Operationalizing the Science of Reading Within the MTSS Framework
Written by: Sarah DeCotis, MEd
National Literacy Director, Age of Learning

Abstract:

This white paper provides a comprehensive overview of evidence-based practices for enhancing foundational literacy skills within the Multi-Tiered System of Supports (MTSS) framework of instruction. It delves into the essential elements of effective literacy instruction supported by the Science of Reading, discussing key characteristics such as explicit instruction, systematic approaches, response opportunities, feedback mechanisms, and the utilization of multisensory techniques. It also addresses the need for consistency across tiers of support within the MTSS framework and the value of intensive intervention when necessary. The principal recommendations highlight the significance of ongoing professional development, data-driven decision-making, collaboration between educators, and the implementation of evidence-based practices to optimize student learning outcomes.

Overview of the Multi-Tiered System of Supports (MTSS) Process:

The concept of a *system* encompasses a cohesive set of elements functioning together within an interconnected network or mechanism. This notion extends to an educational framework known as the Multi-Tiered System of Supports (MTSS), which integrates various components, including assessment systems, curriculum delivery, and intervention programs, into one unified system. The essence of this system lies in a shared set of principles or procedures that guide its operations, creating an organized framework for achieving common goals. The MTSS framework is designed to be proactive and preventative, utilizing data and instruction synergistically to optimize student achievement. Essential to MTSS are its four key components: universal screening, ongoing progress monitoring, multi-level prevention system, and, central to all of these components, a data-based decision-making model. These components serve as pillars supporting data-driven decision-making processes that span from individual student interventions to broader district-level strategies.

Data-Based Decision-Making Model
MTSS operates as a proactive and preventative framework, melding data-driven insights with instructional methodologies to optimize academic performance while addressing students' academic well-being. At the core of every MTSS process lies a robust model for data-driven decision-making. Referred to as the *Collaborative Problem-Solving Process*, this model acts as the driving force behind all MTSS components. The process of data analysis and decision-making is integral to every level of MTSS implementation. This includes utilizing screening and progress monitoring data to inform decisions regarding instructional strategies, student progression within the multi-level prevention system, intensification of instruction and support, and the identification of students requiring special education services as mandated by state regulations. Moreover, implementation data plays a crucial role in assessing the fidelity of interventions, evaluating their alignment with intended objectives and pinpointing areas for enhancement.

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The systematic process for data-based decision-making within MTSS begins with the establishment of MTSS teams, each with defined roles, responsibilities, and procedures. This includes fostering clear communication, efficient processes, and ongoing professional development. Data analysis within MTSS encompasses identifying needs, formulating hypotheses, devising interventions, setting measurable goals, and evaluating the effectiveness of implemented strategies.

Assessment Data

Assessment involves learning about students' reading abilities and collecting data to address these inquiries. The choice of assessment materials and tools should align with the specific purpose or question being explored. The fundamental purpose of assessment is to improve reading outcomes. School-wide literacy models, such as MTSS, include assessments for four purposes:

Universal Screening	Diagnostic	Progress Monitoring	Outcome Measures
• Brief and efficient • Reliable and valid • Administered multiple times per year • Serves as an "indicator" • Given to all students (universal) • Tells you which students may be at risk • Predictive indicators on which students may need a diagnostic assessment	• Comprehensive evaluations conducted to identify students' learning needs • Reliable and valid • Administered once per year or as needed • Helps identify areas requiring intervention • Most useful to inform targeted instruction and intervention in specific skill areas	• Frequent assessment of progress on specific skills • Evidence of retained learning across related lessons or a group of lessons (curriculum embedded assessments) • Simple to administer • Reliable and valid • Easily understood • Can be given often • Quick assessment	• Summative assessment used to determine grade-level expectations (Terra Nova, Iowa Test of Basic Skills) • Administered once per year (after learning) • Administered to all students

