

# Maximize your district's data:

Essential elements & best practices for quality MTSS





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# Overview

Over the past two decades, Multi-Tiered System of Support (MTSS) and Response to Intervention have emerged as a framework to improve outcomes for all students. By utilizing a data-based, decision-making model, educators are better equipped to match student needs.

A recent meta analysis indicated that an RtI framework, implemented with fidelity, has an effect size of 1.09. This is equivalent to having learning rates accelerated by two to three years.\*

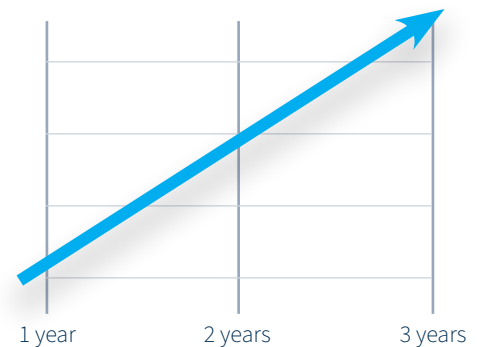
Given the exceptional promise of positive student impact from this framework, many districts are eager to adopt these research-supported practices. However, schools are complex organizations. It can feel daunting to achieve high-quality implementation by all stakeholders needed to attain desired results.

In this paper, we offer insights and practical examples of best-practice implementation and highlight the ways districts can utilize a data-management platform to help drive continuous improvement.

## Topics covered include:

- 1) Effective aggregation and data availability
- 2) Data-based decision-making
- 3) High-quality implementation

learning rates  
accelerated  
2-3 years



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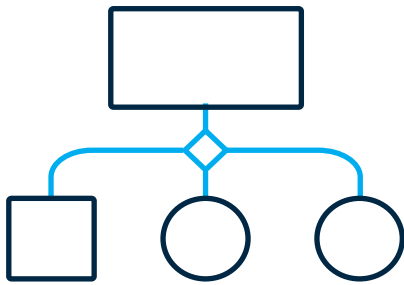
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\*Hattie, J. (2012). Visible learning for teachers: Maximizing impact on learning. Routledge.

# Aggregating multiple data points

Many districts identify with the concept of being “data-rich but information-poor.” While a great deal of student data are collected on a regular basis (e.g.: enrollment, attendance, grades, test scores, discipline referrals, involvement in extracurriculars, intervention participation, etc.), it is often stored in separate, specialized locations with limited access. This separation often makes it difficult to aggregate and use available data in a holistic manner for individual students or the overall system. As they make decisions, stakeholders may not be aware of all readily available data or have time to seek out the data they need. Other times, access to longitudinal data or historic data for students is not easily accessible.



## Streamline access with automated data integration

Using a secure data system that automatically pulls and aggregates data from multiple databases and files can provide streamlined access. It is helpful for districts to consider and define each data source they would like to use across domains (attendance, behavior, grades, test scores, social and emotional learning) within their MTSS framework and make plans for how the data will be brought into a central system, and how the data will be used. Think broadly about data sources that will help fully describe students within the context of their school experience, and those that reflect the priorities

of the local community. If you have invested in gathering a piece of data, be sure it is loaded into your data management system so you can get the greatest value from the information collected.

### For each source, consider:

- Is it a reasonably reliable and valid method for measuring student behavior?
- How will the data be collected (area of input)?
- How often will data be updated?
- How will the results be accessed by stakeholders across roles?
- Which targets or benchmarks will the district use for interpretation?
- What training will be needed for appropriate data use and interpretation?

Clearly defining data being used across domains within your MTSS framework, and a centralized system by which these data are collected, shared, and utilized allow for better use of the data. This process of cataloguing all possible data sources may reveal data sets that are no longer considered useful, or may uncover duplication in testing efforts. These insights offer an opportunity for districts to save time and money by streamlining the overall measurement plan by reducing unnecessary testing. This approach also benefits school and district leaders by creating visibility and confidence of data used to make informed system-level improvements.



