



KyMTSS  
Multi-Tiered System of Supports

# Implementation Guide



Kentucky Department of  
**EDUCATION**

# Contents

Contents .....	i
KyMTSS Project Leadership Team.....	iii
Policy Advisors .....	iii
KyMTSS Project Work Group .....	iv
Introduction .....	1
Kentucky’s Multi-Tiered System of Supports.....	2
An Integrated Framework .....	2
Essential Elements of the KyMTSS Framework.....	3
Infrastructure for Effective Implementation.....	4
Collaborative Problem-Solving Teams (Includes Shared Leadership, Collaboration and Communication) .....	6
Overview .....	6
Integration and Alignment of Teams .....	7
KyMTSS Teaming Structures .....	8
Effective Teaming Process.....	12
Communication Protocol .....	12
Data-Based Decision-Making with a Comprehensive Screening and Assessment System .....	14
Overview .....	14
Problem-Solving Process .....	15
Four-Step Problem-Solving Model .....	16
Decision Rules .....	19
Comprehensive Screening and Assessment System .....	19
Tiered Delivery System with a Continuum of Supports.....	24
Overview .....	24
Universal Level of Support: Tier 1 .....	25
Assessment in Tier 1 .....	26
Decision-Making at Tier 1 .....	27
Supplemental Level of Support: Tier 2.....	28
Assessment at Tier 2.....	28
Decision-Making at Tier 2.....	29

Intensive Level of Support: Tier 3 .....	29
Assessment at Tier 3.....	30
Decision-Making at Tier 3.....	30
Selection of Evidence-Based Instruction, Intervention and Supports .....	32
Overview .....	32
The Role of Evidence within the MTSS Framework .....	33
Selection and Adoption of Evidence-Based Instruction, Intervention and Supports .....	35
Equitable Access and Opportunity.....	39
Overview .....	39
Building an Equitable MTSS.....	39
Equitable Data-Based Decision-Making .....	40
Equitable Practices .....	41
Family, School and Community Partnerships .....	43
Overview .....	43
Key Features of Implementation.....	44
References: .....	47

## KyMTSS Project Leadership Team

### **Caryn Davidson**

Academic Consultant, Division of Program Standards  
Office of Teaching and Learning

### **Jenifer Hill**

Director of School Technology, Planning and Project Management  
Office of Educational Technology

### **Micki Ray**

Chief Academic Officer  
Office of Teaching and Learning

### **Tara Rodriguez**

Division Director, Division of Program Improvement  
Office of Continuous Improvement and Support

### **Jan Sellers**

MTSS Coordinator, Division of Program Standards  
Office of Teaching and Learning

### **Amanda Waldroup**

Assistant Director, Division of IDEA Implementation and Preschool  
Office of Special Education and Early Learning

### **Christina Weeter**

Division Director, Division of Student Success  
Office of Continuous Improvement and Support

## Policy Advisors

### **Matthew B. Courtney, Ed.D.**

Policy Advisor  
Office of Continuous Improvement and Support

### **Sarah Peace**

Policy Advisor, Division of Program Standards  
Office of Teaching and Learning

## KyMTSS Project Work Group

### **Ashley Cook**

Exceptional Children Program Consultant  
Division of IDEA Implementation and Preschool  
Office of Special Education and Early Learning

### **Meghan Martin**

MTSS State Consultant  
Center for Instructional and Behavioral Research in Schools  
University of Louisville

### **Deborah Sauber**

Branch Manager Safe and Supportive Schools  
Office of Continuous Improvement and Support

### **Erin Sudduth**

Program Consultant Title III (English Language Learners)  
Division of School and Program Improvement  
Office of Continuous Improvement and Support

### **Ruth Swanson**

Program Consultant Educational Recovery  
Division of School and Program Improvement  
Office of Continuous Improvement and Support

### **Damien Sweeney, Ed.D.**

Program Coordinator for Comprehensive School Counseling  
Office of Teaching and Learning

### **Kathryn Tillett**

Program Consultant  
Division of Student Success  
Office of Continuous Improvement and Support

### **Melissa Wainwright, Ed.D.**

Director of Professional Learning and Support  
Ohio Valley Educational Cooperative

## Introduction

This implementation guide was developed to provide educators with a definition of Kentucky's Multi-Tiered System of Supports (KyMTSS) and to build a common understanding around the essential components of KyMTSS. The information in this guide reflects current research and evidence-based practices and is designed to support districts and schools in implementation, improvement and sustainability of an integrated MTSS framework. It is not intended to be a substitute for training, but rather to increase understanding of the various components of an effective multi-tiered system of supports.

The KyMTSS Implementation Guide builds on the work from the Kentucky Department of Education's original guidance on response to intervention, the Kentucky System of Interventions (KSI) document, to provide a more developed vision of an integrated and comprehensive framework of academic, behavioral and social-emotional supports that promote positive outcomes for every learner.

### **Associated Kentucky Department of Education Regulations:**

[Senate Bill 9](#)

[KRS 158:305](#)

[KRS 158.6459](#)

[KRS 158:840](#)

[704 KAR 3:095](#)

## Kentucky's Multi-Tiered System of Supports

The Kentucky Department of Education (KDE) has expanded the system for response to intervention (RTI) to a more comprehensive multi-tiered system of supports (MTSS) to assist schools and districts in providing a seamless continuum of instruction, intervention and support to improve outcomes for all students. Kentucky's statewide MTSS framework (KyMTSS) is defined as a multi-level prevention system to support student achievement and social-emotional behavioral competencies through an integration of differentiated core instruction, assessment and intervention.

### An Integrated Framework

KyMTSS is a continuous improvement framework that organizes and promotes integration of the various multi-tiered systems and state, district and school initiatives that support academic proficiency, positive behavior and social-emotional wellbeing. Response to Intervention (RTI) and Positive Behavior Intervention and Support (PBIS) are examples of multi-tiered systems that are supported under the framework of KyMTSS. Integrated school mental health, social-emotional learning, trauma-sensitive schools, resiliency practices and culturally responsive practices are just a few examples of initiatives that are supported under this single, cohesive system of supports.

In their book, *Integrated Multi-Tiered Systems of Support: Blending RTI and PBIS*, McIntosh and Goodman (2016) emphasize that the goal of an integrated MTSS is improved student outcomes by making systems more “effective, efficient, equitable and sustainable” (p. 236). An integrated framework aligns to the research that demonstrates the interconnectedness of academic and behavior skills and provides more cohesive support through the use of integrated teams, data and practices.

KyMTSS utilizes a tiered prevention-based framework with a continuum of instruction, intervention and supports designed to address the needs of the whole child. The foundation of the framework is strong Tier 1 instruction aligned with grade-level academic standards, positive behavioral expectations and core social-emotional competences for all students. A coordinated system of valid and reliable assessments, including screening and progress monitoring measures, provides relevant and useful data to inform instructional and programmatic decisions at both the system and student level.

Collaborative teams engage in data-based decision-making related to program improvement, high-quality instructional practices and evidence-based interventions matched to student need in order to ensure positive outcomes for districts, schools, teachers and students.

Districts and schools may be in various stages of implementing RTI and/or PBIS with many of the procedures, resources and supporting structures already in place. However, academic, behavior and social-emotional supports often are implemented in silos or parallel systems that work independently of each other. Each system and initiative might have its own set of teams

doing the work, separate data systems and separate practices. McIntosh and Goodman (2016) promote building one coherent, strategically combined system to address multiple domains or content areas in education to achieve and sustain positive outcomes more effectively.

While there are various ways to develop an integrated model, the decision of how to do so will be dependent on individual school and/or district circumstances and needs. For those operating as two parallel systems or ready to add a new system to an existing RTI or PBIS model, an integrated MTSS framework can be developed from existing systems by expanding the scope. For schools in the exploration or beginning implementation stages, a fully integrated model may be developed right from the start (McIntosh & Goodman, 2016). The first step in this process is building a common understanding around the essential elements of KyMTSS.

### Essential Elements of the KyMTSS Framework

The vision of the Kentucky Department of Education (KDE), “each and every student empowered and equipped to pursue a successful future,” sets the focus for the work of the agency and also is the goal of Kentucky’s integrated MTSS framework. The essential elements of the KyMTSS framework align with this vision and the big ideas of [United We Learn](#) as outlined in [KDE's Strategic Plan](#).

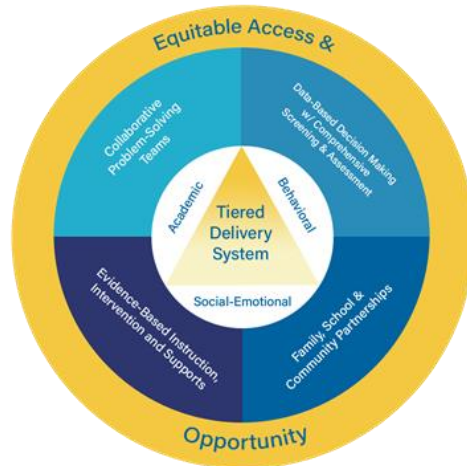
KDE has identified six elements as essential to the implementation, improvement and sustainability of an effective multi-tiered system of supports:

1. Collaborative Problem-Solving Teams (includes shared leadership, collaboration and communication)
2. Data-Based Decision Making with a Comprehensive Screening and Assessment System
3. Tiered Delivery System with a Continuum of Supports
4. Evidence-Based Instruction, Intervention and Supports
5. Equitable Access and Opportunity
6. Family, School and Community Partnerships

The KyMTSS graphic (see Figure 1.1) illustrates how these six essential elements are interconnected and designed to promote positive outcomes for all students.



Figure 1.1 KyMTSS Graphic



- **Equitable Access and Opportunity** surrounds the entire framework to represent the intentional commitment to equity within and across all components of KyMTSS.
- At the center of the model is the familiar triangle representing the **Tiered Delivery System** with a continuum of supports that are designed to meet students’ academic, behavioral and social-emotional needs. These domains surround the triangle to show they are embedded into all layers of the system.
- **Collaborative Problem-Solving Teams**, the strategic use of **Data-Based Decision Making within a comprehensive screening and assessment** system, **Evidence-Based Instruction, Intervention and Supports** and **Family, School and Community Partnerships** surround the triangle to demonstrate they are interconnected and address the needs of the whole learner across the continuum of supports.

### Infrastructure for Effective Implementation

Supporting systems and infrastructure are critical to the successful implementation and sustainability of a MTSS. Key features of district and school infrastructure that must be in place for effective implementation include:

1. Actively involved leadership that provides a visible connection between a MTSS framework with district and school improvement efforts.
2. Policies and procedures that are aligned across classroom, grade, school, district and state levels.
3. Use of a systematic problem-solving process to support planning, implementing and evaluating the effectiveness of services.
4. Collaborative partnerships with all stakeholders who provide educational services and support or benefit from improved student outcomes.

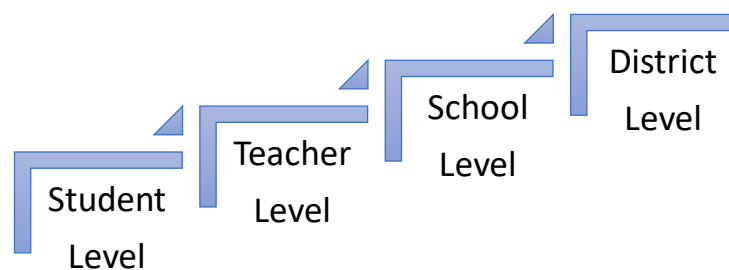
5. Data systems that are comprehensive, efficient and user-friendly and used to inform decision-making at all levels of the system (individual student level up to the aggregated district level).
6. Coaching supports to assist teams at all levels of the system with data-based decision-making and problem-solving.
7. High-quality, data-driven professional learning opportunities that are aligned to school and district improvement efforts.
8. Communication of outcomes, information about the multi-tiered system and action plans with all stakeholders and celebrations of success (Florida's PBIS: MTSS and FL PS/RTI, 2016).

# Collaborative Problem-Solving Teams (Includes Shared Leadership, Collaboration and Communication)

## Overview

Collaborative problem-solving teams within Kentucky’s Multi-Tiered System of Supports (KyMTSS) exist at multiple implementation levels of the educational system (Figure 2.1) and across all three tiers. Teams at each level are aligned to support common goals and outcomes related to students’ academic proficiency, behavior and social-emotional wellness.