Center on Standards Assessment Implementation
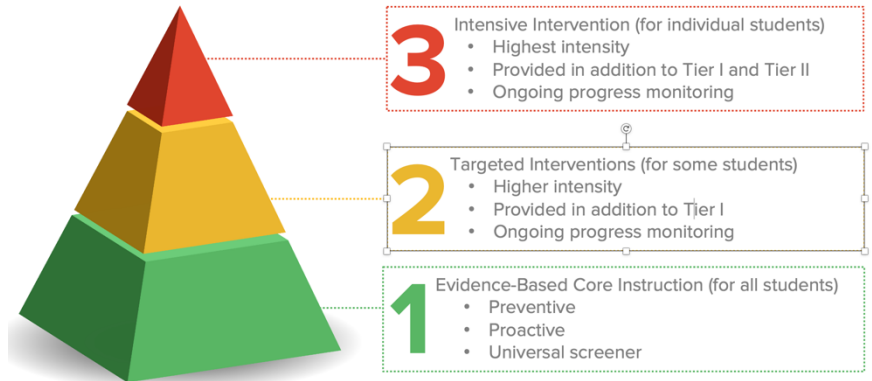
Multi-Level Prevention System

MTSS operates on the premise of tiered systems of support, wherein Tier 1 encompasses universal instruction and support aimed at ensuring that *all* students receive high-quality core instruction aligned with grade-level standards. This tier emphasizes effective teaching practices, differentiated instruction, a high-quality core curriculum, and preventative instruction, with the overarching goal of keeping students out of risk levels. Tier 2 delves into targeted interventions tailored to students who require additional support despite Tier 1 efforts, focusing on specific skill gaps and offering small-group facilitated instruction along with progress monitoring. Tier 3 represents the most intensive level of intervention, providing individualized support for students who do not respond adequately to Tier 1 and Tier 2 interventions. This tier emphasizes smaller group or one-on-one instruction, frequent progress monitoring, collaborative problem-solving, and data-based decision-making to address severe and urgent student needs.

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Tier I Instruction (Universal Tier)

Instruction at this tier focuses on the implementation of the district's core curriculum and is aligned with state academic standards. Instruction at this tier is differentiated to ensure that instruction meets the needs of all learners. Districts spend significant amounts of time and money and enlist a significant number of personnel to ensure that universal instruction is well designed and based on empirical research documenting what works. Furthermore, teachers and staff must receive ongoing professional learning to deliver the universal instructional program the way it was designed. It is important to note that Tier I is more than a single textbook. It encompasses all the materials and instruction used to provide the main classroom instruction that would get most students to proficiency in grade-level standards. At this tier, universal screening tools are often used to identify students who are at risk for poor learning outcomes.

Tier II Instruction (Targeted Intervention)

When instruction at Tier I is not sufficient to meet student needs, students require a heightened level of instruction known as Tier 2. This tier delves into targeted interventions tailored to students who require additional support despite Tier 1 efforts, focusing on specific skill gaps and offering small-group instruction along with progress monitoring.

3 Intensive Intervention (for individual students)
- Highest intensity
- Provided in addition to Tier I and Tier II
- Ongoing progress monitoring

2 Targeted Interventions (for some students)
- Higher intensity
- Provided in addition to Tier I
- Ongoing progress monitoring

1 Evidence-Based Core Instruction (for all students)
- Preventive
- Proactive
- Universal screener

Tier III (Intensive Intervention)

Tier 3 instruction, also known as intensive intervention, is the most intensive level of support within a multi-tiered system of support (MTSS) framework. It is designed to provide individualized, targeted instruction to students who have not responded adequately to tier 1 and tier 2. Key characteristics of Tier 3 instruction include increased intensity and individualization, with sessions occurring daily or multiple times per week for 45-60 minutes, typically in a 1:1 or 1:3 setting. Interventions are tailored to the specific needs of each student based on ongoing progress monitoring data. This instruction is highly explicit and systematic, involving explicit modeling, guided practice, and corrective feedback.

