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## Portraits of Practice: A Case Study on Elementary Schools Successfully Implementing Multi-Tiered Systems of Support

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# Portraits of Practice: A Case Study on Elementary Schools Successfully Implementing Multi-Tiered Systems of Support

**CAT MERKLE completed the requirements  
for Honors in Education  
May 2023**

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Thank you to my friends and family who have had to listen to me talk about multi-tiered systems of support for the last year. You believed in me when I didn't. I love and appreciate you all. Thank you.

## **Abstract**

Multi-tiered systems of support (MTSS) is an educational framework that aims to make the general education classroom more inclusive to all students and types of learners. MTSS has been found to improve student growth and achievement and decrease special education referrals through the use of layered supports that allow students to stay in the classroom as much as possible. There is a direct focus on progress monitoring, universal screening, and data-based decision making in order to ensure that all students are getting the support they need, whether it be universal, group-based, or individualized. This study aimed to understand what factors allow schools to successfully implement the framework. Through interviews with staff at two elementary schools in a New England state, findings shed light on why these schools have been successful in implementing MTSS when others have struggled. These findings suggest that collaboration between educators, families, and the state is necessary to fully support both students and teachers. Strong school leadership that prioritizes communication and listening also seemed to contribute to teachers' abilities to better support students. Teachers' understanding and buy-in to the framework further enhanced their implementation. Despite these positive factors, educators identified areas for improvement, such as their communication from the state during the exploration phase, efficiency of everyday processes, and integration of gifted programs in an MTSS. This research may be able to inform some scaffolding for other schools looking to implement MTSS in the future. These findings contribute to the conversation on successful MTSS implementation and provide implementation recommendations.

## Introduction

I have never read *Harry Potter*. Or *Percy Jackson*. Or any of the other big book series I was supposed to read when I was younger. I told myself I didn't care for fantasy worlds and that was the reason I never opened the books. But that was a lie because, while the other kids were reading *Harry Potter*, I was reading *The Magic Treehouse*. In my mind, the *Harry Potter* books were 600 pages each, growing each time I took them off the shelf in contemplation. I was shocked to learn recently that the first two are less than 300 pages. Nonetheless, I have always despised those books. Their thick spines taunted me, and I felt disconnected from my classmates who sped through them in a matter of days. It was just easier to say that I thought magic was silly.

I identify as a "high functioning dyslexic." This means that while I was not put in special education, I met with a tutor almost every day after school from 3rd through 5th grade. I spent hours re-learning how to spell, read, and write so I would be able to keep up with the rest of the class. Coming from an affluent New Jersey suburb, affording this tutor was no problem for my family. However, for many other students, this privilege would be too far out of reach. Even now, as I sit in an elite liberal arts college, I struggle with spelling basic words and reading passages at the same speed as my peers. Until recently, I never told anyone I was dyslexic. I barely even admitted it to myself. I wasn't embarrassed, but I also didn't think it was an important piece of my identity. I did not want it to overshadow what I was able to accomplish, and I did not want to receive special treatment. My dyslexia has not felt like a very big burden, rather just a fact of life. However, I've only just now realized how my perception of the condition has impacted the way I view my own abilities.

Only in the last year have I begun to consider myself a "good" writer. My entire academic career, I had no confidence in myself as a writer because I could not always see the words I wanted



to write. This is why I had always told myself I was a STEM student. It was in college that I realized my passion for science, while authentic at first, had become a way for me to avoid reading and writing. Sometimes, I think I put myself in this box due to these deeply rooted insecurities that stemmed from my dyslexia. Other times, I think these insecurities stemmed from my placement into lower academic groups at a young age.

Elementary school was where I learned my place. I learned that there were two kinds of special. Some kids were good special, and some were bad special. The good special *got* to leave during the boring parts of school to play fun games and do puzzles. The bad special *had* to leave class because they weren't smart enough to learn material on their own. I fell somewhere in the middle, knowing my place in the "red reading group" was not just a random assignment. These groups, developed in early elementary school, shaped the way I viewed my classmates and myself until the day I graduated high school, their *Harry Potter* badge still shining over a decade later.

While these labels and groups had an impact on me and my peers, they came with only good intentions. My teachers worked extremely hard to provide support in whatever ways they could. Special education, gifted programs, and leveled reading groups were not meant to harm any student's self-esteem. In many ways, the grouping of students like this makes sense. Dividing us into distinct groups was their attempt at meeting us where we were at. It was no one's goal to put us in these unmovable boxes at a young age, but it is possible that the school lacked a framework that helped teachers develop an inclusive classroom.

There are ways these methods, in which different students get different support, can work to provide quality education to all. They require a structured system that is able to address all student needs in a timely manner while also providing adequate support to teachers in the classroom. The burden on our teachers is already astronomical, thus a method that works for

educators must be a priority as well. Without support from school, district, and state leaders, educators are not equipped to provide equitable and quality education to their students.

A relatively new framework called Multi-tiered Systems of Support (MTSS) aims to make the general education classroom more accessible and inclusive to all students and types of learners. The framework consists of three tiers of increasingly intensive supports. Tier 1, also known as “the universal tier,” includes instruction for all students no matter ability. Tier 2 provides small group support in addition to tier 1 instruction for students who need more time or a specific focus. Tier 3, also supplied in addition to tiers 1 and 2, includes more intensified individualized instruction (Sailor et al., 2021). Tier 3 is not always considered special education or vice versa. Special education can be a separate support that serves as a resort when tiers 1, 2, and 3 are not enough for a student’s needs. Entrance into tier 3 may be an indication for a need for an individualized education plan (IEP) (McIntosh & Goodman, 2016). However, one of the key points of this framework is that tiers do not serve as an identification or a static location. Using data-based decision making, students can weave between tiers depending on the subject and their progress made (Bohanon et al., 2016). Regardless of intensity needed, all students should receive as much tier 1 instruction as possible (Gibbons et al., 2019).

MTSS also provides behavioral and social-emotional support in addition to academic support (Sailor et al., 2021). Social-emotional learning (SEL) aims to teach people important skills on processing and acting on emotions (Bohanon et al., 2016). Engaging in this type of learning not only has positive effects on mental health, relationship building, self-esteem, decision making, and goal setting, but it improves academic achievement as well (Bohanon et al., 2016, Sailor et al., 2021). Schools that have adopted the MTSS framework have seen improvements in academics,

behavior, and inclusion (Bohanon et al., 2016, Sailor et al., 2021). However, it takes a lot of planning to set up an effective framework.

In the summer of 2022, I worked as the MTSS Special Projects Intern at a State Department of Education (SDOE). Over the course of this 12-week internship, I was able to conduct two independent research projects on student support systems that aim to impact every student, educator, and family in the most positive way, particularly in school and individual achievement. My research projects, which consisted of cross-state research, surveys, interviews, and qualitative data analysis, served as the foundation for a list of recommendations I was able to make for the State's MTSS framework and Gifted and Talented (GT) programs. Some of my recommendations included developing a State government MTSS team, developing universal state-wide language and standardized practices for the framework, and conducting more research on the current needs of schools around MTSS implementation. Through my research, I learned that MTSS is an effective framework when implemented "well," but implementing it well is not as easy as it sounds. I was able to speak with many state education department employees throughout the United States. However, my limited time frame and scope did not present the opportunity to speak with educators who were on the ground actually implementing these support systems, which inspired me to start a new project.

My experience working at the SDOE sparked my interest in pursuing this research on a smaller, more in depth scale over the next year. During my research, I found that schools looking to implement a new framework find it extremely beneficial when they can follow a model. In this project, I delve into two schools that the SDOE has deemed as successful implementers of MTSS, and through a series of interviews with general educators, principals, special educators, MTSS specialists, and Gifted and Talented teachers I aim to answer three main questions:

1. What factors contribute to the success of MTSS implementation in elementary schools?
2. What factors indicate context-dependency of the framework? In other words, does a rural vs. urban environment, social class, etc change how the framework must be implemented?
3. How do MTSS needs of a school differ based on how long a school has been implementing?

While some research does exist on MTSS implementation, I hope to fill a gap in the research area that will help schools implement MTSS from scratch. This dual school case study aims to provide other educators with a better understanding of strategies and challenges that come with implementing this framework.

## Methods

### Context

#### *New England State*

This study was conducted in a New England state (which we'll refer to as "the state") in the United States. The state is a predominantly rural state with a population of 1.3 million people. 94.6% of the population is white and 51% women. 11.6% of people are considered to be persons in poverty, and the median household income is \$55,425. The state is a local control state, meaning that locally elected members of school boards and committees govern and manage the public schools in that community<sup>1</sup>. Local control operates under the notion that representatives from the community, who most likely have a close connection to the school, are better equipped to make decisions about the school. While this philosophy does have validity, it can make it difficult for the state to enforce new legislation about the structure of education in the state.

In the process of choosing schools within the state to participate in this study, I interviewed the MTSS Specialist, Kristie, at the SDOE. In this interview, I asked for recommendations for schools to participate in this study based on her knowledge of MTSS and schools in the state. Among the list of four schools were Belknap Elementary and Rockson Elementary. I chose these schools because they exist at two different stages of the implementation process, are successful implementers, and were excited to participate.

#### *Belknap Elementary*

The first school, which we'll call Belknap Elementary, is located in the southern half of the state in a city with about 19,000 people. Out of the two study schools, this is the one located in

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<sup>1</sup> edglossary.org

a small city. According to the 2021 census, the city itself is 92.8% white and 16.7% percent of the city is under the age of 18. The median household income in 2020 was about \$39,000 and 17.7% of the population are living in poverty. Belknap Elementary is a public school located in the heart of the city and has a K-6 student population of about 300. They have 23 full time teachers, one school counselor, a student to teacher ratio of 13, and per pupil expenditures of \$16,500. 58% of students are considered “economically disadvantaged,” 57% are female, and 6.7% are racial minorities. On the state test, 37% of students met or exceeded proficiency for math and 52% for reading in the 2020-2021 school year<sup>2</sup>. Belknap Elementary is in their second year of MTSS implementation and was a “no brainer” for this study according to Kristie, the SDOE MTSS specialist. Their assistant superintendent wanted an MTSS pilot for all four elementary schools in the district, and while Belknap was resistant at first, they applied the framework and saw immediate results.

Belknap’s MTSS contains the typical three-tiered system in which general education teachers provide tier one support, ed. techs and general education teachers provide tier two, and interventionists provide individualized tier three. Belknap has three ed. techs and a literacy specialist. The tier 3 leadership team consists of about half of the staff and meets twice a month. They discuss teacher support and training needs, and what their data are showing for behavior and academics. Their smaller RTI team meets 1-2 times a week and exists to help teachers talk through issues and possible interventions for students. Intervention cycles last anywhere from two weeks to three months with continuous progress monitoring. If the intervention does not seem to be working based on state states and classroom assignments, the RTI team will reevaluate. The length

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<sup>2</sup> Data from [usnews.com](https://www.usnews.com), [publicschoolreview.com](https://www.publicschoolreview.com), and [schooldigger.com](https://www.schooldigger.com)

of the cycles depends on how each child is responding to their interventions. Teachers look at the data and work with parents and the RTI team to plan if next steps need to be taken.

### ***Rockson Elementary***

The second school, Rockson Elementary, is located in a town in the southwest region of the state. According to the 2021 census, the rural town has a population of about 8,000, 97.5% of which is white. 26.1% of the population is under the age of 18. 11.2% of the town is living in poverty, but the median household income was about \$77,000 in 2020. Rockson Elementary contains about 460 students K-5. They have 42 teachers, a student to teacher ratio of 11, and per pupil expenditures of \$18,600. The school has a minority enrollment of 4%, 54% of students are female, and 39% are considered economically disadvantaged. On the state test, 42% of students met or exceeded proficiency for math and 50% for reading in 2020-2021, which is about the same as the state average<sup>3</sup>. Rockson Elementary is in their 5th year of MTSS implementation and was identified by the SDOE MTSS Specialist because it was one of the most “true to form” frameworks she has seen at any school she has visited. They have worked with state research institutions on MTSS and RTI in the past and would provide a valuable perspective about how they got to where they are today.

Rockson’s MTSS operates their tiers in a similar manner to Belknap; however, they clarified that teachers are providing tier two in addition to tier one, and ed. techs are there to support other groups in the class at that time. Rockson has interventionists, ed. techs, and a coach who supports them. They have a behavioral team, universal tiers team, advanced tiers team, and a leadership team which all meet about every two weeks and in the summer. Rockson has three cycles a year, each 12 weeks long. While there can be mid-cycle shifting of students, the dismissal

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<sup>3</sup> Data from [usnews.com](https://www.usnews.com), [publicschoolreview.com](https://www.publicschoolreview.com), and [schoolidigger.com](https://www.schoolidigger.com)

process takes place at the end of each cycle. At that time, they assess the students based on a triangulation of data and meet with parents to discuss progress.

## **Participants**

Participants from each school were selected by the principals of that school. After the principals of the schools agreed to participate, I asked them to choose four other staff members to join the study, in addition to them participating themselves. Other than job types, I did not give the principals any guidelines for participant characteristics. Located in a predominantly white state and looking at a predominantly female and middle-class profession, I did not feel as though I could make requests for racial, gender, and class diversity among participants. I also did not set any requirements on experience in the field of education, but I made sure to inquire about it in each interview, as an educator's experience, or lack thereof. Each participant's experience in education and at each study school was recorded and is located in Table 1. While diverse perspectives would have been valuable, I feared it would limit my participant pool to the point where it would be difficult to move forward. Thus, it is important to acknowledge that many of the participants may have similar worldviews and life experiences in regard to race, gender, socio-economic stats, and education. However, it was possible to request different types of educators for this study.

I asked for a general education teacher, special education educator, Gifted and Talented (GT) educator, and a school/district MTSS specialist or interventionist if they had one. If a school was unable to supply one of these types of educators due to a lack of interest or otherwise, I allowed them to choose another staff member they thought would have a valuable perspective on the topic. I chose these types of educators so I would gain a variety of perspectives on the MTSS implementation process. This method allowed for educators who were interested in the study to participate, which I thought would enhance the amount and quality of data I received from them.



Gaining support from the school principals first allowed me to use their support to find willing participants. Based on my research, each of these types of educators has a different and important role in the implementation process. Rather than interviewing five general education teachers, I wanted to see how/if the experiences of these different types of teachers played a role in their perceptions and current status of the framework. All participants are located in Table 1. The first time I mention a participant, I will refer to their name, school, and job title. Throughout the rest of the study, I will use only their name. All participant names and school names have been changed to aid the anonymity of participants in this study.

**Table 1**

Name	School	Years at That School	Years of Experience in Education	Position
Sonia	Belknap Elementary	12	24	Principal
Sophie	Belknap Elementary	5	7	Licensed Clinical Professional Counselor
Juliette	Belknap Elementary	14	15+	Literacy Specialist
Ally	Belknap Elementary	9	9	5th Grade Teacher
Carly	Rockson Elementary	14	16	Principal
Lisa	Rockson Elementary	3	28	Gifted and Talented Coordinator (GT)
Maddison	Rockson Elementary	3	15	2nd Grade Teacher
Sydney	Rockson Elementary	2	11	Instructional Support Network (ISN) Tier 3 Specialist
Maggie	Rockson Elementary	12	23	Special Education Teacher
Kristie	State Department of Education	3 at SDOE	17	MTSS Specialist

## **Data Collection**

The primary form of data collection was interviews with the educators. Semi-structured interviews with different types of staff members allowed me to get a well-rounded picture of how MTSS was implemented at each school. The interviews provided a more in-depth perspective to the process which allowed me to investigate how these educators are interacting with the framework.

