices. As stated by McIntosh and Goodman (2016), "The focus of Tier 1 is optimizing learning and preventing problems as early as possible." The authors go on to say, "Tier 1 practices are not selected specifically in response to individual challenges, but rather to maximize success for all students in all areas" (p. 114).

***Tier 1: Focus on Core Instruction.*** Similar to other districts with limited resources, schools within the District did not have the funds, staff, or resource capacity to address the needs

of all students potentially identified in need of supplemental or intensive supports. Leadership recognized the need to proactively address student needs by strengthening core instructional practices in the classroom. This requires schools to examine and reallocate resources, modify school master schedules, provide professional development to train staff on best practices in literacy and math, and specialize staff roles and responsibilities following their specific areas of expertise.

Participants from Deep Well, Whistlestop, and Mulberry Elementary schools each detailed the efforts of school leaders and staff to create defined and consistent grade-level expectations for core academics, behavior, and most recently, social-emotional learning. Schools provided focused professional development around instructional quality and differentiation for literacy and mathematics. Leadership teams designed and utilized core walkthrough tools to collect fidelity data for examining instructional practices and shared this information and feedback with teachers. PLCs worked to revamp curriculum, pacing guides, and lesson plans to fortify classroom instruction. As a result, some schools are beginning to report student growth. For example, whereas over 60% of students at Whistlestop were identified at-risk in at least one area of concern in previous years, only 18-20% were identified in need of supplemental or intensive supports in the 2018-19 school year. With a continued focus on bolstering core instruction in academic, behavioral, and social emotional domains, stakeholders in the participating schools hope to more accurately identify student risk and reduce the number of students in need of small-group and individualized supports.

***Building Intervention Systems.*** Although a concerted effort to reinforce core supports appears to be positively impacting the schools that I studied, the need for tiered instruction and interventions is still required to address the needs of students that do not respond to classroom-based support. Therefore, the Green Pastures District MTSS Team recommended the installation

of an enrichment and intervention time at each school. With a healthier core, many of the participants interviewed shared that they felt more comfortable and confident that the recommendations that they were making for small-group and individualized interventions were appropriate.

The installation of intervention and enrichment time (I &E) was challenging for schools according to educators participating in this research project. With minimal staff, creating a master schedule and assigning staff to provide intervention supports was logistically difficult. Other challenges included a lack of curriculum and programs to support small groups and individual students in need of skill-based direct instruction.

Participants shared that some educators expressed initial resistance to a designated intervention and enrichment time. For some teachers, the provision of specific, skill-based intervention called for an instructional approach that extended beyond their typical skill set, causing anxiety and discomfort. A few teachers were reluctant to give up their planning time in order to offer intervention services, while others expressed displeasure around the prep time required to plan for intervention groups.

Despite initial uncertainty, staff from all three schools noted that they are beginning to see shifts in teacher's perceptions regarding the provision of tiered supports as evidenced by staff discussions during problem-solving team meetings. Whereas they were once hesitant to send students to other teachers for interventions, teachers have adopted a collaborative approach to instruction, with teachers within (or even across) a grade-level sharing responsibility for all students. Through data-dive sessions, teachers are working together to identify the needs of at-risk students and assign them to interventions based on particular skill gaps. With guidance from district level and school leadership, classroom teachers and interventionists have identified their

own areas of expertise and matched those skill sets to provide supports for students with those specific needs.

Several participants described I&E time as a "work in progress" but were optimistic that students would benefit as they continued to refine intervention practices. Needed improvements include continued discussions to define specific staff roles and responsibilities, professional development and coaching to promote independent data analysis and interpretation, the development of clear decision-making rules for moving students between tiers of support, and the development of a standard treatment protocol for intervention in all domains.

**Critical Component #6: Data Evaluation.** Sustaining MTSS implementation requires that leadership teams use fidelity data to improve systems and practices and guide educational decision making in the best interests of student outcomes (McIntosh et al., 2013; Sugai & Horner, 2019). Schools are not able to determine the effectiveness of practices unless fidelity measures are collected to confirm that educators consistently apply and adhere to implementation plans (McIntosh & Goodman, 2016). In other words, the collection of fidelity data allows educators to know if the systems or instructional changes installed are working to promote school improvement and positive student outcomes. According to McIntosh and Goodman (2016),

> A simple but effective structure for an evaluation plan answers the following questions:
>
> 1. What are we doing to improve student outcomes (process)?
> 2. How well are we doing it (fidelity)?
> 3. Are our actions actually improving student performance (outcomes)? (p. 64)

Green Pastures School District and the three schools within the district that participated in this study are collecting various types of fidelity data to ensure staff commitment to MTSS implementation across tiers of practice. In order to address the overall effectiveness of school improvement efforts, each school is utilizing the NC Star platform to design and prioritize school

improvement goals and track progress on tasks and action steps aligned with those goals. This data is evaluated at least monthly by school MTSS teams, while district-level leadership may also access the platform to monitor progress and provide guidance and coaching support. Each school is also responsible for evaluating the impact of MTSS across tiers of support and areas of concern.

