



Guide to Effective MTSS Interventions in K-12 Education

Best practices for overcoming common challenges and finding solutions for MTSS interventions that help students succeed



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Introduction

Every student deserves to learn in a way that’s right for them. It’s the job of educators and school systems to support every step of their learning journey.

Multi-tiered system of supports (MTSS) programs can provide a framework to effectively address students’ comprehensive needs. Interventions are critical to the success of your MTSS efforts.

In fact, according to the 2024 Education Focus Report:¹

- 45% of education leaders say that a lack of whole-child data is a challenge to implementing a tiered system of supports for their school system.
- Improving student attendance in school and enacting effective student behavior interventions are the top two priorities for school districts.
- Access to rich behavior and attendance data across various demographics and long-term trends is limited. With integrated data, administrators can make decisions that ensure innovations are effective and support a learning environment for all students.

This report will highlight best practices and strategies for implementing effective MTSS processes to best serve students throughout their learning journey.

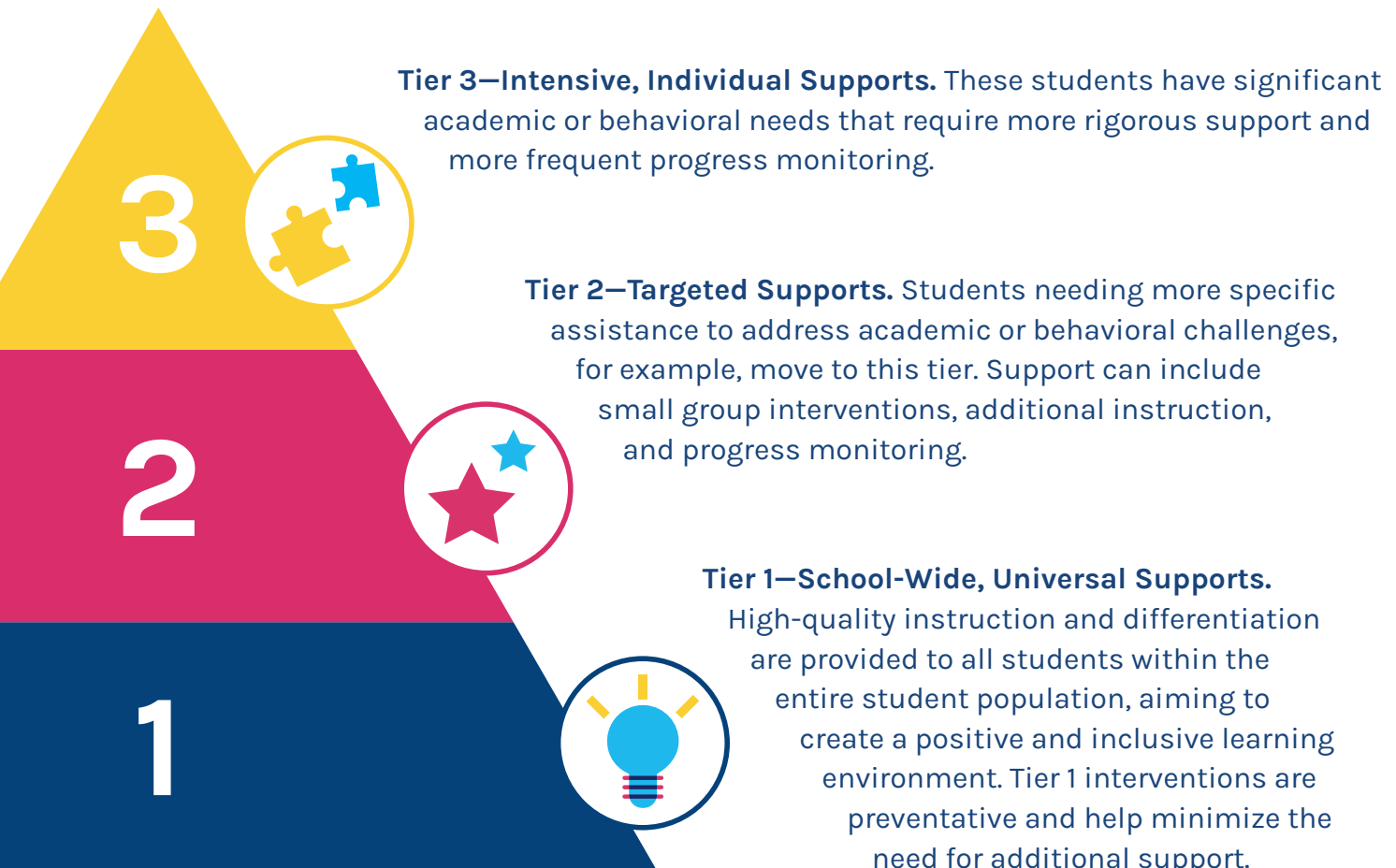
What is MTSS in K-12 Education?