Figure 2.1 Implementation Levels of KyMTSS Teams



For effective and sustainable MTSS implementation, teams at each level of the system should reflect a cross section of key stakeholders and initiatives. Collaborative teams meet regularly using data to determine strengths and needs at both the system and student level. MTSS leadership teams develop a common vision, set goals, establish evidence-based practices and create action plans with input from diverse stakeholders that are reflective of the school and community.

District and school leadership teams are responsible for building the infrastructure, guiding implementation and supporting sustainability of the multi-tiered system. Leadership teams bring together the knowledge, resources and organizational structures necessary to operationalize all components of an integrated MTSS in order to meet the established goals of the district and/or school.

A team approach helps to distribute the workload among multiple individuals and facilitates collaboration and communication between all stakeholders. Teams that establish efficient systems to collaborate and communicate contribute to the alignment and cohesion of the work across the multiple levels of the system (McIntosh & Goodman, 2016).

A collaborative problem-solving team approach maximizes both the implementation and sustainability of an integrated MTSS plan. To be truly effective, districts and schools also must create a system for teachers and staff to communicate and collaborate effectively. This can be accomplished through intentionally designed collaborative teams with shared goals that

integrate the various academic, behavioral and social-emotional initiatives identified as key priorities of the district and school.

### Integration and Alignment of Teams

Within the KyMTSS framework, a strategic alignment and integration of teams is essential to bring separate initiatives and innovations together under one unified system of supports. Alignment of district and school leadership teams encourages a consistent, systematic approach to data-based problem-solving and keeps the focus on improved academic, behavioral and social-emotional outcomes for all students. An integrated team approach brings together the range of skills and knowledge around a shared set of values to solve problems and guide actions to improve outcomes for all students.

Districts and schools may be in varying stages of implementing a multi-tiered system, and it is not uncommon for there to be separate sets of teams in place to address academic and social-emotional behavior. Often additional teams are created to support specific initiatives as they are adopted by the district or school. To strategically implement an integrated teaming structure within an MTSS framework, it is recommended that leadership teams conduct an inventory of existing teams and initiatives, their purpose, typical members, common roles and responsibilities and alignment to school and/or district improvement goals (McIntosh & Goodman, 2016; Sugai, 2010).

By conducting an inventory, schools and districts can determine which teams may need to be consolidated, supported, eliminated or added to build efficiency in the problem-solving process. Thus, the MTSS framework becomes an effective way to organize existing and future initiatives for continuous district and school improvement. It is important to note that there is not one optimal teaming structure that will meet the needs for every school or one perfect configuration of teams.

To assist schools and districts in finding the right balance of teaming structures, McIntosh and Goodman (2016) recommend starting with the most logical teams to integrate and offer three methods for districts and schools to consider:

1. Adapt existing teams;
2. Integrate across domains; or
3. Integrate across tiers.

Regardless of the number and configuration of MTSS teams, it is critical that teams are aligned with each other and with the mission of improving academic, behavioral and social-emotional outcomes for all students.

## KyMTSS Teaming Structures

**District and school leadership teams** comprised of individuals with diverse skills and perspectives are the foundation of a successful MTSS. Chenoweth and Everhart (2002) recommend that teams be reflective of the diversity of the staff, students and community. All grade levels, departments and support staff should be represented by team members who are knowledgeable about school improvement efforts and possess the skills to move the team forward in meeting district or school improvement goals. They propose that leadership team members should:

- Be committed to school-wide change;
- Be respected by colleagues;
- Possess leadership potential;
- Demonstrate effective interpersonal skills; and
- Be able to start projects and “get things done.”

The leadership team crafts a clear vision that prioritizes the whole child and reflects the interconnected academic, behavioral and social-emotional domains of learning. MTSS leadership teams continuously analyze system and student outcome data, examine instructional and intervention practices, and assess effectiveness to ensure that improvement efforts move forward.

The leadership team actively facilitates installation, implementation, management and communication of the integrated MTSS framework as part of a continuous improvement process. Coordinated professional learning and on-going coaching on the essential components of MTSS, effective instructional practices and intervention implementation are provided to all staff as part of the overall MTSS action plan.

**District leadership teams** ensure that there is a consistent, cohesive district vision of MTSS, provide long-term planning to improve student outcomes, evaluate the implementation and success of the system, and coordinate professional learning and coaching to develop capacity at the school level (McIntosh and Goodman, 2016). Membership should include district personnel with the authority to make funding and policy decisions and represent key stakeholders in the district, schools and community.

Effective district leadership teams typically include: school administrators; district curriculum and instructional leaders; the district MTSS coordinator; district coaches or content area specialists; mental health or behavioral specialists; family members; and local community agency representatives. By including family and community representation, MTSS teams recognize that families, educators and others in the community share responsibility for student learning and well-being.

District teams utilize a problem-solving model to identify and align key priorities that will have the greatest impact on student outcomes based on data from a whole child perspective. They problem-solve to remove barriers to learning by allocating funding, resources and time to implement those priorities. Multiple sources of data are continually gathered and analyzed to evaluate MTSS implementation and the impact on student outcomes. District teams typically meet on a monthly or quarterly basis to evaluate the effectiveness of their action plan.

Table 2.1. Common District MTSS Leadership Teaming Structures

Membership	Level of Focus	Core Functions
<ul style="list-style-type: none"> <li>• District administrators (superintendent or assistant superintendent, curriculum and instruction supervisor, director of special education, etc.)</li> <li>• School administrators</li> <li>• Community representatives</li> <li>• Family representatives</li> <li>• District MTSS coordinator</li> <li>• District content/behavior specialists, and/or teacher leader/coach</li> <li>• Gifted/talented coordinator</li> <li>• English language coordinator</li> <li>• Family resource/nurse/mental health</li> </ul>	<ul style="list-style-type: none"> <li>• MTSS Framework - systems capacity for each school</li> <li>• Tier 1/Universal</li> <li>• Tier 2 and Tier 3 systems</li> </ul>	<ul style="list-style-type: none"> <li>• Collect, summarize and analyze districtwide academic and social-emotional behavioral data</li> <li>• Develop and facilitate a district MTSS action plan for implementation and sustainability</li> <li>• Coordinate and monitor the plan</li> <li>• Evaluate fidelity of implementation and effectiveness of the MTSS model</li> <li>• Build local capacity to implement through targeted professional development and coaching</li> <li>• Communicate current status of MTSS implementation and student outcomes to key stakeholders</li> <li>• Remove barriers to implementation</li> </ul>

Adapted from: McIntosh, K. & Goodman, G. (2016); Center for Instructional Research in Schools-CIBRS (2021).

**School leadership teams** align their vision and action plan with the district priorities and build a tiered system of evidence-based instruction, intervention and supports that are a cultural and contextual fit for their school. School teams identify the fidelity and student outcomes they wish to achieve, and the data needed to monitor progress toward those outcomes. They intentionally plan the professional learning and coaching needed for staff to increase their understanding of MTSS, to implement the identified practices and to gather the required data.

This team provides oversight for initial and sustained implementation of MTSS within the building. Team membership typically includes administrator(s), teachers representative of grade levels/content areas, representatives from other teams or school initiatives, staff with expertise relevant to cultural and linguistic differences, families or school personnel central to work with families (school nurse, family resource, school social workers, etc.) and community partners or school personnel central to work with community agencies or organizations. Teams meet regularly to analyze relevant data and evaluate MTSS implementation and progress

toward their goals. This team provides regular updates on the current status and outcomes to staff, district and other stakeholders.

In addition to Tier 1 implementation, school leadership teams ensure that Tier 2 and Tier 3 *systems* are addressed (McIntosh & Goodman, 2016). This can be accomplished by either setting up an additional team or having the school leadership team serve the function of the Tier 2/Tier 3 systems team. The focus of this work is establishing the systems, data and practices to support students identified as at-risk for not meeting grade-level academic, behavioral and/or social-emotional benchmarks, students exceeding benchmarks and for students with more intensive academic and/or nonacademic needs.

A team that is responsible for coordinating and managing academic, behavioral and social-emotional intervention and supports and monitoring intervention effectiveness reflects the continuum of supports of an integrated MTSS.

Table 2.2. Common School MTSS Leadership Teaming Structures

Membership	Level of Focus	Core Functions
<ul style="list-style-type: none"> <li>• Principal</li> <li>• Grade-level or content-level team representatives</li> <li>• Behavior/content specialists</li> <li>• Staff with cultural and linguistic expertise</li> <li>• School counselor/social worker/school psychologist</li> <li>• Family representative(s)</li> <li>• Student(s)</li> </ul>	<ul style="list-style-type: none"> <li>• School capacity</li> <li>• School-wide level: all students</li> <li>• Primary Focus: Tier 1/Universal</li> <li>• Tier 2/3 systems</li> </ul>	<ul style="list-style-type: none"> <li>• Develop, coordinate and facilitate an integrated MTSS plan</li> <li>• Develop an annual plan of action and evaluation</li> <li>• Collect, summarize and analyze school level academic, social-emotional and behavioral data</li> <li>• Define process of how Tier 2 and Tier 3 interventions are selected and how students are identified and matched to intervention based on needs</li> <li>• Define decision rules for determining student response to intervention and supports</li> <li>• Evaluate fidelity of implementation and effectiveness of Tier 1, Tier 2 and Tier 3 systems</li> <li>• Communicate current status of MTSS implementation and student outcomes to stakeholders</li> <li>• Coordinate professional learning and coaching for staff</li> </ul>

Adapted from: McIntosh, K. & Goodman, G. (2016); Center for Instructional and Behavioral Research in Schools-CIBRS (2021).

**Grade-level/content teams** manage and implement evidence-based practices for students within their specific grade or content area. These teams work collaboratively to clarify the

essential learning and skills students must master, the level of rigor and what constitutes proficiency, and the prerequisite skills and knowledge necessary for students to be successful. They use student outcome data to increase consistency across classrooms and facilitate collaboration in problem solving. Teams review universal screening, formative assessment and progress monitoring data to identify and respond to students in need of remediation, intervention or extensions.

Table 2.3. Common MTSS Grade-Level/Content Area Teaming Structures

Membership	Level of Focus	Core Functions
<ul style="list-style-type: none"> <li>• School administrator</li> <li>• Grade-level or content area teachers</li> <li>• Support staff</li> </ul>	<ul style="list-style-type: none"> <li>• All grade-level students with primary emphasis on prevention at Tier 1</li> <li>• Students receiving interventions and/or enrichments</li> </ul>	<ul style="list-style-type: none"> <li>• Collect and review grade level universal screening data and diagnostic assessment</li> <li>• Collaborate and implement grade level integrated academic, behavioral and social-emotional practices, such as intervention groupings and evidence-based intervention</li> <li>• Communicate with the school leadership team</li> </ul>

Adapted from: McIntosh, K. & Goodman, G. (2016); Center for Instructional and Behavioral Research in Schools-CIBRS (2021).

**Student Intervention teams** focus on the needs of individual students who require a more intensive level of support. This is often a core multidisciplinary team with other members added as needed to meet the unique needs of the student. The team’s focus is to develop, implement and monitor the student’s individualized intervention and supports.

Table 2.4. Common Student Intervention Teaming Structures

Membership	Level of Focus	Core Functions
<ul style="list-style-type: none"> <li>• School administrator or counselor</li> <li>• Classroom teacher</li> <li>• Consistent team members with academic and behavior/social-emotional expertise</li> <li>• Staff providing intensive intervention support</li> <li>• Student/family/community agency representative</li> </ul>	<ul style="list-style-type: none"> <li>• Individual student</li> </ul>	<ul style="list-style-type: none"> <li>• Individual student problem-solving</li> <li>• Set individual goals</li> <li>• Select appropriate evidence-based interventions</li> <li>• Monitor effectiveness of intervention by reviewing student progress monitoring data and fidelity of implementation data</li> </ul>

Adapted from: McIntosh, K. & Goodman, G. (2016); Center for Instructional and Behavioral Research in Schools-CIBRS (2021).



