

# IMPLEMENTING AN EFFECTIVE, MULTI-TIERED SYSTEM OF EDUCATIONAL SUPPORTS: AN ACTION RESEARCH CASE STUDY

by

KIEL SOUTHWELL

(Under the Direction of Karen Bryant)

## ABSTRACT

Multi-Tiered System of Supports (MTSS) as an instructional framework are becoming more and more commonplace in the United States educational milieu. Practitioners and policy makers have begun to recognize its potential to address the educational needs of every student while reducing the number of students that are removed from the classroom. The inclusive and all-encompassing nature of MTSS has spurred debate regarding its usefulness and implementation. This qualitative case study sought to identify processes and strategies that could lead to the effective implementation of multi-tiered support systems to increase teacher efficacy and confidence. Teachers and administrators participated in an action research study to answer the following research questions:

1. How can school leaders support implementing a multi-tiered system of supports to impact instructional capacity and teacher confidence?
2. How can teachers effectively implement a multi-tiered system of supports to impact instructional capacity and teacher confidence?
3. What is learned by action research design and implementation teams as they collaborate to implement an effective multi-tiered system of supports?

Using a theoretical framework of instructional leadership to create interventions, the action research design and implementation team completed three action research cycles to conduct the research. The data collected consisted of survey results, interview responses, and research artifacts. An analysis of the data collected and reviewed literature suggested that when administrators give teachers clear goals, support and resources, designated to implement MTSS, and maintain consistent visibility and involvement, teachers are more confident in their abilities to apply MTSS to their instruction. Teachers are also able to produce better results with MTSS when they meet and collaborate on a consistent basis to review assessment data and create corresponding interventions for their students. Finally, when action research is used with consistency and fidelity by administrators and teachers, barriers in communication and misperceptions are removed, and both parties work toward a more allied and productive outcome.

INDEX WORDS:      Multi-Tiered System of Supports (MTSS), Response to Interventions (RTI), and Professional Learning Communities

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SUPPORTS: AN ACTION RESEARCH CASE STUDY

by

KIEL SOUTHWELL

BA, Florida International University, 2004

MAT, Emory University, 2009

Ed.S, Lincoln Memorial University, 2013

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial  
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KIEL SOUTHWELL

Major Professor:	Karen Bryant
Committee:	Jami Royal Berry
	Jamon Flowers

Electronic Version Approved:

Ron Walcott  
Dean of the Graduate School  
The University of Georgia  
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## DEDICATION

I dedicate this dissertation to my loving wife, Mitzie Southwell. Your support, encouragement, and warmth have been invaluable forces guiding me throughout this journey. Your love, your companionship, your very soul are the reasons I was able to come this far. My adoration for you and our wonderful children, Milanie, Mia, and Karter, all to whom this dissertation is also dedicated, is unending and immeasurable.

I also dedicate this work to my parents, Miguel and Allison Southwell, whose journey through life has been in and of itself to me. The sacrifices you made for me provided the opportunities I have been afforded. I am eternally grateful for all you have done and continue to do for my family and me.

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## CHAPTER 1

### INTRODUCTION

Multi-Tiered System of Supports (MTSS) is a strategy used to address the growing concerns over learning disabilities in the 1960s and 1970s. The number of students identified as having a learning disability increased significantly, and the methods used to identify students with a learning disability at an early age were largely ineffective. Various research groups assembled to address these issues and improve student outcomes (Windram et al., 2012). One of those potential solutions was RTI, sometimes used synonymously with MTSS (Torgesen, 2007). The federal government issued the reauthorization of the Individual with Disabilities Act (IDEA) in 2004. This legislation included directives to provide tiered interventions to students before being identified as learning disabled. These tiered interventions are known as RTI.

Schools are under increasing pressure and scrutiny from federal mandates, state governments, and local officials to produce achievement results that reflect quality instruction. Once No Child Left Behind (NCLB) was instituted in 2001, schools were held accountable in ways that forced them to address all students' needs (Windram et al., 2012). In 2004, the Individuals with Disabilities Education Act (IDEA) guaranteed equal access to education for students with disabilities. It also included a provision through which schools could implement processes that discerned whether students would respond to scientific, research-based interventions before being identified as having a learning disability. (Windram et al., 2012). This process, frequently referred to as Response to Intervention (RTI), soon became a tool for many schools to address all students and ensure all learners receive a quality education regardless of

their background (Bender, 2012). The RTI process is a tiered system of responses designed to become increasingly intensive and focused according to which students fail to meet content standards. However, students may also be placed on RTI when facing attendance or behavior concerns. Each tier represents various interventions that target whatever challenges students are facing. The first tier is the least concentrated and includes most students, the second tier contains small group interventions, and the final tier includes individual interventions and remediation. Each tier should incorporate differentiated instruction, meaningful assessments, additional time to support students, and instructional technology to have increase efficacy (Bender, 2012).

Windram et al. state that the implementation of RTI in high schools comes with circumstances unique to the high school setting (2012). There is an increased number of students and staff to monitor. Additionally, the students come from various surrounding schools and often bring much more diversity. Other complexities include more specific curricula, student responsibilities beyond the classroom, less parental engagement, more gaps in education, and a heightened sense of urgency for teachers and students to meet standards and graduate. This paper details the implementation of a multi-tiered system of support and how to increase teacher confidence and capacity in an organized, systematic manner that staff can sustain year after year at Lake Shore High School (LSHS<sup>1</sup>), a large, suburban high school.

### **The Problem**

Students of color, students with disabilities, economically disadvantaged students, and English language learners consistently perform well below their White counterparts every year. Furthermore, Black and Multi-Racial groups face out-of-school suspension at much higher rates

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<sup>1</sup>All proper nouns related to the context are pseudonyms

than other student groups. The academic performance of the student groups at LSHS have varied dramatically over time. For years, Black, Hispanic, Special Needs, and ELL groups have seen moments of success and growth, followed by droughts of low achievement. There have been principals who have attempted to address this issue by implementing MTSS. However, the results have varied drastically (GADOE, 2020). This study sought to understand better the implementation of MTSS concerning the teachers and administration.

### **Purpose of the Study**

This action research sought to identify processes and strategies that effectively implemented multi-tiered support systems to increase teacher efficacy and confidence. In addition, this study aimed to analyze teacher responses and performance to determine what teachers and administrators can do to impact instructional capacity and teacher confidence in implementing MTSS. School districts change personnel, demographics, and leadership frequently. These changes bring about new practices, cultural differences, and varying visions of how best to proceed. Additionally, the tendency of the school districts to adopt new practices with high frequency also makes it difficult to identify meaningful, systemic supports for high-risk students. This study aimed to determine what factors either hinder or support long-term success for all students and staff and improve the instructional support process at one suburban high school.

### **Research Questions**

1. How can school leaders support implementing a multi-tiered system of supports to impact instructional capacity and teacher confidence?
2. How can teachers effectively implement a multi-tiered system of supports to impact instructional capacity and teacher confidence?



3. What is learned by action research design and implementation teams as they collaborate to implement effective multi-tiered systems of support?

### **Definition of Terms**

**College and Career Readiness Performance Index (CCRPI).** a comprehensive school improvement, accountability, and communication platform for all educational stakeholders that will promote college and career readiness for all Georgia public school students (GADOE, 2020).

**Differentiation.** the practice of catering to each individual student’s learning needs and helping them meet their learning potential (Gregory, 2012).

**Direct Certified.** “Direct certification (DC) is used to measure poverty levels of students in Georgia. Directly certified students include students living in a family unit receiving Supplemental Nutrition Assistance Program (SNAP) food stamp benefits, students living in a family unit receiving Temporary Assistance for Needy Families (TANF) benefits, and students identified as homeless, unaccompanied youth, foster or migrant” (Governor’s Office of Student Achievement, 2020).

**Instructional Leadership Theory.** the theory that defining the school’s mission, supervising the instructional program, and promoting a positive school learning climate are the three components needed to produce high achieving schools (Townsend, 2019).

**Multi-Tiered System of Supports (MTSS).** a fully integrated set of practices and interventions directed to academics and behavior, with emerging applications to social and emotional learning in the teaching/learning process (Sailor, 2020).

**OSS.** Out of School Suspension (Cobb County School District Family Information Guide, 2020).

**Professional Learning Community (PLC).** a continual process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve (Dufour, 2016).

**Response To Intervention (RTI).** a systematic, tiered process through which all students receive the support and interventions needed to achieve academic success (Buffum, 2018).

**Teacher Confidence and Capacity** – The perceived willingness and ability of a teacher to initiate, execute, and complete a professional task or goal (Mundschenk and Fuchs, 2016).

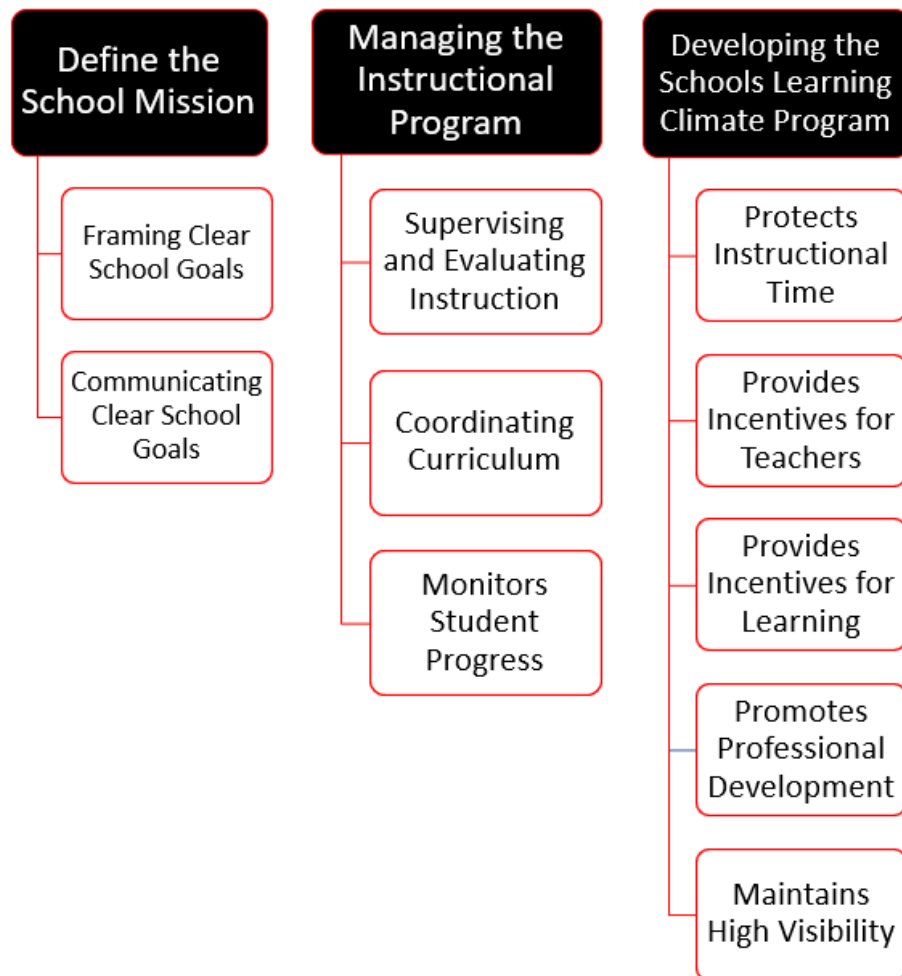
### **Theoretical Framework**

Processes as extensive as MTSS and Professional Learning Communities (PLCs) require competent instructional leadership to succeed. Hallinger (2005) discussed the emergence of several successful schools in the 1980s, whose strong instructional leadership led to positive student achievement. These leaders created a culture of high expectations and clear directives that propelled staff and students' achievement. It was through charisma and competence that these leaders produced empirical change. Goddard et al. state that leadership quality directly impacts teacher collaboration and efficacy (2015). Their study also predicted achievement differences between schools based on an evaluation of efficacy beliefs and indirectly by instructional leadership and teacher collaboration. This evaluation influenced how principals monitored instruction and the collaborative process (Goddard 2015; Wahlstrom & Louis 2008).

The Theory of Instructional Leadership that Hallinger and Murphy (1985) proposed serves as the foundational theoretical framework for this study. The model below was used to evaluate instructional leadership based on three dimensions that encompass ten leadership functions.

**Figure 1**

*Hallinger and Murphy Instructional Leadership Evaluation Model*



The three dimensions are defining the school mission, managing the instructional program, and creating a positive school climate. From right to left, the ten functions are framing clear school goals, communicating clear school goals, supervising and evaluating instruction, coordinating curriculum, monitoring student progress, protecting instructional time, promoting professional development, maintaining high visibility, providing incentives for teachers, and providing incentives for learning. Researchers have used this model in over 110 empirical studies

(Hallinger 2011). Cansoy et al. (2018) used this rating scale in their research regarding an evaluation of principals' instructional leadership behaviors from the perspective of teachers in a similar manner as this study, mentioning its "widely accepted" use. Much of this study's research focused on how teachers implement the MTSS and PLC processes and how the administrative team framed, delivered, and supported their execution. Hallinger's model, known as the Principal Instructional Management Rating Scale (PIMRS), was a critical tool in evaluating the success of LSHS's administrative team's efforts.

The instructional leadership theory contributes to teacher collaboration and collective efficacy, two vital aspects of PLCs and RTI. Goddard et al. stated that the more principals become involved and participate in instructional practices, the more teachers collaborate to achieve their goals (2015). This increased collaboration is an essential part of MTSS and PLC. In addition, the increased amount of interactions between teachers and leaders produce more exposure to best practices, creating collective efficacy amongst the staff (Goddard et al., 2015).

### **Conceptual Framework**

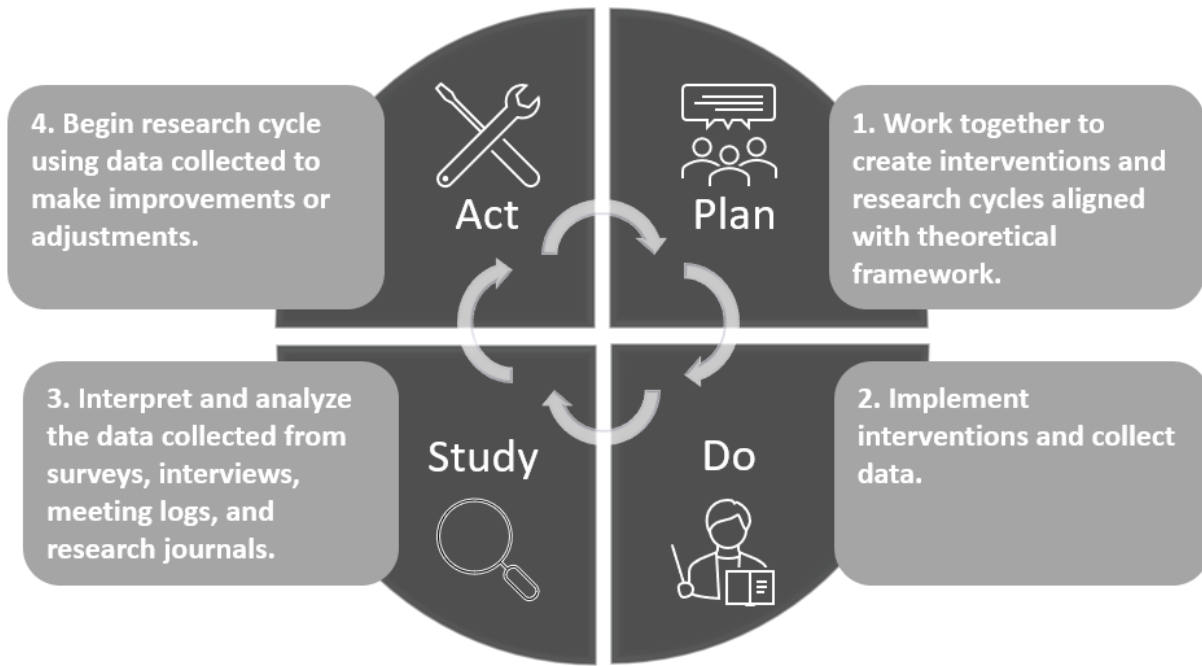
Both the MTSS and PLC processes are well established in the theater of public education. This study's conceptual framework was the Plan, Do, Study, Act (PDSA) model, as seen below in Figure 2 (Moen and Norman, 2016). The PLC model is based on the PDSA model in that it follows the same course of action to reach more desirable outcomes, whether they be teacher or student. During the Plan Phase, the action research team met to discuss the significant issues to be addressed and how to proceed. This phase was extensive in that it determined many of the actions to take place moving forward. These actions included lessons and standards delivered to students, instructional methods, and learning targets for the classroom. They also reviewed the common formative assessments to assess student learning and determine what grading practices

they wanted to use. They agreed upon standard grading practices so that the data yielded was comparable. It was important for administrators to participate in these conversations and offer guidance and positive support. While administrators could not be present all the time, they made their presence a priority so that teachers felt supported and their efforts had meaning. The Do Phase consisted of executing the actions agreed upon during the Plan Phase. Teachers delivered lessons according to the plans discussed and ensured prioritized learning targets. Once teachers gave lessons, they assessed students' learning using common formative assessments.

Administrators observed instruction and offered feedback and praise where appropriate. Afterward, the action research team entered the Study Phase and analyzed the Do Phase results. They used those results to devise concrete, actionable responses designed to improve outcomes. This part of the process is where the teachers implemented the MTSS model. According to data from the common assessments, teachers devised strategies to address student achievement. The Action Research and Implementation Team (AR/I Team) then rated their confidence in their ability to address these concerns and the level of confidence in the administration to support them using a survey based on Hallinger and Murphy's (1985) Principal Instructional; Management Rating Scale (PIMRS). The researcher also interviewed the teachers using a Critical Incident Interview. In the Act Phase, the team implemented the responses created in the Study Phase. This step involved teachers implementing appropriate MTSS interventions to students and administrators offering proper support to the teachers. This process continued into the Plan phase based on the results of the first completed cycle.

**Figure 2**

*PDSA Conceptual Framework*



**Overview of the Methodology**

**Action Research**

The action research team conducted their research through an action learning modality that focused on learning from specifically prescribed tasks. In doing so, participants better understood how they worked by changing it and learning from it (Coghlan and Brannick 2014). The action research team created plans that addressed student achievement, teacher collaboration, and instructional capacity. Being active participants that develop these plans, executed the plans, analyzed and observed the results, and then acted on those results is at the core of organizational development. The teachers and administrators directly impacted the development of outcomes and used the data as the foundation of future tasks.

## **Action Research Plan**

The following is an overview of how the AR/I Team developed the action research project using the PDSA Conceptual Framework (Moen and Norman, 2006). The total time to complete three cycles of action research was nine weeks. The focus of this action research project is to answer the following:

### *Research Questions*

1. How can school leaders support the implementation of a multi-tiered system of supports to impact instructional capacity and teacher confidence?
2. How can teachers effectively implement a multi-tiered system of supports to impact instructional capacity and teacher confidence?
3. What is learned by action research design and implementation teams as they collaborate to implement effective multi-tiered systems of support?

The PDSA Model (Moen and Norman, 2006) is very similar to the process laid out by Coghlan and Brannick (2014). The action research project began in the October of 2021 with the Planning Phase. The team selected priority standards, created learning targets, and developed common formative assessments. The administration supported and supervised teachers throughout the entire process in any way possible. The Do Phase took place over the next three weeks of 2021. First, teachers administered instructional lessons and common formative assessments to the students. Then, teachers reviewed the data from the common formative assessments and assigned interventions to students according to common formative assessment data results and re-assess student achievement. Finally, Study Phase occurred in the last week of the action research cycle. Teachers examined the success of their interventions based on student outcomes. They also took

surveys, participated in interviews, and debriefed at the end of each cycle to collect qualitative data on their perceived efficacy.