A multi-tiered system of support (MTSS) is a preventative, proactive, and comprehensive framework that relies on data to meet the needs of each student. It provides a tiered framework of increasingly intensified supports for a student's academic and non-academic needs.

The tiered structure of MTSS frameworks is designed to help all students get the appropriate support and intervention needed to succeed both inside and outside of the classroom. The framework is often used to prevent and address academic and behavioral challenges before they become significant barriers to learning.

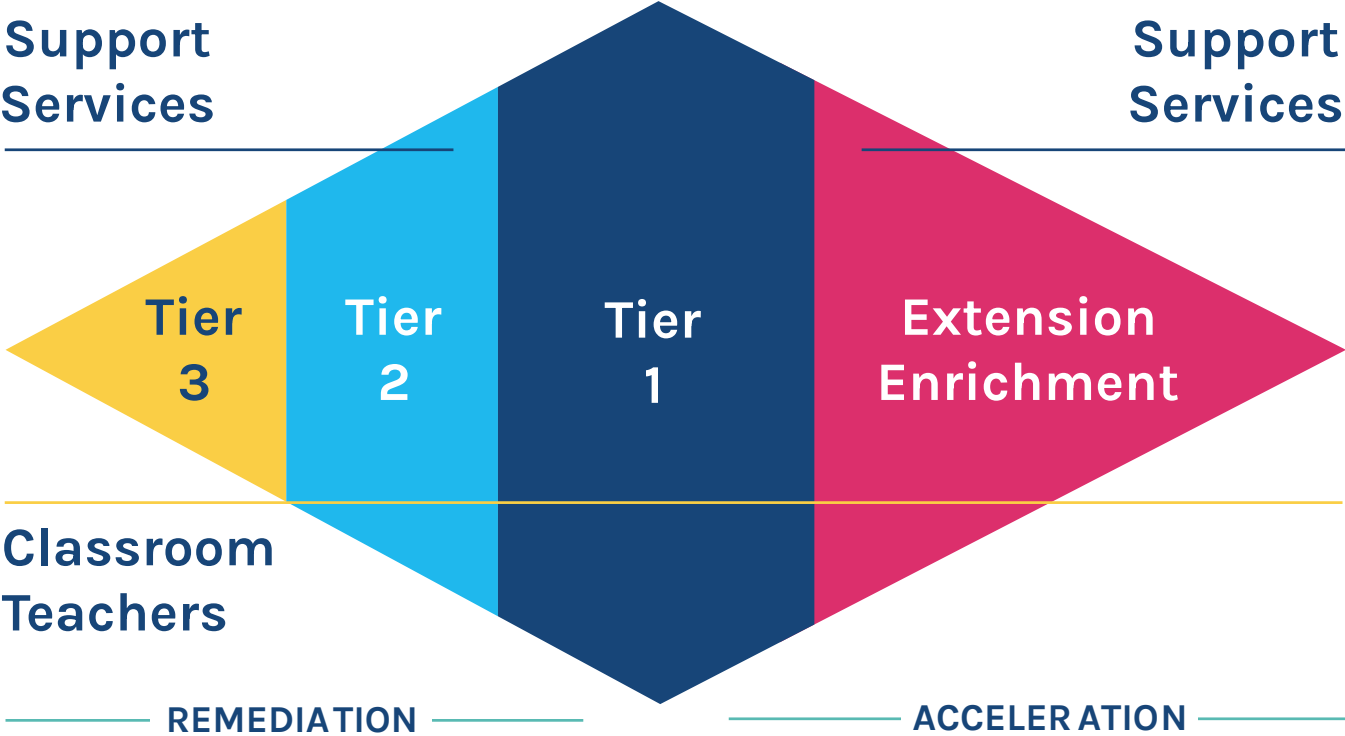
How an MTSS Works within a School

Students have different levels of need. The MTSS framework provides a structured approach with multiple tiers or levels of support:



The Emergence of the Diamond Model

Gaining popularity in MTSS practices is the diamond model, which extends to learners on the other end of the spectrum who need advanced learning or acceleration. Although we understand that MTSS is for all students, many are surprised to learn that MTSS can be a robust framework to support students with advanced learning needs. It can also help students catch up academically.