## Effective Teaming Process

Teams at all implementation levels benefit by using organizational strategies that facilitate effective interactions, problem-solving and action planning. Clear agendas, roles and procedures help teams stay focused on relevant data analysis and decision making. McIntosh and Goodman (2016) propose the following strategies for more effective teaming in an integrated MTSS model:

- Clear mission and purpose
- Agreements and norms
- Roles and Responsibilities clearly identified
  - Facilitator
  - Recorder
  - Timekeeper
  - Data analyst or coordinator
  - Active team member
- Structured agenda
  - Review of student outcome data and fidelity of implementation data with a structured problem-solving and decision-making process
  - Time allocated for each agenda item
  - Tasks and action planning, including person responsible and due date for completion
  - Communication plan
  - Meeting self-assessment (pp. 173-176)

## Communication Protocol

District and school-level teams develop and maintain a written communication protocol in order to share information and elicit input between the various MTSS teams, staff, families, students and relevant community agencies related to the implementation of MTSS. In this way, teams at all levels of the system communicate progress and celebrate successes; identify and address barriers to implementation; and report on actions taken to resolve or address identified areas of concern (State Implementation and Scaling-up of Evidence-based Practices [SISEP], 2018). The written communication protocol should include all identified stakeholders and provide them with an opportunity to have input on the decisions being made based on the data. An effective communication plan includes the following features:

- Information about the level of communication;
- Description of the information that will be communicated;
- Names of the individuals responsible for initiating the communication and who would receive it;

- Frequency of communication and time allotted for disseminating the information;
- Timeframe for the response/action; and
- Response format.

The communication process should be evaluated at least annually for effectiveness and functionality and adjusted as needed.

# Data-Based Decision-Making with a Comprehensive Screening and Assessment System

## Overview

Data-based decision-making within Kentucky's framework for a multi-tiered system of supports (KyMTSS) begins with the provision of high-quality instruction aligned with the *Kentucky Academic Standards (KAS)*, schoolwide behavior expectations and core social-emotional competencies and a continuum of interventions matched to student needs. Data from a comprehensive screening and assessment system inform instructional and programmatic decisions at the district, school, classroom and student levels. District and school leadership teams systematically use data to evaluate the capacity, fidelity and effectiveness of the multi-tiered system and address any barriers to implementation.

School teams at all levels of the system analyze and use data from a variety of relevant sources to plan, implement and adjust instructional and intervention practices to achieve improved and sustainable outcomes for all learners. By focusing on specific questions about student academic, behavioral and social-emotional outcomes, teams can prioritize which types of data to gather to inform programmatic and instructional decisions (Hamilton et al., 2009). Potential data sources include:

- Needs assessment;
- Academic, behavior and social-emotional screenings;
- Formative assessment data;
- Progress monitoring data;
- Demographic data;
- Early warning indicators;
- Student/family/staff survey data; and/or
- Relevant community data.

MTSS leadership teams establish routines and processes for conducting data reviews, systematic decision-making and assessing student progress. They ensure there is a process in place to ensure valid and reliable screening, progress monitoring and diagnostic assessments are selected, matched to local context and used with fidelity. To increase efficiency of data-based decision making, districts and schools need a systematic way to collect the data and a protocol to ensure consistent collection, entry and accessibility to student and system level data (Michigan Department of Education, 2020). Although there are many different types of

data systems, from vendor-published to district-created, there are critical features across all systems that facilitate effective collection and use of MTSS data.

Data systems, at a minimum, should allow educators to:

1. Access student-level data (including screening and progress monitoring data);
2. Enter data in a timely manner;
3. Represent data graphically; and
4. Set/evaluate district, school, grade and individual goals (Bailey et al., 2020, p. 33).

Data systems should be flexible enough for teams to be able to combine, disaggregate and display the information as needed to answer the questions being asked across the continuum of instruction, intervention and supports. Effective MTSS implementation depends on educators having access to the right data within the system to address their questions (Bailey et al., 2020).

District and school leaders make certain that MTSS team members have data literacy skills - the knowledge and skills to select, interpret and use data to make informed decisions, monitor implementation and student outcomes over time, and adjust instruction and intervention as needed.

In an effective system, various sources of data across academic, behavioral and social-emotional domains are analyzed, and trends are disaggregated by group to determine the assets, needs and resource allocation within the district and school. Data-based decision-making is essential to ensure the infrastructure, instructional practices and implementation efforts of the MTSS are effective in supporting each and every student. In addition, a systematic decision-making process provides information that can be communicated to stakeholders about students' academic proficiency, behavior and social-emotional well-being.

### Problem-Solving Process

The use of a consistent problem-solving process is critical to making programmatic and instructional decisions needed for continuous improvement in an effective multi-tiered system of supports. Teams use multiple data sources to make decisions about instruction, movement within the multi-levels of prevention and intensification of interventions and support (Center for Multi-Tiered System of Supports, 2021). Some guiding questions for district/school level leadership teams to ask during the problem-solving process include:

- ❑ Are the universal supports - academic, behavioral and social-emotional instruction - meeting the needs of most students in the district/school (at least 80% or more)?
- ❑ Are there differences among subgroups? What percent of students in subgroups are meeting benchmarks (at least 80% or more)?
- ❑ What percentage of students require additional supports?

- ❑ How does the team determine when student(s) require supplemental and more intensive, targeted intervention and support?
- ❑ Which students would benefit from planned enrichment opportunities?
- ❑ Are students doing better overall? Are most students responding to Tier 2 and Tier 3 intervention?
- ❑ Are systems and practices implemented as intended/designed?
- ❑ Are resources and professional learning provided to educators for implementation fidelity?

At Tier 2 and Tier 3, when looking at groups of students or individual students, the school-level teams would ask:

- ❑ What are the similar instructional, behavioral and/or social-emotional needs among these students?
- ❑ Which evidence-based instructional practices/interventions will best meet those needs?
- ❑ Are most students making adequate progress when provided with supplemental/intensive intervention?
- ❑ Have the interventions been provided with fidelity?
- ❑ Are resources and professional learning provided to educators to ensure implementation fidelity?

The success of a systematic problem-solving process “depends on the quality of the data collection system and the willingness of all members not only to consider problems at the student level, but also at the systems level” (Pullen et al., 2019, p. 8).

#### Four-Step Problem-Solving Model

Utilizing a standardized problem-solving model at all levels of the system assists teams in determining district, school and student needs, identifying solutions, setting measurable goals and monitoring the impact of the multi-tiered systems (Burns et al., 2016). There are a variety of problem-solving models with many common features that educators use to improve the quality of instructional programs and student outcomes. Figure 3.1 shows four easily executed steps of a common problem-solving model (Tilly, 2008).

Figure 3.1: Four Step Problem-Solving Model



**1. Define the Problem:** The first step in the decision-making process is to determine whether a problem exists and define it as precisely and explicitly as possible. To help with this decision, teams compare current data to specific criteria – such as academic/nonacademic benchmarks, local or national norms, performance from previous years, implementation benchmarks, etc. – in order to answer these questions (adapted from Florida-RTI, 2015):

- ❑ What should students *know, understand and be able to do* as a result of universal learning supports?
- ❑ What exactly is the problem or discrepancy between the current performance and the expected performance or goal?
- ❑ Are there students for whom the Tier 1 learning supports are ineffective?
  - Are more than 20% of students identified as at-risk or needing additional support (Tier 2)?
    - If yes, does the MTSS action plan address this (e.g., focus on strengthening Tier 1)?
  - Are more than 5% of students identified as needing intensive intervention (Tier 3)?
    - If yes, does the MTSS action plan address this?
- ❑ Is there evidence of disproportionality in academic/behavior/social-emotional outcomes (i.e., race, ethnicity, sex, disability, grade-level, class distribution, etc.)?

**2. Problem Analysis:** After a problem or goal has been defined, it is necessary to analyze the data with enough depth to develop hypotheses and identify potential barriers to successfully achieving the goal. This is an essential step that provides the foundation for the rest of the data-based decision-making process. The team uses the data to generate hypotheses, or possible root causes, that are grounded in evidence. Careful data collection and analysis during this step will help develop solutions/interventions that are more directly linked to the problem in order to help the team answer these essential questions:

- ❑ Why is the problem occurring?
- ❑ What barriers prevent successful achievement of the goal?

**3. Planning and Implementation:** The MTSS team takes the information from the problem analysis at step 2 to match the intervention to the possible root cause/specific skill

deficit. Some guiding questions for teams as they begin to formulate action steps/interventions include (adapted from FL-RTI, 2015):

- ❑ What are we going to do to address the concern?
- ❑ What evidence-based instructional practices and supports will be used?
- ❑ What resources are needed to support implementation of the plan?
- ❑ Are there standard interventions or approaches that might be beneficial for use?
- ❑ Are there students who might need more intensive or individualized learning supports?
- ❑ What resources are needed to support initial and ongoing implementation of the plan?
- ❑ How will the effectiveness of Tier 2 and Tier 3 supports be monitored over time?
- ❑ How will fidelity of implementation be monitored?
- ❑ What decision rules will be utilized to determine the response to the plan?

A good plan must be feasible to implement, have evidence of being effective and should include the following characteristics:

- ❑ Explicitly state what will be implemented/taught;
- ❑ Set a clear goal with criteria for success;
- ❑ Focus on measurable outcomes;
- ❑ Define who is responsible;
- ❑ Describe the plan for measuring and monitoring outcomes (the progress monitor should align with the intervention that will be implemented);
- ❑ Describe the plan for monitoring fidelity; and
- ❑ Identify any needed resources and/or training available to implement the plan.

**4. Evaluation:** During this stage, the success of the plan is evaluated using data to determine whether the problem still exists. If so, the problem-solving steps will begin again applying new information gained from the process. During this step, teams look at the outcome data (visually represented; ideally graphed) and fidelity data to answer the questions:

- ❑ Did our plan (instruction/intervention/systems change) work? If not, how will the plan be adjusted?
- ❑ Was the plan implemented as designed?
- ❑ What is the response to instruction and intervention?
  - Positive: The gap between the expected performance and observed performance is closing.
  - Questionable: The rate at which the gap is widening slows considerably but is still widening or stops widening, but the closure does not occur.

- Poor: The gap continues to widen with no change in rate of progress after instruction/intervention is implemented.

## Decision Rules

Criteria for decision-making or decision rules are articulated, in writing, and used by leadership teams as a consistent way to determine:

- If universal instruction is effective for most students (e.g. minimum of 80% meeting benchmark);
- Which students are at risk or exceeding benchmarks and need supplemental support;
- How frequently to monitor progress;
- When to review progress monitoring data;
- When to continue, intensify or exit a student from an intervention; and/or
- When to refer a student for a special education evaluation (in accordance with state regulations).

Decision rules facilitate the problem-solving process by clearly defining what happens when less than 80% of students are meeting benchmarks, progress varies by subgroup or lack of progress is evident. Decisions about risk status and response to intervention should be operationalized with clear, consistent rules prior to administration of the tool.

Written decision rules facilitate the analysis and use of screening and progress monitoring data. The Center on Multi-Tiered System of Supports recommends that at least two data sources be used when determining students' at-risk status (2021).

## Comprehensive Screening and Assessment System

A comprehensive system of valid and reliable assessments and screening measures provides relevant and useful data to inform instructional and programmatic decisions at both the system and student levels. In their white paper (2020), Jackson and Ehlers note that a system is comprehensive when it integrates a complete set of assessments to “appropriately and effectively support teaching and learning” (p. 5). Using the right assessment tools and practices, at the right time for the right reasons, allows educators to monitor learning, identify needs and align just-in-time supports (Jackson & Ehlers, 2020).

A comprehensive screening and assessment system serves a variety of purposes, uses multiple measures and provides the data used for decision-making at all levels and tiers of an MTSS. This coordinated system of assessments includes:

1. Balanced Assessment (e.g., formative, benchmark/interim, diagnostic, summative)
2. Universal Screening
3. Progress Monitoring
4. Fidelity Assessment



**Balanced Assessment System:** *Kentucky's Model Curriculum Framework* (pp. 85-88) identifies and defines four primary assessment purposes that work together in a comprehensive, balanced assessment system:

- **Formative assessment** is administered frequently by teachers during an instructional unit to assess student learning continually and routinely as it happens. Used effectively, formative assessment helps teachers quickly monitor students' progress and adjust instruction to improve learning.
- **Diagnostic assessment** is a formal strategy or tool designed to measure specific student strengths and weaknesses in student learning relative to their learning standards or goals. Diagnostic assessments focus on individual students and provide information to help educators adjust instruction or intervention to meet students' current knowledge and skills. While both the formative assessment process and diagnostic assessments are designed to help teachers more effectively support student learning, diagnostic assessments are not an ongoing process embedded in teaching and learning. Instead, they are specific measurement tools and strategies used when educators need more detailed information about individual or groups of students who continually demonstrate a lack of response to instruction. Diagnostic assessments can help to inform next steps for instruction and/or intervention. They also are important for ensuring that interventions are matched to student needs and supporting the hypothesis development necessary for intensifying interventions and supports (Bailey et al., 2020).
- **Interim/benchmark** assessment is typically administered at specific intervals over the course of an academic year in order to compare student understanding or performance against a set of learning standards or objectives. Interim assessments are often common across classes or schools in a district. Interim assessments can give us information about progress toward the longer-term learning expectations and can inform future instructional decisions and school improvement planning. When well aligned to common learning expectations, interim assessments can be predictive of end-of-year performance.
- **Summative assessment** is administered at the end of a period of learning to measure the outcome of student learning and serves as an indicator of learning. Examples of summative assessments include the statewide end-of-year assessment and classroom-level summative assessments. Summative assessment provides information about students in relation to a set of academic or nonacademic expectations and is intended to monitor and evaluate student performance at the group level. Summative assessments also may be used to provide information and inform decisions about the overall effectiveness of MTSS. Data is useful to inform program-level and school

improvement planning; it provides an overall picture of how a system is preparing students to meet academic, behavioral and social-emotional learning expectations.