Delivered by highly trained specialists, such as special education teachers or instructional specialists, Tier 3 instruction uses evidence-based interventions and strategies for students with significant academic or behavioral difficulties. Exit criteria and ongoing monitoring are crucial to determine intervention effectiveness and readiness for transitioning to less intensive support tiers. If a student does not respond to Tier 3 intervention, further evaluation and additional support or services may be necessary.

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The chart below encompasses characteristics of each tier within the Multi-Tiered System of Supports (MTSS) framework.

	Tier 1	Tier 2	Tier 3
Characteristics	• Primary prevention of reading failure • At least 80 percent of students reach grade-level expectations • Standards-based instruction • Effective implementation of research-based curriculum • Data-driven differentiation • Universal screening • Provided by the general education teacher with support from others as needed • Minimum of 90 minutes per day • All students • Whole-group and small-group formats	• Secondary prevention of reading failure • An additional 15–20 percent of students reach grade-level expectations with Tiers 1 and 2. • In addition to, not instead of Tier I instruction • 30–35 minutes per week • Progress monitoring at least two times per month • Students are "at risk" in spite of receiving effective core instruction • Standardized and evidence-based intervention • Provided by the general education teacher with support from others as needed • Frequent and regular progress monitoring • Small, flexible, skills-based groups of 3–5 students	• Intensive, individualized intervention • Frequent and regular progress monitoring • Provided by the general education teacher with support from others as needed • In addition to, not instead of Tier I instruction • 45–60 minutes daily • Small, flexible, skills-based groups of 1–3 students • Students with identified reading difficulties as determined by screening, diagnostic, and progress monitoring data • Remaining 0–5 percent of students reach grade-level expectations with Tiers 1 and 3.

Consistency Across Tiers

Effective interventions should ensure an alignment of resources and materials across tiers. This is crucial to ensure a seamless continuum of support for students. It also facilitates a smooth transition of instruction between tiers as students' needs change, without disrupting their learning. Consistent use of evidence-based practices and high-quality materials across all tiers reduces undue confusion and maximizes the effectiveness of the MTSS framework in accelerating student learning.

Reading Instruction Within an MTSS Framework:

The integration of MTSS with evidence-based practices rooted in the Science of Reading further enhances its efficacy. By aligning core, supplemental, and intervention programs with the principles of effective reading instruction, MTSS ensures a comprehensive approach that addresses diverse student needs while fostering literacy development, from early readers to skilled readers and writers. This alignment extends across differentiated instruction, interventions, and intensive interventions, maintaining consistency in instructional approaches and data utilization to optimize student outcomes within the MTSS framework.

The Science of Reading

The comprehensive understanding of the Science of Reading is crucial for this discourse. To clarify, the Science of Reading is defined as a vast, interdisciplinary body of scientifically based research about reading and issues related to reading and writing. This research has been conducted over the last five decades across the world,
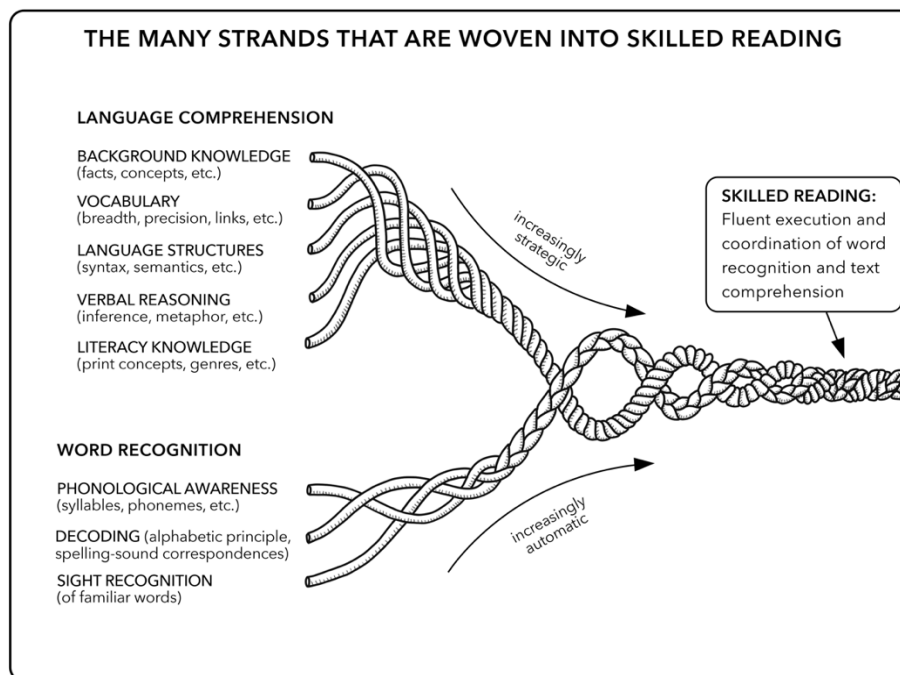
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and it is derived from thousands of studies conducted in multiple languages *(Science of Reading: Defining Guide, 2022).* This research draws insights from various domains such as education, psychology, linguistics, and neuroscience, offering a comprehensive understanding of reading processes.