The diamond model encourages a more strengths-based approach. A student needing Tier 2 support on the behavior side may also benefit from academic enrichment and acceleration. One common reason for "acting out" is boredom. This model may help educators better differentiate instruction to ensure students stay challenged.

PBIS, RTI, and Attendance Interventions within an MTSS Framework

PBIS (Positive Behavioral Interventions and Supports), RTI (Response to Intervention), and Attendance interventions live under the MTSS umbrella by addressing behavioral, academic, and attendance challenges across different tiers of support. PBIS is a component of MTSS that provides a specific framework for addressing behavior-related aspects of student support within the broader MTSS framework. MTSS encompasses a more comprehensive approach that includes academic (RTI), behavioral, and social and emotional support, while PBIS focuses specifically on creating a positive behavior support system.



PBIS Tiers in MTSS

PBIS operates within the MTSS framework by addressing the behavioral needs of students across all tiers. In **Tier 1**, PBIS includes creating clear behavior expectations, teaching SEL skills, and implementing systems for acknowledging and reinforcing positive behaviors for all students. In **Tier 2**, PBIS provides small-group social skills training, mentoring, and check-in/check-out systems to address specific behavioral challenges. In **Tier 3**, PBIS provides individualized interventions for students with significant behavioral challenges, such as functional behavior assessments and behavior intervention plans.



RTI Tiers in MTSS

RTI aligns with MTSS to address academic challenges. In **Tier 1**, regular assessments are conducted to identify students needing additional support. In **Tier 2**, students not making sufficient progress receive targeted interventions, often in small groups, to address specific skill gaps. In **Tier 3**, students who continue to struggle receive intensive interventions that are more individualized and focused on their particular needs.



Attendance Interventions in MTSS

Attendance interventions are an integral part of MTSS. In **Tier 1**, schools work to promote regular attendance by improving school culture and creating incentives. In **Tier 2**, students with attendance challenges participate in interventions such as mentorship, counseling, and incentives. Focusing on two-way communication, which could include sending digital postcards to the home, is another example of a **Tier 2** intervention. In **Tier 3**, schools implement individualized interventions for chronically absent students. An example is providing housing stability supports for families.



Why MTSS Interventions Matter for Students

While schools have made gains toward student success since the pandemic, it's clear that students are not caught up yet. Effective MTSS interventions can provide them with additional support.

According to the [National Assessment of Educational Progress \(NAEP\)](#), also known as the Nation's Report Card, average math and reading scores for 13-year-old students in the United States declined between 2020 and 2023.²

Overall Score Decline

The National Center for Education Statistics (NCES) administered the NAEP long-term trend (LTT) reading and mathematics assessments to 13-year-old students from October to December of the 2022–23 school year. The average scores for 13-year-olds declined 4 points in reading and 9 points in mathematics compared to the previous assessment administered during the 2019–20 school year. Compared to a decade ago, the average scores declined 7 points in reading and 14 points in mathematics.

Math

The average score dropped by 9 points, from 280 to 271, with lower-performing students seeing the largest decline at 12–14 points. The score gap between male and female students also widened, with females dropping 11 points compared to 7 points for males. The gap between Black and White students also increased, from 35 points in 2020 to 42 points in 2023, with Black students dropping 13 points compared to 6 points for White students. Some say the average score has dropped to levels last seen in the 1990s.

Reading

The average score dropped by 4 points, from 260 to 256. Scores declined across all five selected percentile levels, with lower-performing students seeing the largest decline at 6–7 points and middle- and higher-performing students declining 3–4 points. However, there were no statistically significant changes in the score gaps between racial and ethnic groups compared to 2020.

MTSS signals a promising approach. PowerSchool's 2024 Education Focus Report³ lists attendance, engagement, and tiered supports as overall top priorities for educators, demonstrating broad expansion of the concept and practice in schools.