### **Rationale for Action Research**

Bryk et al. (2015) stated that through network improvement communities and thoughtful, consistent processes, any school or organization can ascertain its problem areas and improve upon them. The MTSS process systemically addressed all major academic and behavioral concerns facing Lake Shore High School in a researched-based manner. The literature referenced provides objective validation of the strategies used.

### **Entry Process**

I met with the principal regarding this research and the goals of this study. He provided me full consent regarding how to proceed. This action research focused on the Geometry PLC because I supervise this department, and there were previous school data on student performance for this student group. The principal would like for the initiative to extend to all faculty eventually. I met with the teachers in the Geometry PLC, and they all agreed to participate in the action research study. The research and design team members were the members of the PLC team, the department lead, and myself (the administrator supervising PLC).

### **Contracting Process**

Each member of the PLC had specific roles and tasks. The facilitator was the group leader; this role maintains order and keeps members focused. Should anyone deviate from the agenda or violate the norms, the facilitator called attention to it and held that person accountable. However, our school expected all members to adopt a mutual accountability policy in which any member can draw attention to norm violations. The timekeeper made sure that the PLC's members' time was respected. The person fulfilling this role ensured that teachers understood



that their time was valued. The data analyst documented and processed data at the meetings. There were various forms and spreadsheets completed during each PLC meeting that entailed student rosters, scores, and comparisons of multiple pieces of data. The last role was the recorder. The recorder documented the discussion at each meeting, answering the questions:

1. What do we expect our students to learn?
2. How will we know when they have learned it?
3. What do we do when they do not learn it?
4. What do we do when they do learn it?

Each of these questions involves a series of processes and required an abundance of planning and coordination.

### **Current Status**

The district moved from a virtual setting back to a face-to-face environment. Unfortunately, the COVID-19 pandemic continues to strain the lives of the students, teachers, and community. Nevertheless, the teachers and members of the AR/I team had a renewed sense of urgency and enthusiasm after they returned to in-person instruction. While the possibility of returning to virtual instruction loomed over their heads, the AR/I team members were committed to successfully implementing the MTSS process.

Nevertheless, there were some adverse effects of COVID-19. The pandemic caused the school district to implement virtual learning during the two years prior to this study. This academic setting resulted in increased failure rates for LSHS. The increased number of failures created constraints on the schedule of the school and when various classes could be offered. These constraints also impacted when the teachers were able to conduct their PLC meetings. As a result, the Geometry PLC was only able to meet during a twenty-five minute lunch period

rather than the nearly ninety minutes typically provided. The effects of this occurrence are detailed later in the Findings section of this study.

### **Initial Steps**

This process began by firming up understanding and practices of MTSS and the PLC process amongst design team members and teachers. Many staff members had operated under what many call “survival mode.” Simply put, they were doing whatever they deemed necessary to get the bare minimum accomplished under those trying circumstances. The action research team also needed to work with teachers to re-establish roles and norms within each PLC. Finally, teachers established PLC objectives and priority standards considering the effects of COVID -19.

Using the PDSA Conceptual Framework (Moen and Norman, 2006), The AR/I Team developed a series of interventions for implementation over nine weeks. These interventions occurred during three, three-week cycles. Each intervention entailed a sequence of activities aligned with Hallinger and Murphy’s (1985) Principal Instructional; Management Rating Scale (PIMRS).

### **Issues Going Forward**

MTSS implementation was a significant shift from the standard methods of operation at Lake Shore. Teachers typically operated with considerable independence, regardless of student outcomes. This model asked them for a more substantial preparation on the front end and a more significant amount of flexibility throughout the year. Their task was to consider new methods of instruction and implement them as well, regardless of their comfort level.

Administrators played a large part in the execution of the MTSS process. They were no longer be responsible for only their departments. The MTSS/PLC process required monitoring all PLC groups implementing RTI for all departments. Administrators have not typically

completed so much observation so rigorously. Any failure on the part of our administrative team to be active participants in PLC or MTSS processes could have resulted in teachers' loss of trust in the processes. There was a large amount of work required from the teachers. If the administrators failed to show the teachers' work's importance and appreciation, they could have lost interest and fallen into old habits. A lack of interest would have communicated a lack of significance regarding these processes to the teachers. The constant and consistent participation of the administration conveyed the critical nature of PLCs and MTSS. Additionally, the praise the teachers received had two effects. The first was that it encouraged those already engaged to continue their efforts in earnest. The second was that the public praise persuaded those less active to increase their efforts and move toward a more participatory attitude.

### **Organization of the Dissertation**

Chapter 1 provides an overview of this dissertation and gives an overview of the research questions, the problem of practice, and methods for the study. Chapter 2 details a review of the related literature for the study. Chapter 3 describes methodology and research design of this study. Chapter 4 provides a description of the case and its context. Chapter 5 details the findings of each action research cycle as related to the research questions of this study. Chapter 6 provides a summary of the major findings and provides implications of the research for practitioners, researchers, and policy makers.

## CHAPTER 2

### REVIEW OF THE RELATED LITERATURE

#### **Problem Framing in Literature**

Windram et al. (2012) stated that the implementation of RTI in high schools comes with circumstances unique to the high school setting. There is an increased number of students and staff to monitor. Additionally, the students come from various surrounding schools and often bring much more diversity. Other complexities include more specific curricula, student responsibilities beyond the classroom, less parental engagement, more gaps in education, and a heightened sense of urgency felt by both teachers and students to meet standards and graduate. This paper details the organization and implementation of a multi-tiered system of support and how it can address various student concerns in a methodical, systematic manner that staff can sustain year after year.

The curriculum should be delivered using research-based strategies designed to address struggling learners. Cooper and Hogan (2015) indicated that Hogan utilizes student-centered, active learning for her students. Hogan sets up centers and activities while avoiding direct instruction and lectures unless the students request them. Her students explore content and become agents of their learning. Cooper and Hogan posited that to close the achievement gap, the benefit and focus of instruction must address those negatively impacted by the gap the most. Her students of color have closed the achievement gap by half.

Young et al. (2005) described two types of learners, analytical and global. Analytical learners process written and spoken information best. This type of learner is generally successful

in the classroom. Global learners process information delivered in a visual, tactile, or kinesthetic manner. Global learners tend to struggle because they visualize and process the information simultaneously. The simultaneous nature of this delivery and processing can lead to misunderstandings and feelings of frustration in the classroom setting. Global learners are successful when teachers use group work with analytical learners, class discussions, class projects, and choices through which students can choose the way they can show mastery of the standards (Young, et al., 2005).

Many of the failing students at Lake Shore High School are English Language Learners (ELLs). Therefore, accessing the curriculum in a manner that suits their needs is to be made a priority. Regarding RTI, all of these students are on Tier 2 status at a minimum. Additionally, English Language (EL) teachers should be a part of the PLC meetings to ensure they receive the differentiation appropriate for their learning styles (Fenner, 2014). Finally, Fenner suggested that these students require supplementary advocacy in teacher collaboration to be successful.

ELLs require instructional strategies that have yielded results for this student group. Strategies such as "encouraging multiple means for students to express their thoughts, progress checks on previous understanding, graphics and visuals in conjunction with English text to convey key concepts, and live demonstrations are all examples of approaches that accomplish these goals (Echevarria & Graves, 2003; Téllez & Waxman, 2006). Teachers should also incorporate background knowledge, repetition, meaningful use of vocabulary words, extensive reading, and independent word knowledge to reach ELL students (Braker, 2014).

## **Implementing MTSS**

John Hattie's meta-analysis of 800 other meta-analyses substantiated by more than 50,000 empirical research studies became one of the most widely regarded and referenced works in education (Ewald, 2011). Ewald (2011) stated that:

John Hattie's monograph is unique because such a broad reassessment of research on the conditions of successful school learning has not yet been given it is based on more than 800 meta-analyses into which more than 52,637 individual studies have been integrated. (p. 1)

Hattie's (2010) research showed that RTI has an effect size of 1.07. Hattie considers anything above 0.4 to be significant and anything from 0.0 -3.9 to be insignificant. Anything below zero is detrimental to learning. There are not many practices that have as significant an impact on RTI.

School systems across the country are beginning to recognize MTSS as a vehicle for change and continuous improvement (Dulaney et al., 2013). However, in a case study of dozens of school superintendents, Dulaney et al. (2013) found many superintendents recognize its value but struggle in its execution. The three factors needed for proper implementation were "(1) develop a common language and framework for implementation, (2) work collaboratively within the PLC structure to meet the needs of all students, and (3) purposefully build capacity within the district organization" (Dulaney et al., 2013, p. 9).

One successful implementation occurred in a Pennsylvania school district and was initially implemented by the district psychologists. Pederson (2017) detailed the implementation of RTI to address struggling readers. Over the next several years, the psychologists, teachers, and administrators developed RTI processes (that later became MTSS) and gradually improved reading and literacy for its students. The initial implementation occurred in the early childhood

reading setting. Afterward, MTSS spread to math and then to the secondary setting. However, its success and sustainability persisted because the student outcomes were positive.

One of the biggest challenges to delivering MTSS successfully is finding time to consistently provide interventions (Higgins-Avreill et al., 2014). They found the best solution is to designate a period during the school day specifically for interventions. This undertaking requires many components for an optimal result. The five critical components are listed below:

1. identifying appropriate assessment and intervention resources
2. determining professional development needs to improve capacity for intervention delivery
3. using personnel resources in the most effective way
4. structuring the time to deliver interventions and engage students who are not receiving intervention
5. optimizing the physical space available to deliver interventions.

### **Successes Regarding RTI and MTSS**

Even while mired in confusion and legal quagmire, RTI has seen a fair amount of success. Waitoller and Thorius (2015) asserted that RTI services can serve all students productively and inclusively. RTI can drastically reduce occurrences in which teachers classify students as different, special needs, or general education. They stated that using a combination of Universal Design for Learning (UDL) and Critical Multiculturalism (CM) will provide better outcomes for minority groups and eliminate classifications such as special needs..

A study by Dougherty et al, (2013) exemplified this idea. In a study of three first-grade classrooms in different schools, all in an urban setting, two schools used a fully implemented (FI) model of RTI, while one school used a partially implemented (PI) model of RTI. The fully

implemented schools used a facilitator, while the partially implemented school did not have a facilitator. Using student reading data, observations, and information gathered directly from teachers Dougherty et al. used both qualitative and quantitative methods to ascertain the more effective model. Both models saw favorable results, but the FI model was more successful.

Fisher and Frey (2013) detailed another example of a successful MTSS implementation in a small high school setting over a two-year period. Their distinction between MTSS and RTI is described as RTI versus rti. They describe RTI as the tiered intervention process that is often a precursor to students being classified as special needs. Conversely, rti is described as being part of the instructional framework that addresses the needs of all students within the general education setting by using standards-based assessments to monitor student progress and using tiered interventions to address gaps in learning or accelerate the learning of students that have mastered the standards. The staff at the school made a concerted effort to implement both forms of RTI/rti. As a result, the following themes emerged from their research:

1. Focus on Quality Core Instruction
2. Use Course Competencies to Monitor Progress
3. Schedule Intervention to Supplement, Not Supplant, Core Instruction
4. Dedicate Resources to Support Intervention Efforts
5. Adopt a Schoolwide Approach to RTI to Maximize Intervention Impact

The results of this case study were primarily positive. The school experienced an improvement in achievement, attendance, and grade point average. The school also documented a decrease in special education referrals (Fisher and Frey, 2013).



## **MTSS and Inclusive Learners**

There is also evidence for the successful implementation of MTSS as a tool for inclusion. Rather than being used as a tool to separate students and provide different services, it should be a way to give all students various forms of instruction in the same setting. This increased inclusivity has produced growth in academic performance and socialization (Sullivan & Castro, 2013). Harris-Murri et al. (2006) also presented several models in which MTSS is culturally responsive so that students with emotional disturbances or specific learning disabilities remain in the regular academic setting. The researchers posited that addressing disabilities in the traditional education setting has far more benefits than separating them.

## **MTSS to Succeed RTI**

Some consider Multi-Tiered Systems of Support (MTSS) a more comprehensive approach to RTI that encompasses academics, behavior, and social-emotional support. While many frameworks of RTI encompass these additional aspects of student achievement, many state departments of education are beginning to adopt MTSS (Sailor et al., 2020). Given the previous divisive interpretations, its targeted approach to academics and mental health makes it much more appealing than RTI. Moors et al. (2010) conducted a study of a mathematics class in which MTSS is used to address students with and without disabilities. Teachers and behavior analysts work together to serve students in the same setting. Initially designed to educate students on the autism spectrum, this inclusive practice yielded significant success with all students. For this case study, RTI will often be used interchangeably with MTSS (Torgesen, 2007).

## **RTI and Gifted Students**

Many experts are advocating for RTI because it encompasses all learners, including gifted and talented students. Johnsen et al. (2015) reviewed the policies of multiple states that

have already designed their RTI policies to address gifted students. They presented information on how gifted students can access the RTI process despite its original purpose of identifying students with special needs. It also provides examples of research-based methods and practices regarding integrating gifted students in the RTI process. Brown and Abernathy (2009) came to a similar conclusion. They stated that by using the RTI framework in every class, valuable resources can combine to serve all students rather than spreading them thinly across multiple settings. In doing so, this allows teachers and students to work together in a fluid environment. Students can pass from one tier to the next, depending on their needs and performance, always having access to the tier that suits them best.

### **PLCs and Improvement**

The purpose of the PLC model is for teachers to operate within a system of methodical collaboration to improve their craft and, ultimately, student achievement outcomes (Dufour et al., 2016). Teachers working in isolation sometimes creates stagnation. However, through regularly scheduled and intentional meetings in which teachers share experiences and data regarding prescribed formative assessments, teachers can improve outcomes if they maintain an open mind and are willing to change their instruction (Dufour et al., 2016). Bryk et al. (2015) reinforced this concept with a similar concept called networked improvement communities, or NICs. These groups use data and measurable outcomes to drive improvement through guided inquiry. However, for either NICs or PLCs to be successful, a preparedness must exist to adjust and change from the status quo.

### **MTSS and PLCs**

Research on the topic yielded that MTSS is most effective when implemented in conjunction with PLCs because the purpose of a PLC is to have its members learn from each

other to increase student learning through interventions. In their study of the successful MTSS implementation of a small secondary school, Fisher and Frey (2013) stated, "When secondary schools are places where teachers engage in professional learning communities or other systems of collaboration, RTI is likely to be easier to implement" (p.111). Mundschenk and Fuchs (2016) surveyed 84 PLC members that participated in RTI implementation and found that the large majority of the respondents found the use of PLCs to implement RTI to be very or extremely helpful. They listed the following implication:

In order to build capacity for the effective implementation of RtI, Leadership Teams need ongoing collaborative and critical analysis of practices that support knowledge sharing and innovation. Our work with numerous teams has repeatedly demonstrated the value of the PLC model in the way the teams function and confirms the importance of professional collaboration as an essential component of real school change. (p.23)

Hence, PLC's have directly contributed to improving the educational experience for *all* the students, and that improvement, of course, is the most fundamental goal. The question now centers on identifying the most effective strategies for incorporating PLCs within RtI frameworks in more schools.

Henderson (2018) also posited that tiered support systems combined with PLCs are the most effective method to create an effective educational environment for all learners. Henderson (2018) indicated that collaboration is a critical part of the success of schools. Teachers must work together to meet the challenging needs of students; attempting to do so in a silo, given the scarcity of time and resources, would be inefficient. The PLC process is designed to share the workload amongst its members so that teachers can share ideas, tasks, and in some cases, students to meet the needs of all students. Henderson stated:

Using PLC and RTI ideals, educators can work together to see all students reach their potential. Educators must build a positive school culture, find a shared purpose, be willing to change, find planning and reflection time, and attend relevant PD for collaboration to work. An atmosphere of trust and respect along with assertive administration may create a culture of openness to change. PLCs and RTI can act as a guiding rudder against the current. Without a rudder of purpose, educators are rowing a boat without a paddle, aimlessly drifting on the tides of change. (p.43)

### **Drawbacks and Criticisms**

RTI has not been without challenges. Castro-Villareal et al. (2016) described struggles regarding the lack of consistency and specificity with the RTI model from district to district or even school to school. Hauerwas et al. (2013) conducted a qualitative study regarding how every state defines and interprets the Response to Intervention process after the Individuals with Disabilities Education Act (IDEA) 2006 was published. Each state's methods were evaluated based on how often they collected data, how they determined to need for interventions, and the type of assessments used. The inconsistency from state to state reflected in this article shows how states struggle to pinpoint the most effective RTI methods. Zirkel (2011) reviewed education law regarding RTI and the resulting confusion. He discussed various examples of case law and legal commentary to expose the flaws in the law and the resulting litigation. The article states that the broad nature of IDEA 2006 left RTI open to interpretation and produced multiple forms of RTI, many of which have been the same general education practices under the guise of RTI rather than the original research-based practices. This article is yet another example of the need for studies that provide examples of effective RTI processes. The inconsistent

interpretations of RTI due to the broad definition in federal law show how schools are left to fend for themselves in identifying the most effective RTI methods.

Despite early drawbacks and criticisms, the RTI process can benefit students with special needs, general education, and gifted students. While there is still more clarification needed from the federal and state levels insofar as the parameters of RTI, many districts seem to have developed systems that serve their students appropriately. Moreover, through proper leadership and organization, RTI policies can offer significant change for the better for any school system.

### **Gaps in Knowledge and Research**

There appears to be limited quantitative data to suggest that RTI has positively affected minority and economically disadvantaged populations, much less the general education population at large. Much of the research is either qualitative or incomplete. Due to the variety of programs, initiatives, and influences that students and teachers encounter, it is challenging to isolate RTI as the primary determinant in student achievement.

RTI/MTSS has had a mix of successes and failures. The original intent of RTI was to slow the funneling of students into special education. However, the guidelines regarding RTI's implementation are vague, leaving room for various interpretations and outcomes. Since its initial development, RTI has evolved and been used to address gifted and talented students' academic concerns that require more rigorous work. This paper will add pertinent data to the widely considered murky and vague subject matter.

### **Confusion Regarding RTI and MTSS**

From the onset, the laws regarding RTI have been simultaneously narrow and broad. For example, Zirkel described RTI as a tool used for the identification of special needs children; it is "a process based on the child's response to scientific, research-based intervention"

(§300.307[a][2]). However, this "process" lacks the definition or certainty required for a more uniform approach. Moreover, there is such a lack of clarity that even the court system has minimal legal precedent to distinguish whether or not schools are properly using RTI (Zirkel, 2011).

Zirkel (2018) created a list of 12 common misconceptions regarding RTI and polled a group of 517 educators at 11 different RTI conferences across the United States to expound on the topic. He found that the average level of legal knowledge regarding RTI law was 40%, not an ideal number considering the liability connected to special education. This low level of expertise indicates poor advisement of educators regarding the implementation of RTI (Zirkel, 2018).

### **Confusion in the Classroom**

The confusion concerning RTI continues from the federal government to the state. The actual implementation of RTI on the part of state and local districts is a murky area as well. Savitz et al. (2018) analyzed the RTI information provided by every state department of education website. Assuming this state information dictates how their districts shape their RTI programs, Savitz et al. (2018) used four different characteristics to evaluate each state's program: student assessments, the instructional focus for each tier, the number of students per tier, and critical personnel. They found that there is little to no consistency from state to state regarding how every state defines and implements RTI, resulting in its current lack of positive results. Hauerwas et al. (2013) conducted a similar study using data collection frequency, criteria for responsiveness, and multidimensional assessment. While the standards for their investigations were somewhat different, the outcomes for both Savitz et al. (2018) and Hauerwas et al. (2013) were the same. There is no nationwide understanding of using RTI to identify students with special needs.