The educators interviewed in this study described how behavior, attendance, and academic data were regularly collected and reviewed in MTSS leadership teams, PLCs, and Tier 3 problem-solving groups. Table 6 in Chapter V (see page 162) summarizes common fidelity measures collected in Deep Well, Whistlestop, and Mulberry Elementary Schools. According to Sugai and Horner (2019), "The establishment and use of effective, efficient, and relevant data decision making systems are vitally important to the designation of expected outcomes and selection of evidence-based practices" (p. 11). These data are shared frequently with staff to ensure that staff can visualize how the data that they are collecting and utilizing for decision-making is benefitting the school as a whole and advancing supports for the students whom they serve.

In addition to collecting information to ensure the effectiveness and efficiency of evidence-based instructional practices, schools within Green Pastures School District are examining their progress concerning comprehensive MTSS implementation. Before implementation begins, schools typically conduct fidelity assessments to provide a baseline of current practices and serve as a guide for future action planning. Fidelity assessments are also used periodically to monitor the progress of implementation with the intent of expanding and sustaining MTSS (McIntosh & Goodman, 2016). With guidance from the District MTSS Coordinator, the three schools participating in this study completed a yearly self-assessment of MTSS implementation using a tool provided by NCDPI's department of Instructional, Academic,

and Behavioral Supports. This tool, previously called the SAM (Self-Assessment of MTSS), provides schools with an indicator of MTSS implementation progress as measured by 38 items. School leadership teams completed the self-assessment together, noting responses to each item as 0-not implementing, 1-emerging/developing, 2-operationalizing, 3-optimizing. Responses are then used by the schools and district leadership to assess the strengths and weaknesses of the individual schools and the district overall regarding MTSS implementation. The MTSS self-assessment was used by schools in Green Pastures to celebrate evidences of successful implementation, guide future implementation planning, and develop MTSS implementation action steps in alignment with overall school improvement planning goals documented in the NC Star platform.

## Summary

In this chapter, I provided an analysis of my research findings by answering my four research questions. Making connections to previous research, I examined the perceptions of stakeholders in the Green Pastures School District, summarizing the MTSS implementation challenges they experienced and outlining strategies used to promote more successful implementation practices. Finally, I presented an analysis of my findings by making connections to the NC MTSS Six Critical Components framework.

Participants from across levels of implementation (district office, school administrators, school-based support staff, teachers) expressed a positive response to MTSS implementation in their district and schools. Educators in the Green Pastures School district perceived MTSS implementation as a framework for overall school improvement and noted the intentional alignment of MTSS to district and school professional development efforts, data collection, problem-solving conversations, and resource allocation. Participants discussed efforts to align stakeholder attitudes and beliefs with the work of MTSS by (a) improving overall school climate

and relationships with students and families, (b) utilizing a whole-child approach to examine the needs of students in an integrated way, (c) moving away from viewing a three-tiered support system as a pathway to special education services, and (d) reflecting on instructional practices across tiers of support. Participants attributed their positive perception of MTSS to effective professional development and coaching supports.

Educators in the Green Pastures School District also shared obstacles experienced during the installation and implementation of MTSS. My analysis of the research findings revealed the that implementation barriers involved the following factors: time, stakeholder collaboration, educator turnover, data-based problem-solving, adjusting to new roles and responsibilities, and confusion around implementation procedures. According to stakeholders, the implementation of MTSS is a complicated endeavor that requires the work of many departments, teams, and individuals. Participants discussed their attempts to apply MTSS as a school improvement framework through collaborative planning and the use of common language. Moreover, MTSS implementation required educators in Green Pastures Public Schools to collect and utilize data for educational problem-solving. Many teachers required extensive training to acquire data analysis skills and time to develop confidence with data interpretation. Participants noted how structures, procedures, and responsibilities changed with MTSS implementation. Some educators considered these changes stressful as they sought to implement MTSS with fidelity while facing many demands and time constraints.

District leaders, administrators, and school-based staff shared advice and strategies to promote more effective MTSS implementation practices. These educators recommended that future implementers engage in readiness steps to facilitate MTSS installation. Such preparation includes designating district and school-level coordinators, creating a teaming structure to support the work, and evaluating the resources available for implementation. Participants recommended a

slow, strategically planned implementation process that includes structure and flexibility, a blended approach to professional development (e.g., face-to-face, self-guided modules, embedded PD, and consultation services), and a whole-child approach to educational problem-solving. Participants cautioned future stakeholders to remain patient and keep an open mind. They also stressed the importance of intentionally communicating implementation successes as a means of sustaining staff support of MTSS over time.

