

# MATHEMATICS INSTRUCTIONAL FRAMEWORK

The *Mathematics Instructional Framework* is designed to guide teachers in the planning and delivery of instruction. The framework is composed of four phases. The framework is based on Madeline Hunter's – Elements of Effective Instruction. Each of the seven steps of effective instruction are embedded in the four phases of the mathematics framework.

- **Phase 1 - Focus:** Teacher focuses students' attention on the lessons and provides a hook for learning through instruction that supports the application of number sense. Students are attending to and thinking about the topic.
- **Phase 2 - Engage:** Teacher communicates the purpose of the lesson and what students need to know or be able to do, to be successful. Teacher provides students with scaffold instruction by modeling. Students are actively engaged and building conceptual understanding.
- **Phase 3 – Explore:** Students complete assigned learning tasks while applying the mathematical processes (communication, connection, representation, reasoning/proof, and problem solving) as teacher monitors, guides, and checks for understanding.
- **Phase 4 – Reflect & Assess:** Teacher and students summarize by reflecting on student performance and assessing students' skills to apply new knowledge.

In mathematics the interaction of teachers, students, and content is the key to determining the quality of mathematics instruction. Student success in mathematics ultimately depends on what actually happens in the classroom and what teachers do to prepare and evaluate.