All participants completed a consent form in which they agreed to be voice recorded in their interview. Each interview was conducted in less than an hour, so as to not take up too much of their valuable time. I met with the 10 participants virtually via Zoom between the times of 8AM and 4PM over the course of the fall semester. Zoom eased the challenge of travel and scheduling and easily allowed for the interviews to be audio recorded. I took extensive notes on participants' answers, making special notes where answers from participants from the same school contradicted each other. All recordings, notes, and consent forms were stored in an online dual-authentication server as well as hard copies in a locked cabinet provided by my advisor.

All but one interview from Belknap Elementary was conducted in October and November, and interviews from Rockson Elementary took place in December. The times of these interviews may have impacted the results depending on current events at each school. For example, because most schools use standardized tests to determine progress, interviewing participants before and after these fall scores could give different results. Additionally, many interviews were conducted in the time leading up to longer school breaks, like Thanksgiving and winter break. This can be a stressful time for educators which also could have impacted participants' answers.

Themes included in the interviews were staff teams and responsibilities, training and coaching, data collection and analysis, and connection with families. I asked slightly different questions depending on the position of the participant. For example, I asked GT educators about the GT processes and how they fit within their MTSS, and I asked Principals to speak more on how they were able to get buy-in from staff on the MTSS model. Similar modifications were made for other positions like special education teachers and interventionists/MTSS specialists. For all participants, I wanted to uncover implementation challenges faced by each participant and school and how/if they were able to overcome them. I also asked about their ideas of “success” in implementation in order to help shed light on current perceptions of the framework and when/why they may be considered successful.

The only participant in the study who was not an educator in a school was the MTSS Specialist at the SDOE. Her interview focused on her own and the state’s ideas of success in MTSS implementation along with the role the state plays in supporting schools and enforcing statutes. In this interview, I aimed to answer why she suggested these two “successful” schools for this study. Interview guides are located in Appendix A.

### **Data Analysis**

The interviews were transcribed using an online service (rev.com) and, after the first read through, I developed a list of 90 codes based on common themes. After narrowing down this list to about 40 codes, I read through and coded the interviews again. I narrowed my list of codes down by reconsidering how each fit into my research question. I combined many codes that ended up fitting well together and deleted some I deemed no longer relevant. My third and final pass through the document used 20 codes broken up into three main categories: collaboration, teachers, and leadership (Table 2).

**Table 2**

<b>Collaboration</b>	<b>Teachers</b>	<b>Leadership</b>
<ul style="list-style-type: none"> <li>→ Teams</li> <li>→ District</li> <li>→ State</li> <li>→ Family</li> <li>→ Teachers</li> </ul>	<ul style="list-style-type: none"> <li>→ Teacher Support</li> <li>→ Training</li> <li>→ Frustration/Confusion</li> <li>→ Buy-In</li> <li>→ Teacher representation/voice amplification</li> <li>→ Capacity</li> <li>→ Staff Motivation</li> <li>→ Efficiency</li> <li>→ Staff Knowledge/experience</li> </ul>	<ul style="list-style-type: none"> <li>→ Administration</li> <li>→ Among Teachers</li> <li>→ Implementation Science</li> <li>→ Buy-In</li> <li>→ Efficient Systems</li> <li>→ Communication</li> </ul>

After the third round of coding, I had 439 quotes based on these 20 codes that I used to inform the narrative findings of this study. I pulled out the most relevant and all-encompassing, in terms of themes, of those quotes to form my narrative findings. In working with these findings, collaboration and leadership were combined as they were often very intertwined. The theme of lessons learned appeared in all three main coding categories and thus seemed to be significant enough to become its own narrative finding after the fact. Based on the original themes, collaboration, teachers, and leadership, teachers contained the most quotes and are the primary focus of the narrative findings.

## **Literature Review**

This literature review begins with an overview of the current approaches to addressing student needs in the classroom, such as tracking and special education, and how they are or are not able to promote inclusivity, followed by a discussion of how MTSS can address many of the problems of these current approaches. I provide a summary of research on MTSS, its history, benefits, and what factors have been found to contribute to its success. Then I present a synthesis of some of the literature on MTSS in elementary and rural school environments.

### **Dominant Approaches to Addressing Student Needs and Challenges of Inclusivity**

Schools use a variety of methods to identify and address student needs. Historically, “student needs” has primarily meant academic needs. However, addressing behavioral needs is becoming increasingly common. Educators are tasked with providing all students with a quality education; however, all students are different so it may be difficult to find an approach that works for everyone. Thus, some educators rely on approaches like tracking and special education to give students a more effective learning experience. However, these common approaches have negative consequences that have been found to be minimized with a new approach: Multi-Tiered System Support that aims to address as many student needs in the general education classroom as possible.

#### ***Tracking***

Tracking is a schooling method that groups students by ability in order to give students more targeted instruction in a certain subject, grade, or school (Hallinan, 1994; Loveless, 2009; Oakes, 1992). The method is meant to serve all students with instruction that will promote the most learning (Hallinan, 1994). Tracking takes place at all school levels: elementary schools commonly assign students to groups or separate classes based on ability and middle and high school students are typically divided into regular, advanced, honors, or AP level classes (Oakes,

1992). In a way, colleges and universities themselves are a form and a result of tracking, as it has been found that the advantages given to those in higher tracks results in higher academic achievement and better access to postsecondary education (Domina et al., 2019). Middle and high schools can operate in a similar manner, with certain schools serving as their own tracks rather than tracking within a school (Betts, 2011).

Tracking is not new. In fact, America's schooling system started as only one track in the mid 1800s, in which students who could not keep up with their grade level curriculum had to stay behind or leave school altogether (Loveless, 1998). Over time, the need for educated members of society grew and a wide variety of students, including many immigrants, began attending schools in the 20th century (Loveless, 1998). As more students entered schools, tracking became a way to segregate students based on race and socio-economic status in order to adequately prepare them for their predetermined positions in society (Loveless, 1998). While the current version of tracking is not as outwardly problematic, modern-day tracking has been found to contribute similarity to disproportionalities between these groups.

Modern day tracking is known to disproportionately impact students of color and students of lower socio-economic backgrounds in negative ways that work to reproduce their inequitable lower statuses in society (Loveless, 1998; Oakes, 1992). Poor students are more likely to be put in lower tracks, even with the same scores as their wealthier peers (Loveless, 1998; Wells & Serna, 2010). Elite parents are able to use their privilege to influence what track their child is placed into, a primary example of social reproduction that puts educators in a tough position as they do not want to drive wealthy families out of public-school districts (Wells & Serna, 2010).

Students of color and lower income students are not only more likely to fall behind due to tracking (Wells & Serna, 2010), but also more likely to *start* behind due to what Natalie Wexler

calls “The Knowledge Gap.” In her book, Wexler explains that there are disparities in access to knowledge that cause what we know as “achievement gaps” among students of different races and socio-economic groups (Wexler, 2019). She argues that curriculum often focuses too much on skills and not enough on content, leaving some students without prior knowledge on a topic to fall behind. Thus, these students are disadvantaged and placed in lower tracks from the start when a different type of instruction could have avoided this outcome.

Early track assignments impact later school achievement and post graduate life, with students in the college track having better chances of graduating high school and obtaining a higher status job (Oakes, 1992). Students of color, namely Black and Latinx students, are underrepresented in preparatory courses for college and are more often in classes that prepare students for lower-level jobs after secondary school (Oakes, 1992). Schools with more of this student demographic offer less high academic tracks and more trade courses (Oakes, 1992). While some of these findings could be due to academic potential and hard work of the individual, it further perpetuates larger societal disparities between race and social class. Tracking widens these gaps between high and low track students, and thus tracking widens the achievement gap between white students and students of color and higher and lower income students (Oakes, 1992). The track, post-school opportunities, social standing, and self-image are all connected, despite the fact that tracking is not meant to impact the social emotional growth of a student (Hallinan, 1994).

Proponents of tracking assert that organizing students by ability between classes or schools is more effective and efficient in terms of allocated resources and instruction approaches (Betts, 2011), whereas opponents argue that some students have “high track privilege” (Loveless, 1998). While it is difficult to compare across schools, it is thought that students in higher tracks get more resources and more qualified teachers (Loveless, 1998). However, proponents for this structure

say that more qualified teachers need to be the ones leading advanced material (Loveless, 1998). Tracking has also been found to be beneficial to those in high tracks and while detracking may lessen the gap between high- and low-track students, it is solely at the cost of high-track achievement (Loveless, 2009). Students in middle tracks are not overly impacted by tracking or detracking (Hallinan, 1994). Additionally, some teachers have found it difficult to provide adequate instruction to all students in detracked classrooms (Loveless, 2009), and instruction is more effective in tracked groups (Kilgore, 1991). Though some, like Oakes, disagree, even tracked groups are not fully homogeneous, as there is often overlap between groups and individual growth throughout the year that makes it impossible to have a group of students each with the same abilities (Hallinan, 1994). Teachers also have lower expectations and less interesting material for lower tracked students which impacts student's motivation and achievement (Hallinan, 1994).

One of the more harmful effects of tracking is that once these students are placed in these lower tracks, it is unlikely they will move to a higher one (Loveless, 1998). Students in these lower tracks may not possess the traits, such as drive and self-advocacy, that would help them move to a higher track (Loveless, 1998). This may be an indication of a lack of self-esteem from being in a lower track (Hallinan, 1994), as it has been found that students in high tracks exude more self-confidence (Oakes, 1992). Social groups among peers also form between students within one track, thus compounding the impacts of "othering" that may take place through this method of grouping (Oakes, 1985). It is not uncommon for social hierarchies to form (Hallinan, 1994).

Some studies have found that tracking does not impact average achievement holistically, however this is due to the positive and negative effects that average out when you compare high and low tracks (Loveless, 2009). While it is difficult to determine the difference between tracked



and detracked schools based solely on the fact that not many detracked schools exist, it is evident that tracking widens the gap between students in high and low tracks (Loveless, 2009).

In terms of inclusivity, Kilgore (1991) offers a framework for determining if a school's tracking pattern is "meritocratic, arbitrary, exclusive, or inclusive" (p 189). In this case, inclusive and exclusive are meant to describe how accessible a track is compared to national norm standards. For example, a track is considered to be exclusive if entrance to a track is determined by standards that are higher than the national norm, and the opposite is true for inclusive tracks (Kilgore, 1991). This study found that the inclusivity of a track increases as teachers have more control over placement (Kilgore, 1991). Because many placement methods only use objective forms of data, like test scores, teachers contributing their own subjective data for placing students has also been found to improve inequality among tracks (Betts, 2011; Hallinan, 1994). Inclusivity also includes how many opportunities are available to every student, especially in terms of options for more schooling after high school graduation (Gamoran, 1992). More mobile and flexible tracking systems have been found to improve achievement and reduce gaps between higher and lower tracks (Gamoran, 1992). Overall, academic achievement rises as inclusivity rises (Gamoran, 1992).

### ***Special Education***

The Individuals with Disabilities Education Act, which ensures access to free education services for students with disabilities, defines special education as instruction taught by trained professionals that aims to be accessible to students with various learning differences, needs, and disabilities (Streett, 2004). There have been multiple frameworks for how to situate special education within the wider public education system. Special education institutions existed to educate more students with similar needs at once; however, this resulted in the isolation of students with disabilities from students seen as "normal" (Francisco et al., 2020). Schools were even given

the ability to remove students who were “different” or “disruptive” from their classrooms, thus increasing the separation between the groups (Francisco et al., 2020). The next phase, beginning in the early 1900s, shifted to a segregation model in which students with disabilities were taught in the same buildings as other students but in different classrooms (Francisco et al., 2020). Curriculum for these students was not as challenging or in-depth and there was not a lot of room for growth (Francisco et al., 2020). At this time, disabilities were viewed as genetic traits and people with them were encouraged not to pass down their traits (Francisco et al., 2020). They were viewed as people who needed to be fixed (Francisco et al., 2020).

The 1954 case, *Brown v. The Board of Education* denied schools the right to segregate students by race and, over time, perceptions of ability and integration began to shift. However, special education became a way to segregate students by race in spite of the *Brown v. Board* ruling (Hall, 2009). It was not until 1975 when the Education of All Handicapped Children Act was passed that schools were federally required to provide education to all students regardless of ability (Connor & Ferri, 2005). In the late 20th and early 21st century, laws like the Individuals with Disabilities Education Act (IDEA, 1990), the No Child Left Behind Act (NCLB, 2001), and the Every Student Succeeds Act (ESSA, 2015) aimed to support all students, including those with disabilities, in getting quality general education and holding both students and teachers accountable for making progress (Francisco et al., 2020). While the effectiveness of these acts has been debated, there has been a shift in mindset around how to integrate students with disabilities into the general education classroom and a stronger affirmation of “full inclusion” (Connor & Ferri, 2005). After these acts, there was a significant increase in students with disabilities in the general education classroom (Francisco et al., 2020). Despite this progress from the early 1900s,

special education, in the way it exists today, works to form divides between students of different levels of ability and races (Francisco et al., 2020).

Students of color are referred for special education at higher rates than their white peers (Connor & Ferri, 2005) despite there being no substantial evidence to prove that students of color actually have disabilities at higher rates than white students (National Center for Learning Disabilities, 2020) though some scientists have argued that race does impact ability, a theory often referred to by opponents as “scientific racism” (Watkins, 2001). Linked to systemic racism and classism, cultural biases exist within the system, such as higher rates of discipline for black students (Bohanon et al., 2016), and referral processes, like cultural biases in testing and subjective reviews from mostly white teachers (Connor & Ferri, 2005), that cause black and lower income students to be identified at higher rates than white upper-class students (Hall, 2009). Additionally, the knowledge gap may present as disabilities, which is another reason why students of color and lower income students are disproportionately placed into special education (Wexler, 2019; Hall, 2009), not to mention the lack of representation in gifted programs from these groups (Oakes, 1992).

Though Connor and Ferri (2005) argue that it is impossible for general education and special education to coexist without one “advancing at the expense of the other” (p. 122), some students may need the type of support special education offers, such as more individualized instruction. However, it is important to consider inclusivity and quality education for all in the process. For example, students with disabilities are more likely to drop out of school than students who do not have disabilities, but, with the right support, graduation, employment, and social outcomes can improve for these students (Bohanon et al., 2016). In order to make schooling more inclusive, classrooms must be accessible and effective for all students (Connor & Ferri, 2005),

which means engaging in the general education classroom while also getting the support they need (Francisco et al., 2020). While there are some limitations, some studies have found that inclusive instruction between special education students and non-special education students has actually resulted in lower scores in early elementary school (Francisco et al., 2020). However, if inclusion is implemented correctly, there should be beneficial outcomes for all students. In order to do this, clear definitions and guidelines (Connor & Ferri, 2005), historical/legal awareness, consistency, and communication are needed among all stakeholders (Francisco et al., 2020).

Hallinan (1994) outlines issues around tracking, such as segregation, low social status, and slower achievement. While Hallinan explains the impacts of these negative consequences of tracking, she also states that there are ways to improve them all without removing the system altogether (Hallinan, 1994). How can educators provide intense, semi-individualized instruction that aims to keep students in the classroom as much as possible?