This signals that there is belief that MTSS has the potential in the minds of educators to be part of the solution to helping our students accelerate their learning and get back on track.

As evidence of the validity of that belief, fully implemented MTSS can have a significant impact on academic and behavioral outcomes. According to research from the University of Nebraska:⁴

- Schools implementing MTSS have 30% fewer suspension incidents and 5% fewer behavioral referrals than non-MTSS schools.
- In 500+ schools in Kansas, schools participating in MTSS training were moving toward higher stages of implementation and showed increased proficiency in state assessments, decreases in office discipline referrals, and decreases in special education referrals.
- In Florida, elementary, middle, and high schools participating in MTSS Tier 1 interventions saw a 33% reduction in office discipline referrals (ODRs), a 16% reduction in days of in-school suspension, and an increase in the average percentage of students scoring Level 3 or higher in reading.



Best Practices for Effective MTSS Interventions

Effective implementation of MTSS interventions in K-12 education requires careful planning, collaboration, and a commitment to continuous improvement. By following these best practices, educators can create a responsive and supportive system that addresses the diverse needs of all students.

1 Define, Align, and Communicate Your MTSS Vision

CHALLENGE:

Often, district leadership doesn't articulate a clear and compelling vision for MTSS that resonates district-wide.

SOLUTION:

Your district's MTSS vision should emphasize that MTSS is:

- A preventative, proactive framework to support success for all students
- A framework that all staff can align to—not just interventionists or specialists

The overall benefits of MTSS for both students and staff should be communicated to address change management and gain widespread buy-in from staff.

TIPS:

- ✓ Define your vision.
- ✓ Create common language.
- ✓ Bring together your district MTSS team, if you have one, or your teaching and learning leadership team to define your ultimate vision.
- ✓ Create guiding principles, including statements about "what is MTSS and what is not MTSS" in your district.
- ✓ Avoid labeling students in tiers; interventions can be labeled with a tier, but not students.

2 Define and Communicate Your MTSS Workflow

CHALLENGE:

When leadership doesn't clearly define and document their MTSS processes, workflows, and action plans, they can experience "pockets of excellence" but not systemic excellence when it comes to implementation.

SOLUTION:

Clearly defined and known processes are required for systemic coherence and excellence. Additionally, your staff needs a plan for training and resources, ensuring they feel supported and equipped in implementing an MTSS process.


We know that the "devil is in the details." For example, how exactly will high school juniors be screened for risk? It will likely look different than for your third graders.

TIP:

- ✓ Self-evaluate to monitor the fidelity of MTSS implementation

The Center on Multi-Tiered System of Supports at the American Institutes of Research offers a free MTSS Fidelity of Implementation Rubric.⁵ Individuals and teams responsible for supporting the implementation of MTSS can use this powerful tool to help focus your improvement efforts.





3 Develop Strong Tier 1 System of Supports to Lessen the Burden on Tier 2 and 3 System of Supports

CHALLENGE:

Traditionally, districts should aim to see 5-15% of students in Tier 2 interventions and 1-5% in Tier 3 interventions. But in many cases, we experience much higher percentages at the Tier 2 and Tier 3 levels.

This is problematic for several reasons. First, most districts simply do not have the resource capacity to support that many interventions. But, perhaps even more critically, an overwhelmed Tier 2 and Tier 3 system indicates that more time and attention is needed to support the instructional core within Tier 1.