### Commonly overlooked data to consider:

- Community service hours
- PACER results
- Student group membership (programs, teams, clubs)
- Survey results
- AP exam results
- Locally developed, formative assessment

## Best practice

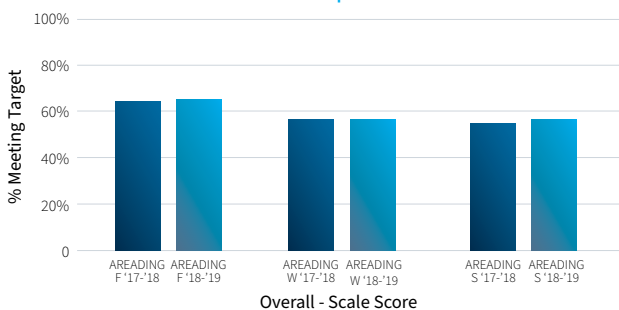
# Asking questions that drive program effectiveness

Once a district has a good handle on what data will be collected, and how it will be stored, accessed, and used, the next critical step in turning data into information is asking the right questions. The MTSS framework provides an important structure for identifying these vital questions with answers to inform next steps for improved practice. In an MTSS framework, we begin with tier 1 or core instruction. This programming must be designed to meet the instructional needs of at least 80% of our students. Said another way, at least 80% of students should meet grade-level standards across subjects and domains given core instruction alone. Using available data, districts can ask critical questions about the extent to which their current core instructional systems are meeting this goal.

### Important questions to ask about core instruction effectiveness:

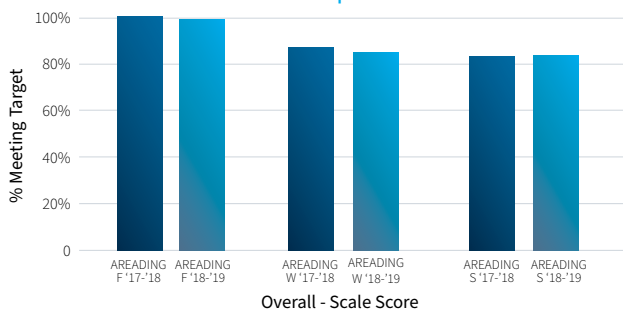
- What percentage of students in each grade level met our target expectations for fall, winter, and spring in each domain?
- How do these percent-above-target scores for the current year compare to those of previous years?
- What percent of students in each grade level who started the year on target finished the year on target?
- What percent of students in each grade level met target expectations in the spring without receiving supplemental intervention?
- What percent of students who started the year below target ended the year above target without receiving supplemental intervention?
- What percent of students who started the year on target made expected growth from fall to spring?

Example A



**Example A\*** compares two years of data from the same assessment. Results show a similar pattern across both years with the school starting the year with about 63% of students on target, and ending the year with about 57% on target. This school does not yet have 80% of students meeting target, and that within each school year the percent of students meeting target decreases from fall to winter to spring. Such results indicate that while the students are likely growing, they aren't growing fast enough to keep pace with the target scores.

Example B



**Example B\*** shows the same graph, filtered to include only children who met or exceeded target in the fall of each school year. Results indicate that too many students who begin the year on target are not ending the year on target.

These data suggest the school will want to focus on applying research-supported strategies to increase core instructional intensity for all students. To understand this pattern more deeply, users may disaggregate results by grade, gender, or other student groups, or look at growth rates and outcomes for students based on initial performance band. The educators who taught these students will bring necessary context and reflection on experiences to best interpret the data and determine next steps.

