



Findings on the Implementation of Multi-Tiered Systems of Support (MTSS) Drawn from the Experiences of Six High Schools

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Purpose/Methodology

Multi-Tiered Systems of Support (MTSS) is a framework for schools to use in improving student academic, behavioral, and well-being outcomes through a layered continuum of interventions and evidence-based practices. MTSS models include methods for identifying students who need additional help to be successful, the thoughtful application of interventions and student support services with varying levels of intensity (Tier 1, 2, and 3) to meet students’ identified needs, and careful monitoring of the extent to which students are progressing.

As of 2024, nearly every state supports local education agencies (LEAs) and schools in implementing MTSS. By most accounts, the experiences of schools working to implement MTSS indicate that it is a complicated initiative that requires monitoring and adjusting over time based on a given school’s context (staffing, non-academic barriers to learning, etc.). Implementation has been particularly challenging for middle and high schools due to difficulties that include scheduling of and staffing for age-appropriate interventions and secondary teachers’ lack of expertise in teaching basic reading and math skills to students with gaps in those skills.

In 2022, the Region 6 Comprehensive Center (RC6) at the SERVE Center at the University of North Carolina at Greensboro worked with the South Carolina Department of Education (SCDE) to examine MTSS implementation through a series of focus groups across the state. Findings from these focus groups led the SCDE and RC6 to explore the unique challenges faced by secondary schools implementing MTSS and how schools can work to overcome them. [Implementing MTSS in Secondary Schools: Challenges and Strategies](#) (2023) outlines these main challenges and possible solutions from research and practice.

As a next step in exploring ways to improve MTSS implementation at the secondary level, the RC6 undertook an effort to better understand how schools take the framework of MTSS and put it into practice in their specific contexts. State education agency (SEA) and RC6 staff were asked to identify high schools several years into the MTSS implementation process and known to have MTSS efforts of note to share. Some high schools were identified when presenting at state or local conferences attended by SEA or RC6 staff. In coordination with SEA and LEA MTSS leaders, the RC6 contacted those schools to see if they were interested in sharing their implementation story and developed an interview protocol. Six high schools were interviewed during the 2022-23 academic year. The individual school MTSS implementation stories derived from these interviews can be found [on the RC6 website, along with other MTSS resources and RC6 publications](#). This document provides an overview of the themes found across the six high school stories and presents observations that may help SEAs, regional and local education agencies, and other stakeholders better understand and support MTSS implementation at the secondary level.

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As seen in Table 1, three of the six high schools had a high percentage of economically disadvantaged students (49%, 99%, 100%) and were smaller (400-1,100 students), while three had a low percentage of economically disadvantaged students (18%, 11%, and 7%) and were larger (1,700 or more students). Some similarities and differences in the implementation of MTSS across these high schools are described in the section that follows.

Table 1. Profiles of Six High Schools Interviewed in 2022-23

School	Location	Students ¹	Student Demographics (2021-22 Data)			
			% ED/FRL ²	% EL ³	% SWD ³	Grad Rate ³
High School A	Suburban, GA	1,732	7% ED	1%	9%	97%
High School B	Suburban, GA	1,799	11% ED	10%	15%	94%
High School C	Rural, SC	2,617	18% FRL	4%	15%	96%
High School D	Rural, SC	1,059	49% FRL	2%	15%	90%
High School E	Town, NC	458	99% FRL	1%	2%	96%
High School F	Rural, SC	561	100% FRL	7%	14%	91%

¹ Data obtained from <https://nces.ed.gov/ccd/schoolsearch/index.asp?Search>

² A measure of poverty. Some states report rates of students receiving free and reduced-price lunches (FRL) through the National School Lunch Program; others report the percentages of students who are directly certified as economically disadvantaged (ED). Directly certified students include those whose families receive SNAP or TANF benefits and students identified as homeless, unaccompanied youth, or foster or migrant youth. Data were obtained from the National Center for Education Statistics and reviewed and confirmed by the schools. <https://nces.ed.gov/ccd/schoolsearch/index.asp?Search>

³ ELL = English learners; SWD = Students With Disabilities. Data obtained from the schools interviewed.

MTSS Implementation Overview – Similarities and Differences

Catalysts, Starting Points, and Leadership

Typical catalysts for the initiation of school attention to an MTSS framework were state or district initiatives that required or promoted MTSS to improve student achievement, particularly for low-performing students. Most of the six high schools interviewed in 2023 described the initiation of their MTSS initiatives occurring between 2016 and 2020. Several described the COVID-19 pandemic and its impacts on students as an additional catalyst for improving student support between 2020-23.