The fog surrounding RTI stretches to the classrooms, where teachers are left to fend for themselves in many ways. Reeves et al. (2010) presented an image of teachers spreading themselves thin and trying to simultaneously fulfill multiple roles, trying to teach, assess, intervene, and diagnose all at the same time.

### **Confusion and Society**

Some authors have found that RTI's use is sometimes more detrimental than helpful. Villareal et al. (2016) explained RTI, its merits, and the struggles to ascertain data reflecting efficacy concerning diverse students. The study suggested that RTI can, in some cases, act as a vehicle through which students are separated from their peers and served in separate settings using separate funds. Thorius and Maxcy (2014) observed the multiple failures of RTI and the instances in which it exacerbates special needs students' marginalization. They also proffer suggestions to eliminate student groups concept and include all students in the same settings. Developing a long-term system of instruction through which all students can be successful will not only demonstrate that all students are capable of participating in the educational process, it will show that all teachers can teach all students.

### **Chapter Summary**

This chapter presented literature reviewed regarding MTSS. The articles and research therein analyzed the implementation of MTSS, previous struggles and confusions regarding said implementation, and the potential of MTSS to improve outcomes for all student groups and the teachers and staff charged with its implementation. The chapter also provided evidence previous disadvantages and pitfalls associated with MTSS and possible improvements for those drawbacks. The literature then details how professional learning communities play an integral role in the effective implementation of MTSS. The following chapter will provide a detailed

description of the execution of the action research plan and the methodology used for data collection and analysis.



## CHAPTER 3

### RESEARCH AND METHODOLOGY

The purpose of this study was to identify processes and strategies that led to the effective implementation of multi-tiered support systems by analyzing teacher responses to determine what teachers and administrators can do to impact instructional capacity and teacher confidence. The following questions guided the action research:

1. How can school leaders support implementing a multi-tiered system of supports to impact instructional capacity and teacher confidence?
2. How can teachers effectively implement a multi-tiered system of supports to impact instructional capacity and teacher confidence?
3. What is learned by action research design and implementation teams as they collaborate to implement effective multi-tiered systems of support?

This chapter describes the theoretical and conceptual frameworks used in this study. It also details the action research design, interventions, data collection methods, data analysis methods, and reliability and validity.

#### **Theoretical Framework**

The theory of instructional leadership directed this study. This theory states that effective collaboration and instruction cannot occur without methodical and deliberate direction from school leadership (Hallinger & Murphy, 1985). Therefore, the AR/I Team decided to use the Hallinger and Murphy Instructional Leadership Evaluation Model to craft and series of interventions and corresponding activities. The three interventions were defining the school

mission, maintaining the instructional program, and creating a positive culture. These interventions were intended to increase the confidence and capacity of the teachers participating in the study. Each intervention and its activities largely corresponded with its research cycle.

The AR/I Team members created the activities for each research cycle. At the end of each research cycle, the AR/I Team reviewed the results and data collected and adjusted the implementation of the interventions where possible. The feedback offered from the teachers as activities researchers informed the researcher and data collected. The teachers often stated that simply being part of the AR/I Team increased confidence in the MTSS and the PLC process. They felt valued and recognized as professionals and educators.

### **Conceptual Framework**

The AR/I Team used the PDSA Conceptual Framework (Moen and Norman, 2006) to carry out the research. This approach required the researchers to plan (P) their interventions, do (D) their interventions, study the results (S), and act (A) to improve their interventions. Carrying out these interventions included all members of the AR/I Team. Once this process was completed, the cycle naturally returned to Plan Phase, and the AR/I Team repeated the process until three cycles were completed.

### **Action Research**

Glanz (2014) stated that “quantitative research attempts to describe the outcomes, the “what” (product) of a study; qualitative studies examine the “how” (process) and “why” questions. The power of qualitative research is in its ability to enrich our understanding of a given phenomenon” (p. 79). The purpose of this dissertation was to analyze teacher responses to determine what teachers and administrators can do to impact instructional capacity and teacher confidence when implementing RTI/MTSS. In this regard, the implementation of

RTI/MTSS is the given phenomenon, and what roles teachers and administrators play in this process are the questions this study seeks to answer. The AR/I decided on qualitative research because of this type of research seeks the opinions and experiences from its participants that provide additional information to the existing quantitative data regarding MTSS. This information cannot be quantified or measured by the techniques typically employed through quantitative research (Creswell & Poth, 2018).

When describing the different types of qualitative research, Glanz (2014) also stated that “a case study involves an in-depth investigation of an individual, a group of individuals, a site, or a scene.” (p.79). This action research studied a group of teachers and the administration of their school as they worked together to implement RTI/MTSS. This case study occurred in a large, suburban school that may offer insight to schools with a similar context. Furthermore, Yin (2018) stated that a case study might be the ideal research method when your research questions ask how or why, you are observing behaviors and actions, or the study is taking place in real time instead of historical events.

The action research team conducted their research through an action learning modality that focused on learning from specifically prescribed tasks. In doing so, participants can better understand how they work by trying to change it and learn from it (Coghlan & Brannick, 2014). Glanz (2014) stated that action research is a way for teachers and administrators to study their practices to improve upon them as they work. The Special Needs, Black, Hispanic, and ELL students at Lake Shore High School have experienced decreased performance levels compared to their White counterparts. This action research seeks to improve upon a system that has produced gains in these groups when implemented appropriately (Waitoller & Thoruis, 2015).

## **Action Research Design and Implementation Team**

This school district utilizes collaborative teams organized by content areas (i.e., Geometry, Algebra 1, World Lit, etc.) to address student needs called Professional Learning Communities (PLCs). Richard Dufour, Rebecca Dufour, Robert Eaker, Thomas W. Many, and Mike Mattos (2006) created the Professional Learning Communities from which the school district's PLCs are derived. Geometry is the highest level of math that every student in the building must take. Focusing on this content area will significantly impact student promotion as every student is required to pass this course to graduate. The Geometry Team agreed to participate in this action research. Each teacher has decided to meet weekly to discuss and compare student performance on common assessments and the strategies used to yield said results. They also discuss remediation for students who failed to be successful (Tier 2/3), enrichment for those who were successful (Tier 1), and extension for those that exceeded all expectations (Tier 1). The PLCs also discuss pacing and the contents of the common assessments. These PLCs are critical in determining how to meet the needs of all students. A well-organized, responsive team can ensure that any variety of learners can be successful. Each PLC establishes a set of norms at the beginning of the year. The norms are a set of rules that must be strictly adhered to by all its members so that these teams have structure and expectations to be successful.

Coghlan and Brannick (2014) indicated that action research is a collaborative exercise through which all participants have equal authority. The implementation and design team members were the same and operated with equal authority. This equal distribution of authority allowed those providing the data to offer input on its analysis and the decisions on the best paths forward.

## **Interventions**

Glanz stated that interventions are synonymous with treatments. He goes on to provide the following definition for treatments:

Any specific instructional practice, program, or procedure that is implemented by a researcher in order to investigate its effect on the behavior or achievement of an individual or a group. Examples of treatments are behavioral management strategies, various textbook series, different methods of teaching, and use of instructional technology. As an educational leader, you'll need to evaluate such treatments in order to decide whether they should be retained, modified, or discarded. (p. 316)

The district officials proposed this study's interventions per the PLC process (Dufour et al., 2016). These interventions were deliberate actions integral to the successful implementation of the PLC and MTSS processes. The AR Team also selected these interventions to align with Instructional Leadership Evaluation Model used as the theoretical framework and the Principal Instructional Management Rating Scale (PIMRS) Evaluation Survey that are both used for this study (Hallinger & Murphy, 1985). The alignment between the theoretical framework, the interventions, and the evaluation survey created meaningful objectives for all researchers and participants to improve student outcomes and increase teacher confidence and efficacy.

### ***Intervention 1 – Defining the School's Mission***

**Defining Goals and Expectations.** The administration of LSHS asked its teachers to volunteer to serve on a Guiding Coalition whose task would be to create clear goals and expectations for the school. These goals include creating a mission statement, vision statement, and instructional framework.

**Communicating Goals and Expectations.** The aforementioned mission and vision statements are posted in every classroom on posters. They are also on every staff member's email signature and the website for the school.

### ***Intervention 2 – Managing the Instructional Program***

**Walkthroughs and Observations.** The administration conducted daily observations and walkthroughs that ranged from ten to ninety minutes. Some of these walkthroughs are mandated by the Georgia Department of Education as part of the teacher evaluation process.

Administrators use the Teacher Key Effectiveness System (TKES) standards to evaluate teachers' proficiency. Administrators also used other standards to observe instruction, especially for the Support, Preparation, Enrichment, Acceleration, Remediation (SPEAR) period.

**PLC Meeting Review.** Since RTI moved from the district portal to Microsoft One Drive in more user-friendly forms, the administration had access to the documents of every PLC. The expectation is that administrators go online and view these documents to leave feedback. These documents were completed on Tuesdays when teachers have a protected planning period to meet with their content-area PLCs and discuss data from common formative assessments.

In addition to teachers' actions, the administrative staff closely monitored student outcomes and how the teachers respond. As the results of both common and formative assessments became available, teachers carefully reviewed them and adjusted instruction accordingly, changing ineffective instructional methods and adopting effective ones. This slow process of 'sifting' out unsuccessful methods while increasing the frequency of useful ones should increase student success and encourage teachers to continue with PLC and RTI practices.

**Priority Standards.** When asking what we expect students to learn, teachers must look at all curriculum standards and discern what standards are necessary for students to learn instead

of covering every state standard at length. These standards are known as priority standards.

These essential standards are those teachers decide that students need to be successful. Based on the selected priority standards, teachers determined how long it would take to teach these standards and administer tests. An assessment plan outlined this course of action and provided details and dates on administering the assessments and standards to be covered, especially priority standards (Dufour et al., 2016).

**Learning Targets.** Learning Targets are the daily focus teachers and students give their attention every day. The teacher posts them on the board and emphasizes their importance as the goal of the day. Priority standards selected by the PLC at the onset of the year determine the learning targets and the content of the assessments moving forward. Learning targets should be accessible to all students without being too complicated or verbose. When teachers divide students into separate tiered groups, each group's learning target may change depending on the standard (Windram et al., 2012).

**Common Formative Assessments.** Once teachers delivered instruction, the second question, "How will we know when they have learned it?" had to be addressed. Each teacher administered the common formative assessments that every group member helped create at the beginning of the year. No one should deviate from this assessment in any way. The questions should be identical, and the dates on which they occur should be the same. This practice ensures the validity and efficacy of the collaborative and RTI processes moving forward (Windram et al., 2012).

### ***Intervention 3 – Creating a Positive School***

**Develop Lessons and Administer Assessments.** Teachers were given time to develop and deliver lessons based on the learning targets, priority standards, and assessments. Using best

practices for instruction such as modeling and guided practice, teachers facilitated student-centered learning to access the curriculum and take agency for their education (Windram et al., 2012). Additionally, the administrator's job was to protect that time by limiting interruptions such as calls to the office, school-wide intercom announcements, and improving the school's tardy system by installing tardy pass stations across the campus.

**Implement MTSS.** The third and fourth questions, "What do we do when they do not learn it?" and "What do we do when they do learn it?" are addressed during and after PLC meetings. Once teachers discussed assessment results and identified unsuccessful students, teachers decided how to address each group. The school has instituted a specific time called SPEAR during which staff and students respond to test results. It stands for Support, Preparation, Enrichment, Acceleration, Remediation. During this time, classes met for thirty-five minutes, and teachers solely focused on the common formative assessment results. This period happens once a day, between the second and third periods, addressing a different period each day. The first period met on Mondays, the second period met on Tuesdays, the third period met on Wednesdays, the fourth period met on Thursdays, and homeroom met on Fridays (Buffum et al., 2018).

The MTSS process relied heavily on differentiation. Teachers grouped students according to their assessment results and how each teacher addressed each student's needs. Each of the three tiers of MTSS addressed the degree to which students were successful. Tier-one students were considered the most successful, tier-three students were the least successful, and tier-two students fell between the two abovementioned levels. The focus of the plan for each teacher was the priority standards covered in the previous common formative assessment. While the focus of SPEAR as it relates to the MTSS process is purely academic, each tier in the MTSS process goes



beyond academics, addressing student concerns that can impact students' overall success. When teachers address all concerns, both academic and otherwise, in conjunction with a targeted focus on achievement goals, the results are profound (Buffum et al., 2018).

Once the teacher created tiered groups according to the assessment results, devising instructional strategies suited for each group's individual needs ensured students understand the information required for their level. For example, tier-one students who have shown mastery needed to extend their knowledge beyond the original instruction. In contrast, Tier two students needed to clarify certain aspects of the standard. Tier three students needed much more attention and may need to have all of the assessment's priority standards examined differently. This scenario is where differentiation played an essential role in the RTI process. Teachers had to be able to differentiate for various learners with differing needs. Gregory (2012) stated that differentiation is "using an array of instructional approaches and assessment tools to enable all students to be successful" (p,23). Teachers chose to differentiate the type of content provided to students, the process they used to deliver the content, and the product students produced to show they have mastered the standard. All of these differed depending on the tiered groups' needs.

Since MTSS documents were housed on Microsoft One Drive, the administration had access to every PLC's documents. The expectation was that administrators go online and view these documents to leave feedback. These documents were completed on Tuesdays when teachers had a protected planning period to meet with their content-area PLCs and discuss data from common formative assessments. They also discussed instructional strategies to improve student learning during their SPEAR periods. Administrators visited PLCs and listened to the meetings. The sole function of administrators was to offer feedback and support for the teachers. During their PLC meetings, teachers placed students in Tier one, two, or three based on their test

results. The tiers determine the method of instruction each student received during the SPEAR periods. The SPEAR periods were the primary time the MTSS process addressed student needs. Administrators visited the sessions, observing instruction and student learning in real-time. Teachers were also allowed to visit other classes to attain new methods and insights and offer support and feedback to one another.

***PLC Meetings.*** Teachers used the data to make decisions regarding MTSS implementation during weekly PLC meetings. They discussed the standards which students performed poorly, the standards which students performed well, which students performed poorly, and which students performed well. They also discussed the teaching strategies used and which yielded positive results. Once they ascertained this information, they followed a series of straightforward steps to address all students (Buffum et al., 2018). This meeting is also when the administration were able to praise teachers' efforts and satisfactory performance.

***Communication.*** Teachers posted exemplary work on boards in classrooms and on their blogs. Students were honored with their names on banners in the hallway.

***Professional Learning and Development Sessions.*** Teachers met every other Thursday in the professional learning room to collaborate, discuss strategies of other teachers, and share information. This environment was job-embedded so teachers could discuss struggles and successes, and everyone involved could learn (Zepeda, 2019). These sessions were designed to allow time to review videos and discuss observations (Visone, 2016).

Teachers also had county and local professional development sessions to learn new skills or receive guidance on instructional techniques.

***Attend PLC Meetings.*** Administrators attended PLCs and listened to the meetings. The sole function of administrators was to offer feedback and support for the teachers. During their

PLC meetings, teachers placed students in Tier one, two, or three based on their test results. The tiers determine the method of instruction each student receives during the SPEAR periods. The SPEAR periods was the primary time the MTSS process addressed student needs. Administrators attended these sessions, observing instruction and student learning in real-time. Teachers were also allowed to visit other classes to attain new methods and insights and offer support and feedback.

### **Implementation - Action Research Timeline**

The action research timeline consisted of three, three-week cycles. The three-week cycles are detailed in Table 1 below.

**Table 1**

#### *Action Research Timeline*

<b>Intervention</b>	<b>Action Research Team Activities</b>	<b>Outcomes/Connection to the problem, theoretical framework</b>	<b>Timeline</b>	<b>Data Collected</b>
Defining the School's Mission	Guiding Coalition Meeting	Clear goals and expectations for the school, mission statement, vision statement, and an instructional framework	First 14 days	Meeting Notes
	Mission and vision statements posted in every classroom on posters and emails signatures	Clear goals and expectations for the school, mission statement, vision statement, and an instructional framework	First 21 days	Observations, surveys, and interviews
Managing the Instructional Program	Observations and walkthroughs	Provided constructive feedback and support	First three weeks of October, November, December	TKES Platform

<b>Intervention</b>	<b>Action Research Team Activities</b>	<b>Outcomes/Connection to the problem, theoretical framework</b>	<b>Timeline</b>	<b>Data Collected</b>
Managing the Instructional Program	Administrators went online and viewed documents for feedback	Provided constructive feedback and support	First three weeks of October, November, December	Editable documents
	Critical standards identified	Set clear objectives for student learning and measure teacher efficacy	First 14 days	List of Priority Standards
	Discussed the best way to convey learning objectives to students	Set clear, attainable, realistic goals for students daily	First 14 days	List of Learning Targets
	Developed assessments to be used in class to measure student learning	Developed reliable methods of measuring student growth for analysis	First 14 days	Common Formative Assessments for all Priority Standards
	Teachers administered lessons and assessments	Teachers executed this intervention while administrators offered guidance and input	First three weeks of October, November, December	Observations, Research Journal, Surveys, and Interviews
	Teachers implemented targeted interventions for all students	More students achieved their learning targets successfully	First three weeks of October, November, December	Observations, Research Journal, Surveys, and Interviews
Creating a Positive School	The teachers reviewed the results of common formative assessments and discussed what tiered support systems to implement	Reviewed areas where students need further instructions for enrichment, remediation, or acceleration	First three weeks of October, November, December	MTSS Plans
	The administration provided resources and tools	Teachers better supported students, increased capacity, confidence, and efficacy	First three weeks of October, November, December	Research Journal

<b>Intervention</b>	<b>Action Research Team Activities</b>	<b>Outcomes/Connection to the problem, theoretical framework</b>	<b>Timeline</b>	<b>Data Collected</b>
Creating a Positive School	Teachers met every other Thursday in the professional learning room to collaborate	Teachers better supported students, increased capacity, confidence, and efficacy	First three weeks of October, November, December	Observations, Research Journal, Surveys, and Interviews
	The administration offered support and feedback.	Teachers reflected and improved their execution	First three weeks of October, November, December	MTSS Plans

## Research Design

The AR/I Team used the PDSA Conceptual Framework (Moen and Norman, 2006) to carry out the research. The total time to complete three action research cycles was nine weeks.

The focus of this action research project was to answer the following research questions:

1. How can school leaders support implementing a multi-tiered system of supports to impact instructional capacity and teacher confidence?
2. How can teachers effectively implement a multi-tiered system of supports to impact instructional capacity and teacher confidence?
3. What is learned by action research design and implementation teams as they collaborate to implement effective multi-tiered systems of support?

The PDSA Model (Moen and Norman, 2006) is very similar to the process laid out by Coghlan and Brannick (2014). The action research project began in the Fall of 2021 when the AR/I team selected priority standards, created learning targets, and created common formative assessments. The AR/I Team included these steps in the first Plan Phase of the first research cycle. Once all preparations were ready for the MTSS/RTI process, the Do Phase occurred the following week.

First, teachers administered instructional lessons and common formative assessments. Next, teachers reviewed the data from the common formative assessments and assigned interventions to students according to common formative assessment data results, and re-assessed student achievement. Finally, teachers examined the success of their interventions based on student outcomes. This process repeated for three weeks. The administration supported and supervised teachers throughout the entire process in any way possible, met with the Team every week, and executed any request for support possible. The AR/I Team then completed surveys and interviews for data collection. The Study Phase occurred after three weeks. Next, the AR/I Team conducted data analysis as a group and reviewed results. The results of the data analysis led to the Act Phase, where the AR/I Team created a plan to improve administrative support, teacher capacity, and teacher confidence for the following cycle. The Study and Act Phases lasted a week altogether.