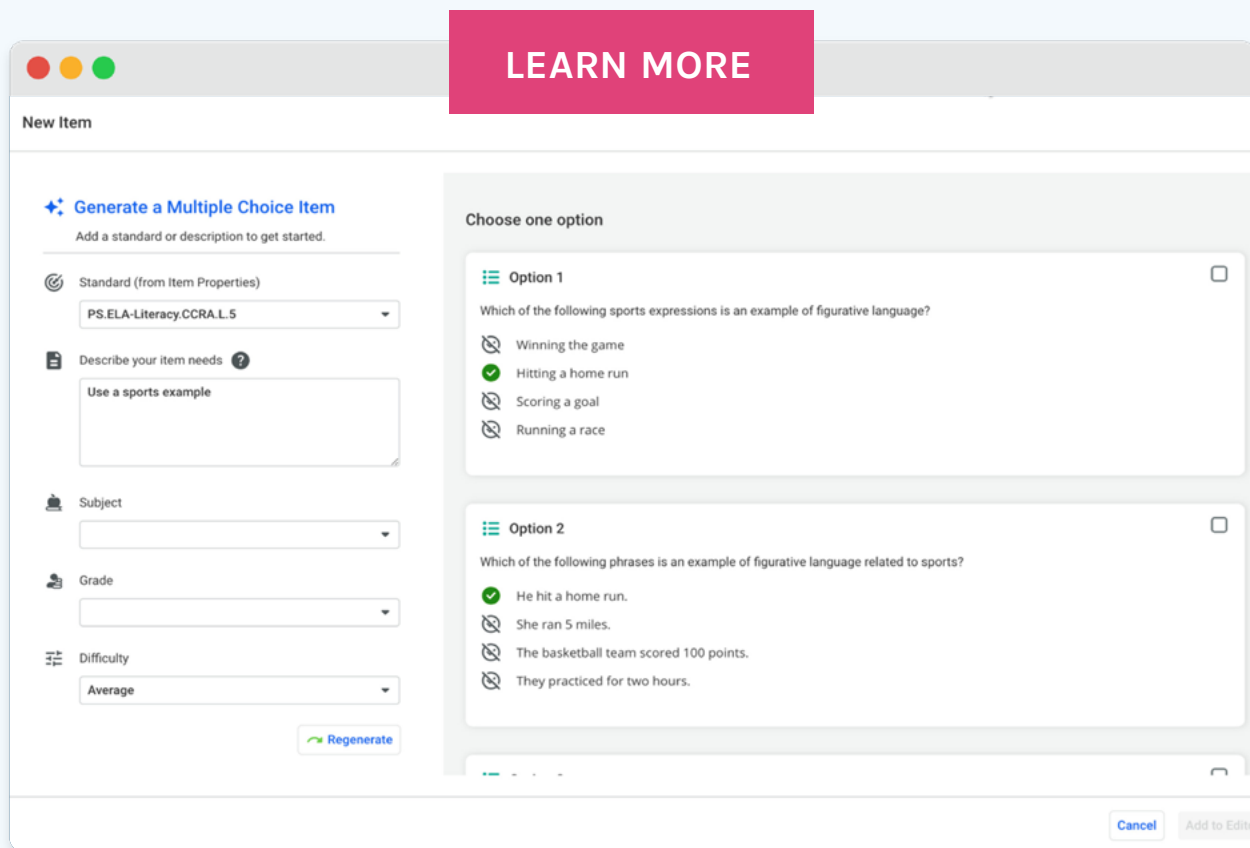
SOLUTION:

Implement early interventions and strong core instruction. By using accurate, real-time data from assessments and screenings, educators are better equipped to address universal student needs.

TIPS:

- ✓ School leaders should take a critical look at their core curriculum and identify any gaps.
- ✓ Educators should review available data to find trends or patterns to improve the Tier 1 practices or curriculum. For example, if universal screening results show that most elementary students struggle with their reading decoding skills, educators can dedicate more time to strengthening this skill among the whole class.

PowerSchool Schoology Learning (LMS) and Performance Matters assessment platform simplify collecting and visualizing student academic data and provide tools for revising, differentiating, and personalizing core instruction to accommodate each student’s learning style and meet their unique needs.



In addition, absenteeism or behavior may represent significant barriers to student success, reducing access to or engagement with high-quality Tier 1 academic instruction.

TIP:

Addressing these concerns requires real-time data to uncover student needs and strategies to promote improvement. [PowerSchool Attendance Intervention](#) and [PowerSchool Behavior Support](#), both part of the [Student Success Cloud](#) are solutions that automate the collection, visualization, and reporting of non-academic data that affects student growth. These products support attendance and behavior through proactive and positive communication with students and families.

4 Ensure Data Security within MTSS Technology

CHALLENGE:

Often in MTSS practices, data is stored and shared in multiple, possibly unsecure formats. These include:

- **On paper:** Risks include catastrophic events/natural disasters, theft, lack of audit trails to see who's viewed records, and lack of storage space that could put sensitive data in unsecure physical locations.
- **Google Sheets, Excel, and Word documents:** It's possible to accidentally share an entire spreadsheet or document, exposing data to all recipients.
- **Email:** Phishing email attacks are one of the most successful and don't require a high level of cybercriminal skills.
- **Accessed via unsecure devices:** There were 1.5 billion Internet of Things (IoT) cyberattacks in the first six months of 2021.⁶
- **Not restricted by role and/or student association:** It's too easy to share data with any user, including those with inadequate permissions.