In response to my fourth research question, I connected the findings of this study to the NC MTSS Six Critical Components, an extension of the implementation science framework that outlines the essential elements necessary for efficient and effective installation of Multi-Tiered Systems of Support. These components provided the framework to analyze my research findings: (a) leadership, (b) capacity and infrastructure, (c) communication and collaboration, (d) data-based problem-solving, (e) three-tiered instructional framework, and (f) data evaluation. MTSS leaders in the Green Pastures School District created effective district-level and school-based teaming structures to positively impact staff consensus, communication, resource acquisition, professional development, and overall school improvement. The commitment of district-level leaders, principals, and school-based leaders facilitated the district transition from RTI to MTSS. The District MTSS Coordinator and School-based MTSS/Instructional Coaches were perceived as educators who are most vested in the work of MTSS. Stakeholders expressed appreciation for these individuals and attributed implementation success to their contributions. With intent to make MTSS the district's school improvement framework, leaders adopted the NCStar platform as a tool to monitor implementation and affiliated professional development with the improvement of core and tiered instruction. District and school-based leaders also acquired resources to support MTSS implementation in schools and provided staff training on data-based problem-solving. Schools implemented a protected time for the provision of interventions and

enrichment (I&E time), despite logistical challenges and minimal resources. Each school continues to build tiered intervention systems, with plans to expand supports to include behavioral and social emotional components and develop standard treatment protocol options for intervention.

My analysis of these research findings indicate that the work of the Green Pastures School District aligns well with the implementation guidance outlined by the NC MTSS Six Critical Components. Stakeholders noted that future action steps include (a) the use of self-assessment tools, such as the FAM-S, to measure the fidelity of MTSS implementation across tiers of support and areas of concern, and (b) the use of data systems to determine if MTSS implementation is effectively promoting positive outcomes for students and schools.

In Chapter VII, I describe how my dissertation continues the conversation regarding large-scale implementation of school reform initiatives and extends upon preceding qualitative literature by offering a rich description of the experiences and perceptions of stakeholders implementing MTSS. I also discuss the limitations of my research project and offer suggestions for future research. Finally, I conclude my dissertation with a discussion of the implications of this research for state and district leaders and school-based implementers.

# CHAPTER VII

# IMPLICATIONS AND CONCLUSION

The purpose of this qualitative case study was to provide an in-depth examination of MTSS implementation in one North Carolina School District via the lens of fourteen educators in Green Pastures Public Schools. Through a series of interviews, three district-level leaders and multiple stakeholders from three schools within the district provided detailed summaries of their journey toward full MTSS implementation following a mandate by the North Carolina Department of Public Instruction. Stakeholders shared their unique stories, illustrating attempts to install and sustain MTSS—elaborately detailing implementation obstacles and facilitating events. Furthermore, stakeholders communicated their perceptions of how MTSS implementation impacted educators, students, and overall school improvement. Although each district and school profile could serve as its own case study, for the purposes of this dissertation, the experiences of all stakeholders were analyzed collectively using NCDPI's Six Critical Components of MTSS as a conceptual framework to explore this district's implementation story. By providing the rich, detailed narratives of stakeholders from multiple schools and educational roles, this research provides a distinctively comprehensive illustration of MTSS implementation, dissimilar from previous research.

When I began this dissertation project, there was little research that directly addressed MTSS implementation as a school improvement framework, although a growing number of schools and districts were in the process of integrating RTI and PBIS to form Multi-Tiered Systems of Support (MTSS) for students. The collection of empirical research on MTSS implementation is gradually expanding; however, very few studies examine MTSS

implementation via the lens of educators directly engaged in the work (Charlton et al., 2018; Rinaldi et al., 2011). My research expands on previous studies of three-tiered models by examining the perspectives of implementing educators in a natural context. It provides additional information regarding how educator beliefs, school resources, teaming and communication structures, data-based problem solving, and leadership impact the success of MTSS as a new school improvement initiative.

Additionally, my study provides stakeholder suggestions for future implementation considerations and practical application strategies. Related studies have shown that district and school teams have difficulty with designing installation and implementation plans. Specifically, implementers struggle with the following components of installation: (a) developing appropriate teaming and communication structures, (b) the creation of professional development, and (c) effective utilization of data. Also, with limited school resources, district and school leaders need support with effective resource acquisition and allocation (Horner et al., 2014; Sugai & Horner, 2019). Research projects such as this study provide valuable information that may assist future schools and districts with implementation planning. This research may also contribute to the construction of training and coaching supports (technical assistance) as leaders attempt to convert a theoretical model such as the MTSS framework into effective and efficient educational practices in the school setting.