**Universal screening** and **progress monitoring** measures are two types of formative assessment used within the MTSS framework. These formative assessments are more formal in design and require valid and reliable tools delivered in a standardized way (Bailey et al., 2020). MTSS teams use universal screening and progress monitoring data to make decisions about instruction, movement within the multi-level prevention system and intensification of instruction, interventions and supports.

**Universal screening measures** offer an evidence-based and proactive way to monitor Tier 1 instruction and supports. Universal screenings are designed to be quick, efficient, reliable and predictive. Using validated screening procedures, the MTSS leadership team ensures that all students are screened with fidelity on an on-going basis (Center on RTI, 2014); typically, two-three times during the school year (i.e., fall, winter and spring). In secondary settings, early warning systems may be used alongside historical data to identify students at risk for not meeting outcomes such as school completion, academic success and college and career readiness. Early warning systems use research-based indicators, such as attendance, behavior, course performance and demographics, that when used with other sources of data can be used to evaluate the effectiveness of Tier 1 as well as identify students at risk (American Institutes for Research, 2020; U.S. Department of Education, 2016).

Universal screening measures provide data on how all students are progressing to meet academic, behavioral and social-emotional indicators and to identify students who may need additional support provided through Tier 2 or Tier 3 intervention. However, it is important to remember that prior to using screening data to identify individual students for supplemental or intensive interventions, teams use the data to evaluate whether Tier 1 instruction is effective for most students and develop a plan for improvement if less than 80% of students are not meeting benchmarks (Metcalf, n.d.).

Universal screening data support decision-making at all levels of the system – from the district level to the student level. District teams use screening data to make decisions and set goals related to program improvement and curriculum, initiative alignment and sustainability, allocation of resources and equitable access and opportunity across schools. School teams use screening data to review school and grade-level trends, monitor effectiveness of schoolwide curriculum and supports, identify areas of need, and to set measurable schoolwide goals (Bailey et al., 2020). Teachers use screening data to identify students in need of additional support or extensions. They adjust instruction, intervention and supports as needed (Center on Multi-Tiered System of Supports, 2021). When selecting appropriate screening tools, MTSS teams should consider the cultural and linguistic needs, context and desired outcomes of the school and/or district.

**Progress monitoring measures** are brief, repeated measures that capture students' progress or rate of improvement over time in response to instruction or intervention using valid and reliable measures (Center on Multi-Tiered System of Supports, 2021). The data provides information on whether the student is making adequate progress with the current level of support. Progress monitoring requires repeated assessment with more frequent assessment when challenges are more intense. Data is collected and graphed regularly so student progress can be compared to a goal set using the standardized decision-making process. The frequency of progress monitoring should be matched to the intensity of the instruction. For example, progress monitoring at Tier 2 typically is at least monthly for students identified for academic intervention and supports, and at least weekly for students identified for more intensive intervention at Tier 3. Depending on the target behavior, progress monitoring for nonacademic skills and behaviors is usually more frequent (e.g., weekly, daily, hourly).

Progress monitoring typically targets one or two specific skills that are the best indicators of growth (McIntosh & Goodman, 2016). Grade-level and intervention teams use progress monitoring data to make decisions about student responsiveness to interventions and supports and to adjust as needed. Accurate decision-making requires ongoing data for valid interpretation. To obtain a reliable estimate of the student's response to the intervention, data should be collected for a minimum of six weeks (or six data points if the data are collected weekly). Teams review data patterns and compare students' rate of improvement to the growth necessary to meet their goals (The IRIS Center, 2015).

Fuchs and Kern (National Center for Intensive Intervention, 2014) identify the following considerations for optimizing data collection during progress monitoring:

- ❑ Does the measure align to the content of the intervention?
- ❑ Is the measure sensitive to change (i.e., will scores go up when the student is provided with instruction)?
- ❑ Is the data collected often enough?
- ❑ Is the measure too challenging to show improvement?
- ❑ Is there consistency in the administration and frequency of data collection?

District and school teams use systems-level progress monitoring data to assess the effectiveness of district and school level interventions (Center on Multi-Tiered System of Supports, 2021).

**Fidelity of implementation measures** are used by teams to evaluate whether the systems, structures and evidence-based practices that are in place to support an effective MTSS are implemented as designed. Fidelity data are necessary for teams to be able to draw accurate conclusions regarding student outcomes and can be used to inform professional learning (Lane, et al., 2019). Fidelity assessments are used for measuring:

- ❑ Implementation of the critical components of a multi-tiered system of supports (MTSS);
- ❑ Use of the problem-solving process across all three tiers; and
- ❑ Implementation of evidence-based instruction and interventions matched to specific need(s).

Two main types of systems-level measures are typically used – self-assessments completed by the team or whole school staff or external evaluations conducted by a coach or district team. Fidelity assessments often are conducted as a baseline or needs assessment prior to implementation (to determine what processes are already in place) and then annually to assess progress. Fidelity of instruction and intervention practices often take the form of checklists or rating scales aligned to the critical components of intervention. They are used to assess whether these critical components of the intervention are being implemented as designed and are conducted as part of the progress monitoring review cycle.

# Tiered Delivery System with a Continuum of Supports

## Overview

Kentucky's Multi-Tiered System of Supports (KyMTSS) is a comprehensive prevention framework organized to provide a continuum of increasingly intensive instruction, intervention and support designed to meet the academic, behavioral and social-emotional needs of all students. In this framework, three tiers (Figure 4.1) are used to describe the level of intensity across the continuum. Equitable, culturally responsive and evidence-based instructional practices, interventions and strategies identified at each tier are delivered in an environment where students feel safe, supported and welcome.

Movement through the tiers is a flexible and fluid process driven by data-based decision-making and collaborative team decisions. Each tier represents an increase in the intensity, frequency and/or duration of the instruction/intervention and a decrease in the number of students included in the intervention. It is important to note that the tiers are used to describe the *intensity of support* and are not intended to be used as a label for students. The design and implementation of a multi-tiered approach provides for efficient and effective allocation of resources within the educational system to improve academic, behavior and social-emotional outcomes for students. (Fuchs & Fuchs, 2006; McIntosh et al., 2009; Stoiber & Gettinger, 2016).

Figure 4.1 Multi-Tiered Delivery System



Organizational structures, such as collaborative problem-solving teams, well-defined professional learning to support continuous improvement of MTSS implementation and instructional practices, data-based decision-making, and a system for collecting and analyzing data support an effective implementation of the MTSS tiered delivery system (Center on Multi-Tiered Systems of Support, 2021). Family, school and community partnerships are integrated into each tier of the system and promote wraparound structures, supports and practices to help students succeed in school (Averill & Rinaldi, 2013).

Tier 1 is the foundation for the multi-tiered system. However, all three tiers should be viewed as inter-related and designed to be preventative (Hill & Theodore, 2019). As shown in Table 4.1 and discussed in more detail below, a tiered delivery system intensifies the focus, instruction or intervention and assessment across the continuum.

Table 4.1: Tiered Delivery System

	<b>Tier 1</b>	<b>Tier 2</b>	<b>Tier 3</b>
<b>Focus</b>	All students	Based on local decision rules. Students identified at risk or exceeding benchmark. Academic and/or nonacademic (~10% - 15% of students)	Based on local decision rules. Students who have not responded to supplemental intervention (Tier 2) or those with persistent and significant academic and/or nonacademic needs or strengths (~3% - 5% of students)
<b>Instruction or Intervention Approach</b>	High-quality, research-based curriculum and evidence-based practices aligned with the <i>Kentucky Academic Standards</i> , schoolwide expectations and core social-emotional competencies	Standardized, supplemental evidence-based interventions matched to student need and aligned to Tier 1. Delivered to small groups (typically 3-7 students or as determined by the intervention program)	Intensive intervention aligned to Tier 1 and matched to student need. Delivered to smaller groups (typically 2-3 students) or individually
<b>Assessment</b>	Universal screening, continuous progress monitoring (e.g., formative assessments) and outcome measures or summative assessments	Diagnostic  Progress monitoring at regular intervals (minimum 1x month, but can be bi-weekly or weekly)	Diagnostic  Progress monitoring (weekly, but may be daily for behavior)

Adapted from Hill & Theodore (2019). *Overview of multi-tiered systems of support – South Carolina MTSS*

### Universal Level of Support: Tier 1

Tier 1 is the foundational or universal level of support. *All* students receive instruction and support through a coherent, high-quality curriculum and evidence-based practices grounded in the *Kentucky Academic Standards*, aligned with schoolwide expectations and designed to support core social-emotional competencies. MTSS is first and foremost a system designed to prevent students from needing intensive intervention by ensuring that all students have access to high-quality, evidence-based instructional practices that are implemented as designed. Teaching and learning objectives are intentional and well-articulated from one grade to

another, as well as within grade levels so that all students have equitable experiences regardless of their assigned teacher (Center for MTSS, 2021; Kentucky Department of Education, 2021). In an integrated MTSS, Tier 1 sets an intentional focus on academic, behavioral and social-emotional learning.

In sustainable multi-tiered systems, districts and schools aim for at least 80% of learners to have their needs met through this universal level of instruction and support (Metcalf, n/d). When high-quality, evidence-based universal instruction, resources and practices are in place and meeting the needs of most students, districts and schools can devote the necessary resources to provide interventions for those students who need supplemental or intensive supports. At Tier 1, teachers use assessment data to identify and address the needs of students and differentiate instruction for students meeting, below or above grade-level benchmarks.

Extension opportunities are built into the schedule and provided as needed for students exceeding benchmarks, and teachers implement those opportunities consistently at all grade levels (Center on Multi-Tiered System of Supports, 2021; Hannigan & Hannigan, 2021). Differentiated instruction and consistency in the use of evidence-based practices and proactive supports are essential components of Tier 1. Within the continuum of supports, a strong foundation at Tier 1 is critical to the success of the multi-tiered prevention system.

#### Assessment in Tier 1

At Tier 1, a balanced system of assessments is used to make decisions at the district, school, classroom and student level. Formative assessments provide data about student learning as it happens and help teachers determine if instruction is effective or if adjustments to instruction are needed. Summative assessments are used to provide data at the end of student learning and generally are based on end-of-year or unit outcomes. Statewide summative assessments often are used to determine if students are meeting state academic standards. They also can be used to inform decisions about systems-level programming and the overall effectiveness of MTSS.

Universal screening is used at Tier 1 to (1) evaluate the effectiveness of the local curriculum and classroom instruction provided to all students, (2) identify students who may be at risk for poor learning or social-emotional and behavior outcomes (i.e., not meeting end-of-year benchmarks, schoolwide behavioral expectations) and (3) identify students who need supplemental or intensive interventions. When assessing Tier 1 effectiveness, teams look for evidence that at least 80% of students are at or above the established benchmark or cut score. Information on benchmark or cut scores can be found in the technical manual associated with the screening tool or on the National Center for Intensive Intervention (NCII) screening tools chart (NCII, 2019).

Diagnostic assessments may be used to help educators identify strengths and weaknesses and provide data about students' knowledge and skills. They also can help the problem-solving team identify the intervention that is the best match for a group of students or an individual student.