### **A Promising Approach: MTSS**

Multi-Tiered System of Supports (MTSS) is a framework that addresses issues of accessibility, equity, and inclusion. MTSS allows all students to have greater access to the general education classroom and curriculum while also receiving intensified support as needed. The framework originated with the emergence and combination of Positive Behavior Interventions and Support (PBIS) and Response to Intervention (RTI) (Sailor et al., 2021). PBIS, which aims to provide behavioral supports, is structured in a similar manner as the wider umbrella MTSS in which supports increase with intensity as students move up through the tiers (pbis.org; McIntosh and Goodman, 2016). While a separate entity, SEL is also incorporated at the core instruction level to teach children important skills such as decision making, self-awareness, and relationship building. RTI is the direct data-driven response that a support or intervention has had on the

student(s). RTI focuses on identifying supporting students who need alternative academic support (Greene, 2019). While some consider RTI the singular step in which you examine the data of an intervention, others view RTI as a larger process synonymous with MTSS (Greene, 2019). In this paper, all three of these frameworks are considered branches of MTSS, the state defines MTSS as “a whole-school systems approach to creating universally designed environments that prevent school failure and ensure the academic, behavioral, and social-emotional well-being of each and every student.”

The goal of MTSS is to establish a well-organized system that allows educators to identify and address the needs of as many students as possible through tier 1 intervention, which addresses full classroom needs at once in the general education classroom. While we should always strive for 100%, at least 80% of students should be meeting academic standards in tier 1. In other words, 80% of students ideally do not need more intensive group or individualized support. If less than 80% are meeting learning targets in the universal tier, educators should investigate possible sources of a rather classwide problem and address them through altering the universal instruction (Gibbons et al. 2019). In addition to changing tier 1 to be more inclusive to all students, students who are not meeting expectations should be given more support using tier 2 or 3, which are contingent on the results of the previous tier (Greene, 2019). MTSS uses flexible tiered instruction with the goal of continuous improvement (Daye, 2019).

### ***Benefits of MTSS***

MTSS has been found to have direct impacts on academic and behavioral outcomes (Bohanon et al., 2016; Sailor et al., 2021; Schilling, 2019). Using the MTSS model, schools are able to identify “at-risk” students and provide support earlier and more often (Webb & Michalopoulou, 2021). Case studies have found that implementing MTSS has resulted in less

special education referrals (Choi et al., 2020; Webb & Michalopoulou, 2021). Based on research of special education, this had positive academic and social impacts on students who were able to stay in the general education classroom and learn alongside peers. Schools with MTSS have been found to have improved academic achievement for students with individualized education plans (IEPs) and students with disabilities compared to schools without MTSS (Choi et al., 2020). Additionally, the implementation of MTSS is timely and essential, as educators are dealing with learning loss from the COVID-19 pandemic (Webb & Michalopoulou, 2021). Social-emotional and behavioral supports have proven to be especially critical as children may be unable to process intense situations such as a pandemic (Webb & Michalopoulou, 2021). MTSS has been found to reduce gaps between performance and standards and improve performance on tests (Choi et al., 2020).

These positive effects on achievement, behavior, and inclusion only occur when the framework is implemented with fidelity (Choi et al., 2020). Fidelity is a term that describes the extent to which a program is implemented as designed (Carroll et al., 2007). Determining whether fidelity is achieved is difficult, but there are 5 main components of MTSS that help guide educators toward this goal:

1. *Evidence-Based Practices*: strategies and interventions supported by data indicating they are effective in improving student outcomes.
2. *Layered Supports for Students*: academic and behavioral support that serves as “proactive and preventative” methods to supporting all students.
3. *Effective Use of Data*: unbiased analysis and responding to data in a timely manner.
4. *Engagement of Families and Communities*: increased support for the student that positively affects the student's outcomes.

5. *Strong Team Leadership*: the foundation for establishing and sustaining MTSS while also supporting educators' effort to be continuously improving (Gibbons et al. 2019; McCart & Miller, 2020).

These components are crucial to ensuring an effective MTSS is implemented; however, there are many barriers that could exist to make fidelity difficult.

### ***Barriers to Implementation***

Educators report a lack of resources, including funding, staffing, and time as a challenge (Dulaney and Hallam, 2013; Mason et al., 2019; Vekaria, 2017). One of the most apparent barriers in MTSS implementation is time (Mason et al., 2019; Vekaria, 2017). At the beginning of the implementation process, schools must do an extensive amount of planning and learning in order for the framework to be successful. This is difficult to schedule in addition to their typical responsibilities because educators must spend time during the school day collecting and evaluating data, meeting with teams, teaching classes, and implementing interventions (Mason et al., 2019). Additionally, some schools do not have the human capacity to complete all the steps necessary to having an effective MTSS (Mason et al., 2019). Lack of personnel and funding for increased capacity also contribute to the challenge of time, as more responsibilities would be spread amongst a smaller staff. In schools with high staff turnover, it can be difficult to hold on to any momentum in implementation.

Lack of good leadership also presents a barrier for schools implementing MTSS (Freeman et al., 2015; Mason et al., 2019). The implementation process can be overwhelming and intimidating without knowledgeable people willing to lead and support school staff (Mason et al., 2019). For that reason, staff resistance to implementation is another challenge. At first, the framework could feel “too long and cumbersome” for educators who already have a lot on their

plates, especially because a large amount of documentation is required for the intervention process (Mason et al., 2019). While MTSS aims to provide an organized, streamlined approach to pre-existing supports, many educators see it as something completely new they have to do and may be resistant to school/district-wide change (Greene, 2019). Change agents, people who lead the charge in MTSS implementation in their school, are essential to the operation, especially in schools that need convincing to change (Mason et al., 2019). However, the framework will not succeed if a school does not have a change agent or strong leadership who understands the need for the framework (Mason et al., 2019). While change agents are important, relying on them to do the work on their own is not a productive method, especially if that individual ends up leaving the school before the process is significantly underway. Thus, staff buy-in is integral.

Geographical context may present additional challenges for schools in rural settings. It is more difficult to get qualified staffing in rural areas due to its isolation (Schilling, 2019). Rural schools also typically have smaller student populations which presents challenges to funding, programming, technology, and necessary staff (Schilling, 2019). Despite smaller populations, rural schools should be given voice, especially in non-local controlled states, to make policies that will support them (Schilling, 2019).

### ***Facilitators for Implementation Science***

Many studies on MTSS implementation have utilized the implementation science model to outline the stages of implementation (exploration, installation, initial implementation, and full implementation), as it promotes evidence-based practices, fidelity, and longevity (Bohanon et al., 2016; Freeman et al., 2015; Schilling, 2019). These stages look slightly different for every school, but the first stage of implementation is *exploration*, typically a year of planning, training, and teaming (Bohanon et al., 2016; Freeman et al., 2015; Mason et al., 2019). It is at this time in which



schools examine their needs and possible ways to address those needs (Schilling, 2019). This stage is supported by the training and buy-in of staff on the notion that this framework is necessary and urgent for their students (Bohanon et al., 2016; Schilling, 2019). In this stage, it is essential that all staff are on the same page in regard to their school's vision and plan for the framework (Bohanon et al., 2016; Choi et al., 2020; Dulaney & Hallam, 2013). Language should be communicated and agreed upon by all staff and then included in the goals of the school/district (Choi et al., 2020; Dulaney & Hallam, 2013). Educators should also cultivate an environment in which they believe that they will be able to meet the needs of all students on a daily basis and all students can succeed in the right circumstances (Marlowe, 2021). "Place-based inclusion" is not enough to ensure success for all students. In other words, putting all children in the general education classroom will not work for all students without the right interventions (Choi et al., 2020). The "equity-based inclusion" mindset, which frames MTSS at the school-wide level, is necessary for MTSS to fulfill its purpose. Children must receive as much tier 1 instruction as possible in addition to other supports that might be needed (Choi et al., 2020; Sailor et al., 2021). The exploration stage is when staff must pledge to promote the inclusivity of the framework and implement with fidelity (Choi et al., 2020).

The second stage of the implementation process is *installation* (Bohanon et al., 2016; Freeman et al., 2015). Schools must also begin to investigate the current uses of resources, including people, and redistribute as necessary (Choi et al., 2020; Schilling, 2019). If it did not occur in stage 1, then this stage must include the development of teaming structure (Bohanon et al., 2016). Teams help reduce the workload on individual teachers which improves issues of teacher burnout (Greene, 2019). Each member should have defined roles and responsibilities that support the larger school-wide framework (Bohanon et al., 2016). Without knowledgeable and

skilled staff to do this work, a school will not have the capacity to follow through on the framework (Schilling, 2019). Leadership should institute ways in which their staff can collaborate and are supported through this process and on the day-to-day (Freeman et al., 2015; Vekaria, 2017). In the early stages of implementation, leadership must meet staff where they are at (Vekaria, 2017). Educators need safe spaces to process thoughts with each other and communicate their experiences through implementation (Greene, 2019). Giving educators this space to collaborate and support has resulted in more positive perception of MTSS from staff (Greene, 2019). Shared leadership within a school building empowers educators to make decisions and gives them more autonomy throughout the process which improves staff buy-in (Vekaria, 2017). Support from district leadership and collaboration throughout the district also helps facilitate implementation (Dulaney & Hallam, 2013; Freeman et al., 2015).

*Initial implementation*, in which teachers begin to use the system they set up in stages 1 and 2, is stage 3 (Bohanon et al., 2016; Freeman et al., 2015). This is when they begin to use new strategies, skills, and tools, like data monitoring and interventions, necessary for school improvement (Mason et al., 2019; Schilling, 2019). Strong leadership, while necessary in stages 1 and 2, must continue into stage 3 as staff will need support in facilitating their new roles and responsibilities (Freeman et al., 2015; Schilling, 2019; Vekaria, 2017). Not only is communication key across all stages of implementation, but communication across the three tiers of support is integral to ensuring that the tiers are flexible and serve as temporary supports rather than a permanent place for a student (Freeman et al., 2015). A data dashboard is an efficient way to streamline the communication and organization of data within a school as it allows colleagues to share and collaborate with each other in order to make more informed decisions about each student (Greene, 2019). Evidence-based practices are a core component of the framework.

*Full implementation* occurs when over 50% of staff are implementing with fidelity (Freeman et al., 2015; Schilling, 2019). Sustainability, in which the framework can persist despite potential staffing changes, is key in this stage (Schilling, 2019). Schools must always be training new leadership staff to ensure the framework does not fall with the departure of influential individuals (Bohanon et al., 2016). However, once a school enters the full implementation stage, their work from the previous stage is never finished. As new students and staff join the system, flexibility, research, and changes to the organization of the program must be an ongoing process repeated every year (Choi et al., 2020), some consider this a final stage in itself, deemed *innovation* (Bohanon et al., 2016).

The exact timeline for each of these stages is different for every school, there is no exact formula for how many days a school should spend on a stage before moving on. Implementation science can be applied on a smaller level than just the broader MTSS implementation, as this process is used for each section of MTSS, such as each of the three academic and behavioral tiers. Thus, a school may be in different stages for different sections of the framework at once (Bohanon et al., 2016). In order to effectively progress through these stages, schools must employ a number of implementation drivers to assist the process.

### ***Implementation Drivers***

The first two drivers, organizational drivers and leadership drivers, have already been included in the various implementation stages. However, it is helpful to outline what exactly these are. *Organizational drivers* help schools lay the foundation on which the framework will take place. Decision support data are the reliable data systems that help educators make decisions within the MTSS framework (Freeman et al., 2015; Schilling, 2019). The organizational structure of the framework within the school must be able to adapt to these decisions. Facilitative administration

are actions from educators to identify and solve problems, such as barriers, resource allocation, and teaming (Freeman et al., 2015; Schilling, 2019). The final organizational driver is systems intervention, which takes a systems approach to addressing the need for changes in funding, resources, and human capital while also working to align with fluctuating external factors (Freeman et al., 2015; Schilling, 2019).

There are two types of *leadership drivers*: technical and adaptive (Freeman et al., 2015; Schilling, 2019). Technical leadership is about learning the necessary knowledge needed to work with those external factors in systems intervention (Freeman et al., 2015; Schilling, 2019). Adaptive leadership is about the skills needed to establish and maintain a cohesive and productive vision in a school and solve problems less easily identified by technical leadership skills (Freeman et al., 2015; Schilling, 2019).

The last driver is called the *competency driver*, or the resources needed to expand knowledge and skills (Freeman et al., 2015; Schilling, 2019). The first competency driver is selecting the right staff to fulfill specific roles and build capacity (Freeman et al., 2015; Schilling, 2019). Training and coaching are other drivers that must also be ongoing throughout each implementation stage (Freeman et al., 2015; Mason et al., 2019; Schilling, 2019; Webb & Michalopoulou, 2021). Different types of training may be necessary for different types of staff at different stages and at different schools and staff must be committed to the professional development process (Schilling, 2019). School and district leadership must determine what training would be beneficial for their staff (Mason et al., 2019). Quality coaching and professional development must exist together to be most effective and should be simple, easy yet still effective (Mason et al., 2019). Coaching, taught by experts, helps staff learn new skills and apply them in context especially when it provides feedback in real time (Mason et al., 2019; Schilling, 2019).

Context is important. For example, evidence-based practices look different at elementary and secondary schools due to the methods that have been found to work best (Daye, 2019). Thus, training must consider the conditions of a school in order to be effective. Another competency driver, performance assessments, including self-evaluations, observations, and formal assessments, is used to ensure fidelity and success of training (Freeman et al., 2015; Schilling, 2019).

## **Conclusion**

Tracking in schools, while aimed to give students the instruction they need, ends up segregating students based on ability, and other factors like race and socioeconomic status, which can impact their intellectual and social development for years to come (Strello et al. 2021). These students, who were already falling behind, do not have the opportunity to catch up because much of their instruction is happening outside the general education classroom. It is common for students placed in these tracks, like special education, to stay in this track their entire educational career. This is particularly important for the state where the schools in my study are located. This state has the largest percentage of special education referrals in the US at 13% in 2018. 88% of those in special education are white, despite the state containing 94% white citizens in 2021. (Annual Disability Statistics Compendium, 2020).

The MTSS framework aims to mitigate the negative impacts of tracking and special education by keeping as many students in the general education classroom as possible with the right supports that will allow them to succeed. At schools in which median scores are below the benchmarks, intense investigation on core instruction is required and it is the responsibility of the school, not the student, to improve outcomes (Greene, 2019). Schools successfully using this

model have seen improvements in academic achievement and behavioral outcomes, however not all schools are implementing successfully.

The implementation science model incorporates and outlines these drivers to better organize the daunting process of school-wide framework integration. Despite this step-by-step approach, schools still face barriers and struggle with the transition to the MTSS model. In order to expand the net cast by MTSS and reduce the negative impacts of tracking and special education, the process must be investigated further. It is still not yet clear what allows some schools to succeed and some to flounder or how much a school's geographic, demographic, and educational context impacts their abilities to successfully implement. This study aims to uncover the factors that made three New England elementary schools successful in different stages of the implementation process.

## **Narrative Findings**

Collaboration and support among teachers and leadership were primary themes discussed by participants. Teachers expressed the need to work together to solve problems and support all students. Strong leadership is integral for these educators to feel supported, heard, and confident in implementing this framework. Among these positive factors brought forth by participants, there were a few areas, such as poor initial communication from the state and a lack of procedural efficiency, that participants expressed a need for improvement.