The three larger, lower-poverty schools began their most recent work with MTSS by identifying key staff to lead their schools’ approaches. For example, in one suburban high school, the LEA hired a district MTSS coordinator in 2018, followed by a literacy intervention specialist in 2021 who was given “carte blanche” by the district to lead and build the high school’s Tier 2 and 3 literacy intervention structures. In a second suburban school, the district began its MTSS initiative by converting school-based dropout prevention coaches (one per high school) to MTSS leaders for their schools. The MTSS leader at this school implemented a reading comprehension intervention in all 9th- and 10th-grade English Language Arts (ELA) classes by providing professional development and modeling for the classroom teachers. A

third school began implementing MTSS in 2017, but the impacts of the COVID-19 pandemic on students prompted increased interest in better coordination of MTSS. One of the school's assistant principals was designated the school MTSS Coordinator, though all three take active roles in MTSS implementation.

The three smaller, higher-poverty schools took more of a whole-school approach to MTSS, led by school leadership teams. For example, one rural school recognized the need to provide time within the school day for all students to receive the support they needed. Led by the Assistant Principal of Instruction, this school's leadership team built upon district MTSS and personalized learning initiatives to begin MTSS implementation. In a second school, the MTSS initiative was led by a team of school administrators who established an intervention period (45 minutes, 4 days per week) during which all teachers provide intervention. The third high school, an Early College High School, acted in response to a district MTSS initiative that pushed schools to more clearly articulate how they were providing supports to students. The principal of the school approached MTSS as a "whole school concept" that was aligned with the philosophy of the Early College Model.

Types of Tiered Student Supports

Most of the schools described starting with an academic intervention focus, with some adding behavioral, attendance, and/or well-being supports along the way as they realized that students in need of academic intervention often also have other non-academic challenges. Academic Tier 2 and 3 intervention support focused on reading and math. One high school implemented the Get the Gist reading comprehension strategy in all 9th- and 10th-grade ELA classes and the ALEKS adaptive math program for Algebra I math support. Read 180 and Exact Path were also mentioned by one school each. In other schools, academic intervention seemed to be teacher-determined and based on a student's specific academic struggles in their class.



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Behavioral and student well-being supports were provided in different ways across the six high schools. One described a well-developed mentoring program including school staff as Check & Connect mentors and more than 50 mentors from the surrounding community. Another used its intervention block for PBIS lessons each Friday and had recently revamped its classroom management and PBIS incentive and consequence systems to better address student behaviors. A third recently began hosting a certified mental health counselor on campus to help support students' needs. All schools mentioned the importance of taking actions that helped them know their students and understand why they might be experiencing behavioral, attendance, mental health, or academic difficulties. Some were working to cultivate a school culture that encourages students to take an active role in their success by "doing the right things" and asking for help when needed.

Scheduling Academic Intervention

Finding time in the schedule for academic intervention was a critical piece of the MTSS puzzle for the six high schools and was accomplished in different ways.

Dedicated school-wide intervention time. Three schools dedicated time to student support during the school day, often in recognition that many of their students would not be able to access the support they needed if it took place outside of school hours. The amount of time set aside for support varied. One school developed a split lunch and intervention period of 50 minutes, with 25 minutes for teachers to provide extra support to their students four days per week. In another, a 45-minute period was dedicated, four days per week, to remediation or meeting time for school clubs, teams, and organizations. A third school set aside one hour of each 90-minute class period every Wednesday for teachers to provide individualized academic support to their students.

Intervention in core and/or elective classes. In some cases, instead of making changes in the master schedule, schools incorporated extra support into core classes or established an intervention class in which students could be placed as one of their electives. One school developed a reading intervention elective course for 9th graders who needed Tier 3 intervention. The intervention class was kept very small—around six or fewer students—and followed their regular ELA class for a total three-hour block of daily ELA instruction for these students. For 10th-12th grade students in need of reading support, the school leveraged a state Remedial Education Program to incorporate extra support into students’ regular ELA courses.

A second school implemented the Get the Gist reading comprehension strategy in all 9th- and 10th-grade ELA classes, with modeling and support for teachers using Get the Gist and small group instructional formats provided by the school’s reading interventionist. This school also used the ALEKS adaptive learning program for math intervention. Ninth-grade Algebra 1 teachers created assignments in ALEKS to help fill in gaps in students’ skills and used small groups during core instruction to reteach the math concepts students were working on in ALEKS.