*Additional information on universal screening and diagnostic assessment may be found in the [Data-Based Decision-Making with a Comprehensive Screening and Assessment system section \(pp. 23-24\)](#).*

### Decision-Making at Tier 1

School leadership teams use universal screening data to monitor the implementation and effectiveness of Tier 1 instruction. If the data indicate that less than 80% of students are meeting benchmarks for academic proficiency, behavior expectations or social emotional-skills, MTSS leadership teams examine the difference between the actual and the desired performance in order to identify areas in need of improvement at the systems level. Utilizing the problem-solving process, teams analyze the local curriculum, instruction and assessment that is happening in general education classrooms and evaluate how well these systems align with each other and with state academic standards, schoolwide behavioral expectations and identified core social emotional competencies.

The team uses the problem-solving process to identify the area(s) of concern and considers school-wide or whole-class instructional strategies to improve student performance that match the identified areas of need. Strategies are analyzed according to the extent to which they are evidence-based, a cultural and contextual fit to the school and are feasible to implement. The school team then sets improvement goals, develops a plan of action and uses outcome data to monitor progress. Some guiding questions for teams to consider at Tier 1 include:

- ❑ What do we expect our students to learn?
- ❑ How will we know if they are learning?
- ❑ How will we respond when some students do not learn?
- ❑ How will we enrich and extend learning for students who already know it?
- ❑ How will fidelity of instruction be monitored over time?

Analyzing universal screening data at the student level, teams use an established data-driven process to identify students in need of intervention or enrichment to accelerate learning. Teams determine whether additional assessments are needed in order to identify the specific area(s) of focus so that intervention and supports are matched to student needs.

*Additional information on this process may be found in the [Data-Based Decision-Making with a Comprehensive Screening and Assessment System section](#)).*



## Supplemental Level of Support: Tier 2

Tier 2 is the supplemental or targeted level of support intended for *some* learners who require support or extension beyond what is provided to all students. This level is intended for short-term, evidence-based intervention aligned with Tier 1 instruction and targeting the skills needed to support the learning and objectives of the universal academic, behavior and social-emotional curriculum and instruction. In sustainable systems, 10% - 15% of learners access this level of support in addition to the universal Tier 1 instruction. At the Tier 2 level, schools provide small group, standardized academic interventions and/or targeted behavioral or social-emotional supports using evidence-based intervention programs and practices to support students identified as at risk through the assessment process (Center on Multi-Tiered System of Supports, 2021).

For students exceeding academic and nonacademic benchmarks, interventions at Tier 2 may focus on adding complexity or abstraction, adjusting the pace of instruction or compacting the curriculum. These interventions do not necessarily require additional work for advanced students, but they do require adjusting the instructional process or product expectation.

### Assessment at Tier 2

Students meeting criteria for Tier 2 supports are identified based on their risk level for academic, behavioral and social-emotional difficulties as indicated by universal screening and other available data – disciplinary referrals, attendance data, early warning systems, etc. Progress monitoring is an essential component of MTSS assessment and can be used to confirm risk status and identify students in need of additional intervention or assessment as well as to determine the effectiveness of an intervention or instructional program. Progress monitoring tools measure student growth over an established period of time.

The frequency of progress monitoring matches the level of student need (administered at least monthly for Tier 2), and student progress toward the established goals should be evaluated at regular intervals. As in the screening process, there should be procedures in place to ensure the accuracy of progress monitoring implementation. Teams make certain that the appropriate students are tested, data is entered accurately, decision-making rules are applied consistently to determine changes in intervention and scores are accurate by monitoring trends over time (Bailey et al., 2020). Tier 2 teams also ensure that fidelity measures are in place to make sure the interventions are implemented as designed.

## Decision-Making at Tier 2

At the systems level, MTSS teams analyze fidelity of implementation data alongside student outcome data to determine the effectiveness of the tiered delivery system. As teams review their data across tiers, they should consider (Bailey et al., 2020; p.37):

- ❑ To what extent is the school under- or over-identifying students for intervention?
- ❑ Are most students benefiting from the Tier 2 intervention system?
- ❑ How can the school improve implementation of Tier 2 interventions and supports?

At the student level, school MTSS teams determine the specific interventions for groups of students with similar academic, behavioral and/or social-emotional needs who require supplemental instruction and supports in addition to the universal level of support. Teams use decision rules to determine when students are identified for intervention, if they are responding to interventions, if the intervention needs to be adapted or if the student needs a more intensive intervention. Guiding questions for problem-solving at Tier 2 include (Florida PBIS, 2016):

- ❑ What are the academic, behavioral and/or social-emotional needs of these students?
- ❑ Which small-group or low intensity individual evidence-based interventions will meet those needs?
- ❑ Are most students receiving a supplemental intervention making adequate progress?
  - If so, which students are ready to transition from the Tier 2 support?
  - If not, does the fidelity data indicate the intervention was implemented as designed? Is a change to the intervention needed (i.e., a different intervention or change in intensity – duration, frequency or area of focus)?
- ❑ Are students who are progressing at Tier 2 also demonstrating progress toward the grade-level Tier 1 expectations?

## Intensive Level of Support: Tier 3

Tier 3, the most intensive level of support, is intended for learners whose needs extend well beyond the reach of the universal level. In effective systems, 3% - 5% of learners will need access to this level of support. Intervention at this level is typically delivered to smaller groups or individually. Intensification of Tier 3 interventions may include:

- ❑ Increased duration or frequency;
- ❑ Change in interventionist, decreased group size;
- ❑ Change in instructional delivery; and/or
- ❑ Change in type of intervention.

For academic, behavioral and social-emotional achievement that is well below benchmark, learners are given access to intensive, individualized research-based intervention and supports in addition to Tier 1 instruction. For learners who well exceed academic and nonacademic benchmarks, collaborative teams may determine a student requires more individualized acceleration utilizing research-based interventions to maximize growth. Acceleration for these students may take various forms, depending on student assessment. The student might need subject acceleration or whole grade acceleration. For primary students, districts should have an evaluation process for early entrance to kindergarten. For middle and high school students, there should be an early exit plan.

### Assessment at Tier 3

Assessment at Tier 3 is used to individualize and intensify the intervention. Progress monitoring data as well as formal and informal diagnostic measures provide the information for teams to use in developing a hypothesis about why an individual or group of students may not be responding to an intervention. Progress monitoring data also is used to identify students making a rate of progress that indicates they are ready to transition to a less intensive level of support.

### Decision-Making at Tier 3

At the systems level, MTSS teams analyze implementation data alongside outcome data to determine the effectiveness of the tiered delivery system. As teams review their data across tiers, some considerations are (Bailey, et al., 2020):

- ❑ To what extent are students under- or over-identified for Tier 3 or referred for special education?
- ❑ Are most student benefitting from intensive intervention at Tier 3?
- ❑ How can the school improve the integration of data and intervention at Tier 3?

School MTSS teams determine the specific intensive, individualized interventions needed to improve the rate of progress of individual students. Teams use decision rules to determine when students are identified, if students are responding to intervention or if a change of intervention or intervention intensity is needed. Guiding questions for Tier 3 include (adapted from Florida PBIS, 2015):

- ❑ Are most students receiving intensive intervention making expected gains (e.g., scores at or above the established criterion for either performance or rate of growth)?
  - If so, which students may be ready to transition from Tier 3 supports to less intense Tier 2 supports?
  - If not,
    - Have interventions been provided with fidelity?

- Are assessment strategies sensitive enough to identify progress?
- Is a change of intervention or change to the intensity of interventions needed to create a better match to the academic, behavioral and social-emotional needs of the student?
- Are students who are progressing at Tier 3 also demonstrating progress toward the Tier 1 expectations?

Within an effective MTSS, all students have access to Tier 1 instruction and supports. Tier 2 and Tier 3 interventions and supports are delivered with increasing levels of intensity and/or frequency and do not replace Tier 1 instruction. The multi-tiered delivery system is designed to be responsive to student progress so that students move fluidly through Tiers 1, 2 and 3 levels of support as needed.

All families are updated on their child's progress in meeting grade-level academic, behavioral and social-emotional expectations. For Tier 2 and Tier 3 levels of support, families are kept informed on their child's response to intervention and are engaged in the problem-solving process when making decisions related to more intensive interventions.

# Selection of Evidence-Based Instruction, Intervention and Supports

## Overview

Kentucky’s Multi-Tiered System of Supports (KyMTSS) is a framework that guides the selection, adoption and implementation of a continuum of evidence-based instruction, intervention and supports. Evidence-based practices are those shown to be effective through research to improve academic, behavioral and social-emotional outcomes when implemented as designed.

The Every Student Succeeds Act (ESSA), which reauthorized the Elementary and Secondary Education Act (ESEA), emphasizes the need for schools to adopt “activities, strategies and interventions (collectively referred to as interventions)” that are supported by research evidence when using federal funds. ESSA establishes a framework with four levels of evidence for consideration and use by school districts when selecting evidence-based interventions – especially as related to school improvement (USED, 2016). The four ESSA levels reflect the rigor of the study used to design the intervention. Table 5.1 provides an overview of ESSA’s levels of evidence.

Table 5.1: ESSA Levels of Evidence

<b>Level I: Strong Evidence</b>	<b>Level II: Moderate Evidence</b>	<b>Level III: Promising Evidence</b>	<b>Level IV: Demonstrates a rationale</b>
Demonstrates a statistically significant effect on improving student outcomes or other relevant outcomes, based on at least one well-designed and well-implemented experimental study (e.g., a randomized control trial).	Demonstrates a statistically significant effect on improving student outcomes or other relevant outcomes, based on at least one well-designed and well-implemented quasi-experimental study.	Demonstrates a statistically significant effect on improving student outcomes or other relevant outcomes, based on at least one well-designed and well-implemented correlational study with statistical controls for selection bias.	Demonstrates a rationale based on high-quality research findings or positive evaluation that such intervention is likely to improve student outcomes or other relevant outcomes, and includes ongoing efforts to examine the effects of the intervention.

According to ESSA, schools receiving federal funding must use evidence-based interventions for specific programs described in Titles I, II and IV of the ESEA. Some federal and state programs and funding streams allow the use of all four levels. However, school improvement funds may only be spent on interventions supported by Level I, Level II or Level III.

*The Office of Continuous Improvement and Support at the Kentucky Department of Education (KDE) has provided a variety of tools and resources to support districts and schools in*

*understanding, identifying and implementing evidence-based practices. These may be found on the KDE website on the [Evidence-Based Practices](#) page.*

### The Role of Evidence within the MTSS Framework

The instruction, intervention and supports delivered across the continuum of a multi-tiered system of supports (MTSS) should be grounded in evidence and aligned with the school's or district's population and values.

According to the National Center on Intensive Intervention (NCII) (n/d), evidence-based at the **universal level or Tier 1** is defined as the “comprehensive, research-based curriculum, delivered class-wide to all students.” At Tier 1, all students should have access to a guaranteed and viable curriculum supported by high-quality instructional resources and instructional practices with documented evidence of effectiveness for the student population and educational context. The research is clear that when students are provided with quality, standards-aligned, grade-level instruction it improves learning (Hattie, et al., 2021; Marzano, 2003; TNTP, 2018).

At Tier 1, there should be evidence that the local curriculum includes comprehensive coverage of grade-level content and skills aligned with the *Kentucky Academic Standards (KAS)*, schoolwide positive behavioral expectations and core social-emotional competencies. A well implemented and effective Tier 1 provides equitable access and opportunity for all students to learn the content/skills and should lead to fewer students needing intervention. Teachers use data from assessments (e.g., formative assessment and universal screening) to ensure that selected instructional practices, strategies and resources are effective for most students and are the right fit for the educational context and student population.

As needed, they adjust, scaffold and/or differentiate instruction to meet diverse student needs (Fuchs and Vaughn, 2012; Gandi et al., 2016). As teachers implement the curriculum, it is important that they are strategic and intentional in the use of evidence-based instructional practices to support students in reaching intended outcomes (KDE, 2021). Instructional resources and practices that meet ESSA levels I-III are most likely to improve student outcomes.

Evidence-based interventions are those validated for a specific purpose with a specific population and must be used in the way they were researched. At **Tier 2**, evidence-based intervention programs and practices are selected that (a) align to the student population, (b) match the identified need based on data and (c) have been shown through rigorous research to have a positive impact on the targeted outcomes for students identified as at risk, when implemented as designed (Gandi et al. 2016).