## Limitations and Future Research Suggestions

A total of 14 stakeholders participated in comprehensive interview sessions. Participants represented district office leadership and school-based educators (principals, MTSS coaches, support staff, and teachers) selected from three schools. However, I selected all participants from only one school district in North Carolina. I expected there to be variance in the perceptions of stakeholders across levels of implementation when comparing district level to school level

responses. I also expected differences from school to school and even contrasts across educators with varying roles and responsibilities. However, the majority of participants shared generally uniform descriptions of their experiences and offered accounts of their perceptions that were quite similar. This may be due to the population of educators sampled and the method used for acquiring participation.

As discussed in the methods section, this research was conducted using a case study approach in which I investigated three schools in one district. Invitations to participate were first sent out to district level MTSS coordinators. Once Green Pastures Public Schools agreed to participate, the MTSS Coordinator of the district provided me with the names of three district-level leaders who were willing to be interviewed. Once I interviewed these participants, they, in turn, provided the names of schools that would best meet research criteria for participation. At this point, I reached out to the school-level MTSS coach, who provided the names of 3-5 educators who were willing to participate in the study.

Each of the participants served in a leadership role in their current positions. It is important to take this into account when reviewing this study. In leadership roles, each of these participants had the opportunity to attend state, district, and school-level MTSS trainings. Furthermore, they had access to online content and resources. Coaching supports were provided directly to these educators, whereas other educators may receive less comprehensive, less frequent, or less detailed information as it has passed from one level to another. Therefore, the experiences and perceptions of these educators may represent possible outcomes when strong efforts are made to directly provide educators with the knowledge, skills, and training supports necessary to promote effective MTSS implementation.

As stated in research by Sugai and Horner (2019), “We have learned that variations in size, experience, resources, expertise, and so forth affect the speed, priorities, fidelity, durability

and outcomes of implementation" (p. 6). Assuming that one district's documented experience with MTSS implementation is generalizable to the MTSS efforts of other schools and districts is imprudent. Green Pastures School District and the schools studied within, may differ from other public school districts in demographics and resources. Additionally, the narratives of stakeholders in this study illustrated a school district eager and motivated to engage in MTSS implementation. With previous experience utilizing the RTI framework, many Green Pastures administrators were inspired to try something new and actively engaged in acquiring more information about MTSS even before official enrollment in an NCDPI MTSS cohort. Many of the stakeholders that I interviewed attributed their cooperative and optimistic approach to MTSS implementation to the leadership of their District MTSS Coordinator. However, this drive to participate in a school change initiative may not be typical of other public school districts. Future research comparing and contrasting educator perspectives across other schools, districts, and states, is recommended for consideration, before making generalizations about attempts to scale up and sustain MTSS as a school improvement initiative.

My dissertation research was conducted only in the elementary school setting. Although not included in this study, many of the educators with whom I spoke mentioned the difficulty of MTSS installation in the middle and high school settings. Previous research on PBIS and RTI has confirmed challenges associated with the implementation of three-tiered school improvement frameworks at the secondary level (Feuerborn et al., 2016). It would be interesting to replicate this study in secondary schools in the Green Pastures School District to examine similarities and differences in practices and perceptions related to implementation across levels of schooling.

Finally, this study solely targeted stakeholder perceptions and experiences. This research is not intended to determine the effectiveness of overall implementation in the Green Pastures School District. To truly evaluate the effectiveness of implementation, I suggest that researchers

examine outcome data and fidelity data for the district as a whole and for each school site. Multiple data sources should be utilized comprehensively (and are mentioned briefly in various sections of this dissertation) as implementation evaluation measures. These data sources may include comparisons of academic student outcome data, EOG scores, behavioral data (ODRs, ISS, OSS), and fidelity measures such as PBIS Tiered Fidelity Instrument, MTSS Self-Assessment data (SAM or FAM-S), or other school improvement information (such as that collected in NC Star). An interesting extension of this study would be to conduct a comparative, quantitative study of MTSS implementation in Green Pastures School District and Deepwell, Whistlestop, and Mulberry elementary schools, using outcome and fidelity data. It would also be interesting to revisit each of the study participants in 3-5 years to examine MTSS implementation fidelity and stakeholder insights longitudinally.

## Implications

My research study provides evidence of a North Carolina Public School District that is making significant efforts toward the full implementation of Multi-Tiered Systems of Support (MTSS) as a framework for school improvement. Based on the stories and experiences shared by the school and district-level stakeholders interviewed in this study, stakeholders perceive MTSS as a proactive way to address the needs of students across areas of concern and intensity of need. Additionally, MTSS provides an alternative to the use of the discrepancy model as a means for determining eligibility for special education services for students with specific learning disabilities.

The implementation of MTSS empowers educators to more thoughtfully examine how we teach students of various abilities and needs. Instead of attributing gaps or deficits to the learner, MTSS encourages educators to take a step back and carefully consider instruction through an equity lens, exploring how instructional practices, the curriculum, and the

environment impact student learning. MTSS highlights the importance of effective, quality core instruction and focuses on research and evidence-based interventions and supports. MTSS also emphasizes shared accountability for student growth through ongoing examination and documentation of whole-school and student progress.

