### WHITE PAPER



HOW MEASURING UP SUPPORTS THE IMPLEMENTATION OF A MULTI-TIERED SYSTEM OF SUPPORT (MTSS)

Research

Peoples Education Inc. DBA Mastery Education

# How *Measuring Up* Supports the Implementation of a Multi-Tiered System of Support (MTSS)

#### WHAT IS MTSS?

*Multi-Tiered System of Support* is used to describe an evidence-based instructional system that includes data-based decision-making and problem-solving techniques to provide targeted support for all learners. MTSS systematically addresses the needs of all students. In many districts, an MTSS framework encompasses the tiered model of Response to Intervention (RTI) and Positive Behavioral Intervention and Supports (PBIS) (Samuels, 2016) to make a difference in achievement for all students.

Different from RTI, MTSS is a paradigm of high expectations that challenges educators to provide support that crosses grade levels, disciplines, and services. It promotes student achievement by building collaborations to provide a broad system of integration. MTSS offers educators "the potential to create needed systematic change through intentional design and redesign of services and supports that quickly identify and match the needs of all students" ("Definition of MTSS," 2019).

The following six critical components have been identified as having the most profound effect on creating and sustaining a successful MTSS:

- Leadership: District and school leadership are held accountable for student achievement.
- Data-Based Problem Solving: Decisions are made based on evidence (data); includes parents; considers both academic and behavior.
- Data Evaluation: Systematic, frequent data collection is evaluated and used to inform decisions; preventative "early warning" (Batsche, 2016) systems are in place.
- Three Tiers of Instruction/Intervention: The RTI model of Tiers 1, 2, and 3 is used here.
- Building Capacity/Infrastructure for Implementation: This encompasses training and staff development; cross functional teams.
- Communication and Collaboration: This develops crossfunctional teams; time is allocated to conversations around the achievement of ALL students (includes gifted).

This document serves both to provide information about MTSS and the Measuring Up program. Thus, it is organized to be useful to educators who are considering the soundness and the practical uses of the materials in classrooms in support of MTSS. Each component of MTSS will be explored; first, as its importance to student achievement followed by a discussion of how the Measuring Up program supports MTSS implementation.

#### LEADERSHIP

How leadership supports student achievement. The impact of school principals on student achievement cannot be underestimated. Effective leaders unite teachers, champion a cause, and stay the course. They develop a culture of high expectations and a "shared vision around standards and success for all students" (Portin et al., 2009; as cited in Krasnoff, 2015). A key study completed by the Northwest Comprehensive Center on qualities of effective leadership found that students in schools with effective leaders had a significant difference in standardized test scores that were "5 to 10 percentile points higher than schools led by an average principal" (Krasnoff, 2015). Effective principals make "sure that academic success becomes the driver of instruction as the entire faculty adopts a schoolwide learning improvement agenda that focuses on goals for student progress." (Knapp, Copland, Honig, Plecki, & Portin, 2010; as cited in Krasnoff, 2015). Central to creating an effective system of multitiered support demands a district- and school-wide expectation of achievement for all students.

MTSS offers leaders the potential to create systems of support that move beyond traditional silos to collaboration and integration of services. Effective school leaders create shared responsibility for achievement by allowing educators time to collaborate, providing research-based resources needed to meet the demands of diverse students, and having ability to "oversee the collection, analysis, and use of data to support student learning" (Usdan, McCloud, & Podmostko, 2000; Wallace Foundation, 2013; as cited in Krasnoff, 2015).

How Measuring Up supports effective leadership. Measuring Up supports effective leadership in three ways:

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It sets high expectations for all students, provides actionable data for decision making, and delivers customized standardsbased instruction and practice.

The *Measuring Up* suite of technology and print programs is developed to provide assessment, instruction, and practice of state standards. Each resource supports high expectations of student achievement. When leaders choose Measuring Up for teachers and students, they are sending a clear message of high expectations: All students in all classrooms receive the highest level of standards-based instruction; all educators are provided with a consistent model of research-based instruction that reinforces high-quality instruction. Moreover, *Measuring Up* provides clear examples of quality instructional practices that can be applied to all content areas.

Effective leaders give educators the tools needed to collect data so that they may analyze and use data to support and improve student learning. Measuring Up Live generates realtime actionable data for instructional decision making and problem solving. Furthermore, its adaptive technology ensures that students are working on the skills they need at precisely the correct level. The Measuring Up Live tools work seamlessly to support and sustain achievement within a multi-tiered system.

