



Southwest ISD
Math Instructional Framework

Vision Statement

Southwest ISD is dedicated to fostering a community of curious, resilient, and critically thinking mathematicians who are able to navigate complex problems that impact our world.

Belief Statements

Math RBIS 1: Balance of Conceptual and Procedural

To achieve rigor in mathematics education, we believe it is essential to integrate conceptual understanding, procedural skills, and fluency. By doing so, we will be preparing our students to apply their knowledge effectively not only to reach the required standards set by the TEKS, but also to apply the acquired knowledge in real-world mathematical challenges.

Math RBIS 2: Depth of Key Concepts

We believe in focusing on math content that aligns with the rigor of the TEKS for each grade level. This will ensure students are engaged with standards-based instructional materials that foster a deeper understanding and mastery of essential topics and prepare them for more complex mathematical challenges.

Math RBIS 3: Coherence of Key Concepts

We believe implementing rigorous Tier 1 instruction must include a strategic progression of alignment within and across all grade levels so students continuously build their foundation to prepare them for future learning.

Math RBIS 4: Productive Struggle

We believe math skills can be cultivated and developed through productive struggle. Confidence and resilience are built when mathematicians identify mistakes and challenges as opportunities to reflect and learn.

SWISD Stakeholder Actions

	Students	Teachers	Instructional Leaders	Families
Balance of Conceptual and Procedural	<ul style="list-style-type: none"> ● Demonstrate a deep conceptual knowledge that allows students to understand procedural skills while developing mathematical fluency ● Practice skills and solve problems in multiple ways. ● Show their work and justify their strategy. ● Collaborate with peers to investigate and solve. ● Explore why and how math strategies work. 	<ul style="list-style-type: none"> ● Internalize HQIM through planning and PLC discussion. ● Provide multiple opportunities, tools (manipulatives), and representations for students to explore and share different solution methods to become problem solvers. ● Provide opportunities for students to complete open-ended tasks and justify their answers. ● Debrief work with students to identify the gaps and misconceptions. ● Provide opportunities for student discourse with problem solving. ● Communicate with parents about their child's progress or lack of progress. 	<ul style="list-style-type: none"> ● Provide protective time for teachers to engage and dive deep into their grade level TEKS, high-quality instructional materials, and lesson internalization. ● Provide teachers and students with high-quality instructional materials and resources (e.g., Bluebonnet Math) ● Promote and monitor the effective implementation of high-quality instructional materials (e.g., Learning Walks, Assessment Data). ● Provide professional development in and out of the classroom based on walkthrough data. (e.g., model instruction, peer observation, and coaching cycles.) ● Hold regular meetings to discuss individual teacher and student needs to provide support as needed. ● Support families through awareness of HQIM to ensure students are mastering the grade-level skills. 	<ul style="list-style-type: none"> ● Understand that math instruction is rigorous. ● Be open to new approaches to solving math problems and learn new concepts and strategies alongside their students. ● Attend parent/teacher conferences to discuss math progress and other math-related family night events throughout the school year.

	Students	Teachers	Instructional Leaders	Families
Depth of Key Concepts	<ul style="list-style-type: none"> Engage in collaborative discussions with peers using academic vocabulary, tools, and strategies to deepen understanding of grade-level TEKS. Produce work that meets the success criteria and demonstrates their understanding of the learning intention aligned with the TEKS. Spend the most time and effort deeply engaging in the primary focal areas for the grade level. 	<ul style="list-style-type: none"> Use high-quality instructional materials utilizing scaffolds, manipulatives, graphic organizers, and technology with fidelity Unpack and deeply understand the grade-level TEKS and internalize modules and lessons in a collaborative setting. Share the learning intention and success criteria with students at the beginning, throughout, and end of the lesson. Communicate with families about the primary focal areas and grade-level strategies before they are covered. 	<ul style="list-style-type: none"> Provide teachers with training and dedicated, protected time during the school day to internalize lessons, plan tools, scaffolds, and strategies that effectively support student learning. Conduct walkthroughs, observations, and hold coaching cycles with all math teachers consistently. Monitor teacher lesson plans and sit in on teacher planning meetings and/or PLCs to ensure connection to the TEKS, lesson internalization, and instruction is on pace with the YAG. Ensure teachers plan for differentiated and small group instruction. Ensure the daily schedule and YAG allow teachers to cover the full scope and sequence and dive deep into the primary focal area. Implement effective campus data analysis protocols to guide actions that drive academic growth for all students. 	<ul style="list-style-type: none"> Understand that math instruction is rigorous. Be open to new approaches to solving math problems and learn new concepts and strategies alongside their students. Attend parent/teacher conferences to discuss math progress and other math-related events throughout the school year.

	Students	Teachers	Instructional Leaders	Families
Coherence of Key Concepts	<ul style="list-style-type: none"> Actively engage in grade-level TEKS to connect prior knowledge to new learning. Apply learning to real-world situations and transfer knowledge to future concepts. Persevere in building a strong mathematical foundation. 	<ul style="list-style-type: none"> Intentionally collaborate with colleagues to internalize and deliver explicit instruction grounded in a deep understanding of the TEKS progression across grades, units, and lessons using high-quality instructional materials. Use data and student work to problem-solve and refine instruction, ensuring strong conceptual connections. 	<ul style="list-style-type: none"> Set and maintain high expectations for rigorous Tier 1 instruction that builds conceptual coherence and supports real-world application. Allocate and protect time for teachers to deeply analyze grade-level TEKS and high-quality instructional materials. Facilitate collaboration and professional development to strengthen instructional alignment and coherence across grade levels. 	<ul style="list-style-type: none"> Support their child by encouraging persistence and engagement in their mathematical learning. Help their child see connections between math and its real-world applications. Participate in school engagement opportunities to stay informed and involved in their child's progress.
	Students	Teachers	Instructional Leaders	Families
Productive Struggle	<ul style="list-style-type: none"> Embrace challenges and view mistakes as opportunities to deepen understanding. Ask questions and persevere through complex problems, knowing that effort leads to growth. Reflect on feedback and use it to improve problem-solving strategies and mathematical thinking. 	<ul style="list-style-type: none"> Provide opportunities that promote productive struggle by challenging students to think critically and explore multiple strategies. Foster a classroom culture where mistakes are celebrated as part of the learning process. Provide timely feedback to guide students through challenges while encouraging independence. Model perseverance and a growth mindset by sharing strategies for overcoming challenges. 	<ul style="list-style-type: none"> Support teachers in creating environments where productive struggle is integral to math instruction. Provide professional learning opportunities focused on providing tasks and scaffolded instruction to promote resilience and critical thinking. Observe and provide feedback to teachers on fostering productive struggle, emphasizing positive student engagement. Celebrate classrooms and student work that exemplify perseverance and problem-solving. 	<ul style="list-style-type: none"> Encourage their child to take on challenging math problems and to view struggles as opportunities to grow. Reinforce a growth mindset by praising effort, persistence, and improvement over simply "getting it right." Provide a safe space at home for their child to explore and discuss math challenges without fear of failure. Engage in family math activities for exploration, problem-solving, and resilience-building.