



Core Instructional Practices in Math

Whole Group Instruction

- **Opportunity to Learn**-The extent of students' opportunity to learn mathematics content through **systematic and explicit instruction** bears directly on mathematics achievement.
- **Standards-Based Curriculum and Instruction for All Students**-All staff members working together to align curriculum, instruction and multiple measurements of student performance. All students have access to grade level standards.
- **Focus on Meaning** -Focus instruction on meaningful development of important mathematical concepts where students are actively involved in constructing and applying mathematical ideas through: a) asking questions b) inferring c) predicting, and d) synthesizing information in order to develop deep conceptual understanding of abstract ideas.
- **Use of the Strategy Concrete-Representational-Abstract (CRA)**-Students move through lessons using concrete materials, creating visual representations and through making connections to the abstract.
- **Use of Five Intertwined Processes to Build Mathematical Understanding**-Provide experiences for students in which they are actively engaged in: a) making connections b) using reasoning and developing proofs c) using problem solving strategies d) creating representations, and e) communicating ideas.
- **Vocabulary Instruction**-It's key that students develop a solid understanding of mathematical concepts before learning new vocabulary so they can attach terminology to their understanding.

Small Group Guided Instruction

- **Small Group Guided Learning**-Using specific prompting and solution-oriented questioning utilizing the Concrete-Representational-Abstract (CRA) strategy.
 - **Extra Practice on Foundational Skills**-Provide extra practice on the topic the class is working on as well as providing comprehensive instruction geared to building student's foundation of mathematical understanding.
- Instruction Focused on Understanding, Sense Making and Skills**-Interventions that provide scaffolding mathematical content is crucial for building math foundations in students.

Independent Practice

- **Practice Opportunities**-Teachers maintain a balance between explicit skill instruction, guided practice and independent application. Teachers appropriately gauge when students are ready to put new learning into independent practice.
- **Independent learning**-This occurs when students are ready to assume control over their own learning after intensive and focused instruction has taken place.