### **Collaboration: There's No 'I' in MTSS**

Participants from both Belknap and Rockson Elementary highlighted the role of collaboration in their day-to-day and long-term processes. When asked about their personal definition of MTSS, Maggie, the special education teacher at Rockson, said, “just supporting all kids academically, and there's a behavioral piece as well, and giving them the tools that they need in order to be successful and to make progress. It involves a lot of collaboration between adults, parents, all that stuff.” Many participants discussed the importance of teamwork and leadership within their classrooms, buildings, and districts. Staff explained how they work with each other, families, and other colleagues throughout the district in order to provide the most support possible to students. Despite these strides, most participants expressed dissatisfaction with their current state of collaboration and communication with the state.

### ***We're All In This Together***

“I do like to showcase and highlight the things that we've done here as a team because that's how we operate, as a team here,” Principal Sonia from Belknap said when I inquired what her favorite part of our interview was. At Rockson, Sydney, the Interventionist, attributed their success in MTSS to the familial nature of their school community: “I think building the community has

helped with being successful. And just collaborating. Again, if we're not gonna collaborate then we might see different endings of what's going on.” While each school has actual MTSS teams made up of various and representative staff members, they also have come together as one big team to better support students, as explained by Carly, Principal of Rockson Elementary:

The biggest change I've noticed [since implementing MTSS] is that now they're all our kids. Before it was, those are Ms. Smith's kids and those are her kids. And now we are all responsible for our kids and what their needs are, whether it's behavior, whether it's academics, whether it's breakfast in the morning, no matter what it is, it's kind of opened up that whole child feeling. And really everyone has a hand in the responsibility of each and every child that walks through our doors.

Carly continued to explain that everyone feels responsible for the students in their school. It is not just on the general education teachers to support their individual classes by themselves, now everyone has a responsibility to ensure student success.

This collaborative work dynamic has improved teachers' ability to serve students. Gen Ed teachers now have access to extra support and new methods and ideas to improve student success. Ally, the fifth-grade teacher from Belknap, emphasized how she is able to work with interventionists, like her colleague Juliette, to better inform her practice:

I also think that in my opinion, because we are all working on the same goal, which is student success, I think that there's been a lot more collaboration that has happened with staff members that I maybe never would've worked with in the past. So that's always really great to see working with our interventionist or working with Juliette. Like I've worked really closely with Juliette the past two years and before [we implemented MTSS] I really didn't.



In both schools, MTSS has cultivated a culture in which all staff feel like they can rely on each other for insight and support, as Carly explains:

Knowing that you have the support of others, and that you can go to people with questions, has really helped not only teachers individually, but our whole school and our whole culture, knowing that we have that family here to rely on and lift up each and every kid that walks through the doors.

Like Ally explained, interventionists provide a unique opportunity for collaboration and fresh ideas. Sydney, the interventionist from Rockson, explained that in their MTSS, Gen Ed teachers feel less overwhelmed because, “there's someone that is trained and is a specialist in the craft that can provide more than, let's say, some classroom teachers can, which is wonderful. Teachers here really care about their students, and we all are here for the kids in the end.” In other words, teachers each have their strengths and can rely on each other for help and guidance, which makes supporting students easier for everyone.

Ally also spoke to the way staff are able to learn from each other and grow as educators through sharing their own findings and experiences in team meetings:

Our staff is also very knowledgeable. All of our staff have so many different experiences that we all kind of play to, whether it's a different path that they've taken or, um, maybe it's a class that they took that they loved... the sharing of the things that we found. I just think that all of that, all of our experiences kind of put together and we're all kind of continuing education in our own ways. And I think that those experiences just help to make this, the experience for students just that much better.

These collaborations have helped Ally discover new interventions for her students which, she said, she otherwise may not have been able to do. For Ally, MTSS seemed to also open doors, literally, for collaboration between Gen Ed staff:

I think the collaboration between staff has been a lot better and it allowed us to be able to switch and flexibly group our students for interventions. So, it's not just, 'Ally's responsible for her 22 kids.' It's now, 'Ally's responsible for helping out and working with all 44 of the fifth graders.' So, throughout my day, I see almost every single kid in the fifth grade, just whether it's an intervention or they come for math or whatever. Instead of having our classroom doors shut all the time, opening them to be able to do small groups has been huge. I just think that has opened a lot of doors for collaboration amongst staff.

This was an intentional shift led by Principal Sonia of Belknap in order to get teachers to be flexible and work together to meet growth targets: "you can walk into a classroom, and there's a blend of three classes in one room and you wouldn't know it." Sonia mentioned this in regard to Ally's blend of fifth grade classes. This blended classroom model is a good example of how changes in culture are often initiated by a good leader.

### ***A Strong Team Needs A Strong Leader***

Participants attributed much of their success in collaboration and MTSS implementation to strong, in-school leadership. At both schools, the principals work closely with the RTI data in order to determine what changes are necessary to improve outcomes for students. Principal Sonia explained her process in overseeing the day-to-day processes:

I have to look at the grade level, at the school level, the grade level, the classroom teacher level [data] for both reading and math. We also look at our behavior data and what kind of supports we need in place for that. I facilitate our RTI meetings and make sure that the

goals and interventions all line up and that teachers understand the difference between teaching, which is what an intervention is versus accommodation... So that's also part of my role is providing professional development and resources for teachers as we are learning this.

Principal Carly understood her role at Rockson similarly:

I am sitting with my data team, and we are looking at data walls and we're making sure that there are no kids kind of falling through the cracks who have those really low scores and aren't getting the support that they need. I'm on multiple committees and teams to make sure we're looking at the data and catching all the kiddos who need that support net. Um, the same is true on [for behavior].

Having a principal who is collaborating with the staff and students and working with the data seemed to be important to each school's ability to work as a team. As Principal Sonia explained, "I walk the talk and I get right in there with them ... I don't just talk."

Staff from Belknap, in particular, cited Principal Sonia as a key component to their success. Ally explained that Principal Sonia works hard to connect with all students in the school and empowers her staff:

I think that Sonia really instills in all of us the power to do what we need to do for our students. If it wasn't for her, I think a lot of people would have left because the climate and education right now is not great. But we have a leader who is willing to stand up for us. She'll stand in front of us, she'll stand behind us, she'll stand next to us. She will do whatever she has to do so that we are successful for our students. And that I think is, is really, really huge.

Ally went on to explain how Principal Sonia works hard to give her staff extra time during the day to work on and plan interventions, so they do not have to stay late. Sophie also mentioned how Principal Sonia was a primary reason for their minimal staff turnover:

We say this to [Sonia] all the time, if you leave, I think a lot of these people are gonna leave because we have a lot of faith in her and she also is someone that we look to for what will be best for our students.

Principal Sonia's staff respects and trusts her leadership, which is why they stay at Belknap even when new, and sometimes confusing initiatives, like MTSS, arise.

Clear communication and listening to teacher voices are important to Juliette, who said Principal Sonia does often:

She works hard to hear teachers. She very much wants teachers to feel valued and heard... She's also very black and white, so, um, she likes things organized and planned out and... I think that's really helpful for staff because there's no ambiguity to what she might be looking for or expecting. Everything is very clear and very straightforward. So, I think that this has been huge.

If they did not receive this support from their principal, Juliette said they would not have been so successful in implementing MTSS. Ally emphasized that it's "important too as an administrator remembering what that's like to be in a classroom and to have to teach six subjects a day." Staff want to be heard, especially when decisions made by administrators primarily impact teachers on the ground.

Principal Sonia and Principal Carly made sure to have representative voices from their school on the MTSS leadership teams. Sydney stated, "It's good because we all have voices and we're heard. It's not like, 'oh you can't talk, sorry.' Yeah. But we all feel supported, so that's a good

thing.” Having a say and feeling supported are important to staff. Sonia discussed how this representation allowed staff to connect with and engage in the framework how they wanted to:

Having that representation on this team basically solves any problem because they're the ones who are providing the input on these changes. And so, they're kind of speaking on behalf of their grade level partner or they're the ones who are going to work with their grade level partners to get them to buy-in. So, I think that was the key to getting these changes to be successful or bought-in by staff... It wasn't like me making it happen or telling people they had to do it.

As discussed later in the narrative findings, participants ascribed much of their success to how much they have been able to believe in this framework. Buy-in is huge. Ally confirmed Principal Sonia's statement: “we do have a lot of say and a lot of input. And I think that we were really heard and validated during that time when we were talking about the master schedule.”

The MTSS master schedule, in which all classes have the same intervention blocks, allows for an added level of collaboration. Ally explained:

People were more on board [with the new schedule] once they realized what it entailed. At first it was like, no way. You're not telling me what I'm gonna do at this time during my day. But once they kind of got into it and tried it for a couple of weeks, it was like, whoa. This is great. Knowing your partner teachers doing the same topic at the same time was also really great to kind of open that door of collaboration as well.

Ally went on to say that the more they collaborate and are involved in each other's processes, the more success she thinks they will see in student achievement and growth.

Teachers also took their own leadership roles when they didn't feel like they had the resources and knowledge necessary to support their work. Because of the poorly executed initial

implementation plan at both schools (addressed later in *Lessons Learned*), teachers had to take it upon themselves to learn about their roles and figure out what was going on. In terms of materials that were provided to staff to help guide their individual processes with this new framework, Ally explained, “In the beginning ... I did a lot of work on finding different materials that like other districts have used to kind of make something for us that would make it easier.” This leadership from staff is one reason the process was able to take hold in Belknap. Juliette explained:

Pretty much I have put together whatever it is that we've been using to whatever we've been focusing on ... I spent a lot of time researching what other districts and other states who've been doing this for a lot longer than us have done. I've presented a lot of those ideas to Sonia. And we've worked really closely beyond our RTI team and leadership team, but we've also worked, um, within those two pieces as well.

While some of this work should have been provided to the educators, it was empowering for staff to be able to take control of their framework and help each other understand it better.

At Rockson, Sydney needed a comprehensive form to evaluate a student's performance and ensure that teachers are following the necessary steps to determine student needs:

Sometimes kids just don't perform well on the [state test] or sometimes they perform really well, but they're really struggling. So, we actually created a checklist. I created one a few weeks ago to make with teachers. Because sometimes it's hard. It's like, well what do we do? So now the checklist kind of tells us what to do is, are they performing at least a grade level below on this, this, this? Have you been progress monitoring them?

Because testing is not always a reliable method for determining student progress, skills, or knowledge, Sydney was able to collaborate with other teachers to develop a tool to streamline the evaluation process for everyone.

Similarly, Sophie said that she hopes to be able to formalize the process of “identifying risk” for students by focusing more on how their home situations may be impacting their presence and performance at school through the current rubric assessment. She explained that “adversity” may indicate needs for SEL and mental health support more than the current questions, such as about extracurricular activities, which not every child has access to. She explained how she will continue to advocate for this addition to the current rubric.

Both Principal Sonia and Principal Carly have given leadership and collaboration opportunities to their staff. Ally mentioned how Principal Sonia needed someone to pilot the new MTSS behavior “morning meeting” program and she was able to step up and try it. In general, Ally discussed that leadership in teachers is not required but encouraged for some: “I don't really think that it's something that is expected of classroom teachers, but because I was on that leadership team, that's one of the things that just kind of got pushed towards me and a couple of other people.” At Rockson, Sydney mentioned Principal Carly turned over the responsibility of RTI meetings to the teachers, unless a child is to be referred to special education. These were both two opportunities for educators to grow and learn from spearheading parts of the framework.

### ***Students and Teachers and Parents... Oh My!***

As alluded to previously, the success of students and the MTSS framework involves collaboration between educators and families. “The family meetings really bridge that connection and build that relationship that we have with families,” Principal Carly emphasized as a factor for Rockson’s success in MTSS. Involving families in their child’s progress and educational experience has been a priority for staff at Belknap and Rockson Elementary Schools. Both schools have similar processes, in which they contact parents to inform them of changes to their child’s tiered support and discuss what this will look like.

Both schools also use parent teacher conferences to go over assessments, progress, and behavior of their students. Principal Carly explained what goes on these conferences:

We talk about the goals, we talk about the progress, we talk about the grade level expectations, all of the data that we have from assessments, and we determine as a team, do they continue tier two or three and if so, what are the goals going to be and do we need to change the intervention? Are they progressing, are they not? And what the data is showing us, and we kind of make that team decision from there.

Ally also explained the expectations of communicating with parents at Belknap:

It's the expectation of the classroom teacher that they need to call the parent before they move them through RTI. And then, parents get a report card three times a year. We don't do progress reports anymore, but we do parent teacher conferences. And so that's when I sit down with parents and go over all their assessments and go over, here's what I'm noticing this year.

With this communication, the response from parents to this new framework has been mostly positive. Principal Carly said parents like being able to treat their child's teacher as their "case manager" to stay up to date on their progress.

However, as explained by Juliette, the literacy specialist at Belknap, parents do not seem to be reaching out as much with this new framework because all students are getting extra support, rather than just those at tier three end of the spectrum (Title One):

Because of school-wide [MTSS], there really isn't like a Title One. Everybody gets it. I feel like because of that, I think parents don't reach out as much. I feel like I used to be somebody that parents reached out to often and I still have a handful of those.

Ally makes a similar comment as Juliette:



So, some parents don't really care. They're just like, I trust that you're doing what's best for my kid. So that's nice. I actually had some very great conversations with parents, who asked me about Title One. And they were like, well my kid used to go to Title One. And so, I had that awesome opportunity to be like, well, now all of our interventionists can work with all students.

Educating parents on this switch from Title One to MTSS has changed how teachers and parents interact and seems to have eased parents' worries about their children's progress.

Some participants have experienced less parental involvement than others, but still make it a priority to remain in contact. Sydney, the tier three specialist at Rockson, described how it is important to stay in contact with parents even if they do not seem to be responsive:

Maybe [the new framework] hasn't had the biggest impact [on parents], because many parents are not very involved, but we still need to try. We've actually had a lot of participation [this year] which we didn't think we would. They can't wait to hear how their child is doing. They're seeing a lot of progress. So, it's really nice because they get to hear great things about their child or some things that they can work on, so they know exactly what's going on.

These partnerships have shown parents important details about their child's progress and have allowed them to stay involved with their education if they are so inclined. Principal Carly indicated that these meetings have proven to provide teachers with the energy and positive reinforcement to keep working hard for their students:

I guess give us their, I wouldn't say praise, but their recognition maybe that things are going really well over there [at home]. And we do get that quite a bit, but it's definitely that

positive relationship that remains with families, with the community within the school, with that positive culture as a whole.

Carly touches on the idea that a student's home life and school life are interconnected. Oftentimes, a student's personal life impacts their ability to focus, behave well, and perform in class.

Carly explained that meeting with parents has helped some of these participants adjust their approaches to better fit a student's current state:

[Meeting with parents] has provided insight for a lot of our teachers because parents will come out and say things that are happening at home. And teachers have no idea. And all of a sudden, whoa, we put the puzzle pieces together and now we've got this kiddo ... so the family meetings have been huge.

In other words, a teacher's understanding of a student's home life may change the way they work with that child in school. Not only is the communication between parents and teachers important for this reason, but there are opportunities to work together to reinforce important skills or topics learned in school at home.

Developing these relationships with parents has allowed Ally to reinforce behavioral and social emotional skills both in the classroom and at home. Ally said:

One activity that we did a couple weeks ago was on responsibility and how to be a responsible classmate. And then there's a homeschool piece too. So, the homeschool connection goes home and it kind of tells parents, this is what we're talking about this week in school. They have a conversation at home and then their homeschool partner signs off saying, 'yes, we talked about this.' I've had a fairly decent success rate with that. I think between 69% and 84% of students every week turn that in, which is pretty decent.

