

Instructional Framework for Mathematics

Fort Stockton Independent School District



Our vision

Fort Stockton ISD is committed to producing globally competitive students who are able to use mathematics to generate their own solutions to real-world problems.

We believe...

All of our students can succeed in grade-level mathematics with the implementation of high-quality instructional materials (HQIM) delivered by highly effective teachers.	Students understand the reasoning and application of mathematical procedures by beginning with conceptual models , experiencing different methods, and discussing with peers. Skill practice to develop procedural fluency is equally important and should follow conceptual development.
Students grow the most when they practice and actively engage in grade-level instruction . Using high-quality instructional materials is critical to ensuring that all students are held to high standards and that they work to the depth of their grade-level TEKS.	Students are successful when concepts are coherently connected within and across grade levels . When students have a variety of strategies to reference, they can better apply prior learning to their current mathematics coursework.
Productive struggle promotes growth, deeper learning, and confidence in independent problem-solving. Mathematics instruction should prioritize intentional effort to create a "culture of error" where students take risks by posing their own solutions to new problems, learn from their attempts, and develop their capacity to persist through difficult tasks.	We acknowledge that technology provides powerful tools that can enrich math learning and instruction . The role of technology in mathematics learning instruction is likely to increase in the coming years. Accordingly, it is important for FSISD to address technology usage in the mathematics classroom.

Take Action.

We expect that every stakeholder will work hard to help our students realize our vision and beliefs.

Equity and Access

At Fort Stockton ISD, our students will:

- show up and commit every day to facing challenges in order to create new learning;
- actively participate in mathematics-related tasks when given the opportunity; and
- work to meet grade-level and progress goals, either with intervention or enrichment.

To support our students, our teachers will:

- commit to implementing research-based instructional strategies in the classroom,
- internalize lessons and plan for effective implementation of high-quality instructional materials; and
- communicate regularly to parents about the help available to parents and students outside of school.

To support our teachers, campus and district leaders will:

- implement an instructional feedback cycle that is aligned to research-based instructional strategies;
- use a variety of data sources to strategize professional learning and planning; and
- set expectations at the campus level for regular communication with parents about ongoing instruction.

To support math instruction, our families and caregivers can:

- ensure that students attend class daily;
- encourage your student to actively participate;
- review the information that gets sent home about math instruction; and
- review the information about math learning and instruction that gets sent home.

Balance Conceptual with Procedural

At Fort Stockton ISD, our students will:

- use academic vocabulary to justify and explain their thinking;
- actively listen to peers to learn from their thinking; and
- use multiple representations, including hands-on approaches, to solve problems.

To support our students, our teachers will:

- create an environment that builds student capacity to represent and discuss their learning;
- create daily opportunities to read, write, and draw in every lesson; and
- emphasize and provide conceptual development as much as procedural development in the classroom.

To support our teachers, campus and district leaders will:

- create a discourse-driven environment during meetings and PLCs that teachers can use as a model in building a discourse-friendly classroom; and
- provide professional learning opportunities that support balancing conceptual and procedural understanding.

To support math instruction, our families and caregivers can:

- ask your child reflective questions about the mathematics that they are learning;
- support math learning that goes beyond procedures; and
- expect that your students' work may look different than the way that you learned mathematics and encourage students to learn multiple ways of doing things.

Depth of Key Concepts

At Fort Stockton ISD, our students will:

- strive to meet classroom expectations of high-quality, grade-level work daily;
- apply learning from the mathematics classroom to real-life examples; and
- work independently as well as collaboratively.

To support our students, our teachers will:

- create classroom structure that encourages and engages students to actively participate throughout class;
- internalize essential ideas to know where the depth should be targeted and student misconceptions addressed; and
- structure lessons to maximize student practice of grade-level concepts.

To support our teachers, campus and district leaders will:

- provide high-quality instructional materials;
- motivate and help guide teachers in the intended usage of HQIM;
- be knowledgeable in the curriculum and research-based learning strategies that teachers of all programs will use in their classrooms; and
- provide professional learning opportunities and support for teachers that struggle with student participation.

To support math instruction, our families and caregivers can:

- encourage opportunities outside of school to use real-world mathematical concepts; and
- facilitate math discussions around real-world examples with your child.

Coherence of Key Concepts

At Fort Stockton ISD, our students will:

- use their background and prior knowledge to choose methods that work best to connect to new topics;
- develop an awareness of their own needs by taking ownership of their data and scores; and
- be intentional about making connections to the developing math story when learning something new.

To support our students, our teachers will:

- internalize module and topic overviews to support mindful planning with vertical alignment that builds on previous grade-level content;
- be consistent, intentional and clear in implementing grade level material and provide timely (just-in-time) intervention for students; and
- provide the students with high expectations related to growth over time.

To support our teachers, campus and district leaders will:

- facilitate and model module and topic internalization protocols as needed;
- across campuses, bring teachers together to facilitate BOY meetings to enrich teacher understanding of where each grade level left off, strengths/weaknesses, and structures/routines;
- within each campus, provide and facilitate consistent conversations throughout the year centered around content knowledge and vertical alignment within grade bands; and
- provide ongoing professional learning opportunities centered around the coherence of HQIM within and across grade levels, including effective practices for learning acceleration rather than remediation.

To support math instruction, our families and caregivers can:

- nurture and encourage students to showcase what they are learning to the people around them;
- facilitate regular conversations with students about their performance; and
- ask your student to give examples of how their math knowledge is growing and to explain how they are building on what they already know.

Productive Struggle

At Fort Stockton ISD, our students will:

- rise to the high expectations that FSISD sets for them;
- take initiative to engage in productive problem solving;
- be willing to make mistakes and learn from them; and
- develop stamina and resilience to persist through difficult tasks.

To support our students, our teachers will:

- select and implement tasks that can be solved in a variety of ways;
- before modeling solutions, allow students time to think and use prior knowledge to work through problems; and
- support productive struggle by asking questions that move student thinking forward and by praising both successful and unsuccessful attempts.

To support our teachers, campus and district leaders will:

- provide time and space for teachers to explore ways to implement productive struggle;
- collaborate with teachers to identify opportunities for productive struggle in their current curriculum; and
- provide professional learning opportunities centered around productive struggle.

To support math instruction, our families and caregivers can:

- acknowledge that we are raising the rigor of mathematics instruction and expect frustration;
- allow your child to struggle productively through challenging daily tasks; and
- let your student know that no effort is wasted because even mistakes are learning opportunities.

Technology

At Fort Stockton ISD, our students will:

- use technology to represent and model problems in a variety of ways; and
- be responsible for devices.

To support our students, our teachers will:

- identify uses of technology that increase engagement and deepen conceptual understanding;
- identify and share virtual versions of hands-on tools that students use to represent and model problems; and
- model productive usage of technology in the classroom.

To support our teachers, campus and district leaders will:

- work with teachers to help define the productive use of technology in math instruction; and
- secure access to technology and build the necessary infrastructure.

To support math instruction, our families and caregivers can:

- work with students to incorporate technology into their studies in productive ways.