Tier 2 interventions should be supported by the highest levels of evidence, *strong evidence* (ESSA Level I) or *moderate evidence* (ESSA Level II), as these are more likely to improve student outcomes. Tier 2 interventions are supplemental to Tier 1 and delivered in a small group setting by a trained interventionist. However, not all students respond to standardized, evidence-based

intervention programs and instructional practices implemented at Tier 2, even when those interventions are delivered with fidelity. Approximately 1% - 5% of students will need access to more intensive, targeted support (Tier 3).

Evidence-based intervention at **Tier 3** includes the features of Tier 2, but intensifies the individualization of the intervention, embedding evidence-based instructional strategies and supports based on student progress data (Gandi et al., 2016). Interventions at Tier 3 should be supported by the highest levels of evidence (ESSA levels I-III). However, when the data indicates a need to individualize an intervention, there should be a level of evidence based on high-quality research findings that the individualization is likely to improve student outcomes (ESSA level IV).

The NCII (n/d) recommends that intensive intervention should be designed from an evidence-based platform (when available), be specifically aligned to student needs and be intensified appropriately. The *Taxonomy of Intervention Intensity* (Fuchs et al., 2017) can be used to help educators systematically evaluate or intensify an intervention at Tier 3. Table 5.2 outlines the seven dimensions of the taxonomy for evaluating a current intervention and building intervention intensity based on research:

Table 5.2: Dimensions of the Taxonomy of Intervention Intensity (Fuchs et al., 2017)

<b>Dimension</b>	<b>Description</b>
<b>Strength</b>	How well the intervention works for students with intensive needs – the evidence base.
<b>Dosage</b>	The number of opportunities the student has to respond to demonstrate their learning during the lesson (verbal, written, physical responses) and receive corrective feedback. Also includes information about the number of lessons, length of time for each lesson and group size. Dosage should increase as the intensity of students' needs increase.
<b>Alignment</b>	How well the intervention (a) matches the targeted academic skills or behaviors of concern, (b) does not include skills already mastered, and (c) incorporates a meaningful focus on grade-appropriate standards, behavioral expectations or social-emotional competencies.
<b>Attention to transfer</b>	The extent to which an intervention is explicitly designed to help students make connections between the skills taught in the intervention and skills learned in other contexts and environments.
<b>Comprehensiveness</b>	The number of explicit instruction principles the intervention incorporates (e.g., providing explanations in clear, concise language; teacher modeling of efficient solution strategies; ensuring necessary background knowledge and skills; gradual fading of instructional supports; providing opportunities for practice; and incorporating distributive and cumulative review).
<b>Behavioral or academic support</b>	The extent to which an academic intervention incorporates behavioral strategies that may support students with self-regulation, motivation or externalizing behaviors that may impact their ability to learn, or whether a behavioral intervention considers academic components as part of the intervention.
<b>Individualization</b>	The ongoing use of progress monitoring data and other diagnostic data sources to intensify and individualize the intervention based on student need.

## Selection and Adoption of Evidence-Based Instruction, Intervention and Supports

Within the MTSS framework, integrated leadership teams use a range of school and community data to assess the needs of the students, families and community. They use a formal process to select evidence-based practices that are aligned to identified needs; establish measurable goals for improvement; and monitor progress and make adaptations to instruction, intervention and supports as needed. Outcome and fidelity of implementation data are gathered and analyzed to monitor the effectiveness of the instruction, intervention and supports.

In the *ESSA Action Guide: Selecting Evidence-Based Practices for Low Performing Schools*, Garcia and Davis (2019) propose the following three action steps that integrate ESSA requirements and local needs and context during the selection and adoption process of evidence-based practices:

1. Review the data and practices to prioritize improvement areas.
2. Explore key resources to identify programs, practices or strategies that meet evidence requirements.
3. Apply other criteria to identify evidence-based programs, practices or strategies that meet local priorities (p. 4).

**Review the data and practices to prioritize improvement areas.** The first action for teams is to analyze the data and current practices to identify and prioritize improvement areas. Using a standardized problem-solving process, MTSS leadership teams use multiple data sources to (a) determine whether a problem exists, (b) define it as precisely and explicitly as possible and (c) identify student outcomes that evidence-based practices should address. The team then analyzes the data with enough depth to identify possible underlying factors or root causes behind the prioritized areas for improvement. Careful data collection and analysis at this step will help the team generate actions or strategies to achieve the identified goal. Identifying the actions needed will determine the general topic area for choosing an evidence-based practice. Teams create an audit or initiative inventory of current academic, behavioral and social-emotional instructional practices, interventions and supports to determine which current practices address their prioritized outcomes. An inventory also can help teams identify which practices have been successful and which are not resulting in desired outcomes or are not matched to student need and should be ended.

**Explore key resources to identify programs, practices or strategies that meet evidence requirements.** MTSS leadership teams review existing online clearinghouses or databases for potential evidence-based practices matched to identified prioritized area(s). Clearinghouses are tools that provide independent evaluations of the research related to programs, practices and interventions (KDE, 2019). They typically include a searchable database of research that



supports easy filtering of results or ranking of practices by various quality factors. They also synthesize research into user-friendly reports and are widely available and free to use. For example, the What Works Clearinghouse contains the “Find What Works” database of studies and practice guides that summarize research across classroom and schoolwide practices.

Guidance from KDE (2019) cautions that clearinghouses can have their drawbacks. They may not be comprehensive in scope, and teams may need to explore multiple clearinghouses to get the full picture of the potential impact of a program, practice or strategy. Clearinghouses are largely self-governed, meaning they have different standards for inclusion and quality, and they also may reflect organizational or review bias. Some best practices to consider when using clearinghouses include:

- Check to see that the research is cited and referenced in the discussion;
- Read the report with a critical eye and scan for bias;
- Pay attention to the scope and methods of implementation discussed in the report (often research only supports the use of a practice with a specific group of students or under certain circumstances); and
- Review reports from multiple clearinghouses, if available (KDE, 2019).

*The KDE maintains a running list of clearinghouses posted on the evidence-based practices webpage [ESSA Evidence Resources](#).*

If online clearinghouses do not contain studies that address the program, practice or intervention teams are considering, another option is to review research studies found at sources like the Education Resources Information Center (ERIC). ERIC is a free database that archives articles from most educational research journals. Kentucky educators also can set up a free account and have access to 62 different academic databases through the Kentucky Virtual Library (KVL). Academic databases provide a comprehensive list of research pulled directly from journal articles. This means that the information comes directly from the researcher without any additional reviewer bias. However, databases often require a subscription for use and may not be very user-friendly (KDE, 2019).

**Apply other criteria to identify evidence-based programs, practices or strategies that meet local priorities.** Once the team determines that the program, practice or strategy selected is backed by evidence showing a positive impact on student outcomes, they examine additional criteria to better understand how the new or existing program or practice fits into their existing work and context. Contextual fit plays an important role in the selection process. Horner and Blitz (2014) define contextual fit as the “match between the strategies, procedures or elements of an intervention and the values, needs, skills and resources available in a setting” (p. 1). An intervention may be said to possess good contextual fit when implementers, recipients and

other stakeholders identify the intervention as “acceptable, doable, effective and sustainable” (p. 3).

To facilitate the selection and adoption process, MTSS leadership teams should develop and consistently use a systematic process to review, select and de-select instructional practices, interventions and supports. Table 5.3 provides a description of key indicators to guide selection and help teams assess fit and feasibility of current and potential programs and practices (Metz & Louison, 2018):

Table 5.3: Key Indicators to Guide Selection and Assess Fit and Feasibility

Indicator	Description
<b>Need</b>	<ul style="list-style-type: none"> <li>• Identification of the target population and/or subpopulation the program or practice will serve</li> <li>• Use of multiple data sources and disaggregated data to understand needs and assets of this population</li> <li>• Family and community perception of needs and assets</li> </ul>
<b>Evidence</b>	<ul style="list-style-type: none"> <li>• Outcome, fidelity and cost effectiveness data</li> <li>• Strength of evidence: for whom and in what conditions</li> </ul>
<b>Fit</b>	<ul style="list-style-type: none"> <li>• Fit with current instructional practices, interventions and supports of the school or district</li> <li>• Alignment with other priorities</li> <li>• Fit with family and community values, culture and history</li> </ul>
<b>Usability</b>	<ul style="list-style-type: none"> <li>• Core features of the program/practice clearly defined</li> <li>• Mature examples/model sites to observe</li> <li>• Replicated</li> <li>• Adaptions for context and populations</li> </ul>
<b>Capacity</b>	<ul style="list-style-type: none"> <li>• Implementation costs</li> <li>• Resources needed and available for implementation (staffing, staff knowledge base, supervisory support, technology resources and support, etc.)</li> </ul>
<b>Supports</b>	<ul style="list-style-type: none"> <li>• Staff meet minimum qualifications</li> <li>• Able to sustain staffing, coaching, training, data systems, performance assessment and administration</li> </ul>

The MTSS district leadership team then ensures that resources are equitably allocated so that all educators have access to the high-quality professional learning, coaching, materials, time and space necessary to implement instructional practices, interventions and supports with fidelity. Using evidence-based practices with fidelity within an MTSS increases the likelihood of

positive student outcomes and improves efficiency of the responsiveness to students' needs because educators start with what is known to be effective.

# Equitable Access and Opportunity

## Overview

The Kentucky Department of Education (KDE) defines equity as the promotion of access, opportunity and advancement of all individuals, including those in underserved communities, in order to identify and eliminate conditions that prevent the ability of all students to reach their full potential. “The term ‘underserved communities’ refers to populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life.” (*Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government.*)

*“Equity in education is fundamentally an effort to ensure that all of our students have the supports they need to meet our academic standards and to reach their full potential as students, citizens and human beings. An equity focus in education recognizes that public school students come to us with a variety of backgrounds, needs, supports and experiences and that we must take those into account when we consider the education of each child.”*

– Jason E. Glass, Kentucky Commissioner of Education

Kentucky’s Multi-Tiered System of Supports (KyMTSS) is a comprehensive system that integrates differentiated core instruction, assessment and intervention to responsively adjust the intensity and nature of support to meet the academic, behavioral and social-emotional needs of *all* students. It is, first and foremost, a framework that organizes the systems, data and practices along a layered continuum of supports to build responsive, equitable and inclusive learning experiences for each and every student. Equitable access and opportunity in education means each and every student must have “access to the educational resources and rigor they need at the right moment in their education across race, gender, ethnicity, language, disability, sexual orientation, family background, and/or family income” (Council of Chief State School Officers [CCSSO], 2017, p. 3). An intentional commitment to equity is embedded into all elements of the KyMTSS framework at all levels of the system - state, region, district, school and student.

## Building an Equitable MTSS

Strong and engaged district and school leadership teams are the foundation for implementing, improving and sustaining an equity-based MTSS. Leadership teams are representative of key stakeholders including administrators, teachers, students, family and community partners who

advocate for and ensure that all students have access to the range of opportunities and resources critical to student success. These teams intentionally address inequitable outcomes for historically underrepresented populations through a strategic analysis of data and data-based decision-making. MTSS leadership teams start with a systems approach and examine distribution of funding, access to highly effective teachers, rigorous coursework, support services, supportive school climates and extracurricular opportunities to ensure:

- All students are **taught by educators who are fully prepared and supported** throughout their career.
- **Students are provided with access to a range of supportive services** that ensure their health and well-being.
- **Schools are funded in a way that is equitable, stable and adequate** to provide all students with 21st Century skills.
- All students are provided **access to high-quality curriculum aligned to the *Kentucky Academic Standards*, school-wide behavioral expectations and core social-emotional competencies, evidenced-based instructional practices and up-to-date instructional resources and tools**, including computers and related technology (adapted from The Learning Policy Institute, 2021).

MTSS leadership teams systematically examine current policies, programs and practices for underlying assumptions and beliefs based on ability, gender, race, ethnicity, sexual orientation, socio-economic status, disability and English language proficiency. District and schoolwide teams create action plans that address academic, behavioral and social-emotional learning expectations, access to learning opportunities, high-quality instruction, resource allocation and/or accountability to achieve educational equity. Teams engage in ongoing, embedded and systematic professional learning to deepen their understanding of the characteristics and practices of an equitable school

### Equitable Data-Based Decision-Making

MTSS teams intentionally apply an equity lens to analyze data on student performance and experience. Data analysis for equity moves beyond a routine analysis of achievement data to asking questions that help the team understand what underlying assumptions or beliefs are driving actions, decisions, policies, etc. MTSS leadership teams might start the data-based decision-making process by asking the question, “What do we as a district/school need to know and be able to do to address the equity issue?” (Villani, 2018, p. 5). In order to do this, teams must ensure the right data is collected and analyzed to answer those questions. Systematic use of a broad range of disaggregated quantitative and qualitative data is essential to enhance equitable opportunity, experiences and outcomes. Disaggregating data in meaningful ways, calculating risk ratios, using root cause analyses, recognizing disproportionate representation

and identifying families who are or are not present at school events all are ways in which districts and schools can begin this work (Wisconsin RTI Center, 2017).