### **Contextual Setting**

The purpose of this case study was to analyze student outcomes and teacher responses to determine what teachers and administrators can do to impact instructional capacity and teacher confidence in implementing RTI/MTSS at a large suburban high school. Given that most LSHS students include low performing populations, having an effective RTI/MTSS process for these populations is particularly important (Duncan and Murnane, 2014).

This study took place in a suburban high school with a diverse student body. However, the school and AR/I Team members did not reflect the diversity of the student population. The homogenous White staff of Lakeshore High school contrasts with its student populations. Lakeshore high school qualifies for Title I status. However, the school administration has decided against doing so and receives support from a very involved local business community.

## **Selection**

The participants in this case study were three math teachers whose years of experience ranged from sixteen to 24 years. These teachers were selected because they were already part of the Geometry PLC and were going to teach a group of students who had existing data from their previous Algebra 1 class.

Each teacher was asked if they were interested in conducting the study before being sent the information regarding the research and viewing an informational presentation. During the presentation, teachers were assured that their participation was always voluntary and their involvement would be kept confidential. The teachers were then allowed to ask questions. Once the researcher answered their questions, they agreed. The researcher then provided a consent form that they signed and returned the same week.

## **Data Collection Methods**

### ***Interview Protocol***

This action research project was a case study regarding the ability of school leadership to support its teachers in the implementation of the MTSS/RTI process. The research questions are as follows:

1. How can school leaders support implementing a multi-tiered system of supports to impact instructional capacity and teacher confidence?
2. How can teachers effectively implement a multi-tiered system of supports to impact instructional capacity and teacher confidence?
3. What is learned by action research design and implementation teams as they collaborate to implement effective multi-tiered systems of support?

Glanz (2014, p. 127) references Seidman (2006) in the position that interviews are the most effective manner to “understand the experiences of others and the meanings they make of them.” Therefore, the AR team decided that interviews would be an optimal method for collecting data. Additionally, Meyer and Behar-Horenstein (2015) conducted a series of three focus group interviews to determine the perspectives of 1<sup>st</sup>-grade teachers on the implementation of RTI at their rural schools. This study did not always focus on the impact leadership had on RTI. Still, it did discern potential factors that leadership could influence to improve the perspectives of teachers on the implementation of RTI. Since the research questions of this study align with the purpose of Meyer and Behar-Horenstein (2015), some of the focus group questions were the basis for the individual interviews. Flanigan’s (1954) Critical Incident Theory (CIT) was used to conduct interviews of the AR Implementation Team Members, and to code the information. These can be found in the Appendix. The Interview questions were field-tested three times and modified for coherence and context.

**Critical Incident Theory (CIT).** CIT states that themes are drawn from the responses of interviewees and sorted into categories from which the researcher can draw meaning (Hughes et al., 2007). For example, Meyer and Behar-Horenstein (2015) found that teachers voiced several frustrations regarding implementing RTI/MTSS and used multiple coping strategies to address the frustrations. These frustrations and coping strategies led to three main themes that defined their needs. The struggles, coping practices, and needs of the teachers were coded and recorded to document and analyze the results of the interviews while providing meaningful information to answer the research questions for this study.

Unmet Teacher Needs (Codes):

- Professional Development (PD)



- Direct Support (DS)
- Tangible Resources (TR)

Frustrations (Codes):

- Role Uncertainty (RU)
- Process Uncertainty (PU)
- Data-Based Decision Making (DD)
- Struggling Students (SS)
- Emotional Frustration (EF)

Coping Strategies (Codes):

- Collaborating (C)
- Asking Questions (AQ)
- Initiating (I)
- Observing Other Teacher (OOT)

### *Surveys*

Hallinger and Murphy (1985a) developed a rating instrument called the Principal Instructional Management Rating Scale (PIMRS) that used ten key indicators to evaluate the instructional management behavior of principals. This tool provided the basis for the theoretical framework used for this study. Figure 3.1 below is a survey using a Likert scale for the PIMRS that the teachers completed at the end of each research cycle. This survey can be found in the Appendix.

### ***Research Artifacts***

The researcher and participants collected artifacts during each research cycle in the form of observation notes and meeting notes. Weekly PLC meetings were held with all three teachers in attendance. The teachers discussed assessment results, instructional strategies, MTSS interventions, and various other topics needed to complete their duties and responsibilities as teachers. The researcher attended these meetings as an assistant principal in a non-evaluative role to offer support and guidance regarding how to complete their responsibilities. The teacher assigned to be the data analyst took notes at each meeting. These weekly notes were collected by the AR/I Teams. Statements made during the meeting were coded using the same codes from the interview protocol.

At the end of each research cycle, the AR/I Team debriefed and discussed the events of the completed cycle, data collected, and the best way to move forward to improve the execution of the interventions to come. In addition, the researcher recorded the statements made by the teacher in a journal, and statements made during the meeting were coded using the same codes from the interview protocol.

### **Data Analysis**

The surveys, interviews, and research artifacts were decontextualized and subject to content analysis (Glanz, 2014). Then, using a priori coding (Blair, 2015), the researcher categorized responses and data collected from the surveys, interviews, and research artifacts using pre-existing codes from the Meyer and Behar-Horenstein study as well as codes based on the theoretical framework for this study (2015). In doing so, the responses of the teachers to the theoretical framework and MTSS are addressed directly.

The AR/I Team reviewed the data, discussed the data collected, and followed the previously stated PDSA conceptual framework. Finally, the Team used the data collected to begin the next research cycle with what they perceived to be improvements upon the previous research cycle.

### **Reliability and Validity**

The triangulation of the meeting notes, interviews, and surveys increased the reliability and validity of the data, given they yield similar results (Glanz, 2014). Additionally, individually interviewing a diverse group of teachers increased the validity of the data. The three teachers have unique experiences that have shaped their views and perceptions. The research and data collected apply to this setting and these particular participants and their thoughts on their research. Creswell and Poth (2018) stated the following regarding the validity of qualitative research:

We consider “validation” in qualitative research to be an attempt to assess the “accuracy” of the findings, as best described by the researcher, the participants, and the readers (or reviewers). This view also suggests that any report of the research is a representation by the author. We also view validation as a distinct strength of qualitative research in that the account made through extensive time spent in the field, the detailed thick description, and the closeness of the researcher to the participants in the study all add to the value or accuracy of a study. (p. 258)

The role and actions of the researcher are as described by Creswell and Poth (2018).

Additionally, the use of the “researcher’s lens” (p. 259) to collect data from multiple sources and corroborate evidence (Creswell & Poth, 2018). This study also provides a positionality statement in chapter four to reveal any past biases, experiences, or prejudices on the part of the researcher

that may influence the analysis. This positionality statement increases internal validity by addressing the potential for undue inferences and highlighting possible factors that can influence conclusions (Yin, 2018). While this case study was designed for this specific setting, the interventions and processes described to execute this action research are detailed enough to provide sufficient external reliability to be used in other settings.

Other strategies used to increase validity were member checking and increased engagement. This study used member checking at the conclusions of each research cycle to increase the credibility of the data and analyses. This member checking took place during the debriefing meetings. The interventions used inherently placed the researchers in the field and led to consistent engagement and observation (Creswell & Poth, 2018).

The reliability of the research was increased through the use of coding for interviews and research artifacts. The participants were all made aware of the codes used and shown the final responses and analyses at the end of each research cycle.

### **Chapter Summary**

This chapter provided the details regarding the research design and methodology used for this action research case study. This research study aimed to develop an effective manner to implement teacher confidence and capacity through a theoretical instructional leadership framework. The AR/I Team used surveys, interviews, and research artifacts to collect qualitative data. The following chapter presents the problem in the context where the action research took place.

## CHAPTER 4

### THE CASE

#### **Overview of the Case**

##### ***Description of the School, Context, and Setting***

Lake Shore High School lies between two small, suburban cities just outside a populous metropolitan area. The combined population of these cities is under 60,000. This community is a small, conservative area looking to modernize itself while maintaining its traditional values and small-town charm. While the two towns are majority white, the location of our school is such that most of the students are economically disadvantaged, Black, and Hispanic (GADOE, 2020). These circumstances create instances where differences between these groups and cultures can be problematic. Cultural differences create social barriers between groups within the same community. When interacting with businesses, government officials, and local organizations, prioritizing students of color tends to take a back seat to highlight traditions and cultural aspects most celebrated by the White community.

There is a genuine will to serve others in the community. For example, the mayor of South Lake regularly substitutes at all the schools in the area. When the local church paid all its debts, it pledged a year's worth of its money that would have gone to its mortgage to donations to local families in need. When one family lost their mother to cancer, the church paid her medical bills and donated \$10,000. This community consists of diverse people who live together and represent various experiences and backgrounds.

Of the approximately 100 teachers of core content and Special Education at Lake Shore High School, six are Black, three are Indian, and one is Hispanic. Meaning 10% of the staff comprises non-white compared to approximately 70% of the student body. As a result, the same type of community divisions persists within Lake Shore between the students and faculty. Table 2 provides the most recent information regarding Lake Shore's student demographics.

**Table 2**

*School Demographics*

Asian/Pacific Islander	5.3%
American Indian/Native Alaskan	0.4%
Black	37.6%
Hispanic	18.6%
Multi-Racial	4.5%
White	33.7%
Economically Disadvantaged	41.0%
English Learners	4.9%
Students with Disabilities	14.0%

Figure 3 provides the years of teaching experience of the teaching staff. Lakeshore's teaching staff is considered a veteran staff with the majority having 21-30 years of experience.

**Figure 3**

*Teacher Years of Experience*

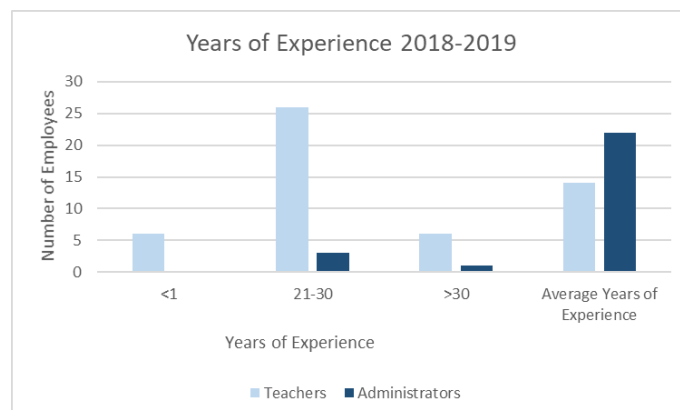


Figure 4 provides discipline information regarding out of school suspensions, which is one of the more serious forms of discipline punishment.

**Figure 4**

*OSS Rates by Ethnicity*

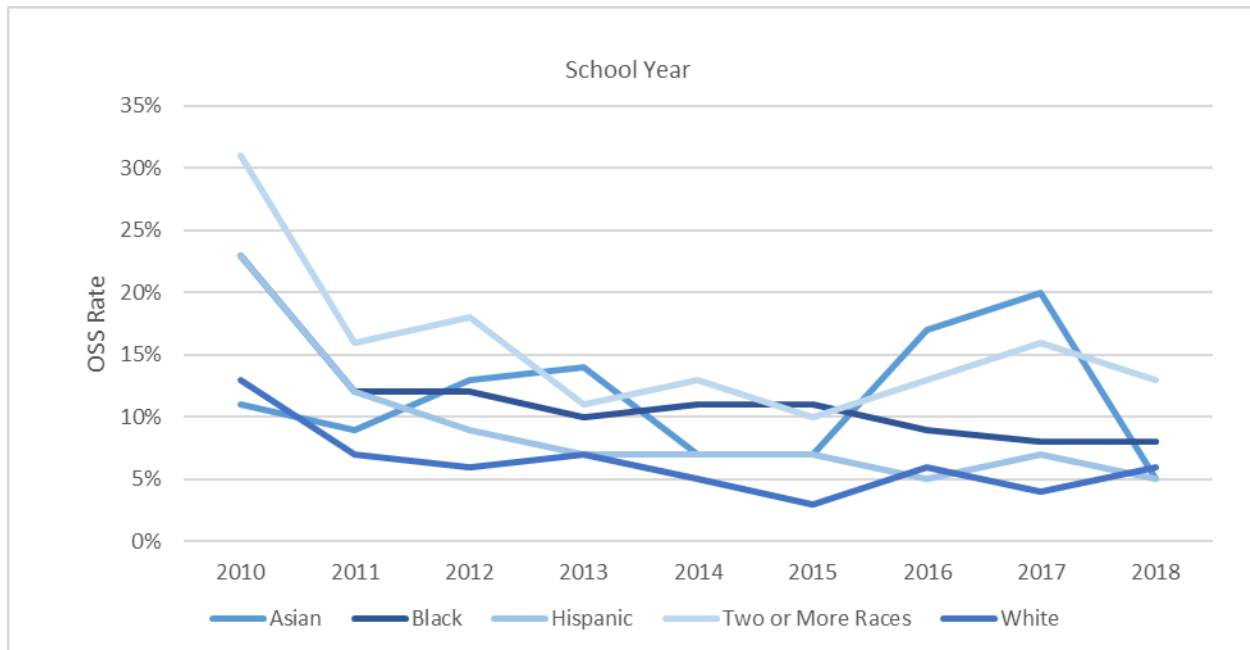


Table 3 provides the latest CCRPI scores from the state for school years, 2017- 2018, and 2018-2019. The scores reflect a roughly five-point dip in the overall score from 2018 to 2019.

**Table 3**

*LSHS CCRPI*

SCHOOL NAME	GRADE CLUSTER	OVERALL SCORE	CONTENT MASTERY	PROGRESS	CLOSING GAPS	READINESS	GRADUATION RATE
LSHS (2018)	High	84.6	80.8	90.3	80.6	78.5	89.6
LSHS (2019)	High	79.8	77.6	90.2	48.6	74.7	89.1

## Problem Framing in the Context

Achievement gaps at LSHS between Students with Disabilities (SWDs) and Students without Disabilities (SWODs) and gaps between those classified as Limited English Proficiency (LEPs) versus Not Limited English Proficiency (NLEPs) are showing a trend of expansion regarding Algebra I End of Course Tests (EOCTs) See Table 4. However, the data is mixed when compared to state and district data.

**Table 4**

### *LSHS Student Achievement Gaps for Algebra I EOCs*

Algebra I (% Proficient)									
	SWOD			SWD			GAP		
Year	LSHS-SWOD	LSHS-SWD	District-SWOD	District-SWD	State-SWOD	State-SWD	LSHS-GAP	District-GAP	State-GAP
2016-17	38%	36%	29%	6%	14%	7%	3%	23%	8%
2017-18	36%	35%	29%	10%	17%	8%	1%	19%	9%
2018-19	40%	39%	32%	14%	20%	9%	1%	18%	11%
Three-year Achievement Gap Change:							-2%	-5%	4%
Algebra I (% Proficient)									
	Not Limited English Proficient			Limited English Proficient			GAP		
Year	LSHS-NLEP	District-NLE	State-NLEP	LSHS-LEP	District-LEP	State-LEP	LSHS-GAP	District-GAP	State-GAP
2016-17	34%	34%	27%	16%	11%	11%	19%	23%	16%
2017-18	33%	34%	27%	0%	6%	8%	33%	28%	20%
2018-19	37%	38%	30%	18%	14%	10%	19%	24%	20%
Three-year Achievement Gap Change:							0%	1%	3%

Ladson-Billings's (2006) educational debt concept also applies to English Language Learners' deficits (ELLs) and lack of achievement. This educational debt concept posits that the cause of the achievement gap is an educational debt of historical, economic, sociopolitical, and moral withholdings. When their Algebra I scores are better than their Biology scores, one must consider language and comprehension a much more significant barrier. Limited resources are being offered to a population that not only has a history of being underserved but continues being ignored and marginalized (Ladson-Billings, 2006).



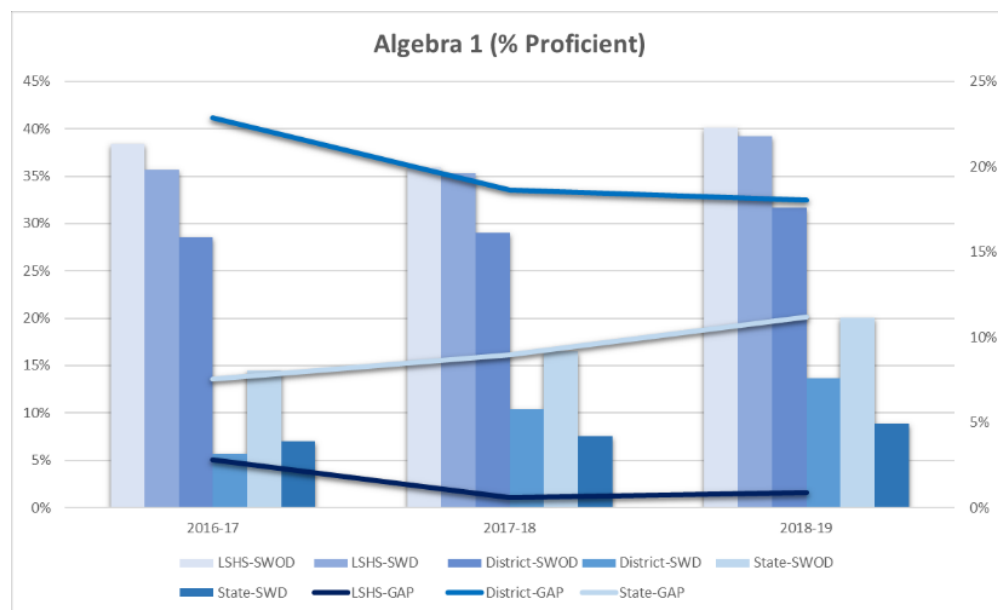
The LEP students' current model is isolated with other LEP students or combined with other NLEP students with an ELL teacher added to a class with a General Education teacher. In the former model, discipline problems prevent students from receiving a quality education (Ladd, 2011). In the latter, the ELL teacher's role is limited in the planning and executing the lessons. Unfortunately, these issues mirror the SWD classes.

### Problem Framing Based on the Site

The information provided in this section details how Lake Shore's student groups underperform compared to their peers. It also looks at progress toward closing the gap, whether positive or negative. Figures 5 and 6 denote the achievement gaps of the student groups.