The Simple View of Reading, proposed by Gough and Tunmer (1986), indicates that reading comprehension is a product of decoding and language comprehension, akin to a mathematical formula:

<p align="center">Word Recognition x Language Comprehension = Reading Comprehension</p>

This formula underscores the interdependence of these factors, where the absence of either decoding or linguistic comprehension leads to compromised reading comprehension. For instance, proficient decoding skills without linguistic comprehension proficiency result in faulty reading comprehension. Conversely, strong linguistic comprehension without decoding skills, such as in individuals with dyslexia or young learners yet to acquire decoding skills, also leads to inadequate reading comprehension. Therefore, both decoding and linguistic comprehension must be robust for proficient reading comprehension.

Another widely used framework that encapsulates the findings of the science of reading research is with Dr. Hollis Scarboroughs's Reading Rope (2001). The Reading Rope represents a visual model of what skills contribute to skilled reading. The Reading Rope serves as a visual representation illustrating the key skills that are crucial for proficient reading. This model vividly shows how different reading skills are interconnected, reinforcing each other to develop skilled reading abilities. The strands of the Reading Rope are categorized into two main areas: **language comprehension** and **word recognition**.

THE MANY STRANDS THAT ARE WOVEN INTO SKILLED READING

LANGUAGE COMPREHENSION
BACKGROUND KNOWLEDGE (facts, concepts, etc.)
VOCABULARY (breadth, precision, links, etc.)
LANGUAGE STRUCTURES (syntax, semantics, etc.)
VERBAL REASONING (inference, metaphor, etc.)
LITERACY KNOWLEDGE (print concepts, genres, etc.)

WORD RECOGNITION
PHONOLOGICAL AWARENESS (syllables, phonemes, etc.)
DECODING (alphabetic principle, spelling-sound correspondences)
SIGHT RECOGNITION (of familiar words)

increasingly strategic

SKILLED READING: Fluent execution and coordination of word recognition and text comprehension

increasingly automatic

Scarborough, (2001)

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Effective instruction in foundational reading skills encompasses several key components. These components include explicit instruction, a systematic approach, opportunities for independent practice, and targeted feedback. This white paper outlines key distinctions of these components and how they should be applied within the MTSS framework.

My Reading Academy Addresses Both Sides of the Simple View of Reading

My Reading Academy is deeply rooted in the Science of Reading research. Students interact with hundreds of learning games, books, and activities that address word recognition and language comprehension skills.

