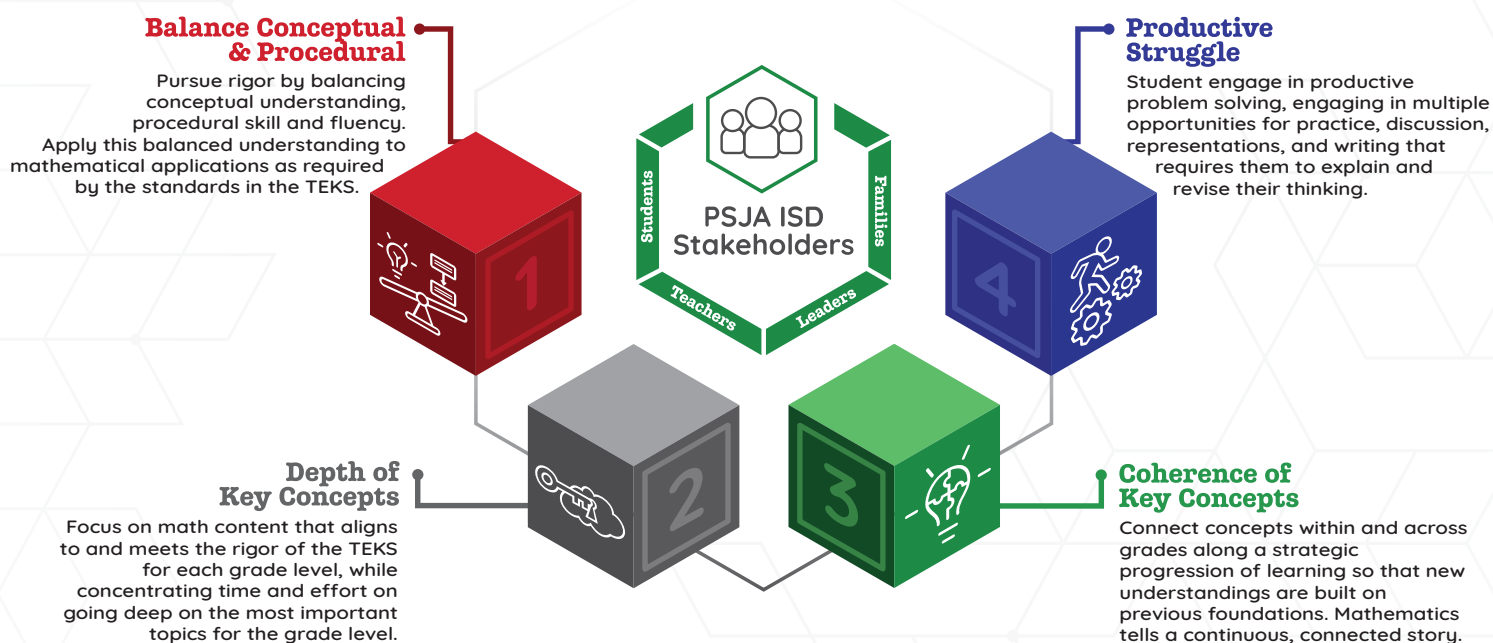


Mathematics Framework Vision

PSJA ISD empowers all learners to be innovators and determined problem solvers who will be equipped to become life-long mathematicians in a competitive global society while pursuing their aspirations in college, career, and beyond.

Research-Based Instructional Strategies



In PSJA ISD we believe...



... a solid foundation in **CONCEPTUAL** understanding and **PROCEDURAL** skills is crucial in mathematics instruction. Balancing both elements ensures students recognize the “why” and “how” behind mathematical procedures as required by the Texas Essential Knowledge and Skills (TEKS).



...all students are actively engaged in mathematical tasks that fully align with the Texas Essential Knowledge and Skills (TEKS) specificity and rigor as applied to real world applications. Instruction must prioritize the **Depth of Key Concepts** to ensure a mathematical foundation for all learners.



...**Coherence of Key Concepts** is essential for students to make Mathematical connections across grade levels. Aligned strategies, consistent vocabulary, and problem-solving tools play a key role in helping students understand and communicate their mathematical reasoning, enabling them to make connections and articulate their thought processes effectively.



...**Productive Struggle** is essential for learning mathematics, as it fosters resilience and cultivates lifelong learners. Students must explore multiple approaches to problem solving, engage in meaningful discourse—including discussions, representations, and writing that encourage reflection.

Mathematics Instructional Framework

Stakeholders	Actions
 Students	 Make connections between understanding concepts and practicing skills by exploring real-world problems, engaging in collaborative discussions, and using tools like manipulatives and digital platforms.  Actively engage with grade-level tasks by analyzing problems, internalizing key concepts, building on prior knowledge, and discussing solutions with peers.  Understand how math concepts connect to previous and future learning, seeing math as a cohesive system.  Embrace challenges with a positive mindset, recognizing the value of effort and growth through struggle.
 Teachers	 Teach concepts and skills using high-quality instructional materials, ensuring lessons focus on core ideas and practical applications.  Implement the curriculum with fidelity and present students with tasks that challenge them to apply their understanding of mathematical concepts in real-world or complex scenarios.  Ensure that the key concepts in the curriculum build on each other coherently, helping students connect prior knowledge with new learning.  Provide students opportunities to engage in productive struggle, to become independent thinkers who embrace challenges, learn from mistakes, and develop skills to solve problems creatively and confidently.
 Leaders	 Provide teachers with access to high-quality instructional materials (HQIM) and professional development opportunities that deepen their understanding of mathematical concepts, instructional strategies with procedural skills for balanced, grade-level instruction.  Provide feedback on teachers' planning to promote quality & consistent lesson internalization to make meaningful mathematical connections.  Foster a culture of collaboration and growth through frequent data driven learning sessions and classroom observations.  Provide intentional professional development and coaching for teachers, focusing on fostering productive struggle and encouraging meaningful discussions.
 Families	 Support their child's learning by staying informed about the curriculum and reinforcing concepts at home.  Encourage real-world problem-solving by helping their child apply math to everyday situations.  Support their child by recognizing that mathematics is connected across grade levels.  Celebrate their child by praising their daily efforts to work through challenging problems, reminding them that productive struggle is essential for growth.