\*Source: edSpring



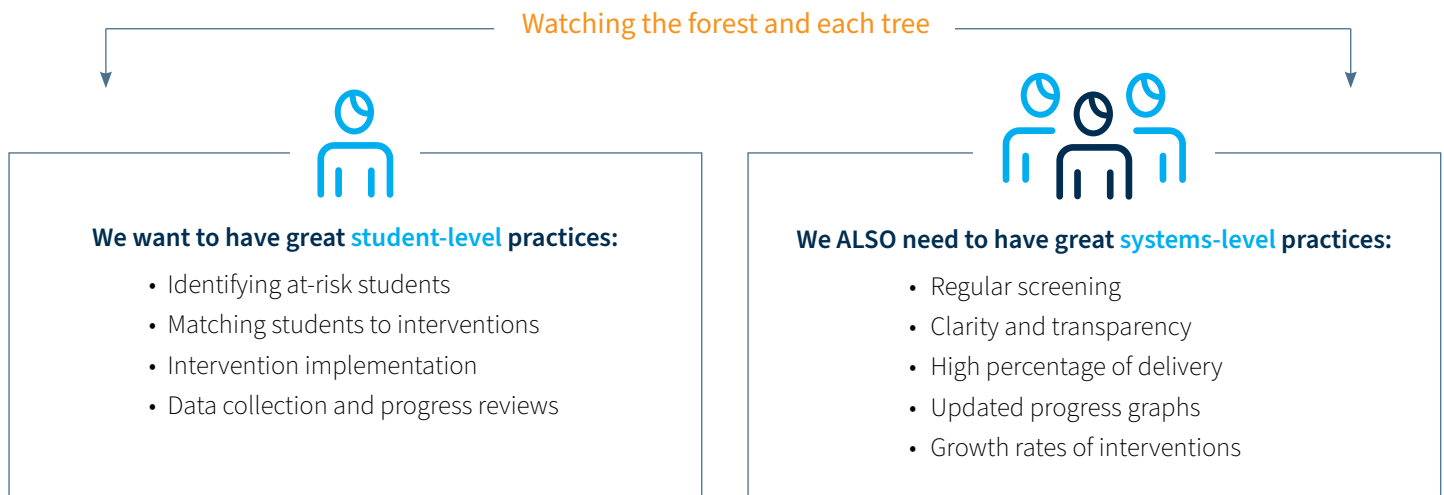
In addition to evaluating core program effectiveness, districts should also regularly review outcomes for students participating in tier 2 and 3/ supplemental intervention programs. This enables districts to measure the performance of these interventions to determine if they are getting the expected return on investment.

### Important questions to ask about supplemental intervention effectiveness:

- Are we using intervention programs that have empirical support?
- How many students are assigned to each intervention that we offer?
- What is the typical duration of intervention participation for students?
- Are the students assigned to these interventions receiving a large enough dose to expect to see improvement?
- What percent of students receiving the intervention are making sufficient progress to catch up?
- What is the average growth rate for students who participated in “X” intervention?

Many districts look to their data-management platforms to go beyond the necessary data aggregation. They also support users’ ability to evaluate the extent to which the current tier 1/core and current tiers 2 and 3 interventions for instructional programming are meeting expected levels of effectiveness.

Data systems that offer clear reporting will enhance district ability to act on results and benefit students. This is also where a data-management system that allows users to dig into their data—through multi-select filtering and disaggregation—is important. Schools can investigate patterns within their data to identify subgroups of students for whom the instruction has not been effective and better understand how to respond.



## Best practice

# Quality implementation makes the difference

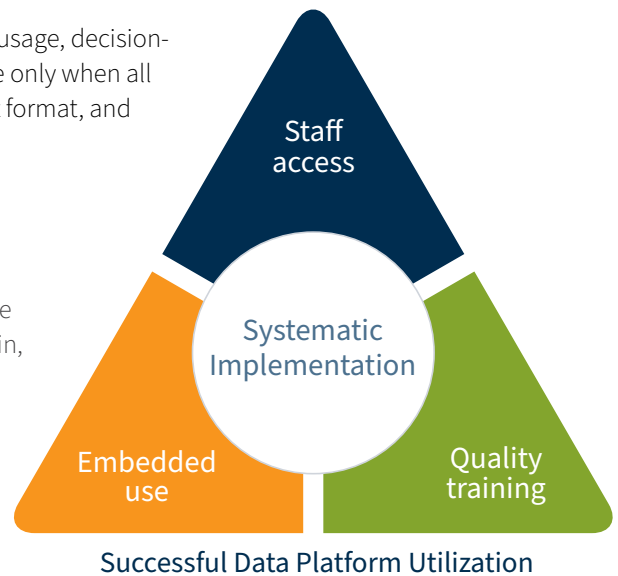
Like other effective frameworks, MTSS must be implemented with fidelity in order to realize positive outcomes for students (Scott et.al., 2019). Confusion around process and difficulty finding ways to intensify instruction are two commonly noted implementation challenges within MTSS (Braun et. al., 2020).\*

Systematic implementation of a data platform will drive consistency in data usage, decision-making practices, intervention delivery, and communication. This is possible only when all stakeholders have access to the same information, presented in a consistent format, and the data platform provides insight that can drive program effectiveness.