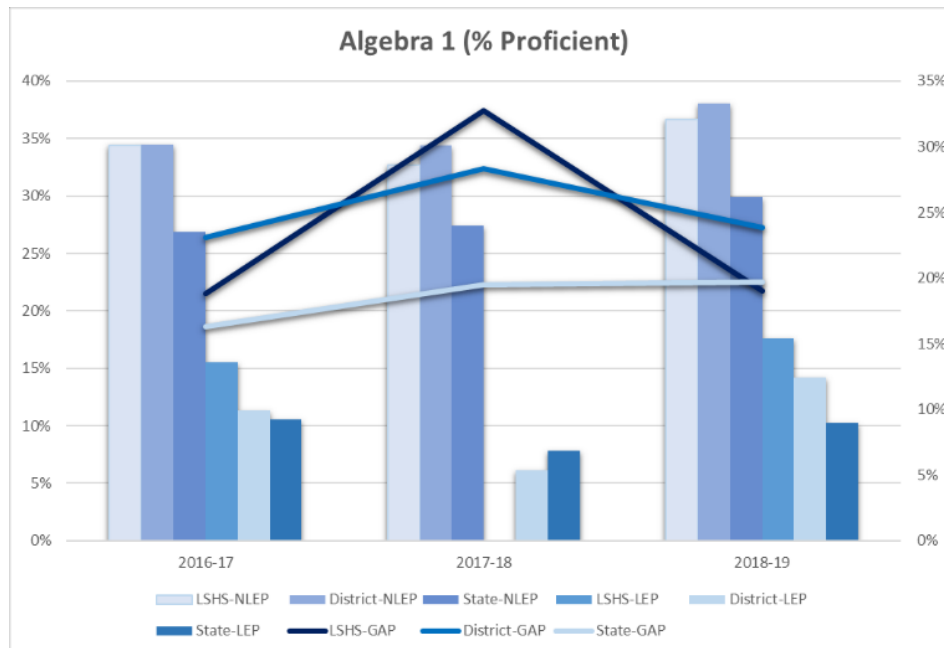
**Figure 5**

*State, District, and School Proficiency Rates for SWD and SWOD in Algebra 1*



**Figure 6**

*State, District, and School Proficiency Rates for LEP and NLEP in Algebra 1*



The bar graphs in Figures 5 and show proficiency rates of LSHS, the district, and the state on the Algebra I EOC regarding SWD, SWOD, LEP, and NLEP student groups. Lake Shore is working toward closing the gap with its LEP students, and SWD students but is showing more progress with the LEP students. The district is making progress with both SWD and LEP students, while the gap widens overall regarding the state.

Overall, LSHS is part of a socio-economically affluent district. However, pockets exist within the county populated by low-income residents. The schools that serve these areas consistently show achievement far behind their more affluent peers.

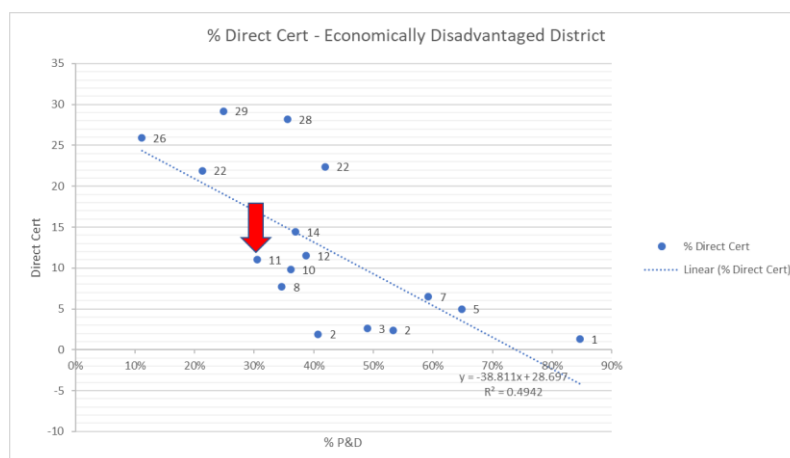
The segregated housing in this area contributes to the narrative of this achievement gap and its causes. While over 40% of the students at LSHS come from economically disadvantaged environments, there are many students who fall in the middle- and upper-income ranges.

Students from affluent areas enroll in Magnet, AP, and Honors courses. Even when students of

differing income levels attend school together, access or lack thereof to resources such as "books, computers, high-quality childcare, summer camps, ...and other enrichment goods and services" can lead to a gap in achievement. This academic/economic grouping of students further coincides with Duncan and Murnane's (2014) findings that students of less affluent families more likely to be in classrooms where the teacher must address more issues with behavior. Most of Lake Shore's discipline issues stem from on-level and co-taught classes. These are also the classes where we find most of our economically disadvantaged students. Figure 7 shows LSHS's Direct Certified Economically Disadvantaged group is underperforming compared to the rest of the district's schools

**Figure 7**

*Comparative Analysis of Direct Certified Students Proficient and Distinguished*



This problem did not start at Lake Shore High School. Evidence suggests that the schools feeding into Lake Shore have had struggles with these issues. Reardon et al.(year) stated that many people have begun to understand that the earliest years in a child's life are most important.

This understanding has not gone unnoticed within LSHS's school district. Two large, state-of-the-art pre-k centers are under construction in the most impoverished areas of the school district. Duncan and Murnane (2014) gave an example of a Boston Pre-K program that instituted and closed the achievement gap by more than half. The school district's decision to build these centers in the county's most impoverished area displays its efforts to address these issues. Each of these centers will support approximately 300 students and be accessible to the children in the area. Unfortunately, these pre-K centers are out of LSHS's feeder pattern. Duncan and Murnane (2014) attributed success in pre-K to exposure to language, vocabulary, and mathematical concepts that prepare them for a rigorous education when they enter the kindergarten setting. While high school is far from pre-k, enrichment activities that supplement the language of high school standards may benefit economically disadvantaged students' success.

### **The Story and Outcomes**

This action research lasted three months, beginning in October and ending in December 2021. I approached each of the teachers in the geometry cohort regarding the action research study and their potential interest in viewing an informational presentation. Once they agreed, they viewed a presentation detailing the purpose of the research and the rationale for the study. The presentation also included the potential participants' tasks and responsibilities during the study. The participants received information regarding the data collection process and the flexibility regarding their voluntary participation. The presentation informed them that their identities would be kept confidential and safeguarded. After reviewing the potential benefits for the education field, the participants had the opportunity to ask questions. The participants received an explanation regarding their decision to move forward and a consent form they would need to complete. Each teacher immediately agreed to complete the consent form and returned it,

thus establishing the AR/I Team. The participants are referred as Teacher 1, Teacher 2, and Teacher 3 moving forward. Table 5 lists the teachers and their roles regarding the PLCs.

**Table 5**

*Members of the AR/I Team*

Team Member	Title/PLC Role
Teacher 1	Geometry Teacher/Facilitator
Teacher 2	Geometry Teacher/Data Analyst
Teacher 3	Geometry Teacher/Timekeeper
Administrator	Administrator/Researcher

Teacher 1 is the PLC facilitator. She set the meeting objectives, ensured its members stayed on task, and addressed every agenda item. She is a veteran teacher with twenty-two years of experience teaching grades 9-12 in multiple states. She has worked with on level and remedial student groups. She has taught Pre-Algebra, Algebra, Algebra II, Algebra III, and Geometry.

Teacher 2 is the data analyst and has sixteen years of teaching experience in multiple states. She has worked with special needs, ESOL, accelerated, and gifted populations in grades 9-12. She has taught Algebra I, Algebra II, Geometry, and Precalculus. Teacher 3 is the timekeeper and has twenty-four years of experience across multiple states. She has taught grades 9-12. She has also worked with special needs, ESOL, accelerated, and gifted populations. She has taught Band, Middle School Math, Algebra I, Geometry, Algebra II, and Honors Algebra II.

***Positionality Statement***

My research focuses on how leaders influence teachers in implementing multi-tiered systems of support (MTSS) to improve instructional capacity and teacher confidence. The long-term outcomes of this research could result in improved student outcomes (Waitoller & Thoruis,

2015). I have been in education for fifteen years. I served as a teacher for the first ten years and an administrator for the last five years. Half of my ten years as a teacher were in general education positions, and the other half was as an interrelated special education teacher. These ten years spanned three school districts, six schools, eight grade levels, and nine principals as an educator. The one constant is that I have worked solely in schools with mostly minoritized students categorized as Title I. I have witnessed a variety of strategies and implementations regarding MTSS. Though anecdotal, most instances of MTSS implementation have been thoughtful, intentional, and well planned. Teachers and leaders have concrete roles and guidelines dictating how and what they do. This approach has encouraged teachers to try new strategies and feel more confident in their practices.

I identify as a Black, first-generation, Caribbean-American male. I lived in the United States, experienced a K-12 public education, and earned an associate's, bachelor's, master's, and specialist's degree. I have maintained consistent employment for most of my adult life. I credit much of this success to my public-school education. However, I realized that my outcome was not typical. Many of my peers from my childhood did not have the same result. Other students of color from my first year in college tested into remedial classes during the first semester. I believe the public education system needs improvement in many ways. Research regarding MTSS shows that the flexibility of a well-developed implementation can yield significant results for all students (Harris-Murri et al., 2006). These results are remarkably accurate for minoritized and special needs students. Students of Color, English Language Learners (ELLs), and economically disadvantaged students perform historically lower than their counterparts (Ladson-Billings, 2006). However, studies have shown that MTSS can be a powerful tool in reversing these unfavorable outcomes. Having been a part of one or more of these groups at different points in

my life, the success of MTSS does have some personal significance. I believe this is one of many improvements needed for the public education system to succeed. Otherwise, the remaining explanation for the current achievement gap is the students and their communities, the same communities of which I am a part. I posit that this possibility is dubious and illogical since the resources available to these communities are insufficient (Duncan and Murnane, 2014).

Research shows that minoritized communities often face challenges that white, affluent students do not (Duncan and Murnane, 2014). The families these students belong to struggle with food, housing, and healthcare. Additionally, their parents often lack the time and education needed to support their children after school and during the summer (Duncan and Murnane, 2014). These factors' cumulative effect on these students builds over time, creating a lack of achievement that can lead to insurmountable deficits and increased dropout rates (Ladson-Billings, 2006).

I often consider the long-term effects and optics of the success of these students. While Ladson-Billings (2006) indicated that the implications regarding these students' futures; another personal motivator is the perceptions formed by people outside of these communities based on appearance. The theory that if "these people wanted to do better and wanted more, then they should just try harder" is not uncommon. Furthermore, some draw undue conclusions, generalizations, and prejudices against certain races and groups based on the lack of achievement. This misconception affects me, my family, and those who come after me. People's perception of me and others based on our race and appearance is troubling. A more robust and responsive education system is part of a more comprehensive solution for a more equitable society.

As a member of the action research team, I collected, analyzed, and contributed to

the research. I am also the assistant principal, evaluation coordinator, and supervisor over many action research team participants. I am also the only Black person in the cohort. These factors created the potential for a complex dynamic. The action research team members may felt obligated to appease me as their direct report, a person of color, and the administrator supervising all the school's evaluations and professional development plans. I am also the only male in this group. I had to consider that offering my opinion may be sexist if it is not delivered appropriately.

Over the years, I have created a culture of trust and open communication with my teachers. I have always encouraged them to express themselves. We have had occasional disagreements that have always been professional and amicable. I continued that dynamic during the action research process by ensuring their opinion had equal value to mine and they were integral parts of the data collected. One of the goals of this research was to improve teacher confidence in implementing the MTSS process. If teachers felt forced to supply the data I was looking for, then the process would have become meaningless.

The socio-political nature of this study could have been divisive. The MTSS process did not have great success in the past. Teachers have typically operated with considerable independence, regardless of student outcomes. This model asked them for a more substantial preparation on the front end and a more significant amount of flexibility throughout the year. Their task was to consider new instruction methods and implement them, regardless of their comfort level. There are those whose conservative values posited that teachers should not do more when the students are the ones who need to increase their efforts. This line of thinking often aligns with traditional tenets regarding the welfare state, government assistance, taxes, and healthcare. More liberal thinking suggests that schools should be making the efforts described in



this research. The MTSS process promotes differentiation instruction and the inclusion of all students for a better education system (Sullivan and Castro, 2013).

The theoretical perspective best aligned with my positionality is diversity, equity, and inclusion (DEI). I firmly believe that we must create empowering systems that support groups historically marginalized by the destructive designs of our past and present. (Saucedo and Hentze, 2020).

### ***Initial Steps***

Using the PDSA conceptual framework (Moen and Norman, 2006), The AR/I Team began developing the action research process based on Coghlan and Brannick's (2014) system. Following Hallinger and Murphy's PIMRS, the AR/I Team decided that the three core dimensions would constitute the three interventions for the case study, each with its own set of activities aligned with the three core dimensions of PIMRS. Next, the team decided to implement the cycles in three, three-week cycles. However, the scheduling of the cycles did not fully determine when the AR/I Team implemented the interventions. The PIMRS-based survey evaluated the efficacy of each intervention at the end of each action research cycle. Table 6 provided an overview of the intervention's timeline.

### ***Cycles of Action Research***

**Cycle 1.** The first cycle of action research defined the school's mission, and it ran from October 14<sup>th</sup> to October 22<sup>nd</sup>. The activities involved in this intervention were defining clear goals and expectations and communicating them. The execution of these goals was primarily the responsibility of the administrator. The school's administration works with a group of teachers who volunteer their time to collaborate with the school's administration to determine school directives. This group of teachers is known as the Guiding Coalition. Together with the Guiding

Coalition, the administration created the mission statement, vision statement, and instructional framework to be used by every teacher in the school. The administrator for the action research group delivered these items to the Geometry PLC. The mission and vision statements were placed on posters in every classroom and made a part of every member's email signature and the school's website.

***Framing and Communicating Clear School Goals.*** Administrators conducted training sessions regarding the instructional framework and MTSS. Administrators trained teachers on posting learning targets, conducting warm-up activities, openings sessions, work sessions, and closings. The training sessions also included using priority standards and common formative assessments to guide instruction and implement an effective MTSS.

Upon the first cycle's completion, the AR/I team convened to debrief the conclusion of cycle 1. The teachers shared their thoughts regarding the completion of the first cycle. The comments were optimistic. Having clearly defined goals and objectives that were realistic and logical made them feel encouraged to be successful. Furthermore, having these goals and plans disseminated throughout the entire staff, student body, and parents helped the teachers feel more confident in their ability to properly implement the school's initiatives with the partnership of all colleagues and stakeholders. The teachers stated that they reviewed the instructional framework and MTSS with students to understand the value of these practices and participate in them more effectively. The hope was also to create agency within the students and take more ownership in their learning.

**Cycle 2.** The second cycle of action research was managing the instructional program, and it ran from October 25<sup>th</sup> to November 12<sup>th</sup>. The activities defined in this intervention Supervising and evaluating instruction, coordinating curriculum, and monitoring student

progress. Most of these assessments took place within the classroom during instructional time. Each activity consisted of one or more components the AR/I Team chose.

***Supervising and Evaluating Instruction.*** The administration conducted observations and walkthroughs that ranged anywhere from ten to ninety minutes. These observations were beyond the prescribed minimum amount required by the Georgia Department of Education (GADOE, 2022). In addition, the administrator would visit classrooms and observe the instruction to provide positive and constructive feedback. The visits were both announced and unannounced. The administrators were also able to hold discussions with the teachers regarding observations and compare perceptions of what had occurred. These discussions provided opportunities for insight on both the teacher and the administrator. The teacher was able to adjust their instruction based on the administrator's feedback, while the administrator was able to adjust the expectations of the desired occurrences when performing evaluations. These observations took place multiple times a week for numerous teachers and yielded valuable information. In addition, the administrator shared this information during weekly PLC meetings whose members consisted of the AR/I Team.

During the PLC meetings, the geometry teachers and the administrator met to discuss assessment results and what had taken place during the week regarding successful instructional strategies. Each teacher brought their assessment data to the meetings and shared their experiences and strategies to reach a consensus on what strategies are the most effective regarding student achievement. Each meeting began with a review of the norms for the meeting. The norms were to be on time, share the workload, come prepared with data, and stick to the agenda. The facilitator decided the agenda items with input from the other PLC members. The administrator attended the meeting to support the group in making decisions and offer their

insights and observations. When team members could not agree, the administrator's input became more objective. However, the ultimate decision on how the PLC would proceed fell with the member of the PLC.

***Coordinating the Curriculum.*** The PLC member agreed on activities at the beginning of the school year and implemented them during instructional time. Choosing priority standards was the first part of this intervention. The PLC chose what they felt were the most critical standards from the state's geometry standards. The PLC decided these are the minimum standards students must learn to be successfully master the curriculum. Teachers also agreed that they would not limit themselves to these standards and would find time to teach the other standards should the opportunities present themselves. These priority standards determined the foundation for all instruction. Once the PLC selected priority standards, they created learning targets based on said standards. These learning targets were objectives posted on the board in class every day that provided students with a daily goal of what they should be striving to accomplish.

***Monitoring Student Progress.*** The PLC group-administered common formative assessments to their students. These assessments aligned with priority standards and learning targets. These assessments helped the teachers better understand what the students learned and what they did not learn. Each member of the PLC agreed to give the same assessment to their students on the same schedule so that the members could compare data accurately. The discussions took place during the weekly PLC meetings. Administrators supported the geometry PLC by creating a spreadsheet that teachers could use to track the common formative assessment results. The spreadsheet sorted the students by period and teacher. It also identified each student according to the results of their common formative assessments. It also provided the PLC

members with student averages, class averages, and the overall average of the PLC group. This spreadsheet was accessible to the administrative Team.

The AR/I met on the last day of the second cycle to debrief on its conclusion. The researcher interviewed each participant individually and conducted surveys to collect qualitative data. Additionally, the researcher collected the meeting notes from each PLC meeting to add to the qualitative data collected. The meeting notes, interviews, and survey data collected suggested the interventions improved overall teacher confidence and capacity. However, the teachers did express some anxiety regarding the increased number of observations and visits from the administration. They were not used to the administration being as involved as these interventions prescribed. One teacher stated:

*“It was weird at first, seeing administration come in so much. I felt like I was always being judged. But after a while and getting positive and helpful feedback, it was nice seeing administrators coming into the room to see what we are doing. It felt like they were really there for our benefit and not just there to check if we were slacking off.”*

The survey results produced similar results to the interviews and weekly meetings. Overall, the results were positive but not as positive as the first week, suggesting some apprehension. The AR/I Team discussed these results and decided to thoroughly examine the interventions for cycle three and ensure they would be abreast of all the activities fully to anticipate their execution better.

**Cycle 3.** The third cycle of action research created a positive school, and it ran from November 15<sup>th</sup> to December 17<sup>th</sup>. The activities defined in this intervention were providing instructional time, providing incentives for teachers, providing incentives for learning, providing professional development, and maintaining high visibility. Some of these interventions took

place during the other research cycles. However, the AR/I Team decided to focus on these interventions during this cycle.

***Providing Instructional Time.*** The administration ensured the teachers had appropriate instructional time to deliver content and assessments. The administration also allotted a daily amount of time for teachers to implement MTSS. Teachers had 35 minutes to address their students and provide differentiated instruction every day. During these 35 minutes, teachers use tiered activities to manage the different achievement levels of their students. The administration also made sure instruction was not interrupted as much as possible. For example, school-wide announcements and pulling out students during instruction are prohibited. The administration also installed a new tardy system to increase the number of students getting to class on time.

***Providing Incentives for Teachers and Student Learning.*** Both teachers and students were recognized for their efforts. Teachers shared successes in the classroom with the other PLC members. Administrators praised these successes as well as successes observed by administrators. The positive reinforcement took place in front of other PLC members and staff meetings. In addition, teachers posted exemplary work and assessments on boards in the classroom. Teachers also published students' names that successfully met the standards on their blogs.

***Providing Professional Development.*** Teachers met every other Thursday to attend professional development and learning sessions. The professional learning sessions involved teachers from different content areas and consisted of sharing ideas, strategies, experiences, successes, and failures that had taken place in the classroom. Teachers collaborated to learn from one another and gain knowledge that may help them and improve their practice. The professional development sessions targeted specific tasks and skills. One such training session was on how to

use a 360 classroom. In a 360 classroom, whiteboards are placed around the entire classroom so that every student has a space to work. The student can then practice skills to make the learning process more visible to the teacher. As a result, the teacher can more easily guide and assist students and display exemplary work in real-time.

***Maintaining High Visibility.*** The administrator attended PLC meetings, professional development sessions, and live class sessions, providing feedback for all members of the PLC. Additionally, other administrators from other content areas observed the instruction of the PLC members and provided feedback. The administration attended MTSS sessions with increased frequency since they are the focal point of the action research.