The third school, a small early college high school, used a flipped classroom approach to learning that encouraged teachers to provide support to students during class time. Teachers offered additional academic support during tutorials before and after school and during lunch, as needed.

Staffing for Intervention

Two of the six high schools had dedicated interventionists. Both schools were fairly large and had low percentages of students from economically disadvantaged backgrounds. One, a suburban school, had an MTSS coordinator, a literacy intervention specialist, and a math intervention specialist who worked in push-in and pull-out settings with students who needed Tier 2 or 3 support. The other, a rural school, recently added a computer lab called the MTSS Lab where students could be provided with academic support. An academic interventionist and a certified teacher assistant supervise and assist students in



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this lab. Both schools with dedicated interventionists also provided Tier 2 academic support to students through their core classroom teachers.

The four schools without dedicated interventionists provided academic intervention solely through classroom teachers. In two schools, this support was accomplished during a dedicated intervention time. The two other schools expected classroom teachers to work extra support into their regular instructional time.

All six schools generally relied on non-instructional support staff—school counselors, school psychologists, and in some cases, licensed mental health counselors from outside the school—to help lead efforts to address students’ attendance, behavior, and well-being needs.

Improving Instruction and Intervention

Several schools stressed the importance of building classroom teachers’ skillsets for providing high-quality Tier 1 instruction and targeted intervention within the classroom.

Examples of school strategies are described below.

- In two schools, MTSS leaders and/or interventionists served as instructional leaders by strengthening classroom teachers’ skills in providing academic support to their students. In one, MTSS leaders modeled small group intervention in ELA and Algebra I classes and helped teachers integrate teaching strategies that provide extra support to students into core instruction. In another, skilled literacy and math interventionists supported classroom teachers in their work with struggling students by developing and maintaining instructional resources and assisting teachers with individualizing Tier 2 supports.
- One school provided teachers with weekly time for data analysis and collaborative planning based on student needs by reserving a 45-minute intervention block one day each week for teacher planning. The school reported that this additional planning time allowed teachers to have regular vertical and departmental conversations about how to help students in ways they never had before. School leaders were working to articulate a vision that goes beyond “teach, test, move on” and were instead encouraging teachers to check in with students along the way and work to ensure that every student has the opportunity to master content.



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Developing Staff Buy-In

Obtaining buy-in for initiatives such as MTSS is critical to their success and is associated with higher levels of implementation ([Grebing, Edmunds, & Arshavsky, 2023](#)). All of the schools interviewed recognized the importance of gaining staff buy-in for MTSS. They worked to achieve this in several ways:

- **Shared leadership.** Several schools described fostering a “whole team concept” for MTSS that intentionally included staff from across the school. One school invited staff who were resistant

to the MTSS initiative to take a leadership role by participating in its MTSS Committee. This school reported that some of these staff ultimately became the biggest champions for MTSS due to their participation in the committee. Another school reported that the many roles and diversity of viewpoints included in its MTSS meetings increased buy-in and helped staff better understand the types of support students needed and how to help them.

- **Transparency.** School leaders were intentional about being transparent with staff and engaging them in discussions about students’ perceived needs and ideas for improvements to MTSS implementation.
- **Gradual change.** Some schools reflected that implementing MTSS can seem overwhelming for school leaders and staff. They recommended that schools go slowly and take small steps toward their ultimate goals for MTSS. For example, one school “started small” by implementing strong intervention for all 9th graders in need, then expanding to 10th grade the following year.
- **Leveraging success.** One school reported that small-scale successes, such as the positive experiences of students and staff with a fledgling mentoring program, can help encourage more staff to become interested in and engaged in the effort, increasing buy-in over time.



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Data Collection and Use

The types of data used for screening and progress monitoring by the six schools varied, including course grades and credits, state exam scores, commercial reading and math assessments, attendance records, discipline incidents, and other early indicators of dropout risk. Course grades, attendance records, and discipline incidents were the most frequent data points schools mentioned monitoring. How schools managed data also varied. One school created “watch lists” for students who need or currently receive extra support. These “watch lists” included separate lists for seniors at risk of not graduating on time, students in the alternative school setting, winter graduates, and students experiencing grief and loss. In another school, interventionists reviewed screening data and monitored the progress of students identified for Tier 2 and Tier 3 services. A third school created a Data Room to reinforce for all faculty



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the importance of knowing the data not just for students in their classes, but also for the student body as a whole. The Data Room includes a magnet for every student to visually represent their progress or level of risk. Across all six schools, attendance data were sometimes monitored separately from academic data by the school counselors or social workers.