Ally has been able to engage more with parents, welcome them into her curriculum, and strengthen students' skills outside of the classroom. Evidently, she is seeing results.

Incorporating feedback from parents is also happening in other areas of the district. Lisa, the Gifted and Talented Coordinator from Rockson, indicated that “the district is trying to pull the parents in too, the new superintendent is starting the strategic planning committee and inviting the community to participate.” Most other participants indicate that it is the school doing most of the work to engage and collaborate with families.

### ***Room for Improvement***

Despite efforts to develop a team between educators and parents, participants feel that an important part of this team structure is missing: effective partnerships with the district and the state. Some collaboration with the district has allowed educators to work together on the district RTI handbook. Principal Carly discussed how teachers, interventionists, GT educators, and coaches across the district worked with the director of curriculum to develop the RTI handbook, which outlines the processes and expectations of a Response to Intervention approach, which is one subset of an effective MTSS.

There are other opportunities for educators in the district to help each other. Sydney mentioned how she took initiative to create a checklist that has helped streamline the RTI process for educators across the district:

So, about the checklist I made, we met last week and now everybody wants the checklist. Yay. So that's something I created, and I wanted to help everybody. So now it's something easier for everybody to know what to do.

Aside from these two instances, participants did not mention collaborating with other educators or schools in their district. Juliette explained that they were told to implement this framework with little to no guidance from the district:

Going into something without knowing the answers is really uncomfortable. That was really hard for me, feeling like the district was going to tell me what it was that we were going to be doing exactly and what it was gonna look like. I spent a lot of my own time trying to figure that out. I feel like a lot of us have been doing that periodically as like taking our own time to figure out what is expected because it has not really been specifically put out there for us. So that's been a really big challenge.

Following cloudy expectations from the state on how to implement MTSS, Juliette, and other participants, were left to fend for themselves in search of their next steps – a clear lack of collaboration.

Kristie, the MTSS Specialist at the New England State Department of Education, talked about the current status of requirements set by the state for MTSS in schools:

So, there is a law and statute that requires [schools in] the state to at least show evidence of some kind of MTSS. In many cases that looks a lot more like an RTI or a very targeted kind of intervention system versus the whole school systemic support system that it's, that's intended to be.

Schools are supposed to implement an MTSS and prove that it exists in their school. However, there does not seem to be clear stipulations on what this must look like which leads to a lack of cohesion across a school that Kristie mentioned. While these requirements exist, there is not much the state can do to ensure schools are complying. Kristie went on:

[We are] a local control state. So, we can't monitor whether schools are complying or not. So, we operate under this premise that they are doing what they're supposed to be doing ... If schools are really out of compliance or are not like following compliance across multiple chapters or multiple rules, the commissioner can intervene.

Despite it being difficult for the state to hold schools accountable, participants felt that the support offered from the state is not adequate. Carly explained that there is optional training offered from the state, but it isn't helpful anymore because they "tend to find that we're more ahead of the curve than what they're providing."

Additionally, many of the resources provided by the state are out of date or out of service.

Juliette commented:

A lot of the stuff on the DOE site is still not active, so we can't necessarily do very much training through it. I think there's like an educational technician series and a few others, but a lot of the links are still not linked to anything. So, we've only had one collective training that was not put together by our principal or our administration.

As indicated by Juliette, most MTSS trainings have been put together by staff at her school, despite this framework being a push from the state. In addition to a lack of training and resources, participants felt like there was a lack of support from the state in the form of a formal foundational MTSS plan. Juliette expressed that there is a need for further clarification of many expectations from the state of the implementation process:

I think personally I feel like some kind of a foundational plan that pretty much outlines the state's expectation for how we are to roll this out and what we should focus on [would be helpful]. I mean, because they kind of give you a general sense that [implementation] is not going to be done in the first year. But then what would you like to see happen in this

first year? What should we be thinking of like in terms of the first year and the second year and the third year? I mean we do have a leadership team that is comprised of certain people, but who else should/what other roles should be part of this?

Since the state is asking schools to implement an MTSS, participants felt that there should have been a guide and expected timeline already in place to support these efforts. The state is not the first state to have this push for state-wide MTSS; however, participants felt that they might not have been prepared enough to move forward.

Instead, some expressed that state employees and other educators should be learning from other places that have been implementing MTSS for longer. As Sydney explained, “there's so many things out there that I'm not aware of that might be helpful to me ... Sometimes you learn a lot by going somewhere else.” Sophie, the Clinical Counselor at Belknap Elementary, shared Sydney's sentiment and turned the responsibility of providing this training to the state. Sophie inquired about the state's lack of action in building their MTSS toolbox:

Why aren't they just sending people to go learn what other places are doing? It doesn't mean that we won't think of great new ideas. It just means that it would be at least a place to start and build upon rather than building from scratch... I think more out of state trainings would be lovely because sometimes I feel like we are trying to recreate the wheel.

There are other states that have been working with MTSS for years.

According to participants, the state may be behind in providing adequate preparation opportunities for schools that are implementing, thus teachers are having to support themselves and each other without much guidance.

## **Teachers: Buying in and Figuring Out**

Educators in schools are the backbone of the MTSS framework. Without Gen Ed teachers, interventionists, EdTechs, and coaches there would be no tiered system of support. Thus, it is integral to investigate what helps educators succeed in implementing MTSS. While some were skeptical of the “new buzzword” at first, most participants believed in the system, especially after seeing successes in their students. Seeing this success only motivated participants to keep trying to improve their MTSS, even in times when they felt unsupported. Room for improvement still exists in the realm of providing adequate support for teachers in terms of physical manpower, training, and guidance.

### ***An Understanding of MTSS***

Understanding a framework the way it is intended to be understood is integral to effective implementation. Kristie, whose job is dedicated to helping others understand and implement the MTSS framework, explained how schools usually have the necessary tools to implement at the beginning:

What I like about a true form MTSS is that maybe 8 and a half times out of 10 most schools already have in place everything that they need to be able to do a really well functioning MTSS. They may just need to reorganize some of it or make changes here and there to some of it.

Even if they do not realize it, any school is able to apply this framework; however, they must understand what it really means to do so. The idea that implementing MTSS just needs a restructuring of preexisting resources was also reflected by Principal Sonia:

RTI and PBIS are subsets of MTSS so it's not something new, it's just how we look at things to make it more systemic and long lasting and not just the new wave, the new ABC acronym that we're gonna focus on.

For some, MTSS is just another acronym for RTI. However, understanding the difference between these approaches is an important step to implementing them as they were intended. In agreement with Kristie and Sonia, Juliette also explained how she understood the framework:

I feel like at the beginning MTSS feels it's such a big change. But it's not necessarily a big change. A lot of times you just don't realize that there's a lot of things that you're already doing, and you just haven't perceived them in that way. So maybe it's just not nearly as overwhelming and is a lot more hopeful than it initially might seem.

As time went on, Juliette said she felt more hopeful the more she understood the way MTSS fit into their existing support network.

In describing what success in MTSS implementation looked like to her, Sydney, who works primarily with students in tier three, said:

Success in MTSS looks like kids smiling, kids making growth and still making growth if they leave us, and less kids going to special ed and less kids going to tier three. So, if you have the triangle and it's tier three, tier two, tier one... I'm gonna have more kids in tier one and then two and then three. So, we're flipping the triangle.

Many participants gave similar answers about academic growth, sending less students to special education, and having the most students meeting goals in tier one. Reducing special education referrals and supporting students before they reach a special education threshold is a goal of an effective MTSS.



A common misconception is that special education is an MTSS. However, as Principal Carly explained, special education is a separate entity: “That discussion of special education comes up in some meetings ... that involves a whole different world. It's a different process that we do not include in the RTI process.” An understanding that special education is not the same thing as MTSS was also reflected in Principal Carly’s staff at Rockson, like Sydney:

I am providing intense instruction to students that are well below grade level. So, I've tried to close the achievement gap to get them closer to grade level and not further behind. So, we're kind of like the step you go to right before special education. We're trying to not have as many kids referred. I think that was an issue before so many kids were referred for special education that we needed to have a step in between.

Firsthand, Sydney saw that students were able to avoid special education with smaller, more intense group interventions in tier two, which is one goal of the framework.

Principal Sonia commented on the way the new MTSS approach allows them to look at data from all students in order to better serve them:

We used to be a targeted school where ... they had to fail before they could get support. So, we're school-wide, we don't necessarily have to have that threshold anymore. We just look at the data and say, ‘okay, where are students at?’ And we're trying to provide like, here's like the classroom level, here's the interventionist level.

Using and reacting to real-time data is an important aspect of an MTSS. Grasping the importance of data to the MTSS framework was also emphasized by Kristie:

I would define success in MTSS implementation by taking into consideration overall student growth over time. Consistency in problem solving and a data rich environment ...

I don't know that we have enough educators that actually know how to dig into the data without over complicating it.

This idea of overcomplicating data is out of the scope of this study, as I was not able to conduct observations of RTI or data team meetings. However, some participants indicated that they understood the necessary steps to use data effectively.

Principal Carly explained how Rockson uses data to determine whether a student needs extra support, or a general education teacher needs to change their class-wide approach:

We absolutely need to have triangulation of data to consider what students are needing. We are working this year on really homing in on tier one to make sure that that is happening and make sure those high yield instructional strategies are incorporated into the classroom. The behavior management and kind of the culture and, and the positivity within the classroom that's all established before we're looking at providing those tier two interventions. Because if they're missing that high yield instructional strategy, then ... It's the teacher who's needing to adjust their practice to really make sure that they're doing what they need to do to ensure learning.

Carly looped in an important aspect of MTSS: behavior. MTSS is not only about academic growth, and it is important to understand that fact in order to implement. Carly also alluded to how timely and continuous data is able to indicate if many students in a class are struggling with a specific topic. Using this data to determine whether it is an individual student intervention or a class wide intervention is integral to success. Participants from both schools seemed to have a clear understanding of what they were implementing. They also understood *why* they were using this framework.

*In MTSS We Trust*

Believing in the system may have impacted Rockson and Belknap's success in implementing MTSS. Most participants from both schools expressed their positive outlook on MTSS; however, it was not always the case. In my interview with Kristie, I asked her what she knew about the two schools she suggested for this study. She explained that the DOE conducted an MTSS pilot in all four of the elementary schools in Belknap's district. In Kristie's eyes, Belknap was the most resistant of the four schools to this new approach:

They didn't want to come to these meetings, they didn't want anything to do with it. They thought most of what we were saying was completely bogus and wasn't gonna work ... Even though they were pushing back, they were still applying it and it was working for them. And it was just amazing to see how their resistance, but also their perseverance were able to come together to show success for that school.

This character arc is one of the reasons Kristie suggested Belknap for this study, as many schools struggle with similar issues.

These same sentiments of resistance were expressed by participants from Belknap as well. Sophie explained that it can be difficult to get educators on board with a new initiative from the top down because many of them do not seem to stick:

I think some teachers are really excited about something new and then others are kind of like, 'oh, great, another thing that's new that we don't know much about,' may or may not be dropped off in the next couple years. So, sometimes it can be hard to get people on board.

Despite this, Sophie went on to explain she did not see a whole lot of resistance on her end when they began MTSS. Juliette shared a similar perspective to that of Kristie about the way educators at Belknap have embraced the framework despite a rocky start:

I think like our second year attacking this, the response has been great. I work with a great bunch of teachers. They want to do their best for students and all students. And so, I think everybody has pretty much jumped on board and is super open to trying things differently. So, I think the response has been really great after that first year. The first year was just really confusing, I think, for everybody.

The “confusing” first year was due to a lack of communication and educator support from the state, as discussed later.

Once teachers realized that interventionists were there to support them, they began to see how MTSS was there to support them as educators too, as explained by Principal Carly:

The fact that the specialists took a lot off their plates as far as creating the plans themselves, doing all the progress monitoring, deciding on the goals and the interventions and holding the meetings so that tier three was really completely off everyone's plates, that was a big part of [getting staff to buy-in].

Support from interventionists for teachers was also expressed by Sophie at Belknap:

I think once staff saw how much more support they were getting, especially from the interventionist, and started seeing more success with kids, um, in terms of their academics or their needs, [buy-in] started to shift a little bit.

As more time went on for both schools, the more participants believed in the system they were implementing.

Being able to “support all students” with the MTSS framework was a recurring sentiment from many participants. Ally explained that the original response from staff when they switched to the MTSS model at Belknap was positive:

I think overall, they were optimistic because I think that they felt like it was going to help all students, not just identified students, especially having that intervention block. So, it's been a great opportunity during the intervention block to not just intervene with students who are struggling, but also to actually enrich those who need it.

Here, Ally alludes to the idea of gifted education as a part of an effective MTSS. Principal Sonia also expressed her appreciation of the master schedule and the intervention blocks:

As we build our intervention schedule and it's chock full of supporting students, I definitely like this process much better than the targeted one. Because I feel like we are catching more kids in our umbrella versus just like the small scope of them ... Then also as teachers are, are making those little shifts with their thinking in how we are providing those supports.

The intervention blocks have given teachers the opportunity to reach more students, which has convinced teachers that his framework is worth implementing.

Before MTSS, students were only able to access extra supports if they scored a certain level. Sophie explained that she considers MTSS as all students now have access to title one because students no longer need to “qualify” to get extra support, so “having just immediate access in larger groups has been really helpful as well.” Sophie expressed her appreciation for the framework and how it has allowed her school to roll out more tier one interventions:

I think the biggest change that we've had in utilizing the MTSS model is less focus on RTI and supporting teachers in doing whole group intervention rather than specific few kids or

pulling out one kid here or there to teach them. We like that approach of it's not gonna hurt the rest of the kids, why not push it out to the whole, the whole class.

This universal instruction approach is at the core of an effective MTSS, and it's especially helpful when addressing grade level learning loss due to something like a global pandemic. Sophie explained that they have started to see successes reflected in the data after using this approach to address setbacks due to COVID-19.

Juliette explained that grades K-2 were heavily hit by the pandemic, and they were concerned they were too far behind to catch up to grade level. In utilizing the MTSS framework, Juliette expressed how they approached the issue of learning loss due to COVID:

Since switching to the schoolwide piece and utilizing the MTSS framework, we've looked at data very differently. Instead of going on an individual basis in pulling kids ... now we're front loading and providing resources to whichever grade levels demonstrate the greatest need.

While Belknap's MTSS implementation process also took a hit during the pandemic, they were able to use the framework to address learning loss.

Staff have expressed their faith in this framework and are starting to notice more success. Though she acknowledged the problematic nature of standardized testing, Juliette discussed how seeing results of student growth in assessment data has reaffirmed her commitment to this process:

It was very affirming when we had so many of our students make such tremendous progress. We had students moving from the first percentile to the 40th percentile over the course of a year, which is amazing to essentially move from what we would've considered a tier three, to being back at tier one, because we've put in such extensive interventions with them.

Seeing success has given staff a reason to keep using and improving their system of support. Principal Sonia explained how they are receiving the results they were hoping for at Belknap:

Each kid has their own growth target. And so that's what we looked at ... So, we were pretty proud that with some of these intervention changes that we made last year, a lot of our kids were meeting their growth target. Maybe they weren't meeting grade level expectations according to the [state test], but if they had a specific growth target, they met it and that's what you want with this.