The AR/I met on the last day of the third cycle to debrief on the conclusion of the final cycle. The researcher interviewed each participant individually and conducted surveys to collect qualitative data. Additionally, the researcher collected the meeting notes from each PLC meeting to add to the qualitative data collected. The data collected suggested that while they increased visibility, incentives and administrative support were all positive experiences, having more time to plan, meet, and discuss strategies for MTSS implementation. One participant shared:

*“We have to meet during our lunchtime because we don't have common planning to do it, and one of the things we talked about is that when we do have ideas for SPEAR, we end up sharing them after we've done it so you might have another in the back of your head if you can use it in the future. But it's hard to plan future ones because we're spending our PLC just planning the regular pacing and how did we do on the test. What do we need to do better that we don't get to? Really plan for spear like we should be able to.”*

This response occurred multiple times with every participant. When the entire AR/I team met to debrief, they described the overall experience as positive and hoped to continue the practices in the future.

## **Surveys**

The AR/I Team used a survey based on Hallinger and Murphy's PIMRS (1985a) to evaluate the teacher's perceptions of the instructional leadership and how administrators supported them regarding MTSS. The items from this survey aligned with the interventions and activities executed by the AR/I team. The participants responded to ten items using a Likert scale ranging from 1 to 5, with one being almost never and five being almost always. The instructions for the survey were, "Regarding the implementation of MTSS and Administration's ability to do so, to what extent does your administration do a satisfactory job of..." Each item from the survey is a function from Hallinger and Murphy's PIMRS, such as "Framing Clear School Goals, Communicating Clear School Goals, etc." The surveys were created in Microsoft forms, and an invitation email asking for their voluntary participation was sent to the teacher's email addresses. The responses were collected anonymously to protect their identities and ensure that their responses were gathered in a safe space. The scores were then transferred to an Excel spreadsheet, and the mean scores were calculated. Below (Table 7) is an example of the results from the first cycle.



**Table 6***PIMRS Evaluation Survey – Cycle 1*

<b>PIMRS Items</b>	<b>Mean Score</b>
Framing Clear School Goals	5.0
Communicating Clear School Goals	5.0
Supervising and Evaluating Instruction	5.0
Coordinating Curriculum	4.6
Monitoring Student Progress	4.3
Providing Instructional Time	5.0
Providing Incentives for Teachers	5.0
Providing Incentives for Learning	5.0
Providing Professional Development	5.0
Maintaining High Visibility	5.0

The results of this survey suggest an overall positive response to the school administration's instructional leadership. The participants unanimously gave the highest marks on 8 out of 10 items while still giving favorable scores of 4.6 and 4.3 on Coordinating Curriculum and Monitoring Student Progress, respectively.

**Interviews**

Monthly interviews were conducted at the end of every research cycle. Participants were each asked the same questions from the Critical Incident Theory Interview Script after completing each cycle. In addition, the researcher asked other colleagues to practice an interview before interviewing the participants. As a result, some of the questions were slightly edited for clarity. Each individual was interviewed for approximately 10 minutes regarding the research cycle.

The interview for the first research cycle focused on defining the school mission received a mean score of 4.9, the highest of all the research cycles. The teachers shared positive responses regarding how the school communicated its mission, vision, goals, and expectations to all

stakeholders. Concerning students and MTSS expectations, when Teacher 3 was asked, "How to have the learning experiences that you provide students changed since the implementation of MTSS, if at all?" she responded,

*"They don't seem to mind; I think they're used to it. They know when they come in then, I'm gonna split them up into groups, and they just wait to hear their group. They're excited if they're a hallway group because that means that whatever we're doing means they're doing good at it."*

For the second research cycle, the action research team focused on managing the curriculum and received an overall positive score of 4.8. The functions of this cycle were supervising and evaluating the curriculum, coordinating the curriculum, and monitoring student progress. When Teacher 2 was asked to identify how her Team has developed over time since the implementation of RTI last year, if at all, she responded:

*"I've been here for six years so it's a common practice to meet weekly. I will say that last year over or so we've had more of a sense of information of MTSS and of a focus towards building common form of assessments. I think definitely we use that time to spend together, I'm dedicating that weekly amount of time too."*

The third action research cycle focused on creating a positive school culture, and the mean score for the five items was 4.7, the lowest of the three cycles. The items were providing instructional time, providing incentives for teachers, providing incentives for student learning, providing professional development, and maintaining high visibility. The score was positive overall, but all teachers expressed the need for more time to meet for their PLC meetings to prepare for the MTSS activities properly.

## **Action Research Team Artifacts**

The researcher also collected research artifacts during each cycle to increase the amount of qualitative data. The PLC met weekly to discuss common formative assessment results. Each meeting was documented on a PLC Meeting Log for each unit of study. The number of logs totaled three in all. In addition, the research all used observation notes for each meeting to collect information that may not have been entered on the PLC Meeting Log. Data from the meeting logs and the observation notes were coded in the same manner as the interviews.

The meeting log stated that the PLC members were preparing priority standards, learning targets, and common formative assessments during the first cycle. In addition, the meeting logs had clearly stated objectives for the coming unit. Finally, observation notes indicated that teachers seemed confident in meeting school expectations regarding MTSS, PLCs, and the instructional framework.

During the second cycle, the focus was managing the curriculum; the meeting log indicated that teachers required specific web-based software to help formative assessments. They also requested assistance with monitoring the results of common formative assessments. The administrator developed a spreadsheet with the results of their assessments. They could group the assessment results by tier and get average scores. The observation notes indicated that the teachers were pleased with this support. However, observation notes did indicate frustration with having insufficient time to discuss assessment data. In addition, the meeting logs did not always reflect a complete discussion of common formative assessment data.

The third and final cycle focused on creating a positive school. The meeting logs for this cycle yielded more positive results overall. However, the teachers indicated frustration with motivating students. They showed that many students seemed to have given up. The

administrator offered to assist with this and involved the social worker for students whose parents were unresponsive. According to the observation notes, the teachers communicated approval regarding this response.

### **Chapter Summary**

This chapter describes the case and context of this action research study. The story and outcomes illustrate how the AR/I Team carried out the action research cycles using interviews, surveys, and research artifacts to collect qualitative data regarding teacher capacity and confidence. Preliminary results indicate the prescribed interventions yielded an overall positive effect. The following chapter details the findings of this action research study regarding the research questions and the execution of three action research cycles.

## CHAPTER 5

### FINDINGS

#### **Introduction**

The purpose of this study was to identify processes and strategies that would lead to the effective implementation of multi-tiered support systems by analyzing teacher responses to determine what teachers and administrators can do to impact instructional capacity and teacher confidence. The following questions guided the action research:

1. How can school leaders support implementing a multi-tiered system of supports to impact instructional capacity and teacher confidence?
2. How can teachers effectively implement a multi-tiered system of supports to affect the instructional ability and teacher confidence?
3. What is learned by action research design and implementation teams as they collaborate to implement effective multi-tiered systems of support?

This chapter describes the data collected during this action research process to answer the research questions. The data collected from surveys, interviews, and research artifacts were triangulated into themes and developed in the table below. This chapter also details the results of each action research cycle.

#### **Data Collection Connected to Research Questions**

##### ***Research Question 1: How Can School Leaders Support MTSS?***

This study employed surveys, interviews, and research artifacts to determine how school leaders can increase teacher confidence and capacity in the implementation of MTSS following prescribed interventions. Once analyzed, (See Table 7) the data bore out the following themes for Research Question One:

1. Set clear goals and expectations.
2. Support teachers with resources and training.
3. Provide time for collaboration.
4. Provide time for MTSS.

**Table 7**

*Summary of Findings*

Research Questions	Findings
1. How can school leaders support implementing a multi-tiered system of supports to impact instructional capacity and teacher confidence?	Theme 1 – Set clear goals and expectations. Theme 2 – Support teachers with resources and training. Theme 3 – Provide time for collaboration. Theme 4 – Provide time for MTSS.
2. How can teachers effectively implement a multi-tiered system of supports to impact instructional capacity and teacher confidence?	Theme 1 – Prepare standards, learning targets, and assessments prior to the start of the school year. Theme 2 – Meet regularly and collaborate. Theme 3 – Spend collaboration time reviewing common formative assessments.
3. What is learned by action research design and implementation teams as they collaborate to implement effective multi-tiered systems of support?	Theme 1 – Preconceptions about the prerogatives of teachers and administrators.

Table 8 below provides the results of all the surveys and the mean scores referenced throughout this chapter.

**Theme 1** – Set clear goals and expectations. Teacher participants all agreed that the school's goals and expectations regarding MTSS and its implementation were clear and reasonable. During weekly PLC meetings, participants stated that having expectations provided and having an administrator present at their meetings to make clarifications and to offer support and guidance was a positive experience.

**Table 8**

*Summary of Survey Results*

<u>PIMRS Items</u>	<u>Cycle 1</u>	<u>Cycle 2</u>	<u>Cycle 3</u>	<u>Mean Score</u>
<u>Framing Clear School Goals</u>	<u>5.0</u>	<u>5.0</u>	<u>4.6</u>	<u>4.9</u>
<u>Communicating Clear School Goals</u>	<u>5.0</u>	<u>5.0</u>	<u>4.6</u>	<u>4.9</u>
<u>Supervising and Evaluating Instruction</u>	<u>5.0</u>	<u>4.6</u>	<u>4.6</u>	<u>4.7</u>
<u>Coordinating Curriculum</u>	<u>4.6</u>	<u>4.6</u>	<u>4.6</u>	<u>4.6</u>
<u>Monitoring Student Progress</u>	<u>4.3</u>	<u>4.3</u>	<u>4.3</u>	<u>4.3</u>
<u>Providing Instructional Time</u>	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>
<u>Providing Incentives for Teachers</u>	<u>5.0</u>	<u>4.6</u>	<u>5.0</u>	<u>4.9</u>
<u>Providing Incentives for Learning</u>	<u>5.0</u>	<u>4.6</u>	<u>4.3</u>	<u>4.6</u>
<u>Providing Professional Development</u>	<u>5.0</u>	<u>5.0</u>	<u>4.6</u>	<u>4.9</u>
<u>Maintaining High Visibility</u>	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>
<b><u>Mean Score</u></b>	<b><u>4.9</u></b>	<b><u>4.8</u></b>	<b><u>4.7</u></b>	<b><u>4.8</u></b>

The mean scores for framing clear school goals and communicating clear school goals were 4.9, with 5 being the highest score and one being the lowest. Teacher 2 stated:

*“Having you present there at the meetings made it easy to plan what we were gonna do. I mean we already knew what we were gonna do, but with you there offering tips made it easier for us to know that our SPEAR activities were what you were looking for.”*

Another teacher mentioned that having an administrator present added efficiency to the process.

A mean score of 5 for maintaining visibility further supports the identification of this theme.

During a weekly PLC meeting, Teacher 3 was observed stating:

*“There used to be times when we'd kinda go back and forth about what we were going to do, and we'd get stuck because we didn't agree, but having you their kinda made that easier because you would add you opinion or thoughts on something which was nice because it wasn't like an order. We would still choose what we were going to do, but you would give us the administrations perspective, so it would help us make a decision.”*

These responses showed that clearly defined and consistently communicated goals and expectations could increase teacher confidence and capacity.

**Theme 2 – Support teachers with resources and training.** The results from the data collected also indicated that leaders can support teachers by providing resources and training. For example, the mean score for professional development on the survey was 4.9, and the score for monitoring the curriculum was 4.6. In addition to the training sessions and instructions teachers received regarding MTSS, teachers received resources and tools to make their instruction more manageable and efficient. For example, teacher 2 stated during a weekly PLC meeting that the web-based program (DeltaMath) they received to help with student instruction and assessment was beneficial.

*“I really like DeltaMath with the upgrade that we got this year. It's so much easier to assign practice and homework to each student. The way you assign them practice and tutorial videos based on how they do with the problems we assign them makes things so much easier. Planning for SPEAR and even using it for SPEAR activities is so easy.”*

Teacher 2 also commented on the spreadsheet the administrator created for the PLC and its benefits during her interview.

*“The spreadsheet that you gave us helps so much. The way I automatically sorts students into tiers for MTSS is huge. It also helps track each individual and monitor their progress*



*if we need to. Oh, and it's also good for our PLCs because we can compare our common formative assessment data really easily since it automatically loads into the PLC spreadsheet."*

Teacher 1 also commented on the support of the administration:

*"If our department asks for a certain program such as DeltaMath we get it. So, our administration is extremely supportive too in supplying us anything that we would need. It's just that I personally have never gone and asked, but when the need does arise, we definitely are provided with whatever we need."*

The teachers collectively recalled the professional development at the beginning of the year that detailed the purpose and mechanics of MTSS. Teachers stated that this helped gain a clear understanding of the guidelines regarding MTSS.

**3 – Provide time for collaboration.** The data collected showed that the participants valued time planning and collaborating. MTSS involved planning and creating multiple activities for multiple groups of students at once. While the involvement of all PLC members helps to alleviate the workload involved in the planning and preparations of MTSS implementation, the PLC members still require time to create said plans. In at least one of their interviews, every teacher mentioned that not having enough time to plan together hampered their ability to plan MTSS lessons. These responses correlated with their survey scores; monitoring student progress received the lowest mean scores. Much of monitoring student scores and generating MTSS lessons based on their scores occurs during PLC meetings. Due to constraints involving scheduling, the teachers were only able to meet during their lunch period. This twenty-five-minute period is much less than the almost ninety minutes teachers with true common planning time. Teacher 3 stated:

*“We have to meet during our lunch time because we don't have a common planning to do it and one of the things we talked about is that when we do have ideas for SPEAR, we end up sharing them after we've done it, so you might have another in the back of your head if you can use it in the future. But it's hard to plan future ones because we're spending our PLC just planning the regular pacing and how did we do on the test. What do we need to do better that we don't get to? Really plan for MTSS like we should be able to.”*

Teacher 2 stated similar sentiments in her third interview when asked what processes or structures hinder the success of MTSS:

*“The limited time that we have to meet since we don't have common planning. So I remember in the years prior when I did have planning. ~ Maybe hindering the effectiveness of SPEAR is I'm something that is 2nd nature. It's just a part of the schedule here I get can't be helped, but then they are hindering their own effectiveness of SPEAR.”*

The interview response from Teacher 1 was also critical of their planning time.

*“I just think that we need to have a designated time during our planning and our PLC meetings to devote to SPEAR. And you know our PLC meetings are kind of hindered by a specific amount of time so if we want to target SPEAR more than we need time to plan too. So again, it kind of goes back to time. I'm pretty good at coming up with things that our students need, but to have other people's opinions and sharing ideas et cetera, but again we are limited by time.”*

Each participant noted the need for the administration to provide common planning for the teachers as an area that needs improvement, and it affected the MTSS implementation.

Therefore, even though the survey results reflected positive results overall regarding administration support, this deficiency should be noted as an area for possible improvement.

**Theme 4 – Provide time for MTSS.** The last theme from the data collected concerned providing time for MTSS implementation. The school offers a thirty-five-minute block for every teacher to implement MTSS every day. Survey results suggested that this was a positive intervention. The mean score for this area was a 5. This score was the only area that received the highest possible score at each teacher's end of each research cycle. Teacher 1 made the following statement during an interview:

*“I would say that the process has improved in that we've had another year to sharpen our skills. We know what to expect, we know how to pace our activities for that thirty-five - minute time period, you know? It's like anything else but the more that we practice the better it gets so we're able to be planning out the time a little better and come up with new or interesting activities and that kind of thing.”*

Teacher 1's reference to the positive utility of MTSS is similar to the sentiments expressed by Teacher 3.

*“The administration puts (MTSS) in the schedule so that we have a time slot for it. We don't have to figure out which class. So you know that's a big plus. It's not always the most convenient day once in a while cause it could be that to be that 2nd period MTSS falls on the day that 2nd period finished their test so that you know that's gonna happen. It could fall the day before their test or the day anyway it could fall so that they get an extra review in which is good.”*

During a PLC meeting, the teachers expressed how useful it was to have dedicated time to address individual student needs. They stated that under the previous system, trying to find to do so at the end of a period or taking a whole period to do so was not always an effective manner to address the needs of different students.

### ***Research Question 2: How can teachers effectively implement MTSS?***

This study employed surveys, interviews, and research artifacts to determine how school leaders can increase teacher confidence and capacity in the implementation of MTSS following prescribed interventions. Once analyzed, the data bore out the following themes for Research Question Two:

1. Prepare standards, learning targets, and assessments prior to the start of the school year.
2. Meet regularly and collaborate.
3. Spend collaboration time reviewing common formative assessments.

**Theme 1 – Prepare standards, learning targets, and assessments prior to the start of the school year.** The data analyzed to flesh out this theme is similar to the data communicating the importance of having instructional time to plan. Early PLC meeting discussions highlighted the importance of selecting priority standards, learning targets, and assessments before beginning the year. The participants stated that with the already limited amount of time they had for their weekly PLC meetings, not having these items every week was critical to implementing MTSS and their confidence to do so.

The survey results reinforce this notion by communicating and framing clear goals with mean scores of 4.9 and supervising and evaluating instruction with a mean score of 4.7. The highest score, a 5 for supervising and evaluating instruction, occurred at the beginning of the research plan when standards, targets, and assessments were selected.

**Theme 2 – Meet regularly and collaborate.** The data collected also reinforced the importance of meeting regularly and collaborating. While the group expressed that they did not have enough time to meet, they also emphasized the importance of meeting consistently at every weekly meeting. Having all teachers present at the meeting, along with administrators, is a

critical part of the planning for MTSS. The participants made attendance one of the mandatory norms for all PLC meetings. These statements correlate with the mean survey scores for monitoring student progress and maintaining visibility. The mean survey scores for each were 4.3 and 5, respectively.

Teacher 2 provided the following comment regarding the importance of meeting for MTSS.

*“Last year at we had PLC's and ever since. I've been here for 6 years so it's a common practice to meet weekly. I will say that last year we've had or more so sense of implementation of M TSS and do a focus towards building common formative assessments. Oh yeah. I think definitely without that time to spend together I'm dedicating that weekly amount of time to it MTSS wouldn't be as good.”*

**Theme 3 – Spend collaboration time reviewing common formative assessments.** Data collected from PLC meeting notes ,observations, and survey results indicate that spending s collaboration time reviewing common formative assessments has the potential to positively impact teacher confidence and capacity regarding the implementation of MTSS. While the importance of weekly meetings was discussed in the first theme for this research question, this theme speaks specifically to what should occur at the meetings.

During the PLC meetings, teachers spoke about the importance of reviewing common formative assessment results. The teachers stated that using that time to discuss tests, what questions should be on those tests, and how the test questions should be worded is not ideal. On numerous occasions, they mentioned that their time is best spent reviewing the results of common formative assessments and comparing strategies used and how they affected student

achievement. In doing so, teachers can find the most effective strategies for their students. This conversation took place at least once during each research cycle.

***Research Question 3: What did the AR/I Teams learn during collaboration to implement MTSS?***

This study employed surveys, interviews, and research artifacts to determine how school leaders can increase teacher confidence and capacity in the implementation of MTSS following prescribed interventions. Once analyzed, the data bore out the following theme for Research Question 3:

1. Preconceptions about teachers' and administrators' prerogatives.

**Theme 1 – Preconceptions about teachers' and administrators' perspectives.** In discussions during PLC meetings and cycle debriefings, teachers vocalized new understandings of MTSS, PLCs, and how administrators observe and evaluate their work. They had previously worked under preconceptions that were not wholly accurate, thus influencing the instructions and professional decisions.