The Role of Explicit Instruction

Archer & Hughes (2011) defined explicit instruction as "… unambiguous and direct approach to teaching that incorporates instruction design and delivery." The impact of explicit instruction on student learning has a robust effect size of 0.56 (Visible Learning Meta[X], 2023). The key benefits of explicit instruction on student learning include:

- Engagement in the process of learning. Explicit instruction involves modeling, providing guided and independent practice, and giving timely feedback.
- Reduced cognitive load. Explicit instruction reduces the cognitive load on students, especially those who struggle with working memory. By breaking down concepts into clear steps and providing scaffolding, explicit instruction frees up mental resources for the learning itself.
- Improved retention and automaticity of foundational skills and concepts. Explicit instruction involves distributed practice, review of previous learning, and building toward mastery, which helps cement knowledge.
- Makes higher-order and inquiry-based learning more accessible. By first providing direct instruction on critical content and skills, explicit teaching lays the groundwork for students to engage in more complex, student-directed learning.

Educational researchers (e.g., Brophy & Good, 1986; Christenson, Ysseldyke, & Thurlow, 1989; Gersten, Schiller, & Vaughn, 2000; Hughes, 1998; Marchand-Martella, Slocum, & Martella, 2004; Rosenshine, 1997; Rosenshine & Stevens, 1986; Simmons, Fuchs, Fuchs, Mathes, & Hodge, 1995; Swanson, 2001) have identified and delineated a range of instructional behaviors and elements that exemplify an explicit approach to teaching. These elements are listed below.

1. Focus instruction on critical content. Teach skills, strategies, vocabulary terms, concepts, and rules that will empower students in the future and match the students' instructional needs.

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2. Sequence skills logically. Consider several curricular variables, such as teaching easier skills before harder skills, teaching high-frequency skills before skills that are less frequent in usage, ensuring mastery of prerequisites to a skill before teaching the skill itself, and separating skills and strategies that are similar and thus may be confusing to students.

3. Break down complex skills and strategies into smaller instructional units. Teach in small steps. Segmenting complex skills into smaller instructional units of new material addresses concerns about cognitive overloading, processing demands, and the capacity of students' working memory. Once mastered, units are synthesized (i.e., practiced as a whole).

4. Design organized and focused lessons. Make sure lessons are organized and focused in order to make optimal use of instructional time. Organized lessons are on topic, well sequenced, and contain no irrelevant digressions.

5. Begin lessons with a clear statement of the lesson's goals and your expectations. Tell learners clearly what is to be learned and why it is important. Students achieve better if they understand the expected instructional goals and outcomes, as well as how the information or skills presented will help them.

6. Review prior skills and knowledge before beginning instruction. Provide a review of relevant information. Verify that students have the prerequisite skills and knowledge to learn the skill being taught in the lesson. This element also provides an opportunity to link the new skill with other related skills.

7. Provide step-by-step demonstrations. Model the skill and clarify the decision-making processes needed to complete a task or procedure by thinking aloud as you perform the skill. Clearly demonstrate the target skill or strategy in order to show the students a model of proficient performance.

8. Use clear and concise language. Use consistent, unambiguous wording and terminology. The complexity of your speech (e.g., vocabulary, sentence structure) should depend on students' receptive vocabulary to reduce possible confusion.

9. Provide an adequate range of examples and non-examples. To establish the boundaries of when and when not to apply a skill, strategy, concept, or rule, provide a wide range of examples and non-examples. A wide range of examples illustrating situations when the skill will be used or applied is necessary so that students do not underuse it. Conversely, presenting a wide range of non-examples reduces the possibility that students will use the skill inappropriately.

10. Provide guided and supported practice. To promote initial success and build confidence, regulate the difficulty of practice opportunities during the lesson and provide students with guidance in skill performance. When students demonstrate success, you can gradually increase task difficulty as you decrease the level of guidance.

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11. <u>Require frequent responses</u>. Plan for a high level of student–teacher interaction via the use of questioning. Having the students respond frequently (i.e., oral responses, written responses, or action responses) helps them focus on the lesson content, provides opportunities for student elaboration, assists you in checking understanding, and keeps students active and attentive.

12. <u>Monitor student performance closely</u>. Carefully watch and listen to students' responses so that you can verify student mastery as well as make timely adjustments in instruction if students are making errors. Close monitoring also allows you to provide feedback to students about how well they are doing.