Student data were often organized for MTSS purposes—identifying students in need of supports or progress monitoring those students—using low-tech solutions such as spreadsheets, or even physical files. Data were often managed primarily by school MTSS leader(s), which points to the importance (and value) of having a person dedicated to the complex and time-consuming task of handling and communicating data. How student MTSS data are managed could also affect a school’s MTSS culture in that the two

schools in which data were more collectively held and managed were also the most vocal about the importance of collective ownership and leadership of MTSS.

Impacts of MTSS

The six schools reported various impacts to date that they attributed to their implementation of MTSS. Across the six high schools, the academic impacts mentioned included higher graduation rates, higher scores on end-of-course exams and state assessments, and decreased course failure rates. Behavioral impacts included decreased discipline referrals, fewer fights, better relationships between students and staff, and improved overall culture. Some impacts noted by the schools were meaningful and observable to them, but not necessarily measurable (e.g., increased student motivation, engagement, and interest; the development of a “growth mindset” among both students and teachers and increases in students’ confidence and self-efficacy). Impacts also extended beyond students to teachers and families. One school reported an increase in family engagement due to MTSS. Another reported that teachers had more vertical and collaborative conversations about student progress and needs.



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Three Overarching Observations about MTSS in the Six High Schools

Taken as a whole, the MTSS implementation journeys of the six high schools support three overarching observations about MTSS implementation in secondary contexts.

1 MTSS was heavily context-driven – there did not seem to be one “right way” to implement MTSS that fit the needs of all schools.

The six high schools all had different implementation stories to tell about how their MTSS initiatives began, who led them, whether the focus was on Tier 2 or 3 intervention or more of a schoolwide focus involving all teachers, the interventions/evidence-based practices they used, staffing and funding approaches, how they used data for student identification and progress monitoring, how they evaluated their implementation of MTSS, and more. MTSS is a complex process for schools to manage, especially at the secondary level, and how it is initiated and implemented depends on a school’s leadership, staffing, and overall resources and goals.

One aspect of school context is the number of students who require additional support, as reflected in differences between schools with high versus low percentages of economically disadvantaged students. MTSS is often presented as a triangle of tiered supports, proposing that 80% of students should get what they need from regular classroom instruction, 10-15% need additional targeted or small group

instruction in specific skills, and 5-10% need intensive support outside of the regular classroom. However, prior research has found that actual MTSS practices may not always fit this model ([Balu, Zhu, Doolittle, Schiller, Jenkins, & Gersten, 2015](#)). Schools with large populations of students with greater needs for support may find the percentage guidelines less useful.

The three smaller schools with large populations of economically disadvantaged students tended to take a whole-school approach to MTSS that involved all staff in efforts to support students. There was a vision of shared leadership of MTSS and intentional efforts to create buy-in among teachers. Interviewees from these schools described their support as more of a continuum based on the individual needs of students, rarely using language about the tiers of MTSS. They described MTSS models with intervention support that was more fluid and less clearly defined as belonging to a particular tier. Two of the smaller, higher-poverty schools also established dedicated intervention time in the master schedule, compared with only one of the three larger, lower-poverty high schools.

Schools with fewer students in need of extra support could focus more on Tier 2 and Tier 3 interventions, and their descriptions of their support structures were more reflective of the traditional language of the MTSS framework. They often spoke of tiered intervention in ways that more clearly divided it into Tier 2 and Tier 3. They described working towards gaining more involvement in MTSS from classroom teachers, but the core work of MTSS was often managed by a few individuals (e.g., interventionists).

2 MTSS in all six high schools was driven by a commitment to the overall goal/vision of improved supports for students, rather than compliance with district or state requirements.

The schools did not report being driven by fidelity to a particular MTSS implementation rubric or self-assessment tool. Rather, they seemed to have internalized the vision and mission of providing more students the support they need to be successful through continuous discussions of what was working and not working and adjustments to their implementation of MTSS. Some interviewees described MTSS as being built up to be “this big, convoluted, complex thing,” but they see it as just another name for doing what they have always done—organizing their efforts to support students and ensuring that students have the support they need to be successful.

3 Successful MTSS implementation requires shared leadership and regular reflection and refinement.

Schools described their MTSS implementation journey as a continuous improvement process, learning as they went about what was working and not working in their implementation and adjusting, as needed, to better meet the needs of their students. All six schools described a long-term continuous improvement approach to MTSS implementation, with impacts on student outcomes emerging slowly over three to six years. Thus, their message was to persevere with their goals for MTSS and realize that school-level impacts may come slowly over time.

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