Teacher 2 expressed hesitance and anxiety regarding the increased presence and participation of the administration. She stated that, “she was concerned that the administration would have an unfavorable opinion of her instruction if everything were not perfect.” However, as the action research progressed, she became far more comfortable with administration and the feedback she received from observations. She came to understand the administration's involvement of the PLC and MTSS process as supportive and developmental. Additionally, all teacher participants assumed the administration looked negatively on classroom occurrences such as student outbursts or students struggling to understand concepts. However, the

administration helped clarify this misconception during PLC meetings. The administration explained that these instances are expected and understandable incidents in the classroom.

Conversely, the administration learned more about the preferences of teachers. During a PLC meeting, when participants discussed scheduling and student rosters, teachers expressed that they would instead teach multiple content areas during the day rather than the same content area all day. This revelation came as a surprise to the administration. The goal had always been to keep the number of content areas taught as low as possible for each teacher. The teachers explained that the monotony of teaching one content area was not desirable. This information was valuable in planning for future classes and PLCs.

### **Results from Action Research Cycle 1**

The first action research cycle yielded the most positive results. Survey scores and interview responses indicated teachers felt confident in their ability to implement MTSS based on the administration's goals and expectations. In addition, the additional resources and support provided increased their confidence and capacity to deliver instruction. The survey results for the first cycle were the highest of the entire action research process. Interview responses and observations from teacher meetings further reinforced these findings. One teacher stated during the debrief for cycle 1, "I think we can do this! Seriously, it's not as bad as I thought!" A further discussion revealed that preparing multiple activities for the MTSS period was daunting. However, once the administration explained that working with their fellow PLC members would reduce the workload and that many of the activities could be modifications of previous ones, the teachers became much more confident in executing MTSS effectively.

Once they began delivering instruction and implementing MTSS during the first cycle, they felt confident in their approach and identified minor issues that they believed could be

addressed moving forward. With most of their assessments, learning targets, and standards prepared, the teachers felt they were ready to address their students' learning appropriately.

### **Results from Action Research Cycle 2**

Overall, the second action research cycle yielded positive results; the teachers responded positively to the interventions. While the data collected from the interviews, surveys, and research artifacts were positive overall, the participants expressed more concern in their capacity to address student needs using MTSS. These concerns were evidenced by survey scores dropping by a tenth of a point. The participants stated that they struggled to find time to discuss the results of common formative assessments and compare teaching strategies to address student learning appropriately. Teachers noted that only had twenty-five minutes to collaborate rather than the nearly ninety minutes that most teachers receive was becoming more and more of a struggle. Teachers understood that scheduling constraints made the loss of time unavoidable. Nevertheless, the lack of time was considered a hindrance that would yield a more favorable experience if resolved.

Teachers responded favorably regarding the amount of time provided to each of them to address their students. Teachers stated that both they and their students have become accustomed to the MTSS sessions and find it to be a valuable time of the day in which their learning is either remediated or extended. In addition, teachers stated that having time dedicated to MTSS has made their schedules and lesson planning easier to manage.

### **Results from Action Research Cycle 3**

The results of the final action research cycle were also positive overall. However, the results dropped by a tenth of a point again. All items from the survey results either decreased or stayed the same except for providing incentives for teachers. During this cycle, teachers



reiterated their frustrations with the lack of time for PLC meetings. They view this time as critical for properly implementing MTSS. While they are provided some time, they would like to have more time to implement MTSS.

The participants also noted the need for student recognition, other than for high performing students. For example, the school recognizes students who receive A's and B's by placing their names on banners for Honor Roll and Dean's List and hanging the banners in the hallway. The teachers suggested that we find a way to recognize all students that meet expectations, regardless of whether they receive an A or B. The teachers suggested that they could display lists in their classrooms to recognize students. However, they suggested there be school-wide lists displayed as well.

The teachers maintained positive regard for the amount of instructional time provided, the increased participation on the part of the administration, and the amount of praise for teachers. Data collected showed that teachers prefer the administration to be involved and visible. When the administration had honest discussions with teachers and stayed abreast of what was happening in their classrooms, teachers were more motivated and encouraged to engage in the MTSS process. The increased buy-in had a positive effect on teacher confidence.

### **Chapter Summary**

This chapter detailed the findings from the action research cycle as they pertained to the research questions. The survey results, interview responses, and research artifacts suggest that the prescribed interventions positively affected teacher confidence and capacity. The data collected also indicated that teachers would benefit from sufficient time to collaborate and review common formative assessment data. The following chapter discusses the findings,

findings related to the reviewed literature, and the research questions, limitations, implications, and recommendations.

## CHAPTER 6

### DISCUSSION OF THE FINDINGS

Following mandates from the federal government, K-12 public schools began instituting various forms of tiered interventions that became known as Multi-Tiered System of Supports or MTSS (Windram et al., 2012). However, the lack of guidance regarding the appropriate implementation of MTSS has led to confusion among educators. This confusion has resulted in many variations of MTSS (Savitz et al., (2018). This action research case study pursued clarity on the appropriate manner for teachers and administrators to implement MTSS using teacher confidence and capacity to gauge its success. The research questions below guided the participants and this study:

1. How can school leaders support implementing a multi-tiered system of supports to impact instructional capacity and teacher confidence?
2. How can teachers effectively implement a multi-tiered system of supports to impact instructional capacity and teacher confidence?
3. What is learned by action research design and implementation teams as they collaborate to implement effective multi-tiered systems of support?

This chapter details the conclusions and analyses from the action research study. The discussion will compare the results of the literature reviewed and the theoretical framework. This chapter also provides limitations, implications, and recommendations.

## **Summary of the Findings**

The findings from this case study suggested that the interventions had a positive effect on teacher confidence and capacity. The data collected also indicated that teachers would benefit from sufficient time to collaborate and review common formative assessment data. Eight themes in total emerged upon completion of the action research cycles. The following sections describe the significant findings concerning the literature reviewed and the research questions addressed for this action research.

### **Major Findings Related to the Literature Reviewed**

#### ***Finding 1 – A Fully Implemented MTSS Model has a Positive Result on Teacher Capacity and Efficacy***

The AR/I Team designed the action research cycles to implement MTSS fully. The teacher and administration developed a comprehensive system of assessment, instruction, interventions, and acceleration to ensure the needs of every student were addressed. The tiers for intervention included academic, behavioral, or social-emotional. A case study by (Dougherty et al., 2013) concluded that a fully implemented model would be more successful. The findings from this case study were similar in that this implementation was more successful than previous partial implementations. The success of this model extended to all students regardless of classification. This success coincided with the earlier findings of Waitoller and Thorius (2015), stating a proper execution of MTSS may someday eliminate the need for many students to require a special needs or ELL classification. Harris-Murri et al. (2006) state that keeping all students in the same setting produces more positive results than separating them. This inclusion applies to gifted students as well. Both Johnsen et al. (2015) and Brown and Abernathy (2009) found that having all classifications of students in the same group improved performance.

***Finding 2 – An Organized PLC in Conjunction with MTSS Can Produce Increased Positive Results***

This research showed that preparing standards, learning targets, and assessments so that the results of said assessments can be reviewed during regularly scheduled PLC meetings to develop appropriate MTSS strategies increased teacher confidence and capacity. Moors et al. (2010) came to a similar conclusion in their study of a mathematics class that used MTSS for students with and without disabilities. In addition, Moors et al. (2010) found that using common formative assessments in concert with other teachers while maintaining standard alignment can be a valuable tool to monitor student progress. When combined with the utilization of a multi-tiered system of supports, the likelihood of the achievement of all students increasing has a higher chance of improving.

***Finding 3 – Instructional Leaders Should be Active Participants in the MTSS and PLC Processes***

The administration played several parts in the success of this action research study and the implementation of both MTSS and PLC. Hallinger, P., & Murphy, J. (1985a) conducted a study of the instructional behavior of ten principals in a single school district. Based on the results from this study, he created the Principal Instructional Management Rating Scale (PIMRS). The AR/I Team used this PIMRS as the theoretical framework for this action research study. The AR/I Team decided to use the three dimensions of the PIMRS as the basis for the interventions and the survey used for data collection. This alignment leads to many conclusions similar to Hallinger, P., & Murphy, J. (1985a). The data collected suggested the importance of Providing clear and consistent expectations and goals for students, teachers, and all other stakeholders. Additionally, maintaining high visibility and providing teachers with instructional

time proved to be essential parts of the MTSS and PLC processes. The administrator attended every PLC meeting and frequently visited classrooms. In addition, the administration set aside a period for MTSS every day for every class. However, when the administration failed to provide adequate time for teachers to monitor student progress and discuss data, the results were not as favorable as the other areas.

***Finding 4 – High Functioning Professional Learning Communities Can Produce a More Successful MTSS***

This study showed that teachers felt more confident and competent when planning and preparing for MTSS as a Professional Learning Community (PLC). Mundschenk & Fuchs (2016) found similar results when nearly one hundred PLC members were surveyed for their study. The recommendations they provided for increased capacity and long-term change were very similar to the ones found in this study. The PLC model designates meeting times for teachers to collaborate and prepare lessons, activities, and strategies to engage and educate their students using assessment data to drive and inform instruction and interventions for MTSS.

**Major Findings Related to the Research Questions**

***Finding 1 – Communicate Clear Goals and Expectations***

Survey results and interviews indicated a positive response from teachers regarding understanding the expectations of the administration. Additionally, teachers experienced more confidence when these goals and expectations were shared with all stakeholders. Mutual accountability encouraged teachers to achieve their goals in conjunction with their colleagues. Ensuring students understood the MTSS process was helpful in that they too understood the expectation and arrived at MTSS sessions ready to work. Teachers were also encouraged when speaking with parents about the additional MTSS period. The parents did not need explanations

and communicated positive responses regarding the supplemental support for their children. Having so many stakeholders buy-in to the MTSS process encouraged teachers and bolstered their confidence. This study indicates that school leaders can support MTSS implementation when the administration works with its stakeholders and staff to communicate and execute school-wide initiatives clearly and concisely.

### ***Finding 2 – Provide Resources, Training, and Time for Teachers***

The data collected shows that teachers feel more confident in their ability to implement MTSS when they are provided with the resources, training, and opportunity to do so. The administration gave training sessions on implementing MTSS in tandem with the PLC process. Additionally, the administration gave teachers the software, tools, and supplies they requested to plan appropriately and execute an effective multi-tiered support system. The schedule for the school was adjusted to create an MTSS period every day so that teachers could meet with students and take a narrower focus on their individual needs. The administration also provided specific times for teachers to meet and make plans to implement MTSS. Teachers responded positively to this support. Their responses indicated that they were encouraged to complete their tasks when provided with the time, tools, support, guidance, and resources.

### ***Finding 3 – Meet Regularly to Collaborate and Review Assessment Results***

While the overall survey responses to the time provided to teachers to meet and collaborate were positive, interview responses indicate that teachers would have liked more time to meet and collaborate. Planning for MTSS takes a significant amount of time. First, teachers have to review the assessment data of all of its members. They then have to discuss the data and compare the differences from one class to another. Finally, the PLC members must devise interventions activities for each student group depending on their performance on the

assessment. The teachers indicated that the twenty minutes provided was not sufficient. They would have preferred to have the nearly ninety minutes that most other PLC groups had. However, staffing and scheduling constraints prevented this from happening. Nevertheless, the teachers expressed that they would have felt even more capable if they had more time.

***Finding 4 – Communication Between Teachers and Administrators is Critical to Efficient and Effective MTSS Implementation***

Data collected indicated that teachers felt more confident in their abilities when an open communication channel was maintained throughout the MTSS and PLC processes. If teachers had questions, comments, or requests, the administration accommodated their needs. Additionally, both teachers and administration discovered that previous understandings and assumptions about each other were occasionally inaccurate. For example, teachers were able to see that not every visit to their classrooms was evaluative. The administration learned that teachers prefer teaching multiple content areas rather than the same content every day. These understandings helped the teachers understand each other better and operate more efficiently. The administration adjusted the practices and procedures to serve their teachers better. Teachers used their newfound understanding of the expectations of administration to adapt their approach. Teachers and administrators working with one another for a common purpose positively impacted teacher confidence and capacity for MTSS.

**Limitations of the Current Study**

The following limitations should be acknowledged when considering the results of this action research study. First, the setting for this case study was LSHS, a large suburban high school. Ergo, the findings and conclusions of this study are limited to this school and its participants. The work conducted in this case study has not been duplicated in any other school



setting and has limited validity. This study could benefit from replications in schools of differing sizes and populations.

Additionally, more participants and a more diverse population of participants should be considered. Finally, the primary researcher was the assistant principal and evaluating supervisor for the participants. While they were encouraged to be honest and reassured that their thoughts and opinions would have no bearing on their work, the position of authority held by the researcher could not be ignored.

### **Implications and Recommendations for Practitioners**

The goal of this study was to increase teacher confidence and capacity in implementing MTSS. This study, along with the literature and studies, indicates that an effective MTSS can improve student achievement across all student groups. The interventions and practices used in this study may apply to other school settings. Practitioners should consider the following recommendations.

The PLC used in implementing MTSS was an integral part of the action research process. The participants and the researcher of the study were in continual communication. The teachers and administrators continually shared information in a structured, systematic manner; it ensured that the appropriate information was discussed at the proper time and place. Local school practitioners could use the process, or variations of it, in their specific buildings to increase the efficiency of their collaboration.

The implementation of MTSS was improved when teachers felt confident in their capabilities to serve their students and meet the expectations of their administrators. This study detailed multiple factors that contributed to the sentiments of the teachers participating in this study. The actions of administrators were among the most significant of these factors. Following

the PIMRS (Hallinger, P., & Murphy, J., 1985a) and the action research process outlined in this study could lead administrators to similar success with their teachers. The administrators in this study set and communicate clear goals and expectations. Afterward, they took concrete steps to manage and supervise the MTSS implementation. Lastly, the administrators remained active participants in the instructional program. Working alongside their teachers, they dedicated themselves to improving student outcomes for all student groups. The activities involved could yield results in various school settings.

This study did not include the direct participation of central office staff. However, instances occurred in which central office personnel requested information and professional developments. Additionally, the implementation of MTSS was a district expectation. However, the local school determined the manner of its execution. Therefore, central office personnel could consider the results of this action research study when determining how much of the MTSS implementation should be left to local schools. Another option would be to share the setting and success with other schools to consider adopting the strategies used.

### **Implications and Recommendations for Researchers**

The research within this study was applied in a specific setting to specific participants. Future researchers could use the interventions used in this study to expand into other settings and participants. While this study was specific to three high school geometry teachers in a large suburban high school, potential researchers could consider different grade levels, content areas, and other participant pools. For example, in LSHS exist PLC groups with up to seven teachers of varying backgrounds and experiences. Bryk et al. (2015) suggest that multiple groups conducting this same research provide the potential to expand knowledge and improve processes. The expansion of this research could lead to change beyond this narrow study.

## **Implications and Recommendations for Policy Makers**

MTSS is a valuable tool in meeting the needs of diverse learners (Castro-Villareal et al., 2016). As the population in this country continues to become more varied, MTSS may become a more critical tool in the achievements of all learners. As policymakers continue adopting various strategies, this study offers insight into some potentially successful strategies and provides insight concerning the perspective of teachers regarding policy implementation. In addition to the administration communicating school goals, the administration also included the teachers in creating said goals. This inclusion helped teachers be more confident in MTSS since they contributed to their goals and objectives. Including teachers may also help make a more amicable reception of the MTSS process. While the federal government requires tiered interventions in some manner, the lack of consensus regarding what MTSS implementation should look like creates variations in its efficacy (Savitz et al., 2018). Further research similar to this action research study could improve, or even narrow, current perceptions of what defines a successful implementation of MTSS concerning teacher capacity and confidence.

## **Chapter Summary and Final Thoughts**

This action research study served to discern how to improve teacher confidence and capacity in implementing MTSS. Once the data was collected and compared with related literature, the results of the action research cycles showed an overall increase in teacher capacity and confidence. Below are the major findings of this case study regarding the literature and research questions.

### ***Major Findings Related to Literature***

1. A Fully Implemented MTSS Model has a Positive Result on Teacher Capacity and Efficacy

2. An Organized PLC in Conjunction with MTSS Can Produce Increased Positive Results
3. Instructional Leaders Should be Active Participants in the MTSS and PLC Processes
4. High Functioning Professional Learning Communities Can Produce a More

### ***Major Findings Related to Research Questions***

1. Communicate Clear Goals and Expectations
2. Provide Resources, Training, and Time for Teachers
3. Meet Regularly to Collaborate and Review Assessment Results
4. Communication Between Teachers and Administrators is Critical to Efficient and Effective MTSS Implementation

These findings create implications for practitioners, researchers, and policymakers on MTSS and how all officials address improvement and collaboration. Implications and recommendations are listed below.

### ***Recommendations and Implications***

1. Local school practitioners could use the process, or variations of it, in their specific buildings to increase the efficiency of their collaboration.
2. Following the PIMRS (Hallinger, P., & Murphy, J., 1985a) and the action research process outlined in this study could lead administrators to similar success with their teachers.
3. Central office personnel could consider the results of this action research study when determining how much of the MTSS implementation should be left to local schools.
4. Share the setting and success of this action research with other schools to consider adopting the strategies used.

5. Future researchers could use the interventions used in this study to expand into other settings and participants.
6. Include teachers in decision-making to increase their confidence in MTSS and create a more amicable reception of the MTSS process.
7. Further research similar to this action research study could improve, or even narrow, current perceptions of what defines a successful implementation of MTSS regarding teacher capacity and confidence.

More research is needed to expand the reach and potential of this study. In addition, the replication of this study in both similar and differing contexts is vital to gain further understanding of how to improve teacher capacity and confidence. However, the findings in this study suggest that the theoretical framework used in this action research to implement both the PLC and MTSS processes has positive effects on the ability and willingness of teachers to provide tiered interventions to all students.

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## Appendix A

### IRB Approval



Tucker Hall, Room 212  
310 E. Campus Rd.  
Athens, Georgia 30602  
TEL 706-542-3199 | FAX 706-542-5638  
IRB@uga.edu  
<http://research.uga.edu/hso/irb/>

### Human Research Protection Program

#### EXEMPT DETERMINATION

December 17, 2021

Dear [Karen Bryant](#):

On 12/17/2021, the Human Subjects Office reviewed the following submission:

Title of Study:	IMPLEMENTING AN EFFECTIVE, MULTI-TIERED SYSTEM OF EDUCATIONAL SUPPORTS: AN ACTION RESEARCH CASE STUDY
Investigator:	<a href="#">Karen Bryant</a>
Co-Investigator:	Kiel Southwell
IRB ID:	PROJECT00004460
Funding:	None
Review Category:	Exempt Flex 7

We have determined that the proposed research is Exempt. The research activities may begin 12/17/2021.

Since this study was determined to be exempt, please be aware that not all future modifications will require review by the IRB. For more information please see Appendix C of the Exempt Research Policy (<https://research.uga.edu/docs/policies/compliance/hso/IRBExempt-Review.pdf>). As noted in Section C.2., you can simply notify us of modifications that will not require review via the “Add Public Comment” activity.

- Cobb County School District has approved this action research project. We have determined that the proposed research is Exempt.

- The researcher has confirmed that the IRB submission and materials contain descriptions of voluntary research activities only, and participant consent will be obtained for research activities under conditions that minimize the possibility of coercion or undue influence.

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- The PI is responsible for ensuring that UGA HRPP policies pertaining to research involving external sites, recruitment, and recommended consent disclosures for Exempt research are followed.

A progress report will be requested prior to 12/17/2026. Before or within 30 days of the progress report due date, please submit a progress report or study closure request. Submit a progress report by navigating to the active study and selecting Progress Report. The study may be closed by selecting Create Version and choosing Close Study as the submission purpose.

In conducting this study, you are required to follow the requirements listed in the Investigator Manual (HRP-103).