Academics and behavior are linked. Sydney attributed much of the improvement in academics to MTSS and though it has simultaneously improved behavior problems at Rockson Elementary:

I find that the data has been getting better each year. So, on the standardized exams, you're seeing more progress in it, which is wonderful. And even the whole school's reading levels, you're seeing progress with it. And I really think it's because of MTSS because you're pinpointing that instruction and you're giving the child what they specifically need.

Behaviors have also decreased, decreasing partly because of academics.

Because students are understanding the academic material, there have been fewer behavioral referrals and students seem happier overall.

Improvements in behavior have been rewarding for participants at both schools. Belknap started utilizing morning meetings, a time in which students are able to communicate feelings and check in with their peers and teacher. Sophie discussed how it has been great to see students engaging in these meetings and has noticed less behavior issues rising up later in the day:

Just seeing kids being able to talk and get things off their chest early on so it's not pent up and coming out as a behavior later on has been really helpful. I think we have a lot of kids that don't get the most attention outside of school, and they're really looking to fill their

cup when they're here. And I just feel like we're filling it a little bit more on a school-wide front.

Understanding the reasons for addressing behavior in addition to academics has helped staff justify their commitment to this process. These moments remind educators why they are doing this.

Principal Carly emphasized the importance of sharing success from different parts of school with the rest of staff. In a presentation showing real examples of behavioral progress at Rockson, Principal Carly lit a spark in her staff:

The wider population of teachers and staff members here had no idea what [the behavior program] was doing. And after they saw that, then they saw the change. Really sharing information with staff is huge... because they all realize, holy cow, this is awesome.

These wider conversations of student achievement and growth have given staff a glimpse into why they are implementing this framework.

Maddison, a second-grade teacher at Rockson, thought her efforts to address behavior in her own classroom have been rewarding:

Definitely the behavior piece [has been successful]. In my own classroom, yes [I have seen progress] ... I think it's one of those things where it has to be the early intervention, get them all while they're young so that they have the skills and the strategies to cope with their behaviors.

It can be difficult to approach behavioral interventions as a Gen Ed teacher because, as Maddison explained, "they can't teach you this in college." It comes with experience. Thus, seeing these successes and acknowledging them is an important step in reminding educators they are making a difference and what they are doing is working. Most participants, aside from Maddison who did



not seem to think MTSS at Rockson was successful due to the 12-week intervention cycle, seemed to have “bought-in” to the MTSS framework in a way that has allowed them to see results.

These moments of success are what have motivated participants to keep using the framework. As Ally explained:

[Student] successes are our successes and when we have our students who are not doing well and all of a sudden, they turn it around, it just makes you feel like you're doing something that matters. I think that it boosts your confidence a little bit too in the process and that's really helpful ... So, it then reaffirms to you, what we're doing matters.

Ally indicated that months can be demoralizing with one hit after another, until you reach those breakthroughs with students, and it all becomes worth it. Smaller moments are also motivating. Principal Carly mentioned that she appreciates little interactions that prove their interventions are working:

The best parts of this are kiddos who walk into my office and have something to show or share with me, whether it's a piece of work, whether it's that they earned three stickers for being safe, respectful, responsible this morning, or they were able for the first time to tell on the mood meter what they were feeling and use a strategy to help regulate themselves or co-regulate with an adult. It's really about the day-to-day things that invigorate that this is working and we gotta keep going.

Small moments go a long way in reminding teachers why they do what they do. Being an educator is a difficult and often thankless task, and both schools have found motivation in sharing examples of success.

### *Obstacles for Teacher Success*

The teachers at Rockson and Belknap Elementary felt empowered to keep utilizing the MTSS framework; however, they expressed some dissatisfaction with the amount of support to which they have access. In this context, support means staff who are there to support their work and other resources available to help them implement, such as training, guides, data organization systems, and time.

Nationwide, a teacher and substitute teacher shortage has exacerbated many of the challenges with the occupation. Principal Sonia mentioned she has seen a lot of “staff burnout,” and Maddison explained that because of the staff shortage, “the kids just aren't getting seen.” While Ally expressed they do not have a lot of staff turnaround at Belknap, Principal Sonia discussed the struggles with filling open positions:

We need more bodies to work with these kids in small groups... I mean, but then again, the other problem to that equation is that you don't have people wanting to fill those positions. I have three EdTech openings right now, and they've been open since the start of school. So even if you have the positions, you don't have the people to fill them.

Sonia expressed that although she would like to put more money designated for training toward staffing, there is no one to take these jobs. Sophie shared a very similar sentiment:

I think it's been nice having some funding to support our training needs... I wish we had just more ability to use our resources for more people. It's a hard world out there right now just hiring people to support schools. But I feel like sometimes we're lacking in the manpower of what would be the best for our kids.

At the end of the day, the teachers do what they do for their students; however, with burnout and capacity issues, participants expressed their struggle to support students as much as they want to.

Because of the substitute shortage, participants from Rockson explained that EdTechs are often removed from their instruction and used to fill in for teachers. Sydney expressed her frustration with this system:

EdTechs are pulled all the time [to sub]. So that means that they're not providing instruction ... So, then we lose instruction for a day and then it becomes another day. And that's really the biggest challenge is that sub shortage and not being able to service our kids every day. EdTechs usually provide tier two support but are not able to if they are covering for an absent teacher. They are available "few and far between," Maddison said.

Participants in the gifted and special education departments both expressed a need for more staff in their area. Maggie explained:

One of the downfalls that we kind of have seen, which actually just happened, we were notified that there's a chance that we're, we could potentially be getting five referrals. So, for the two of us [who handle special education], that's a lot. With this cycling, we kind of are always thinking, it's the end of the cycle, so how many kids are we gonna get referred?

Whereas before it kind of was more sporadic. It wasn't all at once.

With the new cycle process embedded in an MTSS, special education referrals often come all at once, which leave special education teachers feeling overwhelmed at the end of a cycle. In a similar vein, Lisa discussed how there are just as many GT students as there are students in tier three, yet they have far less staff to support them:

Theoretically, if you are thinking about the bell curve, if you believe in this human construct of intellect, there's just as many GT as there are special ed kids in those extreme extremities at the end of the curve. So, we need to devote just as many people or tier three

specialists ... We've got three of us [GT educators] for seven schools. Some schools have two or more tier three specialists alone.

Multiple participants expressed how GT has fallen by the wayside in terms of the way it fits into the MTSS framework (more on this later), and staffing is a huge obstacle for Rockson at the moment.

Time to plan interventions, run them, log and look at data, write reports, and receive professional development seemed to be a challenge for many participants. Principal Carly expressed the need for an in-house specialized intervention coach at Rockson who would be able to oversee much of the intervention processes:

There's just not enough of me to do all of that. So, having someone to really oversee it, number one. But I would like to do more with it that I [currently] can't do. I would love to be in the classroom with the teacher, showing them how to provide that tier two and showing them how to do the progress monitoring. So, having that one person at our school to constantly be supporting teachers with how to do it would be huge.

As a Principal, Carly must oversee and support her own teachers in their MTSS processes; however, she needs someone to support her too.

At Rockson, despite the intervention block schedule, they “have pushed support into the classrooms for writing because there's not enough time in the day or enough bodies to do writing pullout support,” Maggie explained. Ally also expressed that time has been an obstacle at Belknap:

There's no time ... Unless we start taking things off plates, there's not really a way that we can really fix that. But the time it takes to prepare for the meetings, the time it takes to put the interventions into place, the time it takes to play with the photocopier when it doesn't want to spit out your copies, all of that stuff just adds up.

Time is not the only obstacle for implementing MTSS, though the time it takes to learn and implement something new is significant. While Principal Carly explained that training should be “established for the whole staff, not just the folks who are running that intervention,” she also mentioned that staff have complained about having too much training and not enough time to do what they need to do.

There seemed to be adequate funds for training at both Rockson and Belknap; however, participants held conflicting views about whether the training they were receiving was adequate. At Rockson, Principal Carly said her staff was getting MTSS academics training monthly and behavior training 2-3 times a year. However, Maddison claimed to not receive any training on MTSS in her time at Rockson. Sydney mentioned that their RTI coaches have provided some training:

So, Response to Learning [RTI] coaches, they provide the training. So, they kind of oversee all of the specialists. They are our go-to person... Then sometimes we'll have trainers come into the district and I know the literacy coach of the district has trained teachers.

Summer seemed to be an optimal time to get training for both schools, though specific training on MTSS seemed to be lacking. Sydney explained:

We definitely do [training] every summer before school starts. If something has changed or we have new programs, we'll be trained then, but I would say that's about it. Unless something new happens in the middle of the year.

Kristie did a presentation with Belknap that they were able to work on with their leadership team during the summer. Juliette remembered: “We had one [training] collectively through the DOE that first summer after we first learned about [MTSS] and I don't believe very many people across the district participated.”

Sophie seemed to think more trainings would be helpful, especially from states that have been working with MTSS for a while:

I think just more like broader expert trainings [would be helpful], preferably from places that have been doing this for years ... we are, we're kind of trying to replicate [something from a more experienced area] a couple times a month the school either started later or was let out early and those teachers would have like that collaborative intervention planning time.

Teachers need to be given time to learn about their process and work with each other on how to improve it for their school. Training, while it takes up time, may help ease the burden of implementation.

### **Lessons Learned: Never Ending Implementation**

After implementing a school-wide framework like MTSS, it is likely that educators pick up some lessons along the way. In addition to thinking about what worked well in their process, participants also reflected on what could have gone better. The lack of communication about the framework and implementation from those in positions of power was a common frustration. Looking forward, participants want to focus on improving the way their GT programs fit within their MTSS and how they can make their MTSS frameworks more efficient.

### ***Communication From The Top Down***

Many participants expressed their frustration with the lack of communication during the implementation process. Many of the teachers felt like MTSS was forced onto them with little to no warning. Juliette remembered what it was like at the beginning stages of implementation:

I would have to say from the administrative place, they really didn't provide a lot of heads up to it. It was kind of just like thrown out there. Even people on the leadership team didn't

really understand what the change was. So, I would say for the first-year people were really confused and wondering when Title One services were starting and it was kind of a phrase that was thrown around, but people didn't realize at all those things were actually changing in the school.

According to Juliette, even those who were guiding the change at Belknap because of their roles in leadership, were not fully clear about what it all meant. Juliette said the push came from the SDOE with little to no guidance:

We were essentially put into this position; we didn't seek this out. Whereas some of our other schools [in the district] sought this out. We feel like we're evaluated on it, and it would be great from the DOE to know exactly what it is that they were looking for.

In Belknap's case, the schools in their district were not on the same page. Juliette went on to explain that the first year was especially confusing because each school in the district was doing something different.

At Rockson, who is a few years ahead of Belknap in this implementation process, Maddison expressed that she is still confused about why teachers are required to do specific things:

I'm still trying to understand the process and the reasoning behind all of it myself. I'm not even sure that my own principles understand it. It's just kind of been dictated to us ... It's almost like there is a lot of miscommunication. I think if you want any information, you have to go seek it out.

As discussed earlier, figuring things out for themselves was a common theme among participants. When expectations or explanations were not laid out for them by the state, they had to research and decipher their next steps. When they first began MTSS, educators were not fully informed on

the processes and their responsibilities. Ally expressed her annoyance about this time with an example:

I know that we were really frustrated because when we would hit that tier three, we need to now send these kids to a special education referral, and we would get kicked back all the time with, you don't have enough data, or you don't have enough of this, you don't have enough of that.

Understanding what is needed for a student to transition from each tier and then into special education is a critical aspect of an MTSS. Without a clearer guide, educators like Ally were left frustrated by the process.

A few participants from Rockson discussed how the implementation of MTSS was not received well because the initial timeline discussed was not followed. According to Principal Carly, the phases of Rockson's implementation process were planned out on paper:

After [a] year of really working with teachers, helping them understand, showing them research, and going through that implementation process, year two would begin with the four specialists. And the four EdTechs sounded great. Then year three would be just kind of tightening that up a little bit. That sounded great.

What was supposed to be a three-year transition plan, was actually expedited to only a few months, explained Principal Carly:

Come October, so not even two months in, that move started happening. So, in October, early November, our people found out they lost jobs, their jobs changed, they were moved. It was not pretty. So, then people really started feeling bitter toward the whole process and what it was.



While the end result and current state of Rockson's MTSS is positive, the initial dissatisfaction with the implementation process masked itself as dissatisfaction with the MTSS framework itself. Principal Carly explained that staff had an issue with the way it was implemented but had trouble separating that from what the framework was there to do. She acknowledged that the model was not the issue, but that there were missteps and miscommunications that left staff feeling frustrated in the name of MTSS.

At Belknap, there was also not a clear understanding of MTSS at the beginning of their implementation two years ago. Similar to Rockson, Juliette explained that there did not seem to be any phases of implementation at all:

A lot of things were done after the fact and a lot of teachers were really upset because they didn't know coming into it that they were gonna have all these expectations upon them. Additional assessments and things were kind of told to them last minute or sometimes after the fact. So, there were a lot of issues with the communication piece and there kind of wasn't really a phase at all.

Both schools faced difficulties in getting this framework off the ground due to a rushed and seemingly incomplete exploration phase but were still able to develop a successful framework. Looking back, participants from both schools recognized things they would have done or wish had been done differently.

### ***Efficiency From The Bottom Up***

Because an effective MTSS uses universal screeners and progress monitoring, there is quite a bit of paperwork and procedural aspects in place. These things can get tedious and time consuming for teachers who also have to worry about teaching a class all day. There are also many other aspects to the framework, such as types of interventions and RTI cycle timelines, that must

be considered daily. While some resources, like Belknap's google site which has folders for all MTSS documents and step-by-step directions for each form, exist to streamline processes for teachers, participants expressed that there could be more done to improve efficiency.

Multiple participants thought an MTSS guidebook would have greatly improved their initial implementation and would continue to inform their daily processes. Ally explained:

I would like something that we are able to refer to, whether it's example pieces for teachers on how you fill these forms out. Because sometimes I find that, especially when mentoring new teachers, they don't always know the information that we're looking for. So, just having a book of interventions and things that you can pull from.

Principal Sonia mentioned that she is currently working on a district handbook that would better outline teacher expectations:

So, we are working on putting together a district handbook. We don't have one yet. Our assistant superintendent is big on having systems and operations in place ... creating a blueprint for the schools to utilize. We don't have anything yet because this is kind of fresh out of the gate.

While a handbook like this would have been helpful prior to implementation, Sonia and other collaborators can incorporate what they have learned throughout their experience to help others.

To the knowledge of the participants, the state does have a blueprint like this currently. However, Kristie mentioned that she had worked on a guide earlier and are currently working on a more step-by-step guide:

So, there is one guide that was created in that very first spring of 2020, that was specifically made for tier three schools. There was some controversy because I wanted to make that document available to every school [in the state]. There was some tension between co-

authors about that being something that we did and ultimately, we wound up not using it across the state ... Right now, we are in the process of developing a districtwide implementation startup guide and a schoolwide implementation startup guide.

The state is behind other states in implementing MTSS and providing guides such as this. However, it is on their radar, and it is becoming a reality.

On a more specific scale, participants commented on the inefficiency of their current paperwork and data systems. One of Maddison's biggest challenges has been navigating the intricacies of data logging for each individual student:

We've got to type in all the plans and then we have to do the data point. And so that's been a thorn in our side ... Because it's on top of writing the plans, now we have to put them all into Synergy [data software]. Sometimes they save, sometimes they don't ... So, then you have to start from scratch again ... [Sometimes] I just didn't have time to put [data] in the computer ... I know you wanna hold us accountable too, but at the same time if you have six kids in a class on a tier two, that's a lot of data that you're having to do every two weeks.