13. <u>Provide immediate affirmative and corrective feedback</u>. Follow up on students' responses as quickly as you can. Immediate feedback to students about the accuracy of their responses helps ensure high rates of success and reduces the likelihood of practicing errors.

14. <u>Deliver the lesson at a brisk pace</u>. Deliver instruction at an appropriate pace to optimize instructional time, the amount of content that can be presented, and on-task behavior. Use a rate of presentation that is brisk but includes a reasonable amount of time for students' thinking/processing, especially when they are learning new material. The desired pace is neither so slow that students get bored nor so quick that they can't keep up.

15. <u>Help students organize knowledge</u>. Because many students have difficulty seeing how some skills and concepts fit together, it is important to use teaching techniques that make these connections more apparent or explicit. Well-organized and connected information makes it easier for students to retrieve information and facilitate its integration with new material.

16. <u>Provide distributed and cumulative practice</u>. Distributed (vs. massed) practice refers to multiple opportunities to practice a skill over time. Cumulative practice is a method for providing distributed practice by including practice opportunities that address both previously and newly acquired skills. Provide students with multiple practice attempts to address issues of retention as well as automaticity.

Students receive explicit instruction.

Students receive explicit instruction through My Reading Academy's instructional videos. The primary program host uses language that has been written by experts in literacy. As students learn new skills, they are immersed in a game world designed to apply their new learned skills!

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The delivery of explicit instruction should follow a systematic approach. Leveraging instructional routines such as the Gradual Release of Responsibility model ("*I do. We do. You do.*") allows us to deliver explicit instruction effectively. This routine is characterized by a clear description, explanation, or execution of a skill or concept, followed by guided practice that is supported with timely and corrective feedback.

The initial phase includes high levels of teacher involvement. Once student success is evident, teacher support gradually decreases as students work toward independent performance.

Throughout the MTSS instructional framework, explicit instruction, combined with other essential elements such as data-driven decision-making, progress monitoring, and multi-tiered support is an integral part of the process.

The Role of Systematic Instruction

Another hallmark for effective foundational skill instruction is systematic instruction. Systematic instruction involves logically sequencing lessons, building on existing knowledge, and progress in manageable steps (Blevins, 2017). There are several key characteristics of systematic instruction, which include:

1. Structured and sequential – Systematic instruction is structured and sequential, meaning that it follows a planned and organized approach that builds upon previous learning. It typically begins with the most basic concepts and gradually progresses to more complex ones.

2. Repetitive – Systematic instruction is repetitive, with frequent opportunities for practice and review. This helps to reinforce learning and ensures that students can apply the skills and conepts being taught.

3. Differentiated – Systematic instruction is differentiated, meaning that it is tailored to the needs and abilities of individual students. Teachers may use a variety of instructional strategies, materials, and assessments to meet the needs of all learners.

4. Data-Driven – Systematic instruction is data-driven, with ongoing assessments used to monitor student progress and inform instructional decision-making. Teachers use the data to adjust instruction and provide additional support or enrichment as needed.

5. Goal-Oriented – Systematic instruction is goal-oriented, with clear learning objectives and outcomes identified for each lesson or unit of instruction. Teachers communicate the intended learning outcome to students and provide feedback on their progress toward achieving them.

Overall, the goal of systematic instruction is to ensure that all students have access to high-quality instruction that is effective in promoting learning and academic success.