By examining academics, behaviors, social-emotional issues, and attendance in an integrated way, schools and districts may more effectively, and equitably distribute their limited resources to the needs of all students via a whole-child approach (McIntosh & Goodman, 2016). According to educators in Green Pastures Public Schools, diligent implementation of MTSS may provide the opportunity to encourage a positive school climate, develop the academic and social competencies of students, and ensure safe and supportive learning environments for both students and staff. Furthermore, the practical application of MTSS serves as an impetus for increased communication and collaboration across stakeholders, both within the school district and with families and community agencies that support students.

It is important to keep in mind that the perceptions of educators involved in any school change initiative directly impact the ability of a school or district to install and sustain implementation over time successfully. The beliefs and attitudes of staff significantly impact the outcomes of school reform. That is why it is so important to fully understand the perspectives of staff directly involved with the MTSS implementation effort. Educational leaders must consider the perspectives of implementers when making decisions regarding educational policies, practices, and resources.

**Implications for State and District-level Leaders**

As noted in the research of Cavendish et al. (2016) and Levin and Fullan (2008), educational reform is a difficult endeavor. Not only is change often unwanted by stakeholders, but changes do not necessarily lead to school improvement. Stakeholders need to understand

why an educational change is needed and how that change is going to occur. Educators need to understand both the purpose and the process. If educational leaders fail to engage in proper preparation work, confusion and frustration can result. This case study demonstrated that even in the best of circumstances, school change initiatives are challenging. However, with the guidance of leadership, goal-tailored professional development opportunities, and effective communication and collaboration structures, district and school teams can make implementation progress over time.

Appropriate preparation for implementation requires that State, District, and School leaders communicate the mission and vision for the work, establish structures to support the initiative, and promote stakeholder consensus and buy-in (Horner et al., 2017). Educational leaders in the North Carolina Department of Public Instruction and Green Pastures School District invested a significant amount of time and effort to improve stakeholder understanding of MTSS and develop educator buy-in before requiring full implementation. NCDPI provided initial communications around MTSS in the 2014-15 school year, giving public school districts in Cohorts 1-2 four to five years to prepare for the 2020 mandated implementation. The findings of this dissertation outline examples of how district and school-level leaders within the Green Pastures School District provided professional development opportunities to expand stakeholder understanding of the purpose and essential components of MTSS over time. Also, I shared examples regarding how school-level leaders addressed issues with staff beliefs and attitudes that hindered MTSS implementation.

Although North Carolina and Green Pastures attempted to promote an understanding of MTSS to facilitate implementation, stakeholders reported some confusion regarding the function and composition of teaming structures and specific staff roles and responsibilities as schools worked to shift from previous RTI implementation practices. My findings suggest the

significance of quality, well-aligned professional development and coaching supports for building the capacity to promote educational changes such as MTSS. Green Pastures leadership appointed an MTSS Coordinator to lead professional development for MTSS. Through a blended presentation approach, schools participated in face-to-face PD, self-paced online modules, and consultation. Although schools in this study received exposure to the theoretical components of MTSS, stakeholders reported that the most effective and important work accomplished took place through embedded conversations within school-based MTSS team meetings and PLCs. With guidance, modeling, and facilitated problem-solving sessions lead by the MTSS Coordinator, schools became more comfortable with the practical application of MTSS within the natural context of school collaboration sessions. Additionally, professional development was provided to staff in small increments, making retention and application of new information more manageable. The findings of this research study expand upon the importance of professional development with a practical approach for promoting meaningful change.

Successful implementation of a new school improvement initiative requires resources for installation and sustainability. Those resources include funding, staffing, instructional programs or curriculum for instructional interventions, and allocated professional development and collaboration time. Although stakeholders perceived the professional development provided by the North Carolina Department of Public Instruction as effective, educators expressed concerns regarding the lack of state-provided funds and tangible resources to support MTSS implementation. Districts and schools across North Carolina are implementing MTSS using sparse district and school budgets. Staff-to-student ratios are low due to years of state budget restrictions. Schools need additional support personnel such as teaching assistants, reading and math specialists, counselors, social workers, psychologists, and ESL, EC, and AIG teachers to staff small group and individualized intervention sessions. As schools focus on improving core

instruction, research-based instructional curriculum and materials are essential. Computers and online programs to support individualized supplemental instruction/intervention and progress monitoring are also required. However, neither the State of North Carolina nor NCDPI has directly or fully provided these things.