It's just very time consuming.

Logging this data also has to be done in a timely manner in order to effectively react to it. However, these teachers have many other daily responsibilities, which make it difficult to find the time, especially with the process itself being inefficient. Sydney discovered how to attach documents to Synergy which has helped streamline her processes:

But then there's different programs that teachers use and if that's the case, then you could attach documents to Synergy, which is great. So, like the dyslexia screener, I'll attach it to the plan so everything is kind of in one place, even if it's not on that program.

Teachers have found these small ways to improve organization and efficiency based on their own experiences.

Similarly, paperwork after their weekly meetings can be tedious and sometimes confusing. Through experience, Ally suggested that it would be easier if paperwork was filled out in meetings with the group rather than after meetings individually:

It would be better if we, instead of looking at the notes that were taken and then looking at or trying to remember everything, if we just filled that document out together because we write it all down in one place and then I have to transfer it to this other place and turn in this other paper ... Why are we not streamlining this process?

Teachers who have been working in this framework have experience and ideas on how to improve it. Small changes, such as reducing the middle stage of paperwork, could go a long way in giving teachers back some time, a common barrier identified by participants.

In the interest of efficiency and effectiveness, both Maddison and Principal Carly both expressed their lack of approval of their 12-week RTI cycle system. Maddison, a newer member to this framework, expressed that 12 weeks is too long of a cycle and does not allow for the necessary flexibility for students between tiers:

Well, success would be a 6-week model and not a 12 ... Because it's three times a year, and when you have a kid that's struggling, they're supposed to do at least three rounds of a tier. So technically that's a whole school year. So, if they're not making progress, then this whole year has been lost. You wanted me to give this three cycles, but now the whole school year's gone, and they needed more. It just seems like a disservice to the kids ... But if we would look at the data every six weeks instead of every trimester, maybe we could get these kids more help and improve our test scores too, to give them what they need.

Principal Carly also acknowledged the long cycle but mentioned a bit of flexibility they are able to have within it:

It's a really long intervention cycle. So, we've had to do some mid-cycle shifting. And we put kids in whenever they're showing us they need to be put, it's more of the dismissal process that takes effect at the end of the cycle.

Based on these accounts, a reexamination of the cycle length could help improve their system to better fit the needs of evolving students.

### ***Incorporating Gifted and Talented***

MTSS is often discussed in terms of supporting students who may need specific interventions in order to perform at grade level. However, GT programs can also operate under this same framework. Lisa explained how GT fits within an effective MTSS:

It totally fits because the idea behind MTSS, as I understand it, is that all kids can learn, and all kids can accelerate their learning. So, if we want to accelerate students in tier three to reach grade level, we can do the same for kids at the upper level. It doesn't have to be acceleration either. It can be enriching or extending concepts at grade level too ... MTSS shouldn't be the pathway to be identified as gifted, [but] we can serve kids fluidly through the levels.

As Ally discussed earlier, the intervention blocks have allowed her to enrich certain students in addition to providing support. However, on a systematic level, Principal Carly mentioned that gifted students are not currently considered to be on tiered plans at Rockson: “we're not yet at that place where we have tier levels for those kiddos who are up here. We have GT but we don't quite have that tiered support. So that's a missing piece for us.” Part of that is due to the lack of personnel

available to run these supports, Lisa said. But it is also due to the school's goals and view of the framework.

Principal Carly mentioned that Rockson is beginning to focus more on growth at this point their implementation process which may allow them to provide special attention to high achievers:

This is the first year that, as a district, our goals have been focused on growth rather than achievement. So that's forcing us to say, 'Hey, what about those kids who are achieving and are they growing the way they need to be growing?' So that's definitely a place for us to look in our next steps.

Reflecting on how to help all students grow put gifted students back on Principal Carly's radar. Acknowledging room for improvement like this is a sign of success in itself, according to Kristie:

If a school has the capacity to know and be able to weave within the implementation stages, that's a sign of success ... I don't see any one stage ever coming to completion ... Because at any given point in time, you need to be able to adjust your stage of implementation based on the results that you're getting with your data.

Being able to investigate your own framework and processes and pinpoint what could be done differently in order to better serve all students is an important aspect of MTSS.

Like the students and tiers, schools should be flowing through the implementation stages continuously adjusting as they learn more. Through their implementation processes, Belknap and Rockson both identified communication, efficiency, and gifted education as points for improvement and have learned how to solve some of these problems along the way.

## Discussion

While my literature review focuses on ways students are supported by the MTSS framework, the results of this study center the educators responsible for implementing the framework. We must understand what inspires and frustrates teachers, what allows them to succeed, and what may be standing in their way. The themes presented in the narrative findings, such as collaboration, strong leadership, buy-in, and teacher support, all come together to underscore the essential components of successful school reform. The significance of these findings is discussed through the lens of Coburn's theory on scale of reforms, which refers to the capacity and reach of a specific reform, in this case a framework, MTSS. The theory states that depth, sustainability, spread, and ownership must be at the forefront in order to implement a reform effectively and "at scale" (Coburn, 2003). These four factors help explain why Rockson and Belknap Elementary Schools have been able to implement MTSS successfully, but they also shed light on a few things they could do to ensure that this change is long lasting.

### *Depth*

Scaling up a reform, whether it be school, district, or statewide, relies on the depth of the reform. Coburn (2003) explains that reforms must facilitate profound change that go beyond basic systems change of materials or organization. In the context of MTSS, implementing the framework must not only change classroom structure but the overall understanding of why supporting students in this new way is beneficial for all. A culture and mindset shift in which teachers' perceptions of their pedagogical approaches change in response to the framework is a necessary and deep change that must occur to ensure success.

Most of the participants from Belknap and Rockson seemed to have a comprehensive understanding of how MTSS works and why it is important. While some participants referred to

past experiences at previous schools at which their approach to teaching was different, it did not seem to stand in the way of them fully buying into the new framework. This change in beliefs reflects the depth with which MTSS is being implemented at these schools. Marlowe (2021) also illustrates the significance of a school's culture that emphasizes the idea that all students can succeed with the right support, the very idea on which MTSS is based. By understanding this underlying idea of success for all students and applying the interventions, progress monitoring, and universal screening, these educators are not only changing their approach on the surface, but on a deeper level as well that has allowed them to implement MTSS intentionally and successfully.

As Coburn suggests, the pedagogical principles by which these educators teach have been influenced by the framework. My research focused less on what exact materials teachers were using for this framework and more on their personal understandings of it. Despite some moments of frustration with the implementation process and lack of initial communication, most participants evidently believed in the new approach on a pedagogical level. The shift to the open-door collaborative classroom model and the awareness that tier one interventions are essential for student success are two examples of deeper pedagogical changes experienced by the participants.

Not only is this deeper understanding and commitment to the mission important but believing in the framework seems to have had a big impact on the success of their implementation. Multiple participants mentioned that seeing and celebrating their successes made them have more faith in their MTSS mission. This hope from teachers was also found to be true in a similar study that investigated educators' perceptions of MTSS more specifically (Greene, 2019).

### ***Sustainability***

As discussed previously, teachers face a multitude of challenges each day that go beyond difficulties of implementing a new framework. Staff turnover, the COVID-19 pandemic, chronic



absenteeism, and lack of time, to name a few mentioned by participants, are all external factors that have made implementing MTSS that much more difficult. These barriers, as explained in the literature review, have been identified by other studies as well (Mason et al., 2019). A successful implementation of a framework or reform must be sustainable despite challenges like these (Coburn, 2003). This means that the framework should not break down when a school is faced with a challenge like one of the aforementioned. A framework should be so far ingrained in the policies, processes, values, and staff of a school that it would be able to sustain if something were to go wrong.

The issue of sustainability is especially common with reforms enacted by “external developers,” like the SDOE (Coburn, 2003). Oftentimes, the initial implementation is accompanied by temporary resources, such as training or other assistance, provided by the party who has asked a school to change in some capacity (Coburn, 2003). In the context of this study, both schools received one-off training in the summers provided by the SDOE. The initial jumpstart of “what is MTSS” is helpful until it’s not. In other words, the small amount of training offered quickly became unhelpful when participants were ready to engage with professional development that was beyond what was being offered at the time. Additionally, it is important to acknowledge the capacity of the SDOE to provide a diverse array of professional development through time to all schools in the state. Thus, it may be common for resources offered at the beginning of the implementation process to dissipate as the limited amount of training and trainers have to move to other schools in need.

It is for these reasons that supporting teachers was identified as a key component to ensuring successful and sustainable implementation. Support for teachers comes in many shapes

and forms. Coburn identifies four mechanisms (p. 8) of support for teachers to improve sustainability of implementation, three of which were addressed by participants in some capacity:

***A Supportive Professional Community***

Participants found the most support from each other. Their ability to rely on each other for insight and manpower was a common sentiment shared by participants. This community of mutual support can empower teachers and provide them with new knowledge that will help them better serve their students. At both schools, all participants shared these same values and the relationships between participants seemed to have had a huge impact on their ability to implement MTSS. This shared vision cannot be forced upon staff, but rather formed through trust building and opportunities for educators to share their voices (McLeskey & Waldron, 2015). They learn from each other, rely on the expertise of one another, and take comfort in knowing that they are there for each other. Because of the nature of the MTSS framework, which requires an “all hands on deck” attitude, the seemingly intentional staff community at both schools is a significant factor for their success. This support network ensures that staff are developing a deeper understanding of the framework, holding each other accountable for implementation, and providing the most productive environment for staff, thus making the reform more sustainable long term.

While some participants commented on how full their plates were, others discussed ways in which the framework has made them feel more supported. For example, interventionists are able to take on some of the responsibilities previously had by classroom teachers. This was also explored in Greene (2019) which discussed how reducing teacher fatigue can make MTSS more sustainable. The MTSS teams, as explained by participants, have allowed them to rely on and work with each other in new ways. Teams, too, have been found to make teachers feel more supported in their work (Greene, 2019).

Because of high turnover rates in the education sector, it is all the more essential for seasoned teachers to continue building their knowledge and experience to ensure the framework is sustainable after others leave (Coburn, 2003). Teacher experience can correlate to better student outcomes (Nye et al., 2004); however, in this study, the experience level (measured in years teaching/years at this school) did not seem to impact the results. Newer and more experienced teachers both provided similar responses. This could be because most of the participants have had the same experiences with MTSS at this specific school. Since MTSS presented in this way is a newer framework and most participants have been at their school since the exploration phase, it makes sense that they all have a similar amount of experience and knowledge about it. There are limitations to this finding, as teacher experience could be measured in much more nuanced ways other than years in the profession. For example, experience could be measured based on years spent working on the MTSS framework specifically or perhaps determined based on the amount of and types of educational degrees a teacher has.

### ***Knowledgeable and Supportive School Leadership***

With any productive team, there needs to be someone leading the charge who knows how to best navigate a school's culture and existing processes. These supportive staff communities seem to be spearheaded by the principals in this study. Principals Carly and Sonia make it a priority to listen to staff and provide spaces for them to ask questions or seek support. Additionally, they both want to see their staff take on leadership roles within their schools and provide opportunities for this experience. Leadership at a school must be accessible and knowledgeable in order to best help support teachers (Blase, 1987). At both Belknap and Rockson, the principals worked to understand the framework, provide professional development, and opportunities for staff to provide input.

Leadership like this is how good staff are able to stay at a school for a long time, even when conditions of an occupation, like teaching, are difficult. Principals who support new teachers, are aware of issues their teachers are facing, and promote professional growth for all staff have been found to keep staff for longer periods of time (Brown & Wynn, 2007). Additionally, increased teacher autonomy, as provided by this leadership, has been found to improve job satisfaction and teacher retention rates (Worth & Van den Brande, 2020). As Ally explained, if it weren't for Principal Sonia's leadership, there would probably be a lot more staff turnover at Belknap. A revolving door of educators at a school would significantly harm the sustainability of the framework. While a truly sustainable reform should ideally be able to withstand staff turnover, realistically, it can be quite difficult to sustain a model or even productive school dynamic if the staff keeps changing. Thus, the leadership of a school must be strong to mitigate as much turnover as possible.

### ***Connections With Other Schools***

While a few participants discussed their collaboration with educators from other schools nearby to create different MTSS resources, it did not seem to be a huge aspect of their implementation process. Room for improvement exists in this realm at no fault of Belknap or Rockson. Because other schools were at different stages of the MTSS implementation process, if engaged in the process at all, it made it difficult for educators to collaborate. However, more of this type of collaboration could bring schools in a district to the same page, which would continue to enhance district collaboration in other areas.

Like intra school collaboration, collaboration between schools would help educators share best practices and learn from each other (Winn & Blanton, 2005). Many times, teachers will face a problem that another teacher has already faced. Anticipating these needs and working together

between schools would eliminate the time it would take to find new interventions or answers to these problems. The lack of unification around implementing MTSS across the state may be a source of unsustainability. Despite MTSS being an initiative to come from the SDOE, they do not have the power nor the capacity to ensure universal implementation. Thus, it is difficult for schools to collaborate with each other even though it could greatly improve their ability to ensure success for all students.

### *Spread*

Spread refers to the ability of a framework, including new pedagogical principles and values, to expand to new classrooms, schools, or districts (Coburn, 2003). Similar to depth, the idea of spread also aims to describe how a framework should eventually become so ingrained that teachers will begin to refer to and integrate the framework in all activities even when they do not directly relate. The framework would essentially be adopted into the school's underlying culture and routines. At the school level, this could look like integrating clear data monitoring expectations, providing consistent training on MTSS practices, and ensuring all systems are there to support every student regardless of performance. On a classroom level, teachers would integrate strategies from the MTSS framework, such as modeling good behavior and classroom expectations, in addition to providing tiered support.

It is the responsibility of the state and then the district, especially in a local control state like this one, to ensure that all schools in an area have the necessary information to implement a framework with adequate spread. Additionally, it is important that they develop strong, knowledgeable leaders at each school who can inform the practices and principles (Coburn, 2003). No one from the wider school districts were interviewed for this study, aside from Kristie from the SDOE. Thus, it is difficult to determine whether or not this is happening. However, based on the

knowledge that both schools do not collaborate much with others in the district and there is only one MTSS specialist at the SDOE, while other states have whole teams dedicated to MTSS, it may be safe to assume that this aspect of spread is not being adequately addressed.

### **Ownership**

Because a reform, or initial push for a framework, often comes from an external party, like the SDOE, there must be a point at which those responsible for actually implementing it, take ownership of the framework (Coburn, 2003). While decision makers at the district or state levels may have the knowledge and power to implement changes, it is the educators on the ground who understand their students and resources who are responsible for effecting the framework. There must be a shift in authority to those who are closest to students and leading the charge in the classroom because they are the ones who are really able to “sustain, spread, and deepen” the framework (Coburn, 2003, p. 7).

Coburn argues that professional development around the reform is integral to transferring ownership to teachers. Other studies have also emphasized the importance of professional development in regard to increasing knowledge and supporting systems change (e.g., Mason et al., 2019). Despite these findings, most participants could not pinpoint very many MTSS related training after the initial implementation stage. Despite the lack of professional development, participants seemed to be able to take ownership of this framework quite well. As mentioned previously, both principals provided opportunities for growth and leadership for their teachers. Participants explained moments in which they were able to use their voice and provide input on the MTSS processes. Feeling like they have a say or any influence over the process was a very important part of their reasoning for believing in the framework. While their influence was slim to

none when deciding whether MTSS was something they were going to undertake, their roles on the various MTSS teams helped shape their school-wide MTSS.