#### DATA-BASED PROBLEM SOLVING

The importance of data-based problem solving to student achievement. Data-based problem solving is a hallmark of MTSS. The framework "requires teams to use data to guide decisionmaking at all levels—from the systems level to the individual student level. Teams examine data using a consistent decisionmaking and problem-solving process to build, implement, evaluate, and refine the framework, and to guide instructional and intervention decisions for individual students and groups of students." (Data-based Problem-solving & Decision-making). Successful schools base decisions a broad range of data that are consistently reported and analyzed. Their leadership teams make critical decisions about the type and frequency of data collection; they are intentional about the data they use; they agree on and are invested in the processes they set.

**How Measuring Up supports data-based problem-solving.** Educators who use Measuring Up have access to a variety of actionable data that shows evidence of student learning. Educators can customize reports based on content and frequency for the following:

- Screening—identifying students who are in danger of failing
- Benchmarking standards—tracking achievement towards standards mastery. Growth report shows student progress over time and can be customized to show progress within a skill across time. Drill down to the standard/skill level
- Ongoing progress monitoring—frequent evidence of learning, daily actionable data for intervention/reteaching/grouping
- Time on Task—indicates how well students are attending to the task
- Depth of Knowledge/application—tasks are identified by Webb's DOK and Bloom's Taxonomy

#### DATA EVALUATION

The importance of data evaluation on student achievement. MTSS makes systematic, frequent data collection incumbent upon educators. It requires ongoing evaluation to be used to inform decisions for assessment and instruction. Researcher Nancy Protheroe (2009) claims that evaluating data can have a profound effect on aligning curriculum, improving instruction, and providing timely intervention. Most important, systematic data-evaluation provides for a preventative "early warning" (Batsche, 2016) system.

**How Measuring Up supports data-evaluation.** Data, in the hands of trained educators, is a valuable tool to promote achievement. *Measuring Up* provides educators with the data to:

- Inform instruction: continue, reteach, adjust pacing, extend learning
- Screen for early intervention
- Group students: form flexible groups; move students among groups
- Benchmarking/Progress Monitoring: mastery towards standards
- Self-reflection/ modify instruction: item analysis (content, item type, DOK, instruction)

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Additionally, the reports are customizable so educators can view and analyze data in a variety of ways. Reports can be generated for individual students, classes, grades, schools, and district and by standard and substandard.

#### THREE TIERS OF INSTRUCTION/ INTERVENTION

The importance of using the three-tiered model of instruction/intervention. MTSS embraces the RTI model. RTI was first introduced with the reauthorization of IDEA in 2004. Founded upon the belief of high expectations for all students, RTI required educators to make informed data-based decisions and placed an emphasis is research-based strategies and resources. Anne Miller (2015) describes RTI as a "preventative, proactive, school-wide framework designed to address efficiently the needs of all students with an appropriate level of intensity to ensure strong outcomes."

RTI identifies a three-tiered instructional model of instructional intensity:

- Tier One—High-quality standards-based classroom instruction for all students.
- Tier Two—Typically conducted in a small-group setting, tier two intervention provides students with immediate attention in addition to regular classroom instruction.
- Tier Three—Intense individualized instruction.

Assessment and evaluation such as universal screening, diagnostic measures, and process monitoring are vital components of the RTI model. They are used in tandem to make informed decisions appropriate for each tier of instruction.

**How Measuring Up supports tiered instruction.** The *Measuring Up* blended solution of technology and print programs is developed to provide assessment, instruction, and practice of state standards. Measuring Up print resources present clear standards explanations, instruction, and practice that is appropriate for use at all instructional tiers. Founded on research-based pedagogy, it is ideally suited for use as an introduction and practice in whole-class instruction, for small group reteaching, as well as for intense instruction in one-to-one setting.

Designed intentionally to work seamlessly with *Measuring Up* print resources, *Measuring Up Live 2.0* technology is a multi-level prevention and instruction program that incorporates a universal learning design that differentiates opportunities for learning. *Measuring Up Live* Insight is a customizable assessment tool used to create measures of standards-based assessment for a variety of purposes: screening, progress monitoring, item/skill analysis, benchmarking, and grouping. Customized reporting for individual students, groups, classes, schools, and district facilitates decision making.

Likewise, *Measuring Up Live* MyQuest adapts practice to the ability level of students based on an algorithm that meets students at their zone of proximal development. The programs work in tandem to ensure students' precise needs are measured, monitored, and addressed.