The purchase of these resources places a financial burden on exhausted district and school funding sources. Therefore, stakeholders are creatively allocating their limited resources to comply with MTSS recommendations for building instructional and intervention systems. Although stakeholders in this case study voiced support for MTSS as a means of promoting school and student growth, they expressed their frustration regarding the obligation of the district to piece together inadequate resources to support a state-mandated initiative. Some stakeholders further asserted that the lack of state financial and resource backing instigated distrust and caused them to question whether NCDPI would continue to prioritize MTSS as a mandated school improvement framework or if an alternative initiative might soon replace MTSS. This study supports previous research (Cavendish et al., 2016; Charlton et al., 2018) which emphasizes the importance of state and district provision of resources to support capacity building for effective MTSS implementation.

Previous research (Lane et al., 2015; McIntosh et al., 2015) underscores the importance of district facilitated professional development, technical support and coaching, and practical procedural guidance. My research suggests that it may be important to balance state and district-level direction with school-based autonomy for decision-making. As shared by stakeholders I interviewed, Green Pastures Public Schools did not mandate certain MTSS procedures or set any specific timelines for implementation. Instead, stakeholders were invited to attend professional development, where the District MTSS Coordinator guided creating teaming structures, building intervention systems, and monitoring school, classroom, and student growth. In the absence of

state-provided resources, Green Pastures district leaders worked to acquire instructional intervention resources for all schools. However, due to the variances in resources across schools, central office leaders encouraged school teams to design structures and procedures that best meet the needs of their respective schools, using the resources they had available in the interim. Schools appreciated the combination of district guidance and flexibility for schools to implement following their unique needs and resources. This sense of autonomy created a trustful relationship between school-based MTSS teams and the district MTSS coordinator. It also helped to promote staff buy-in and instill a sense of stakeholder ownership for school improvement. Those interviewed said that they felt supported by the district and charged to do the right thing for children, but also accountable and responsible for student outcomes.

**Implications for School-based Educators**

MTSS is intended to be a school improvement framework that provides a high-quality continuum of instruction and interventions matched to student needs through data-based problem-solving (McIntosh & Goodman, 2016). Full implementation of MTSS requires that schools build the structures necessary to support students with various intensities of need. Most educators intrinsically desire to help students succeed; however, using data to guide educational decision making may not come as naturally. Using an MTSS approach, data must be systematically collected and analyzed frequently to determine both the effectiveness of core instructional practices and to identify students that need supplemental or intensive supports (Sugai & Horner, 2019). As discussed in the findings of this study, some teachers expressed initial discomfort with the use of data to guide instructional planning. However, consistent with Pinkelman et al. (2015), as staff experienced positive outcomes as a result of their data-based problem-solving efforts, their comfort level increased. With time and ongoing coaching, educators began to use data in problem-solving more independently. From the data analysis, teachers and other instructional

staff determined that current school structures were incapable of supporting the number of students identified at-risk in various domains. With that in mind, MTSS teams determined it necessary to step back and shift focus to improve core instructional practices. This is an important lesson for schools and districts, especially when considering that staffing resources are not abundant enough to support large numbers of students through small group and individualized intervention.

Schools must use data to guide instructional planning, but data also plays a significant role in the fidelity of MTSS implementation. Effective implementation requires that schools create a plan, monitor that plan, and make adjustments in practices as needed to address school and student needs. Consistent with the recommendations of previous researchers (e.g., Bohanan et al., 2016), the study of Green Pastures School District provided examples of a district and schools that used data on student outcomes, instructional practices, and educator behaviors to hold themselves accountable for implementation fidelity. Green Pastures district and school-level leaders used the NC Star platform to guide school improvement planning and to document progress made toward school improvement goals. They utilized the NC MTSS six critical components to guide MTSS implementation steps and self-assessment tools (e.g., SAM, FAM-S) to measure their implementation progress over time. Using implementation data enables district and school leaders to make better informed decisions that impact overall school improvement including allocation of resources, professional development planning in alignment with school goals, and the provision of structures to support improved outcomes for students.

Per the MTSS model, academics, behavior, attendance, and social-emotional needs are to be addressed in an integrated way to reduce the burden on school staff and resources and to increase the effectiveness of problem-solving conversations (McIntosh et al., 2009). The study of the Green Pastures School District provides an example of a North Carolina school district that is

attempting to use a cohesive approach to address student needs. Participants in this study, especially at the district level, conveyed the perceived value of integrated behavioral and academic problem-solving. According to previous research, problem-solving teams were more prone to neglect risk factors or may fail to appropriately provide students with needed supports when behavior and academic components were analyzed in silos (Stewart et al., 2007). However, at the time of this study, schools were still working toward a comprehensive problem-solving model that included regular discussions around behavior and attendance, core and tiered instruction for emotional learning, and wrap-around supports for mental health needs. Given the previous experiences with RTI, participants in Green Pastures were most comfortable discussing MTSS from an academic perspective and focused conversations on core instructional practices and the provision of tiered supports for literacy and math. In order to implement MTSS as intended, school teams will need to dedicate intentional effort to integrated problem-solving. Since counselors, social workers, nurses, and other support staff possess expertise in behavioral, social-emotional, and mental health wellness, it is imperative that districts and schools include support personnel in MTSS problem-solving sessions for effectively integrated conversations around the needs of children from a whole-child perspective.