Sincerely,

Kimberly Fowler, Director  
Human Subjects Office, University of Georgia

## Appendix B

### Empirical Analysis Table

Author, Date and Title	Research Questions	Methodology	Key Findings	Analysis
<p>Bryk, A. S., Gomez, L. M., Grunow, A., &amp; LeMahieu, P.G. (2015).</p> <p>Learning to Improve: How America's Schools Can Get Better at Getting Better.</p>	<p>How can schools improve the process involved in improving schools without scarifying the quality of implementation?</p>	<p>The researchers used improvement sciences from a variety of industries to create methods for schools to improve their performance.</p>	<p>Networked improvement communities should focus on six key principles:</p> <ul style="list-style-type: none"> <li>• Make the work problem-specific and user-centered.</li> <li>• Variation in performance is the core problem to address.</li> <li>• See the system that produces the current outcomes.</li> <li>• We cannot improve at scale what we cannot measure.</li> <li>• Anchor practice improvement in disciplined inquiry.</li> <li>• Accelerate learning through networked communities.</li> </ul>	<p>Effective NICs and PLCs create a process of deliberate inquiry that produces meaningful improvement in schools.</p>
<p>Dougherty Stahl, K. A., Keane, A. E., &amp; Simic, O. (2013).</p> <p>Translating Policy to Practice: Initiating RTI in Urban Schools. Urban Education.</p>	<p>Research Question 1: Did this RTI framework reduce the number of first grade students at risk for reading difficulty?</p> <p>Research Question 2: Within one school year, how effectively were</p>	<p>This is a mixed method research study of the initial application of a Response to Intervention framework in three urban, first grade classrooms. Two schools were in a fully implemented condition (FI) with</p>	<p>Repeated ANOVA (analysis of variance) measured by DIBELS phonemic awareness and decoding tasks were reduced in both conditions but favored the FI condition.</p> <p>Qualitative</p>	<p>All models were effective, but the fully implemented model was more effective.</p>

	these schools able to implement the three components (data-driven tiered instruction, evidence-based practice, systemic collaboration and coordination) associated with an RTI paradigm?	a facilitator and one was a partially implemented condition (PI) without a facilitator. The study used using student achievement data, field notes, teacher questionnaires, and teacher focus groups.	evidence indicates that short term goals were achieved, but long-term changes did not occur.	
Hallinger, P. (2011).  A Review of Three Decades of Doctoral Studies Using the Principal Instructional Management Rating Scale: A Lens on Methodological Progress in Educational Leadership.	This report examines methodological approaches used by doctoral researchers in studying principal instructional leadership.	The article reviews the full set of 130 doctoral dissertations completed over the past three decades that used the Principal Instructional Management Rating Scale (PIMRS). The report analyzes trends in the research foci, conceptual models, research designs, and statistical methods employed in these studies.	The study finds that interest in instructional leadership among scholars and practitioners remained strong throughout the period of the review.	PIMRS has proven useful data collection tool, and the use of research methodology has improved in several specific areas. However, the results also suggest that the conceptual frameworks and methodologies used failed to contribute to either the theoretical or the practical knowledge base in this field.
Hallinger, P., & Murphy, J. (1985a).  Assessing the Instructional Leadership Behavior of Principals.	This article presents results from a study that examined the instructional management behavior of 10 elementary school principals in a single school district to describe the instructional management behavior of these principals in terms of specific job behaviors.	This study used questionnaires designed to assess principal instructional management behavior and an instrument developed for measuring principal instructional behavior.	This profile of the principals suggests that there are consistent differences between principals in their instructional management behavior. The principal and supervisory ratings generally support those of the teachers. However, in several cases, the self-reports of individual principals were not consistent with those of the teachers and supervisors.	(1) Generally, the principals are more actively involved in managing curriculum and instruction than the literature leads the reader to expect. (2) The principals supervise and evaluate instruction more closely than has been found in previous studies. (3) The principals generally do not view students as a key audience. Thus, few make systematic efforts to create or maintain



				<p>close contact with students. (4) The principals who are highly ranked across the 11 job functions tend to maintain close contact with students. (5) Most of the schools do not have policies and practices that protect instructional time from interruptions. (6) The principals rarely reinforce outstanding teacher effort or performance publicly. (7) There is less between-school variation on policies and practices that the district office controls. (8) Principals score fairly consistently across job subscales; that is, principals who rank near the top on one function are likely to rank highly on other functions.</p>
<p>Hauerwas, L. B., Brown, R., &amp; Scott, A. N. (2013).  Specific Learning Disability and Response to Intervention: State-Level Guidance.</p>	<p>This study investigates how state departments of education are defining the Response to Intervention (RTI) assessment processes.</p>	<p>A qualitative research design of directed content analysis was used to examine each state's regulatory criteria for SLD and state guidance documents on the use of RTI for SLD identification. Best practices were identified in three areas: (a) frequency of data collection, (h) criteria for responsiveness, and (c)</p>	<p>Results showed no national consensus for how multidisciplinary teams should use RTL data as part of SLD identification.</p>	<p>Findings showed that few states had detailed language concerning application of consistent procedures to RTI practices. Results suggest that much more work needs to be done to support states in requiring and evaluating the RTI assessment process.</p>

		multidimensional assessment.		
<p>Moors, A., Weisenburgh-Snyder, A., &amp; Robbins, J. (2010).</p> <p>Integrating Frequency-Based Mathematics Instruction with a Multi-level Assessment System to Enhance Response to Intervention Frameworks.</p>	<p>This paper illustrates how a multi-level assessment system aligns standards with lessons and learning targets and formative assessments within an RTI framework to drive academic outcomes.</p>	<p>Three levels of assessment intensity are prescribed: Macro, Meta, and Micro. Several Macro, Meta, and Micro assessments were employed in the current investigation. Student outcomes were analyzed to measure efficacy.</p>	<p>The results revealed that both of the highlighted 4th grade students made significant mathematics progress over the course of the Tier 2 intervention. Of particular interest, despite being qualified for special education services under the eligibility category of Specific Learning Disability in the public school system, a student gained <i>over four grade levels</i> in quantitative reasoning skills and <i>over two grade levels</i> in applied reasoning and math fluency skills.</p>	<p>The power of using a multi-level system of assessment as a formative decision-making tool for students and teachers is the alignment of curriculum to assessment and on-going progress monitoring in a general education classroom for all students, regardless of diagnoses or ability levels. This assessment system can be utilized for any academic subject area where there exist normative standards for mastery. Creating a powerful alliance of the expertise of those who know how to teach (teachers) with those who know how to analyze (behavior analysts) is an exciting prospect which will likely result in substantially positive impact for future generations of students with and without disabilities.</p>
<p>Mundschenk, N. A., &amp; Fuchs, W. W. (2016).</p> <p>Professional Learning Communities: An Effective Mechanism for the Successful Implementation and</p>	<p>This article provides evidence for professional learning communities as an effective means to implement MTSS.</p>	<p>The article begins with an examination of RTI and PLCs. After, it presents survey results from eighty-four member of RTI Leadership Teams who participated in PLC sessions.</p>	<p>Results show that participants judged the sessions as a highly acceptable way to further their professional development, developing PLCs, completing a needs assessment, developing data-</p>	<p>In order to build capacity for the effective implementation of RTI, Leadership Teams need ongoing collaborative and critical analysis of practices that support knowledge</p>

Sustainability of Response to Intervention. <i>State Journal</i> , 25(2), 55-64.			based decision making, and supporting RTI implementation.	sharing and innovation. Their research repeatedly demonstrated the value of the PLC model in the way the teams function and confirms the importance of professional collaboration as an essential component of real school change.
Savitz, R. S., Allington, R. L., & Wilkins, J. (2018).  Response to Intervention: A Summary of the Guidance State Departments of Education Provide to Schools and School Districts.	This article reports an analysis of RTI information provided on the websites of all 50 State Departments of Education, based on the assumption that school districts rely on this information when developing their RTI programs.	The first and second authors conducted a search of all 50 state department of education (SDE) websites during the fall semester of 2015, at a public research university.	The analysis revealed little consistency in (a) the methods used to identify students to be served in RTI interventions, (b) recommended instructional focus of each tier, (c) instructional group sizes, and (d) personnel to provide RTI instruction.	The wide variation in the way RTI has been implemented across states provides a possible explanation for the failure of RTI to accomplish its intended goals.
Zirkel, P. A. (2018)  Response to Intervention: <i>Lore v. Law</i> .	The first part provides an update of a previous iteration that compared 12 common conceptions, referred to here as the “lore,” with an objective synthesis of the applicable primary sources of law. The second part consists of a summary of the results of the polling of professionals who attended a recent series of regional RTI conferences. The third part provides a discussion of these results, including the limitations of the items and	The authors lists a dozen common conceptions about the legal requirements for RTI under the IDEA, along with an objective synthesis of the applicable law. For each item, the accompanying answer on a True–False basis is, akin to the preponderant evidence standard, more False than True.	The overall response rate was approximately 31%. The total sample consisted of 517 respondents, with the distribution of conference times and locations as follows: January 2015 in Chicago ( <i>n</i> = 59); April 2015 in New Orleans ( <i>n</i> = 76); April 2016 in New Orleans ( <i>n</i> = 16); November 2016 in Chattanooga ( <i>n</i> = 25); January 2017 in Houston ( <i>n</i> = 31); September 2017 in Lincoln, NE ( <i>n</i> = 158); October 2017 in	The overall average score of 40% reflects a relatively low level of legal knowledge about RTI under the IDEA.

	the polls, the implications for practitioners, and recommendations for further research.		Tacoma ( $n = 97$ ), and November 2017 in Oklahoma City ( $n = 55$ ).	
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## Appendix C

### UNIVERSITY OF GEORGIA CONSENT FORM

#### IMPLEMENTING AN EFFECTIVE, MULTI-TIERED SYSTEM OF EDUCATIONAL SUPPORTS

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

**Principal Investigator:** *Dr. Karen Bryant*  
*Educational Leadership*  
[bryantkc@uga.edu](mailto:bryantkc@uga.edu)

**Co-Investigator:** *Kiel Southwell*  
*Educational Leadership*  
[Ks66872@uga.edu](mailto:Ks66872@uga.edu)

This action research will seek to identify processes and strategies that will lead to the effective implementation of multi-tiered support systems to meet all students' needs. This study's goal is to analyze teacher responses and artifacts to determine what teachers and administrators can do to impact instructional capacity and teacher confidence in implementing MTSS.

This action research will consist of three cycles in which participants will implement MTSS using professional learning communities as a framework. The researcher will conduct interviews, surveys, and the collection of artifacts in order to collect data. This study's conceptual framework will be the Plan, Do, Study, Act (PDSA) model. The Theory of Instructional Leadership that Hallinger and Murphy (1985) propose will serve as the foundational theoretical framework for this study. The focus of the surveys and interviews will be how administration can effectively support teachers in their execution of MTSS.

#### Research Questions or Hypotheses

1. How can school leaders support the implementation of a multi-tiered system of supports to impact instructional capacity and teacher confidence?
2. How can teachers effectively implement a multi-tiered system of supports to impact instructional capacity and teacher confidence?
3. What is learned by action research design and implementation teams as they collaborate to implement effective multi-tiered systems of support?

You are being invited to be in this research study because you play a critical role in the education of our students and school.

If you agree to participate in this study:

- We will collect information about teaching experience, interactions in PLCs, interviews, and surveys.
- We will ask you to *meet / CCCs once a week*; it will take about 45 - 90 minutes each session. You will be asked to record these sessions and store them electronically on a secure platform. All information will be discarded once the research is complete. All identifiable information will be stored on jump drives and locked in a researcher's safe for five years.
- We will have a follow-up meeting every month of the research cycles through to the end of the semester.

Participation is voluntary. You can refuse to take part or stop at any time without penalty. Should you *refuse or withdraw*, it will not affect any benefits you are otherwise entitled to or other activities that are otherwise conducted. Your decision to participate will have no impact in your participation in any programs.

There are questions that may make you uncomfortable. You can skip these questions if you do not wish to answer them.

Your responses may help us understand the following:

- Increased Student Achievement
- Increased Teacher Morale
- Reduced Special Education Enrollment
- Reduced Teacher Workload
- Increased Professional Collaboration
- Increased Community Involvement
- Increased Mutual Accountability

We will take steps to protect your privacy, but there is a small risk that your information could be accidentally disclosed to people not connected to the research. To reduce this risk, we will create pseudonyms and a coding system. Information such as your phone number, email address, and or school address will be used to schedule the sessions. Once the initial data collection phase is complete, all identifying information will be destroyed. Until that time, the principal investigator will have access to identifiable data.

The project's research records may be reviewed by the Office of Human Research Protections and by the department at the University of Georgia responsible for regulatory and research oversight. Researchers will not release identifiable results of the study to anyone other than individuals working on the project without your written consent.

Participation is voluntary. Anyone can stop at any time without penalty. If you decide to withdraw from the study, the information that can be identified as yours will be kept as part of the study and may continue to be analyzed unless you make a written request to remove, return, or destroy the information.

#### **If you have questions**

The leading researcher conducting this study is Kiel Southwell, Assistant Principal. Please ask any questions you have now. If you have questions later, you may contact Kiel Southwell at [ks66872@uga.edu](mailto:ks66872@uga.edu) or (404) 441-9471. If you have any questions or concerns regarding your rights as a research participant in this study, you may contact the Institutional Review Board (IRB) Chairperson at 706-542-3199 or [IRB@uga.edu](mailto:IRB@uga.edu).

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

\_\_\_\_\_  
Name of Researcher

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Principal

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Participant

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

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

## **Appendix D**

### **Critical Incident Interview Script for Research Study: Implementing a Multi-Tiered System of Support**

**Greetings**, thank you for agreeing to participate in the interview.

This action research will seek to identify processes and strategies that will lead to the effective implementation of multi-tiered support systems to meet all students' needs. This study aims to analyze student outcomes and teacher responses to determine what teachers and administrators can do to impact instructional capacity and teacher confidence in implementing RTI.

Your responses to the interview questions will be coded for anonymity, and they will remain **confidential**.

**Sign consent** forms, answer questions about the study.

Ask participant if they **agree to be audio recorded, begin recording** once the participant agrees.

**Collect** basic demographic data.

**Begin interview**

**Background**

I am trying to understand better your perceptions of RTI/MTSS, your opinion on your ability to implement RTI/MTSS effectively, and the ability of the administration to support you in said implementation. I would like to ask you some questions about a few of your most significant experiences related to this problem. I would also like to ask you about how you interpreted these experiences, and finally, what happened. Shall we begin?

**Critical Incident One**

**Prompt:**

Recall the most recent implementation of MTSS in your classroom.

1. How has your teaching changed since the implementation of RTI, if at all? Describe specific skills you have learned or improved and how those skills have impacted your teaching if any.
2. How have the learning experiences that you provide students changed since the implementation of RTI, if at all?
3. What tasks does your team need to accomplish collaboratively in RTI, if any?
4. What resources, if any, have accompanied the implementation of RTI? How have they impacted your teaching or the activities/learning experiences that you provide for students?
5. How do school leadership and other school staff support you in the RTI problem-solving process and in providing interventions for students in need, if at all?

## **Critical Incident Two**

### **Prompt:**

1. Can you describe any school structures or processes that support your RTI team, if any?
2. In terms of being a professional learning community, can you identify how your team has developed over time and since the implementation of RTI last year, if at all?
3. Can you describe any struggles or frustrations you have had in learning and implementing RTI, if any?
4. Describe the ways that district personnel support your team with the RTI process or interventions related to RTI, if at all.
5. Describe a situation(s) when the team sought the help of school or district personnel to solve a problem, if at all.
6. Describe any professional development you have had this year regarding RTI



that has had a positive impact on your ability to help students learn if any.

### **Critical Incident Three**

#### **Prompt:**

1. Describe how/if the RTI process has improved at your school since last year.
2. Does a team leader need new or different skills to lead the team since the implementation of RTI? If so, please describe the skills needed.
3. Can you describe how/if your team could become more effective as a problem-solving team?
4. What kind of support do you envision that your team might need to overcome any limitations and increase your effectiveness as collaborating teachers?
5. Describe how/if the leadership is distributed among your team, and describe any specific roles you have as a team member.
6. Can you identify and describe any school structures, processes, or aspects of culture that support or hinder the effectiveness of the team?
7. What changes do you believe are still needed in your team, school, and district in order for RTI to be sustained, if any?

#### **Final Question**

In light of what you have now discussed, is there anything else you would like to tell me (or you think that I should know) about this problem?

**Wrap up** and **answer** any participant questions.

**Thank you** again for agreeing to participate. Please do not hesitate to contact me should you have any questions.

**Speak** into the recorder: “This ends the current interview” and **stop** the recorder.

## Appendix E

### Principal Instructional Management Rating Scale (PIMRS) Evaluation Survey

Please complete the following survey by selecting a number from 1 to 5, with **1** being almost never and **5** being almost always.

To what extent does your administration do a satisfactory job of...	Almost Never				Almost Always
<b>Defining the School's Mission</b>					
1. Framing Clear School Goals	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
2. Communicating Clear School Goals	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Managing the Instructional Program</b>					
3. Supervising and Evaluating Instruction	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
4. Coordinating Curriculum	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
5. Monitoring Student Progress	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Creating a Positive School</b>					
6. Providing Instructional Time	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
7. Providing Incentives for Teachers	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
8. Providing Incentives for Learning	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
9. Providing Professional Development	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
10. Maintaining High Visibility	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

## Appendix F

# Collaborative Community Unit Agenda and Log

<b>Team Name:</b>	
<b>Team Facilitator:</b>	<b>Team Recorder:</b>
<b>Team Goal for SY2021-22:</b>	
<b>Members:</b>	
<b>Unit Goal:</b>	
<b>Agenda (Team Goals for Each Meeting)</b>	<b>Norms</b>
Meeting #1 (Date) <ul style="list-style-type: none"> <li>• Review team norms</li> <li>•</li> <li>•</li> <li>•</li> </ul> Meeting #2 (Date) <ul style="list-style-type: none"> <li>• Review team norms</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>

Four Critical Questions	Evidence/Comments/Notes
<b>What do we want students to learn?</b> <ol style="list-style-type: none"> <li>Identify the priority standards that students WILL learn → Need to Know vs. Nice to Know</li> <li>Review options for how priority standards might be taught</li> <li>Intentionally plan for learning engagement and balanced instructional strategies</li> <li>Plan with the end in mind</li> </ol>	
<b>How will we know students learned it?</b>	

<ul style="list-style-type: none"> <li>a. Create common assessments collaboratively</li> <li>b. Build common understanding of proficiency</li> <li>c. Demonstrate how each item aligns to priority standards</li> <li>d. Rate each item's DOK level</li> <li>e. Clarify conditions for administering common assessments consistently</li> <li>f. Compare the data teacher by teacher through the Data Tracking Log</li> </ul>	
<p><b>How do we respond when students don't learn it?</b></p> <ul style="list-style-type: none"> <li>a. Discuss strategies to help students who did not learn it</li> <li>b. Plan systematic intervention provided during the school day → MTSS</li> <li>c. Intervene as a team, not individuals</li> <li>d. Carefully match interventions to individual student need</li> <li>e. Provide a timely response at the first sign of struggling</li> </ul>	
<p><b>How do we respond when students do learn it?</b></p> <ul style="list-style-type: none"> <li>a. Create and provide extension opportunities → MTSS</li> <li>b. Enhance instruction</li> <li>c. Differentiate to address students' needs</li> </ul>	
<b>Assigned tasks for next meeting</b>	
<b>Team goal for next meeting</b>	

<b>Materials needed for next meeting</b>	
<b>Support needed</b> <i>(From Principal, District Personnel, Other)</i>	

**Additional Comments:**