### Manage staff access

Ideally, staff access to a data system is centrally managed, typically within the district student-information system. It is important to confirm that as staff join, leave, or change roles, their access to job-appropriate data are maintained.

Asking all staff to log in at the start of each year to confirm correct access can help quickly identify problems. Monitoring to see who has logged in can help a district identify both master users, and those who may need assistance using the platform.



**Example:** Technology can offer benefits only to the extent that it is used. Tools, such as Sourcewell Technology’s edSpring, provide districts regular feedback on platform usage so that leaders can quickly identify both power users and staff who may need support.

User	District Number	Login Number	Last Login
M. Johnson	4999	25	09/23/2020
D. Miller	4999	4	09/21/2020
G. Taylor	4999	12	06/19/2020
A. Smith	4999	6	03/12/2020

\*Terrance M Scott, Nicholas A Gage, Regina G Hirn, Amy Shearer Lingo & Jon Burt (2019) An examination of the association between MTSS implementation fidelity measures and student outcomes, Preventing School Failure: Alternative Education for Children and Youth, 63:4, 308-316.  
Gina Braun, Skip Kumm, Christerralyn Brown, Samantha Walte, Marie Tejero Hughes & Daniel M. Maggin (2020) Living in Tier 2: educators’ perceptions of MTSS in urban schools, International Journal of Inclusive Education, 24:10, 1114-1128.

## Provide high-quality training

Implementation of an MTSS framework requires regular, ongoing professional development and review of practices to ensure effectiveness. Each year, staff who are new to their roles will need clear training on access and procedures for data-based decision-making. In addition, staying up to date with enhancements and how these might prompt changes in school-based practice, are important to highlight and help to ensure all users feel confident and are able to work efficiently to support students.

Since time for training is often limited in schools, be sure to prioritize covered topics. Review of systems-level data can be used to inform targeted topics.

**Example:** If the data demonstrates that too many students start the year on target but finish short of target, collaborative work around enhancing core instruction may be warranted. If growth rates for students receiving supplemental intervention programs are not high, and data on implementation suggest inconsistencies, updated training on intervention implementation may be a good use of resources.

## Embed data platform use into daily activity

The implementation science framework described by Fixsen and his colleagues (2009) provides district teams with guidelines for integrating tiered implementation models and a problem-solving system that can be used to expand MTSS. As other evidence-based practices are adopted, systems can bridge the gap between theory and practice by establishing shared goals and procedures.

School- and district-level leadership can contribute to continuous improvement in MTSS practices by articulating clear goals and collaboratively establishing procedures for data-based decision-making that are built into regular school practice.

**Example:** Schools can establish a regular cadence for data review and decision-making for grade-level teams, schools, and district teams. Agendas for these meetings would describe the particular data to be reviewed, questions to be considered, and decisions to be made. Having a data-management platform that effectively operationalizes these activities through clear, question-driven reporting can make these meetings more efficient and effective. It also embeds the platform within regular practice and establishes it as a critical component of ongoing work rather than an add-on.

If your data show  
less than  
**80%**  
of students proficient,  
the most effective place to  
intervene is with all students  
in their core instructional  
programs.

Classwide intervention programs, like Spring Math®, effectively strengthen core instruction — raising proficiency rates and reducing the need for small group or 1:1 instruction.





# Conclusion

## Essential elements of quality MTSS

While there are many other quality practices for education, these are three essential best practices:

- 1) Effective aggregation and availability of data across domains to promote its use for critical decision-making
- 2) Asking the right questions to drive data inquiry so that effective decisions can be made
- 3) Focusing on high-quality implementation so that all stakeholders have the knowledge, skills, and resources they need to embed MTSS practices into their everyday work

These practices transcend school demographics or format. Whether your school is small, rural, and serves young children in a face-to-face format, or is a large, urban high school that delivers content online, these best practices are both relevant and necessary for quality MTSS implementation.

Particularly as systems are making transitions in programming or format, these same quality practices will help ensure a well-informed evolution and provide essential information about the impact on student outcomes of the implemented change.

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### We're here to help drive student success:

Interested in learning more about how Sourcewell Technology's MTSS and data experts can help you maximize your MTSS/RtI programs? Our dedicated and knowledgeable team of education experts is here for you.

Contact us at: 615-999-6000 | [clientsolutions@sourcewelltech.org](mailto:clientsolutions@sourcewelltech.org)