Multiple sources of data are disaggregated (e.g., office referrals, suspensions, measures of academic achievement and growth, behavior screening, early warning systems, school climate surveys, etc.) and analyzed to inform decisions and monitor equity in student outcomes. MTSS teams use a [systematic problem-solving process](#) to identify trends, patterns and differences in how students are experiencing school and performing academically, behaviorally and social-emotionally. Teams intentionally examine inequitable outcomes from a systems perspective first before viewing it as an issue with an individual student or family. As part of the problem-solving process, teams identify possible root causes that the school or district has the ability to act on and the influence to change.

Guiding questions for the MTSS leadership team when identifying root causes during the problem-solving process might include:

- What is the performance by school and by student group?
- Do all schools have adequate funding? Are funds allocated according to identified need based on data?
- Do all schools provide high-quality, standards-aligned curriculum?
- Who is chronically absent? What might be keeping this group from attending school?
- Which students are receiving the highest number of office disciplinary referrals? Suspensions?
- Which students have access to rigorous and advanced courses?
- Which students are graduating college or career ready?
- Which students are taught by the most experienced and highly effective teachers?
- Are financial and human resources distributed equitably within the school/district? (Villani, 2018)

Once a reasonable set of root causes have been identified, the next step in the problem-solving process for teams is to investigate the research on evidence-based interventions and best practices to address the identified area(s) of concern (Villani, 2018, p. 5). MTSS leadership teams use the evidence for what works to develop plans to remove barriers and commit to the equitable allocation of sufficient funds, resources (people, materials, training, etc.) and time based on the needs of the school and its students. Goals are set and monitored using implementation and student outcome data.

### Equitable Practices

Within an integrated MTSS, the universal level of support (Tier 1) available to all students includes high-quality instruction and support through a coherent local curriculum aligned to the

rigor of the grade-level *Kentucky Academic Standards (KAS)*, schoolwide behavioral expectations and core social-emotional competencies. Equitable practices at Tier 1 include:

- Universal instruction intentionally designed in a way that allows *all* students to engage.
- Evidence-based curriculum and instructional practices used for academic, behavioral and social-emotional learning are designed to be responsive to the diverse backgrounds, abilities and life experiences represented by the students and the community.
- Practices, curriculum, instructional resources and the school environment authentically reflect the images and experiences of all students.
- Differentiated and scaffolded instruction, as needed, to ensure that each and every student has access to the content and skills taught.
- A positive school climate that encourages inclusion and promotes respect for the identities and cultures of the learners and families served.
- School and classroom spaces that are inviting, physically and environmentally safe, and supportive of learning and engagement for all students.

Supplemental (Tier 2) and intensive (Tier 3) equitable practices include:

- Interventions that are matched to meet the needs of the learner based on data.
- Interventions that not only have evidence of effectiveness, but also are appropriate for the population served.
- Universal screening and progress monitoring practices that are inclusive and are used to ensure that students receive just the right amount of support they need at the right moment in their education.

MTSS leadership teams ensure that resources are allocated for professional learning that address the needs of the whole child. Districts and schools provide high-quality professional learning opportunities so educators become aware of how their unique life experiences and implicit assumptions about ability and potential based on gender, race, ethnicity, sexual orientation, social class, disability and English language proficiency can create barriers to success in classrooms and schools. Continuous, sustained and job-embedded professional learning and coaching help teachers evaluate, explore and expand their instructional practices to meet the needs of diverse learners.

# Family, School and Community Partnerships

## Overview

Kentucky's Multi-Tiered System of Supports (KyMTSS) provides an organizational framework for families, schools and community partners to work together to support and improve the learning and well-being of each and every student. Using multi-tiered prevention logic, data-based decision-making and evidence-based practices, districts and schools can become more intentional in supporting all families to be more involved at school and better informed about ways to support their children at home. District and school MTSS leadership teams strategically leverage community partnerships to extend their reach, create more fluid and comprehensive supports, and help bridge the cultural and linguistic gaps between families and the educational system.

For the purpose of this document, “family” means natural, adoptive or foster parents; close relatives; legal or educational guardians; and/or community or agency advocates.

The National Center on Safe Supportive Learning Environments (2021) defines family, school and community partnerships as purposeful, reciprocal relationships in which schools, families and other community agencies and organizations actively engage in meaningful and culturally appropriate collaboration with the goal of improving student outcomes. A growing body of evidence is clear and convincing (Henderson & Mapp, 2002): When families, community groups and schools collaborate to support learning, students of all ages, backgrounds and across race and ethnicity:

- Earn higher grades;
- Attend school more regularly;
- Have better social skills, display a more positive attitude toward school and behave better both in and out of school; and
- Enroll in higher-level programs and persist to graduation.

The research shows that families of all income and education levels, and from all ethnic and cultural groups, support their children's learning at home. However, the data also shows that families with higher levels of income and education tend to be more engaged at school and have more resources to help their children at home.

The more the relationship between families, schools and the community is a real partnership, well-planned and intentionally executed, the more student achievement increases (Henderson, et al., 2007). This concept of partnerships expands the idea of engagement and recognizes that families, educators and others in the community share responsibility for students' learning and well-being.



The partnership between schools and families encompasses and reinforces student health and learning in multiple settings - at home, in school, in out-of-school programs and in the community.

### Key Features of Implementation

A successful implementation of MTSS requires appropriate district and school infrastructure and support systems (Center on Multi-Tiered System of Supports, 2021). As part of an effective MTSS, leadership teams intentionally address potential barriers to family and community engagement. In Part 1 of the *Toolkit for Engaging Families and the Community as Partners in Education*, Garcia et al. (2016) summarize the research around barriers to family and community engagement that can pose challenges for educators. These include:

- Parents' (and other family members') previous negative experiences or interactions with schools (e.g., parents did not do well in school or educators told parents only what they should do without acknowledging what they might already be doing);
- Language and cultural barriers (e.g., parents or their representatives believe they should defer to educators and not play an active role in education);
- Limited professional development and training of educators in family and community engagement;
- Educators' own cultural beliefs and attitudes (p. 4).

Other barriers to family and community engagement may arise if families have not been exposed to the “practices, experiences, and beliefs that are validated by the school culture” (Garcia et al., 2016, p. 6). For example, school personnel might assume that all parents and families are familiar with school grading practices, the *Kentucky Academic Standards*, the value placed on parent–teacher conferences, the methods schools use to communicate with parents (for example, newsletters, websites and daily folders), or attendance policies. If parents and family members are not aware of these practices, they may need support to navigate the educational system, view their involvement as unimportant or may not participate in family engagement activities (Garcia et al., 2016).

MTSS leadership teams can help ensure that a proactive and responsive continuum of supports is in place to assist families and increase engagement. For example, most families will be able to navigate the educational system and have the resources to do that (e.g., transportation, language proficiency, ways to communicate with staff – phones, email). Some families may not know how to access the information they need. In this scenario, all that may be required is to identify the need and provide them with supplemental or Tier 2 supports (e.g., explain the routines, supply the number to call or name of the person to contact, provide an interpreter). A few families will have a very difficult time even though they know the routines and how to

make contact. In this case, families simply may not have the resources to be able to access the system (e.g., transportation, finances, mental health issues), so the team identifies the barriers and/or needs and provides more intensive or Tier 3 level of supports.

Research has shown that traditional family engagement events and activities have small effect sizes on student achievement (Henderson & Mapp, 2002). Family, school and community engagement that has been shown to have a greater impact on student achievement is “collaborative, culturally competent and focused on improving student learning” (The National Association for Family, School and Community Engagement [NAFSE]; n/d). Some examples of high-impact strategies recommended by NAFSE that can be implemented to support all families include:

- Building personal relationships, respect and mutual understanding with families through home visits, community walks and class meetings;
- Sharing data with families about student skill levels;
- Modeling effective teaching practices so families can use them at home;
- Listening to families about their children’s interests and challenges, and then using this information to differentiate instruction;
- Incorporating content from families’ home cultures into classroom lessons; and
- Aligning family engagement activities with school improvement goals.

Utilizing high-impact practices at Tier 1 ensures conditions for engaged, positive partnerships among families, educators and community agencies are in place. Through the organizational framework of KyMTSS, districts and schools can build the systems, data and practices that bring about more engaged partnerships between families, schools and community groups and organizations. Effective MTSS systems that support family, school and community partnerships include:

- MTSS leadership teams that include representation of all key stakeholders, including family, student and community members and reflect the diversity of the school and community.
- A multi-tiered continuum of proactive and responsive supports for families to increase active engagement and participation. Each tier of the MTSS continuum represents greater intensity of services and problem-solving as well as more frequent data collection. When family, school and community partners are included in the MTSS process, each tier also represents greater frequency of communication and joint problem-solving.

- Data-based decision-making that includes teacher, student, family and community voice. Leadership teams gather, analyze and act on multiple sources of data, including demographic data, student outcome data and perception data (teacher, staff, student and family perceptions gathered through surveys, interviews and/or focus groups). Family and community partners are given an opportunity to contribute, participate in the data-based decision-making and give feedback on action plans, programs and policies.
- Data sharing is a two-way process – from school to home and from home to school. Educators share student performance data (academic, behavioral and social-emotional) and families share information about their children’s interests, strengths and challenges. Communication is ongoing and carefully planned so families can understand and use the data to support learning at home (Garcia et al., 2016). Families are continually informed of their child’s progress or any lack of progress.
- Assessment data and progress monitoring information and results are explained to the student’s family as part of conferencing and families are part of the problem-solving process and intervention planning at Tier 2 and Tier 3.

## References:

- Algozzine, R.F., & Algozzine, K.M. (2006). Facilitating academic achievement through school-wide positive behavior support. In W. Sailor, G. Dunlap, G., Sugai, & R. H. Horner (Eds.), *Handbook of positive behavior support* (pp. 521-550). New York: Springer.
- Marken, A., Scala, J., Husby-Slater, M. & Davis, G. (2020). *Early warning intervention and monitoring systems implementation guide*. Arlington, VA: American Institutes for Research. <https://www.air.org/sites/default/files/EWIMS-Implementation-Guide-FINAL-July-2020.pdf>
- Bailey, T. R., Colpo, A. & Foley, A. (2020). Assessment practices within a multi-tiered system of supports (Document No. IC-18). <https://cedar.education.ufl.edu/wp-content/uploads/2020/12/Assessment-Practices-Within-a-Multi-Tiered-System-of-Supports-2.pdf>
- Barth, P. (2016). Educational equity: What does it mean? How do we know when we reach it? Center for Public Education. Retrieved from <https://www.nsba.org/-/media/NSBA/File/cpe-educational-equity-research-brief-january-2016.pdf?la=en&hash=A0F139B97D13C589CE00F186E594BEF1C3396F93>
- Burns, M., Jimerson, S., VerDerHeyden, A. & Deno, S. (2016). Toward a unified response-to-intervention model: Multi-tiered systems of support. In Jimerson, S., Burns, M. & VanDerHeyden, A. (Eds), *Handbook of Response to Intervention: The science and practice of multi-tiered systems of support* (2<sup>nd</sup> Ed., pp. 1400-1426).
- Center on Multi-Tiered System of Supports at the American Institutes for Research. (2021.). *Essential components of MTSS*. Retrieved from <https://mtss4success.org/essential-components>
- Center for Multi-Tiered Systems of Support at the American Institutes for Research (2021). *Essential components of MTSS: Screening*. Retrieved from <https://mtss4success.org/essential-components/screening>
- Center for Multi-Tiered System of Supports at the American Institutes for Research (2021). *Implementation*. Retrieved from <https://mtss4success.org/implementation>
- Center for Multi-Tiered Systems of Support at the American Institutes for Research (2021). *Guide to designing the screening process*. Retrieved from <https://mtss4success.org/resource/guide-designing-screening-process>