It is important to note that the population of children served by educators in Green Pastures Public Schools, and elsewhere across the United States, is constantly changing. The children that we teach are experiencing the world in a different way than previous generations of learners. Some of our students face daily obstacles that hinder their ability to sit in a classroom and learn via traditional instructional methods. Many students experience the effects of substance abuse, poverty, traumas, illnesses, neglect, and abuse. As such, educators must engage in self-reflection and modify our teaching practices in response to the needs of the children that we serve. This is the intention of MTSS. This study offered examples of how educators in Green

Pastures Public Schools engaged in universal screening to identify student needs and provided interventions and supports based on those specific needs. Additionally, this study described how educators completed professional development sessions specifically geared toward fostering awareness of student need, changing mindsets, and building relationships with students. It is important that future MTSS implementers keep in mind that MTSS is not only about academic improvement for schools, but also about nurturing strong connections between educators and students and encouraging engagement with families and communities.

**Implications for All Implementers**

MTSS implementation requires increased collaboration among stakeholders as teaming structures form, new roles are defined, and educators take on shared responsibility for school improvement and student growth. To support effective communication, departments within the district offices and schools must work together. When groups of educators work in silos, the ability to implement or sustain a large-scale initiative such as MTSS is hindered. Effective communication requires the use of consistent language and a clear, consistent message across levels of stakeholders (Pinkelman et al., 2015). This study provided examples of the challenges associated with communication within and across a district. Organizational structure, staff turnover, personality conflicts, and staff willingness to collaborate can negatively impact the effectiveness of communication structures. Communication efforts must be intentional and ongoing in order to maintain implementation over time. Additionally, collaboration structures such as designated problem-solving meetings, data review sessions, and coaching opportunities, and professional development sessions are essential to support communication. Unlike previous research that noted stakeholder frustration due to ineffective communication structures and inadequate opportunities for collaboration (Cavendish et al., 2016; Feuerborn et al., 2016), this

case study illustrated three schools within a district that actively constructed collaboration structures to support MTSS implementation and perceived the impact of these efforts as helpful.

The selection and appointment of personnel to lead school improvement reform are also essential to effective communication and overall implementation success (Regan et al., 2015). This research study underscores the importance of leadership's role in MTSS implementation. District and school participants highlighted the contribution of the staff serving in the MTSS Coordinator and School-based MTSS Coach positions. These educational leaders provided Green Pastures staff with the knowledge necessary for MTSS installation, filtering, and prioritizing information from the state or district level to make it more manageable for stakeholders to process and apply. It is important that educational leaders value implementers, keeping in mind that the weight of school reform initiatives such as MTSS cannot be carried by one district person or one school-based person. Participants in this study perceived the district MTSS Coordinator and school MTSS Coaches as carrying the weight of MTSS implementation responsibilities. As noted in previous research by Horner et al. (2017), large-scale implementation is logistically complicated and requires additional coaching supports to maintain quality and sustainable implementation efforts. It is my recommendation that districts and schools invest the time and energy necessary to expand MTSS skills and expertise of educators to build implementation capacity. In addition to assigning MTSS Coordinators and Coaches to organize and facilitate MTSS, leadership responsibilities must be distributed across stakeholders to form implementation teams with shared responsibility and accountability for school improvement.

Levin and Fullan (2008) assert that large-scale change in educational systems requires sustained efforts over time to produce desired outcomes. My research substantiates the importance of gradual, well-planned implementation efforts. Green Pastures School District is currently in its fifth year of MTSS preparation and implementation. The work is not complete,

and stakeholders understand that the process is ongoing. It is far too common that educators deem educational reform initiatives as unsuccessful because they abandon them too early. According to implementation science, successful outcomes are most likely in schools that engage in 3–5 years of committed practice. It is also important to note that school reform models provide guidance for implementation, but it is up to school problem-solving teams to design implementation plans that fit the unique needs of their school or district. Stakeholders must be willing to honestly evaluate implementation over time, learn from mistakes made, and regroup when necessary to fine-tune implementation efforts.

## Moving Forward

MTSS installation is still a work in progress in Green Pastures Public School District. Although well on their way toward full implementation, the schools studied are not actively implementing all components of MTSS at this time. Some schools are just beginning to integrate conversations around behavior and attendance into problem-solving sessions. Others are starting to examine the role of social-emotional learning on student academic performances. However, when asked about these components, multiple stakeholders conveyed a growth mindset, responding, “We are not there yet.”