SOLUTION:

- A modern, consolidated MTSS framework provides better data security:
 - One secure system with role-based access controls
 - Fully encrypted storage
 - End-to-end encryption
 - Full auditing
 - Full data recovery

TIP:

Gain the security of a modern, consolidated MTSS framework in one comprehensive K-12 solution. For example, [PowerSchool MTSS](#), part of the [Student Success Cloud](#), keeps your student data secure in one controlled platform, providing centralized access to critical current and historical student information—unlike old methods of compiling and sharing unsecure data from disparate sources.

Making MTSS More Secure in K-12 Education

Learn how you can protect your highly sensitive student data better in a modern MTSS system.

[SEE THE INFOGRAPHIC](#)

5 Gain Actionable Insights with Intervention Analytics

CHALLENGE:

District leaders, chief academic officers (CAOs), superintendents, school board members, school and classroom leaders, and parents want to know if MTSS investments are making a difference. They need to know which interventions are working and which students they're helping.

Unfortunately, most districts lack data systems to support these questions and analysis. In fact, most education leaders and Superintendents can't answer the following fundamental questions:

- What interventions do we assign?
- Which students get interventions?
- Which interventions are at specific schools?

When you can't answer these basic questions, it's impossible to understand what's working.

These challenges arise because most districts don't have data systems that can collect and aggregate intervention information. And for the few that do, many don't have data systems that can deliver this information back to them in insightful intervention analytics.

What this means: The people accountable for improving student outcomes are operating without a clear, comprehensive view. They can see student outcomes, like standardized test scores, but can't see the assigned interventions that led to these outcomes. District leaders deserve better.

Only 34% of district leaders can say which interventions are working, and only 16% say they have the data to see what works.

—2024 EDUCATION
FOCUS REPORT

SOLUTION:

PowerSchool MTSS allows educators at all levels (teacher to superintendent) to view the intervention data they need.

- Teachers can better understand whether a student or group of students has made progress on an assigned intervention.
- Superintendents can understand which interventions were completed with a successful outcome—by grade level and demographics across the entire district, as an example. This information can help district leaders tailor professional learning efforts around specific interventions or inform resource allocation decisions.

Superintendents, CAOs, MTSS leaders, principals, and teachers should all have the data to understand whether interventions make students more successful. Currently, many educators simply lack visibility into intervention efficacy.

But it does not need to be this way anymore. PowerSchool MTSS, combined with the essential education technology products that drive school operations, can help bring visibility and insight into this critical data.



6

Address Behavior and Attendance with Focused Analytics

CHALLENGE:

The need for positive behavior and attendance support systems in schools is great. In our 2024 Education Focus Report, we revealed that “Disruptive students behavior/crisis response” was selected as “the top thing adding to teachers’ workloads that must be addressed for the profession to be more sustainable.”⁷

Meanwhile, seven in 10 educators agree that student attendance has been a significant challenge in their school system since the pandemic. Disengagement, lack of family support, and mental health issues were cited as root causes.⁷

While many districts have implemented successful reward systems, accountability measures, and family engagement strategies to improve behavior and attendance, others still experience challenges at higher than pre-pandemic rates.

SOLUTION:

BEHAVIOR SUPPORT ANALYTICS

Reinforce positive behaviors through individual and group reward systems by connecting all your behavior data in one place with focused analysis tools. Tools like PowerSchool Behavior Support Analytics provide powerful metrics to better track and analyze student behavior at the school and district level.

- Streamline the intervention decision-making process by assigning PBIS-based student groups to MTSS interventions, directly inputting students’ behavior and PBIS data into the PowerSchool MTSS application, and ensure interventions are based on complete behavioral insights.
- Integrate data from PowerSchool SIS and PowerSchool Behavior Support to unlock comprehensive behavior analytics, empowering administrators and teachers with a broad perspective on behavior trends to make the best data-driven decisions and promote positive student outcomes.
- Available for PowerSchool Student Analytics customers using both PowerSchool SIS and Behavior Support, this feature provides invaluable insights to promote positive student outcomes and streamlines intervention decision-making.