#### BUILDING CAPACITY/INFRASTRUCTURE FOR IMPLEMENTATION

The importance of building capacity/infrastructure for implementation. There is no doubt that teacher effectiveness is the number one factor of student achievement or that effective teachers are critical to school improvement (Ko & Sammons, 2013). A review of research on teacher effectiveness (Kinl & Podolsky, 2016) revealed that educators who stayed in the profession were more likely to cite peer collaboration and supportive leadership as their reason for satisfaction. Moreover, the research indicated that educators benefited and felt supported when district and school leaders facilitated regular blocks of time for collaboration and planning.

Successful schools and districts employ leadership that is dedicated to providing an infrastructure that supports educators. They provide for routine collaboration across multi-functional teams as well as ongoing professional development. Beyond research-based instructional strategies, effective educators are skilled at collecting, analyzing, and using data for problemsolving decisions.

How Measuring Up supports building capacity/ infrastructure for implementation. The consistent lesson design is built upon research-based instructional strategies and provides a consistent model of instruction. Easy to follow, each lesson format is based on pedagogically-sound practices. Lessons include an introduction to the standard with student-friendly explanations, guided instruction with built-in supports, guided and independent practice, and a culminating activity to review and assess learning. The consistency of each lesson, regardless of grade or subject matter, serves as a model of effective instruction in every classroom.

Furthermore, the *Measuring Up Live 2.0* algorithm provides immediate, customized, online-practice based on assessment of student performance. Although educators can also customize and assign practice, the system automatically generates individualized practice ensuring high-quality, standards-based practice for every student. Additionally, real-time data generated from online assessment and practice becomes the pivot point of discussion leading to data-based decisions.

## COMMUNICATION AND COLLABORATION

The importance of communication and collaboration to student achievement. When conversations are centered on evaluating what data reveals about teaching and learning, students achieve. Effective leadership intentionally creates an atmosphere of collaboration when it provides dedicated time for educators to meet and encourage dialogue among crossfunctional teams. Teams are not formed haphazardly; they are created purposefully to examine and evaluate data—academic and behavioral—to address the achievement of the "whole" student. For example, oftentimes poor behavior stems from academic frustration. Data help teams to determine and address root causes of issues that may be hindering maximum growth.

Another critically important element of collaboration and communication is the home-to-school connection. Engaging those at home with students had a positive impact on the students' performance. Studies show that "parent involvement was significantly related to academic performance above and beyond the impact of the child's intelligence (IQ)" (Topor, Keane, Shelton, & Calkins, 2010). When teams interact with family members, they are better able to positively affect student achievement.

How Measuring Up supports communication and collaboration. *Measuring Up* supports communication and collaboration in three ways: (a) data is easily shared, (b) contributes to the home-to-school connection, and (c) reduces academic frustration.

Educators have found that the data provided by the *Measuring Up* reports are an effective and vital resource to the collaborative process. Public setting options within the *Measuring Up Live* reporting system makes it easy to share information, which facilitates cross-communication. The robust reporting system allows for customization.

Data is reported by	Data is reported for	Types of reports
Standard	Individual students	Skill/Standard
Substandard	Groups	Grouping
Level of difficulty	Classes	Growth
	Grade	Time on Task
	School	
	District	

The Measuring Up adaptive technology can be accessed anywhere an internet connection is available. This feature significantly increases the ability of family members to engage with their child in meaningful work beyond the classroom. They system generates the appropriate task, provides instant feedback, and tracks progress making "homework" a productive and more enjoyable experience.

Several features of the adaptive technology have a significant impact on avoiding frustration. First, the system automatically places students at their optimal level of learning. Second, the system provides immediate feedback to keep students motivated. Third, students are able to monitor their own progress. Fourth, an engaging reward system sustains enthusiasm and promotes continued motivation. Working together, these features help to keep students on track and moving forward in a positive way.



#### CONCLUSION

MTSS is characterized by integrated systems that provide "fluid access to instruction and supports of varying intensity levels" (Definition of MTSS, 2019). Through collaboration between academic and behavioral services, educators using the MTSS model strive to make connections that benefit the whole student.

*Measuring Up* is the quintessential resource for enacting MTSS: for screening, progress monitoring, multilevel prevention/ instruction, and data-based decision making. It puts a research-based model of instruction founded on best practices and pedagogy in the hands of every educator for the benefit of all students.



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At *Measuring Up*, we understand both the profound importance and the practical challenges of nurturing 21st-century skills in the classroom. To improve students' skills, knowledge, and readiness for assessment, our research-based products provide rigorous content and scaffolded support, real-world applications and problem-based learning, formative assessment and plenty of practice. Like you, we are constantly striving to deliver opportunities that provide richer and deeper learning experiences and that prepare students for the challenges of mastering today's standards and unlocking all the possibilities of a brilliant future.

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