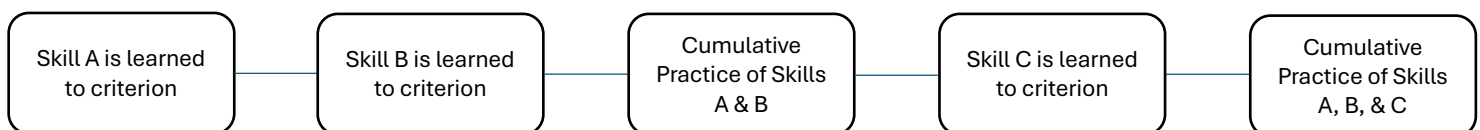Age of Learning®

The Role of Practice

Once students can perform a target skill at a high rate of success within the context of a lesson, they need opportunities to practice the skill independently to transfer knowledge from working memory to long-term memory. Without adequate practice, students—especially those with learning difficulties—have problems retaining or becoming fluent in a skill. The two major purposes behind practice are to build skill proficiency and maintaining it over time. From the research that compares massed practice (practicing a skill over an extended period of time to mastery) to distributed practice (mixing the practice over several related skills or concepts together short practice sessions over time), we can conclude with confidence that distributed practice better aids in retention for most students in a variety of academic areas. (Hattie, 2009)

> **Instruction in My Reading Academy is Systematic**
>
> My Reading Academy's skills are taught in a strategic manner, building on previously learned skills and gradually introducing more complex ones. Our approach ensures that students have acquired a solid foundation before moving on to more advanced concepts. In addition to foundational skills, vocabulary and comprehension activities are designed to develop students' oral vocabulary while simultaneously building background knowledge on relevant science and social studies topics.

Initial practice of a skills strategy or concept should occur as part of a teacher-directed lesson, under their supervision. After the lesson has been modeled and students have engaged in guided practice, teachers should have students engage in initial practice to check for understanding. When students have demonstrated accuracy on several items, independent practice can begin. In many cases, it is appropriate and beneficial to provide one or two massed-practice sessions, in which students independently practice a skill with many examples. This practice opportunity allows students to quickly strengthen their acquisition of a skill. However, this should be followed up with distributed practice in order to retain the skill in long-term memory and build fluency.

The last phase of practice should be *cumulative practice*. This involves adding related skills to skills that were previously acquired, in such a way that all of the skills are practiced together in one practice session. Mayfield and Chase (2002) describe this procedure as follows:

> *Cumulative practice begins by independently training two skills to criterion and then practicing them together, usually by mixing tasks for both skills within the same practice set. After a criterion is met on the cumulative practice set, a third skill is trained to criterion. Next, the new skill is added to the two previously trained skills in a cumulative set involving all three skills. This procedure is continued until all the skills in a sequence or hierarchy have been trained, with the mastered skills accumulating across the cumulative sets.*

The figure below illustrates this definition:

| Skill A is learned to criterion | — | Skill B is learned to criterion | — | Cumulative Practice of Skills A & B | — | Skill C is learned to criterion | — | Cumulative Practice of Skills A, B, & C |

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Research indicates that the key benefits of cumulative practice are improved long-term learning, better problem-solving skills, increased efficiency of skill acquisition, and higher overall achievement levels—all of which stem from the way cumulative practice reinforces connections between different concepts and skills over time.

Providing opportunities for these various forms of practice within the MTSS framework allow for a structured and progressive approach to skill development across its tiers. In Tier 1, it serves as a reinforcement tool within regular classroom instruction. As students move to Tier 2, practice sessions aid targeted interventions by addressing specific learning gaps while reinforcing other previously learned skills. In Tier 3, where intensive interventions are applied, practice offers focused and repetitive exercises to promote mastery and retention of critical concepts.

The Role of Feedback

Effective instruction also includes providing high-quality feedback to students on their performance. This includes both corrective and affirmative feedback. It is one of the most powerful instructional acts within the learning process. Feedback has the goal of closing the gap between students' current performance and the desired result by informing students whether an answer is correct or incorrect, whether their understanding is correct or flawed, and what can be done to improve future performance (Hattie & Timperley, 2007; Lenz, Ellis, & Scanlon, 1996). Educators should consider a number of practices while providing feedback on students' responses.

- **Provide immediate corrections**. Teachers play a crucial role in effectively addressing student errors within the learning process. As Watkins and Slocum (2004) emphasize, teachers must notice every error made by students during a lesson and determine the specific type of error that has occurred. Importantly, teachers should then offer a correction that guides the student toward the correct answer, ensuring that the correction is provided immediately before additional practice opportunities are given.