Educators in schools must have the power to make decisions and respond to the possible context-dependency of their school (Coburn, 2003). Once they have the knowledge and confidence, the external party should step back to allow the educators to take control, as they typically know what is best for their specific students. While Belknap and Rockson received some guidance from the state and the district, most of the power was already in the hands of the school leadership. This autonomy seemed to empower many teachers and frustrate others. While in general, increases in teacher autonomy have been found to increase empowerment (Pearson & Moomaw, 2005), perhaps, more specific guidance would have been appreciated by the school leaders and teachers who were more frustrated with the lack of structure. It is clear that the teachers have a lot of faith and trust in their school leaders, and less so in the external forces like the SDOE.

These school leaders have created conditions for teachers to take ownership over their framework by providing them positions on leadership teams, encouraging collaborations, and helping them overcome obstacles from outside forces. It is clear that the community within each school has empowered the staff to face this new challenge head on with an eagerness to do it in the best way possible. At the end of the day, these participants just want what is best for their students. It is clear that they are motivated to problem solve and improve their practices every day. Based on Coburn's theory, this mindset and drive to implement this framework to the best of their ability is one reason both of these schools have been able to see success thus far.

Other studies have found that data dashboards have made educators feel less overwhelmed by making large amounts of data very accessible (e.g., Greene, 2019). However, a few participants mentioned that their data dashboards are still a bit overwhelming and inefficient, despite all the

data being in one place. Participants had many ideas on how they could improve their overall MTSS system, including how they keep and log their data. Their thoughts on efficiency and communication could greatly improve their current experience in the implementation process. Many of the participants mentioned small things they have done to make their daily processes easier. Finding these ways to improve organization and efficiency can help, but perhaps there are easier methods that would not require teachers to make these adjustments. While the importance and presence of teacher autonomy was a main finding of this study, there is still room for these teachers to have further influence on the system.

### **Limitations**

It should be acknowledged that there are limitations due to the scope of this study. In terms of participants, only a few educators were interviewed at each school. Additionally, all participants were chosen by the school principals which could have skewed the results if they consciously or subconsciously only chose staff members who were eager and supportive of the MTSS framework. It is entirely possible that other educators in both schools may not be connecting with the framework at the same deep level that was shown in this study. Despite this limitation, enough participants showed signs of the deep implementation on their own.

It is difficult to study sustainability in this context without conducting a multi-year study. Thus, there are significant limitations in terms of determining if Belknap and Rockson show signs of sustainability in their MTSS frameworks. Each participant was only interviewed once. Thus, all the data collected is a snapshot of their experiences with implementation at that moment in time. Additionally, both schools are relatively new to MTSS and started implementing in the last few years. While that is still a great accomplishment, it is difficult to discern whether their framework is sustainable with both schools still early in the process. Despite these limitations, both schools



show promising signs, through their supportive communities and strong leadership, that their frameworks could be long lasting and effective.

It may still be too early in their implementation processes to determine whether Belknap or Rockson have successfully “spread” their MTSS within their schools. Again, this study only focused on one point in their first few years of implementation. However, both schools show signs that they are well on their way. While the difference between implementing a framework and increasing the spread of the framework is nuanced, it is one more factor of which to be conscious to ensure that the framework, and its ideals, are fully embedded into the everyday processes and principles of a classroom and school.

The depth, sustainability, spread, and ownership of a framework are interwoven concepts connected by the goal of successful implementation with fidelity. While it is difficult to measure fidelity in MTSS, working toward these four attributes is one way to stay as true as possible to the goals of the framework. However, some of these ideas conflict with this manicured idea of fidelity usually imposed by the state. For example, if educators have successfully taken ownership of the framework and feel confident making changes to their MTSS to best fit their current students, fidelity, as deemed by an external party, could be at risk. To that, I say there will not be one perfect framework that fits every school in every global context, as much as MTSS would like to claim that prize. At the end of the day, if the kids are learning and improving, the educators have succeeded even if not every detail of their MTSS is ironed out or by the book, though you may disagree. As expressed by participants, teachers know their students and what they need best, so they should be the ones to make decisions.

## Conclusion

In my year studying and working with MTSS, I learned the theoretical foundations of the framework and also discovered the more realistic applications of it. The real-world applications of MTSS do not always line up with the theory. There could be many factors that may prevent a school from implementing MTSS in its intended form, which is what makes implementation so difficult. While diverting from the authentic framework is risky, as the theory is based on research that shows this type of support can improve achievement for all students, there must also be flexibility within the framework that allows schools and educators to utilize it in ways that best fit their classrooms. If there is anything to take away from Belknap and Rockson, both of whom have “successfully” implemented MTSS thus far, it's that implementation does not have to be perfect to be effective. While one should try to stay true to the foundations and values of the framework, as they are there for a reason, there may be ways to stray slightly to better serve one's context.

Belknap and Rockson have shown that there are key factors that contribute to the success of implementation. Collaboration, strong leadership, buy-in to the framework, and teacher support are common themes among this and other case studies on effective MTSS implementation. However, there are also factors that could have improved their experiences and outcomes of implementation that may be able to help inform future schools considering MTSS.

Educators are asked to do so much and are extremely busy with the daily practices of taking care of their students, that oftentimes, they may not be able to consider the bigger picture. There are opportunities for growth and reevaluation to better improve Belknap and Rockson's systems of support. While some of these recommendations may seem simple or obvious, this study provides these schools with an outside perspective on what could be done to further enhance their MTSS. For these two schools, who seemed to be in similar stages of implementation, despite their

slight difference in time dedicated to the framework, there are a few recommendations that have arisen from the data:

1. Keep doing what you're doing
  - a. The strong teamwork, collaboration, and leadership have served Belknap and Rockson Elementary well. Principals Sonia and Carly support their staff well and their staff help and listen to each other regularly in order to figure out how to best serve each student. Staff share and communicate their successes, which inspires them to keep applying the framework. This inspiration and hope enact a positive feedback loop in which progress continues because of this inspiration and that progress further shows teachers that what they are doing is working, and what they are doing *is*, in fact, working.
2. Demand more from the state
  - a. Universal goals, definitions, and guidelines, as suggested by participants, should also be established by the state in order to improve outcomes (Dulaney & Hallam, 2013). If the SDOE really wants schools to implement MTSS, they should be providing schools with ongoing training and a step-by-step guide on how to implement this framework. While the SDOE should have systems and resources in place when setting an implementation mandate, it is important for schools to advocate for their needs when they are not being met. Staff must be knowledgeable about what they are implementing and should not have to figure out what everything means on their own. They should be supported in the long term, not just during exploration or initial implementation. While the principals have been a huge

source of support for teachers, who is supporting the principals? In order for these people to have the capacity to support others, they must be supported themselves.

- b. If the state is going to mandate a framework, it must be one that has been found to be successful. Many other states have been implementing MTSS for a lot longer than this state, thus more collaboration should take place among these states. An investigation of the current MTSS resources offered by the state was out of the scope of this study. It is entirely possible that more resources exist that the participants, and I, are not aware of. The ways in which the state does or does not provide resources in these instances was also out of the scope of this study. These are only recommendations based on the data presented in this study, and participants have made it clear that they need more.

### 3. Increase collaboration with the district

- a. The district could play a bigger role in supporting schools as suggested by Freeman and colleagues (2015), which states that MTSS must be sustained by district leadership with the implementation of training and consistent and reliable assistance. District leaders should provide schools with efficient models that allow educators to work with and communicate the data with others in the district.

### 4. Allow opportunities for change

- a. The first successful form of MTSS does not have to be the last. MTSS should change as staff and students change. What works one year may not work the next. With that being said, consistently listening to teachers is crucial. Teachers will have ideas on how to improve the systems, these ideas should be vocalized and acted upon. These changes include all of the ideas brought forth by participants, such as

improving efficiency of data logging or shortening the length of intervention cycles. It is my hope and recommendation that they share those same ideas with their school leadership if they have not already. Straying from the framework is possible, but it must be intentional. Staff must build knowledge to remain faithful to the framework as they make decisions over time. The core values of MTSS, as outlined in the introduction, must remain constant.

5. Reflect more on processes and progress

- a. It was also interesting that multiple participants expressed their appreciation to this study in their interviews because it required them to broadly examine their processes and progress in a way that they haven't in a while. Many said that the interviews reminded them of the good work they were doing and of aspects of their system they want to focus on more. Evidently, simply inquiring about their processes helped them reflect in meaningful ways too, illustrating the need for educators to constantly be discussing and asking questions about their processes.

6. Incorporate GT

- a. MTSS should be reaching all students. Theoretically, as one participant pointed out, there are just as many high achieving students as there are low achieving. Both schools expressed interest in integrating GT into their everyday MTSS rather than have it serve as a separate entity. Because both of their systems are in motion and seeing results, Belknap and Rockson should begin to think more about how to serve these high achieving students within an MTSS. In order to do this however, they may need more staff. Hiring and keeping staff is a major challenge in education. Even if more positions were created, whether it's more coaches, interventionists, or

GT specialists, there is no guarantee that they would be able to be filled. As Principal Sonia pointed out, they have been having trouble filling EdTech positions as it is. Perhaps, by increasing teacher autonomy, schools can more easily find qualified people for these positions.

Schools looking to start the process of MTSS implementation should use these schools as a model. Belknap and Rockson's team structure and mindset, strong leadership that prioritizes teacher voices, and routine of sharing MTSS success stories should inspire other schools to do the same. These schools have paved their own way with little guidance from the state or district. Hopefully their experience can help guide others.

The biggest lesson to learn from these schools is the importance of clear communication of the framework, implementation timeline, and expectations for all staff. The exploration phase is arguably the most important to ensure schools have a clear and uniform understanding and plan for their implementation process. Participants from both schools wished they had spent more time in this phase. While Belknap and Rockson overcame initial complications due to their exploration phase, or lack thereof, other schools can learn from their experiences by including more communication and teacher representation in this process from the beginning.

As discussed previously, there are many limitations with this study which warrant further research. While the small number of schools and staff that participated were the perfect size for the scope of this study and provided valuable findings, a larger study could look into more schools across a state or even the country to investigate what these are really ubiquitous. Additionally, a cross-state study could be beneficial to learn more about the role of the state in supporting MTSS implementation. Because MTSS implementation is a multi-year process, a more comprehensive study should span over the course of five or more years, in order to capture all phases of

implementation, though it never really ends, and to shed more light on how to determine whether a framework is sustainable or not. It could even include classroom or team meeting observations to capture significant parts of the process including the day-to-day interventions. While interviews provide valuable information on the beliefs and knowledge of the participants, observations and further investigation into physical materials used in the classroom may uncover more factors for success or possible barriers not considered in this study. Because MTSS is a school-wide framework this research may require multiple researchers to observe every aspect of the school, even just for one day.

Further research should be done on the differences in MTSS between rural and urban communities, communities of different socioeconomic statuses and racial background to further determine the context-dependency of the framework. Additionally, while this study did not originally focus on the extent to which the MTSS framework is embedded in the pedagogy and values of a school, this would be an important topic to further investigate in order to determine how schools can achieve depth and spread of a framework.

While there is still more to learn, there is also much to celebrate. Belknap and Rockson have overcome plenty of barriers and continue to provide quality education to their students. These schools are full of staff who care deeply about their work and are eager to make it better. While many have struggled to implement MTSS, this study shows that successful implementation does not have to be perfect and can be done. Hopefully, more schools will begin to understand the merits of the MTSS framework and begin the implementation journey. Perhaps, younger, growing readers will be able to discover the magic of *Harry Potter* or *Percy Jackson*, or whatever fourth graders are reading these days, with a little extra support and a little less intimidation.

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## Appendix

### Participant Interview Guides

#### SDOE MTSS Specialist

- What is your job title, and how long have you worked in this position?
- What educational degrees do you have?
- What, if any, previous experience with MTSS have you had before this position?
- How would you define success in implementing MTSS?
- At what point would you consider a school successful in implementing?
- What might determine success at each stage of the implementation process?
- What made you think of the schools you suggested for this project?
- How can a school's context change the way they implement MTSS?
  - How can context change what they may consider successful?
  - Does success look the same in all schools?
- What is the state's position on MTSS implementation?
- How does the state recognize success?
- What kind of support/training does the state offer to schools regarding MTSS?
  - Do you have to offer different things for different schools depending on needs in order to promote success?

#### School Participants:

#### General Questions

- What is your job title, and how long have you worked in this position?
- What educational degrees do you have?
- What, if any, previous experience with MTSS have you had before this position?
- What is your/your school's working definition of MTSS?
- What MTSS materials, such as blueprints/guides, do your schools have?
- What is your role in implementing MTSS?
- What 'say' or influence have you had on the implementation process?
- What MTSS teams does your school have?
  - How often do they meet?
  - What are their goals?
  - How do they communicate with each other and other teams?
- Who is responsible for providing the various tiers of support?
- What was the response from staff when you switched to the MTSS model?
- What did the different phases of implementation look like?
- What training have you or your staff undergone surrounding MTSS since starting?

- How often do you have PD/training?
  - Who provides this training?
- What resources have been provided to you to help with the implementation process?
  - Where do these resources come from?
  - What is missing? What else do you need?
- What forms of data do you collect to inform what supports are necessary for a student?
  - How do you collect this data?
  - How quickly do you react to/use this data?
  - Where do you store this data?
- What has been the response from families to this framework?
  - How are parents informed about their child's status/progress?
- What changes have you noticed in your school since implementing MTSS?
  - In student behavior, achievement, inclusion, progress
  - What other changes do you expect or hope to see in the near future?
- Why do you think your school/district has been successful in implementing MTSS?
  - Are there any particular factors that you think have been particularly influential to your success?
- What have been some of the biggest challenges of implementing MTSS?
  - How did you overcome them?
- Are there any individual moments that have reaffirmed your commitment to or skepticism of MTSS?
- What does success in MTSS look like to you?

Principal:

- What has been the history of MTSS at your school?
  - When did your school begin the implementation of MTSS?
  - Why did your school begin to implement MTSS?
- What has been the most helpful to getting buy-in from staff?

General Education Teacher:

- How do you determine when a student needs different support?
- How do students typically move between tiers?
- How/do you incorporate social, emotional learning/behavioral support?

Special Education Teacher:

- What are your current special education referral rates?
  - How are students identified?
- How does special education fit into your school's MTSS?

Gifted and Talented Teacher:

- How are students identified for GT?
- How does GT fit into your school's MTSS?

District/School MTSS Specialist:

- What has been the most helpful to getting buy-in from staff?

Debrief

Thank you for participating in this research study. I would like to ask you a few questions about the interviewing process.

- The focus of my study is to determine what factors allow for the successful implementation of MTSS at your school. Have any of your views changed about MTSS, yourself, others, and the world over the course of the interview process?
- What was your favorite part of the interview process? Your least favorite?
- Are there any questions you wish you hadn't been asked or were difficult for you to answer? If so, what questions were those and why?
- Are there any questions you answered previously that you wish to change the answer or elaborate on?
- Are there any questions you wish we had asked you and would like to answer now?
- Are there any questions you would like us to ask other participants?
- Is there anything more you want to share with me?
- Do you have any concerns or questions about the research project?