- Center on Multi-Tiered System of Supports at the American Institutes for Research (2021). *Multi-tiered system of supports (MTSS): Fidelity of implementation rubric*. Retrieved from <https://mtss4success.org/resource/essential-components-mtss-rubric>
- Chenoweth, T. G., & Everhart, R. B. (2002). *Navigating comprehensive school change: A guide for the perplexed*. Larchmont, NY: Eye on Education.
- Cook, C., Dart, E., Collins, T., Restori, A., Daikos, C., & Delpont, J. (2012). Preliminary study of the confined, collateral, and combined effects of reading and behavioral interventions: Evidence for a transactional relationship. *Behavioral Disorders, 38*(1), 38-56.
- Florida PBIS Project. (2016). *Effective data systems for behavior*. Retrieved from <https://flpbis.cbcs.usf.edu/foundations/PEDS.html>
- Florida's PBIS: MTSS and Florida's PS/RTI Projects. (2016). *MTSS implementation components: Ensuring common language and understanding*. Retrieved from [Multi-Tiered System of Supports \(MTSS\) \(usf.edu\)](https://www.flpbis.usf.edu/multi-tiered-system-of-supports)
- Florida's PS/RTI. (2015). *Guiding tools for instructional problem-solving*. Retrieved from <http://www.florida-rti.org/gtips/index.html#chapter3-5>
- Fuchs, L.S., Fuchs, D. & Malone, A.S. (2017). The taxonomy of intervention intensity. *Teaching Exceptional Children, 50*(1), 35–43.
- Fuchs, L. S., & Vaughn, S. R. (2012). Responsiveness-to-intervention: A decade later. *Journal of Learning Disabilities, 45*, 195–203.
- Garcia, A. & Davis, E. (2019). *ESSA action guide: Selecting evidence-based practices for low-performing schools*. Washington, DC: American Institutes for Research (AIR). <https://www.air.org/resource/essa-action-guide-selecting-evidence-based-practices-low-performing-schools>
- Garcia, M. E., Frunzi, K., Dean, C. B., Flores, N., & Miller, K. B. (2016). *Toolkit of resources for engaging families and the community as partners in education: Part 1: Building an understanding of family and community engagement (REL 2016–148)*. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Pacific. <https://ies.ed.gov/ncee/edlabs/projects/project.asp?projectID=4509>
- Gandi, A.G., Holdheide, L. & Edmonds, R.Z. (2016). *What counts as evidence? Making decisions for instruction and intervention within a multi-tiered system of supports*. [Webinar]. National Center for Intensive Intervention. Retrieved from <https://intensiveintervention.org/resource/what-counts-evidence-making-decisions-instruction-and-intervention-within-multi-tiered>

- Hamilton, L., Halverson, R., Jackson, S., Mandinach, E., Supovitz, J., & Wayman, J. (2009). *Using student achievement data to support instructional decision making* (NCEE 2009-4067). Washington, D.C.: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.  
<http://ies.ed.gov/ncee/wwc/publications/practiceguides/>
- Hannigan, J.D. & Hannigan, J.E. (2021). *The MTSS start-up guide: Ensuring equity, access, and inclusivity for all students*. Corwin.
- Hattie, J., Bustamante, V., Almarode, J., Fisher, D., & Frey, N. (2021). *Great teaching by design*. Thousand Oaks, CA: Corwin Press.
- Henderson, A. T. & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family and community connections on school achievement*. Austin, TX: Southwest Educational Development Laboratory. <https://sedl.org/connections/resources/evidence.pdf>
- Henderson, A. T., Mapp, K. L., Johnson, V. R. and Davies, D. (2007). *Beyond the bake sale: The essential guide to family-school partnerships*. New York, NY: New York Press.
- Hill, U. & Theodore, K. (2019). *Overview of multi-tiered systems of support – South Carolina MTSS*. Retrieved from <https://www.air.org/project/southeast-comprehensive-center-secc#resources>
- Horner, R., Blitz, C. & Ross, S.W. (2014). The importance of contextual fit when implementing evidence-based interventions.  
[https://aspe.hhs.gov/sites/default/files/migrated\\_legacy\\_files//44416/ib\\_Contextual.pdf](https://aspe.hhs.gov/sites/default/files/migrated_legacy_files//44416/ib_Contextual.pdf)
- Horner, R.H., Sugai, G. & Lewis, T. (2020). Is school-wide positive behavioral interventions and supports (PBIS) an evidence-based practice? <https://www.pbis.org/resource/is-school-wide-positive-behavior-support-an-evidence-based-practice>
- The IRIS Center. (2015). *Intensive intervention (part 2): Collecting and analyzing data for data-based individualization*. <https://iris.peabody.vanderbilt.edu/module/dbi2/>
- Jackson, A., & Ehlers, L. (2020). Accelerating and assessing: Using a comprehensive, balanced assessment system to equitably close learning gaps caused by COVID.  
<https://www.illuminateed.com/download/accelerating-and-assessing-whitepaper/>
- Kentucky Academic & Behavior Response to Intervention. (n/d). MTSS teaming structures. Retrieved from: <https://louisville.edu/education/kyabri/training-documents-and-forms>
- Kentucky Department of Education (2019). *Elevating evidence: Using databases and clearinghouses*. [PowerPoint presentation].

<https://education.ky.gov/school/evidence/Documents/Using%20Databases%20and%20Clearinghouses%20Powerpoint.pdf>

Kentucky Department of Education. (2021). *Kentucky's Model Curriculum Framework*.

<https://kystandards.org/standards-resources/model-curriculum-framework/>

Lane, K. L., Oakes, W. P., & Menzies, H. M. (2019). Comprehensive, integrated, three-tiered (CI3T) models of prevention: The role of systematic screening to inform instruction. In P. C. Pullen & M. J. Kennedy (Eds.), *Handbook of response to intervention and multi-tiered systems of support* (ch. 5). New York: Routledge.

Marzano, R.J. (2003). *What works in schools*. Alexandria, VA: ASCD

McIntosh, K., Horner, R. H., & Sugai, G. (2009). Sustainability of systems-level evidence-based practices in schools: Current knowledge and future directions. In W. Sailor, G. Dunlap, G. Sugai, & R. H. Horner (Eds.), *Handbook of positive behavior support* (pp.327-352). New York: Springer.

Metcalf, T. (n.d.). *What's your plan? Accurate decision making within a multi-tier system of supports: Critical areas in Tier 1*.

<http://www.rtinetwork.org/essential/tieredinstruction/tier1/accurate-decision-making-within-a-multi-tier-system-of-supports-critical-areas-in-tier-1#:~:text=Tier%201%20Critical%20MTSS%20Decisions,resources%20available%20to%20the%20building>

Metz, A. & Louison, L. (2018) *The Hexagon Tool: Exploring Context*. Chapel Hill, NC: National Implementation Research Network, Frank Porter Graham Child Development Institute, University of North Carolina at Chapel Hill. Based on Kiser, Zabel, Zachik, & Smith (2007) and Blase, Kiser & Van Dyke (2013). <https://nirn.fpg.unc.edu/resources/hexagon-exploration-tool>

Michigan Department of Education (2020). *Multi-tiered system of supports practice profile version 5.0*. [https://www.michigan.gov/mde/0,4615,7-140-81376\\_86454---,00.html](https://www.michigan.gov/mde/0,4615,7-140-81376_86454---,00.html)

Miller, A. (2016). How to select and implement an SEL program that works. *Changing Schools*, Vol. 76, 10-12.

National Center on Intensive Intervention. (2019). *Academic screening tools chart*.

<https://charts.intensiveintervention.org/ascreening>

National Center on Intensive Intervention. (2014). *Data rich, information poor? Making sense of progress monitoring data to guide intervention decisions*. Washington, D.C.: U.S. Department of Education, Office of Special Education Programs, National Center on

- Intensive Intervention. <https://intensiveintervention.org/resource/data-rich-information-poor-making-sense-progress-monitoring-data-guide-intervention>
- National Center on Intensive Intervention (n/d). *Levels of intervention and evidence*. <https://intensiveintervention.org/tools-charts/levels-intervention-evidence>
- National Center on Intensive Intervention (n/d). *The taxonomy of intervention integrity*. <https://intensiveintervention.org/taxonomy-intervention-intensity>
- National Center on Safe and Supportive Schools (2021). *Family-school-community partnerships*. <https://safesupportivelearning.ed.gov/training-technical-assistance/education-level/early-learning/family-school-community-partnerships>
- Orla, & Averill, Higgins & Rinaldi, Claudia. (2013). Research brief: Multi-tier system of supports (MTSS). Tempe, AZ: Urban Special Education Leadership at Education Development Center, Inc.
- Pullen, P.C., van Dijk, W., Gonsalves, V.D., Lane, H.B., & Ashworth, K.E. (2019). RTI and MTSS: Response to intervention and multi-tiered systems of support: How do they differ and how are they the same, if at all? In P.C. Pullen & M.J. Kennedy (Eds.), *Handbook of response to intervention and multi-tiered systems of support* (Ch. 1). New York: Routledge.
- Reschly, A. (n/d). *Schools, families and response to intervention*. <http://www.rtinetwork.org/essential/family/schools-families-and-rti>
- State Implementation and Scaling-up of Evidence-based Practices [SISEP]. (2018). *Communication plan template*. <https://nirn.fpg.unc.edu/resources/communication-plan-template>
- Stoiber K. & Gettinger M. (2016) Multi-Tiered Systems of Support and Evidence-Based Practices. In: Jimerson S., Burns M., & VanDerHeyden A. (Eds) *Handbook of Response to Intervention*. Springer, Boston, MA.
- Sugai, G. (2010). *Committee/group self-assessment & action planning (working smarter matrix)*. Eugene, OR: Center on Positive Behavioral Interventions and Supports, University of Oregon. [https://www.pbisapps.org/Resources/Pages/PBIS-Assessment-Publications.aspx#InplviewHasheb8cc975-d2fb-4c20-9bcb-501fee4ffd42=Paged%3DTRUE-p\\_SortBehavior%3D0-p\\_FileLeafRef%3DSchool%252dWide%2520Evaluation%2520Tool%2520%2528SET%2529%252epdf-p\\_ID%3D65-FolderCTID%3D0x012001-PageFirstRow%3D21](https://www.pbisapps.org/Resources/Pages/PBIS-Assessment-Publications.aspx#InplviewHasheb8cc975-d2fb-4c20-9bcb-501fee4ffd42=Paged%3DTRUE-p_SortBehavior%3D0-p_FileLeafRef%3DSchool%252dWide%2520Evaluation%2520Tool%2520%2528SET%2529%252epdf-p_ID%3D65-FolderCTID%3D0x012001-PageFirstRow%3D21)



- The Aspen Education & Society Program and the Council of Chief State School Officers. (2017). *Leading for equity: Opportunities for state education chiefs*. Washington, D.C. [https://ccsso.org/sites/default/files/2018-01/Leading%20for%20Equity\\_011618.pdf](https://ccsso.org/sites/default/files/2018-01/Leading%20for%20Equity_011618.pdf)
- The National Association for Family, School, and Community Engagement [NASFSE] (n/d). *Family engagement defined*. <https://nafsce.org/general/custom.asp?page=definition>
- Tilly, W.D., III. (2008). The evolution of school psychology to science-based practice: Problem-solving and the three-tiered model. In Thomas & J. Grimes (Eds.), *Best Practices in School Psychology, V* (Vol 1, pp. 17 – 36). Bethesda: National Association of School Psychologists.
- TNTP. (2018). *The opportunity myth: What students can show us about how school is letting them down—and how to fix it*. [https://tntp.org/assets/documents/TNTP\\_The-Opportunity-Myth\\_Web.pdf](https://tntp.org/assets/documents/TNTP_The-Opportunity-Myth_Web.pdf)
- U.S. Department of Education. (2016, September). Issue brief: Early warning systems. Washington, D.C.: Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service. <https://www2.ed.gov/rschstat/eval/high-school/early-warning-systems-brief.pdf>
- U.S. Department of Education (2016). Nonregulatory guidance: Using evidence to strengthen education investments. <https://www2.ed.gov/policy/elsec/leg/essa/guidanceusesinvestment.pdf>
- Villani, S. (2018). *Exploring equity issues: Educators use data and find solutions to improve equity*. Center for Education Equity. <https://maec.org/resource/educators-use-data-find-solutions-improve-equity/>
- Wisconsin RTI Center (2017). *Equity: Wisconsin’s model to inform culturally responsive practices*. <https://www.wisconsinrticenter.org/district-implementation/overview-of-systems-change/>