- **Provide specific, informative corrections**. The aim of feedback is to minimize the gap between the present response and the target response. Binary feedback like "yes, that's correct" or "no, that's incorrect" lacks the detail needed to guide future improvements. Furthermore, simply telling students the correct answer is not often adequate. Planned, specific information is more likely to influence student performance than haphazard, general feedback (Herschell, Greco, Filcheck, & McNeil, 2002).

- **Focus on correct answers versus the incorrect answer.** When providing corrective information, it is essential to focus on the correct response rather than incorrect responses. Focusing on the incorrect answer is not only negative but may also confuse students.

- **Utilize an appropriate tone when correcting errors.** Students need to understand that the objective of any lesson is learning, and acknowledge that errors are an inherent part of the process. When corrections are informative and conveyed without anger or irritation, students tend to feel secure within the learning environment and are more inclined to take academic risks. Corrections should embody positivity rather than punishment, constructiveness over destructiveness, respectfulness rather than insult, and encouragement instead of demoralization.

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- **End every correction by having students give the correct response.** If students are not required to produce the correct response after a correction procedure, less learning will occur (Barbetta & Heward, 1993). Learning is enhanced if the correction procedure includes requiring a response; the outcome is more positive for students when their final performance is correct.

In summary, quality feedback should be immediate, corrective, match the type of error that was made, be specific, and facilitate a correct response. In addition, corrections are delivered in an encouraging and respectful tone (Archer & Hughes, 2011).

Students receive immediate, corrective, and actionable feedback.

My Reading Academy's corrective feedback routines offer three layers of feedback to students. Feedback is immediate, corrective, and actionable. Our feedback prompts are designed to support students in the learning through the strategic use of prompting.

Instruction Across Tiers

As students move up the tiers, the intensity, frequency, and duration of the interventions increase, with more personalized, targeted, and diagnostic support to address the students' specific learning challenges**.** At the universal (Tier I) level, the intensity is the lowest, as it is designed to meet the needs of the majority (around 80 percent) of students. Tier 2 provides more targeted, supplemental instruction and interventions in addition to Tier I. The intensity of interventions increases at this tier, typically involving an additional 15–20 minutes of instruction 2–3 times per week, in small groups of 3–8 students. Tier 3 provides the most intensive, individualized instruction and interventions for the students with the greatest needs. The intensity of interventions is the highest at this tier, with a higher frequency (e.g. daily), longer duration (e.g. 30–45 minutes), smaller group sizes (1–3 students), and delivery of instruction is facilitated by the classroom teacher or specialized staff (i.e., interventionist, literacy coach, etc.).

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Intensity of Instruction Across Tiers

Tier 1 (Universal Instruction)	Tier 2 (Targeted Intervention)	Tier 3 (Intensive Intervention)
I do. We do. We do. You do together. You do.	I do. I do. We do. We do We do. You do together. You do together. You do together. You do. You do.	I do. I do. I do. We do. We do. We do. We do. You do together. You do together. We do. You do together. You do. You do. You do.

Adapted from the National Center on Improving Literacy

Implications for School and Districts

Facilitating effective literacy instruction within the Multi-Tiered System of Supports (MTSS) framework begins with strategic planning and data-driven decision-making by educators. The choice of instructional methods, materials, and interventions sets the tone for learning outcomes. Teachers play a critical role in fostering a positive learning environment, providing explicit instruction with a systematic approach, providing targeted feedback, and providing strategic practice throughout the learning process. In closing, we suggest that schools and districts assess their MTSS processes at the district, building, grade, class, and student level. When doing so, consider the following guiding questions:

- How strong is your Tier 1 instruction?
- Are the core, supplemental, and intervention teaching materials structured with a clear scope and sequence?
- Do the sequences apply a systematic approach to teaching reading skills?
- What are the similarities and disparities in teacher pedagogy across tiers?
- How is instruction being intensified across tiers?
- What adjustments are needed for pacing in Tiers 2 and 3?
- How can you manage inconsistencies within the broader MTSS framework?

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