Participants noted future implementation plans that include (a) refining the process and criteria for identifying student needs, (b) developing a well-defined standard treatment protocol for interventions across areas of concern, (c) developing ways to monitor the fidelity of instruction and intervention, (d) growing supports for mental health and social-emotional wellness, (e) building better connections between general education and special education staff and services, and (f) expanding connections with students, families, and community. Instead of seeing the remaining work as shortcomings, the educators that participated in this study perceive future work in MTSS implementation as an opportunity to provide the structures, skills, and

supports necessary to make educators comfortable with addressing the challenges that students and staff face every day.

Like all school reform initiatives, MTSS installation requires a shift from a theoretical model to practical application. This process is complex and challenging but potentially worthwhile for students. Educators must understand why MTSS is important, how it works, and maintain the mindset to promote implementation fidelity (Horner et al., 2017). Through the continued exploration of stakeholder perceptions and current practices regarding implementation, educational leaders may better examine factors that facilitate school improvement, using this information to design structures for teaming, communication, and problem-solving to build the capacity to promote and sustain MTSS implementation efforts. Through the rich description of the MTSS implementation process in one North Carolina school district and three schools within that district, this case study provides insight into facilitators, challenges, and procedures of MTSS implementation, via the perspective of stakeholders directly involved in the effort. I hope that this dissertation will bridge gaps between theoretical and practical implementation, encourage policymakers and upper-level leadership to consider the perspectives of stakeholders when making decisions regarding school reform, and guide educators as they navigate through the obstacles of MTSS implementation and celebrate the successes.

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# APPENDIX A

## MTSS IMPLEMENTATION EXPERIENCES AND PERSPECTIVES INTERVIEW GUIDE

1. Please tell me your name and position
2. Please tell me about the demographics of your district/school
3. How long has your school/district participated in MTSS?
4. What NCDPI cohort are you in?
5. What roles have you served with MTSS implementation?
6. What teams do you serve on with regard to MTSS?
7. What types of MTSS training or professional development have you received?
    a. Have any of these trainings been provided by NCDPI or other state-sponsored trainings?
    b. PTEC sessions?
    c. Regional or district trainings?
    d. What are your feelings about the way PD has been provided at state/district level?
8. What phase of implementation is your school in right now?
9. What are some things that you are learning about or working on during this stage of training and implementation?
10. Are there other initiatives that are taking place in your school or district at this time? How does that impact MTSS implementation? Have there been difficulties merging these?
11. When you think of MTSS as a type of school reform or means of school improvement, what are your thoughts/feelings?

12. Tell me about the teaming structures that are in place for MTSS. How are those working? What meetings do you have? Who serves on those teams?
13. What has your personal experience been with the roll out of MTSS?
14. Tell me about the intervention programs that are taking place with MTSS implementation
15. Tell me about your assessment and screening processes.
16. How is data being used in your school or district with regard to MTSS? What data sources do you have available?
17. In general, how do you feel about the MTSS mandate? How do you feel about the 2020 deadline?
18. How would you define success in regard to MTSS?
19. Do you feel that your MTSS implementation efforts thus far are successful? If so, what factors (action steps, characteristics) have contributed to that success?
20. Talk about the beliefs and attitudes of staff and how that impacts implementation
    a. Resistance?
    b. Change in beliefs over time?
    c. Staff concerns?
21. Did your school conduct a belief survey? What were the outcomes of that survey? How did you use that survey?
22. What data are you using? How are you using that data to make decisions? How often do you review data?
23. Can you tell me more about each tier of problem-solving?
    a. How are those teams working?
    b. What are their roles and responsibilities?
    c. How often do they meet?

    d. Have your teaming structures changed significantly? How are they different?

24. Describe communication and collaboration with regard to MTSS? Has anything changed?
25. How has MTSS impacted your master schedule?
26. Talk to me about resources with regard to MTSS. What resources do you have for professional development?
27. Are you seeing gaps or holes in resources? How has that been addressed? What do you need?
28. What do you think are the major factors that can make MTSS successful?
29. What about difficulties, obstacles, challenges, barriers to MTSS implementation?
    a. What have you experienced?
    b. How did your school work through those challenges?
30. What concerns do you have?
31. Any points of pride that you would share?
32. What are some things that have gone well?
33. Have you seen any direct impact on student academic outcomes or staff performances? Attendance or behavior?
34. NCDPI is moving away from the discrepancy model for SLD eligibility and will now use MTSS data for making decisions about EC placement. How do you feel about this change?
35. With regarding to funding and MTSS, what needs do you see? How is MTSS funded in your school/district?
36. What would need to be improved?

37. If you were to meet someone from another district, what advice would you give them on MTSS . . . how do you make this the best possible effort?
38. How has this impacted you personally? Has this been a positive experience or stressful?
39. What other educators do you see carrying the load of the work?
40. Things you hope to see in the future?

# APPENDIX B

## MTSS OBSERVATION TEMPLATE

MTSS Observation Template

Location:

Meeting Type:

Setting:

| Time | Event | Observation Notes | Analysis |
|---|---|---|---|
| | | | |
| | | | |