ATTENDANCE INTERVENTION ANALYTICS:

PowerSchool understands that MTSS and data-driven practices can be used to identify and reduce barriers to attendance. With tools like PowerSchool Attendance Intervention Analytics, schools and districts can access powerful metrics to better track and analyze student attendance at the school and district level.

- Effectively incorporate attendance data into your MTSS framework, as opposed to treating attendance with separate initiatives, and achieve attendance gains with analytics that measure key data points that apply to every district's MTSS efforts.
- Create Student Groups and build Student Plans to increase workload efficiency and overall efficacy.
- Alleviate barriers to attendance with clearer analytics that help districts communicate the importance of attendance with families, who serve as a cornerstone of effective MTSS implementation. Easily engage them with clear details about their children's progress and the support available to them.
- Available for Student Analytics customers using both PowerSchool SIS and PowerSchool Attendance Intervention, this feature provides key insights to promote attendance.



While progress has been made on student academic insights, leaders are now prioritizing insights on student behavior and durable skills for graduates.

—2024 EDUCATION
FOCUS REPORT

7 Bring MTSS Data and Processes Together in an Integrated System

CHALLENGE:

Educators often jump from system to system, spreadsheet to spreadsheet, and form to form to complete the entire MTSS process.

Universal screeners, diagnostic assessments, intervention plans, progress monitoring forms, progress monitoring trackers, and intervention templates are just a few of the tools within MTSS—all potentially located in different systems. As educators navigate between and within these items, they waste precious time that could be directed toward supporting students.

The chaos of "system jumping" also muddles your workflow. It becomes harder to understand which steps come next in the process.

SOLUTION:

Adopt technology systems that bring coherence to your system. By doing so, you can save educators time.

At its core, MTSS can be broken down into the five steps depicted in the graphic below, starting with the review of data.

INTERVENTION WORKFLOW



Today's technologies allow the entire MTSS workflow to be housed in one software solution. One comprehensive solution empowers educators to review a holistic data set, such as academic, behavior, attendance, and SEL information—in one convenient place.

They can select the appropriate intervention based on student needs and then monitor the intervention's progress in real time. District staff can view which schools assign specific interventions and also see the results. This can help tailor professional learning efforts or inform resource allocation decisions.

Taken even further, PowerSchool's [Student Success Cloud](#) gives educators a comprehensive MTSS product combined with student analytics, attendance, and behavior support in one, complete system. With the Student Success Cloud:

- Gain insights into the needs of the whole child
- Address chronic absenteeism
- Promote positive behavior
- Improve your MTSS interventions and effectiveness





Conclusion

MTSS in K-12 education is critical in supporting students on their learning journeys. But MTSS can be difficult to implement successfully, especially considering an educator's limited time and increasing responsibilities.

That's why educators need to continuously reflect on best practices.

With the right MTSS tools and processes, educators can create a responsive and supportive environment that supports each student along their journey.

PowerSchool Student Success Cloud

One interoperable system to support the needs of the whole child. Find out how only PowerSchool's Student Success Cloud provides the complete support students need for future success—from addressing chronic absenteeism and promoting positive behavior to implementing multi-tiered system of supports (MTSS). [system.](#)

[LEARN MORE](#)

Sources

1. [2024 Education Focus Report: Addressing the Urgent, Shaping the Future of Student Learning](#), PowerSchool
2. ["NAEP Long-Term Trend Assessment Results: Reading and Mathematics."](#) The Nation's Report Card, 2023
3. [2024 Education Focus Report: Addressing the Urgent, Shaping the Future of Student Learning](#), PowerSchool.
4. Rangel-Pacheco, M.A. & Witte, Amanda, Ph.D., "[NeMTSS Research Brief: A Brief Review of MTSS Evaluation Measures and Empirical Support for MTSS Implementation](#)," Nebraska Center for Research on Children, Youth, Families & Schools, 2020.
5. "[Multi-tiered System of Supports \(MTSS\) fidelity of Implementation Rubric](#)," Center on Multi-Tiered System of Supports, 2021.
6. Cyrus, Callum, "[IoT Cyberattacks Escalate in 2021, According to Kaspersky](#)," IoT World Today, 2021.
7. [2024 Education Focus Report: Addressing the Urgent, Shaping the Future of Student Learning](#), PowerSchool.



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