

Top **Eleven** Best Practices in Math Instruction
A Synthesis of the Research

1. The goal of teaching mathematics is to help all students develop mathematical power.
2. Teaching for mathematical power requires providing experiences that stimulate students' curiosity and build confidence in investigating, problem solving, and communication.
3. How well students come to understand mathematical ideas is far more important than how many skills they acquire.
4. Mathematics is not a set of isolated topics, but rather an integrated whole.
5. Problem-solving is the focus of a curriculum that fosters the development of mathematical power.
6. Students need many opportunities to use language to communicate mathematical ideas.
7. Reasoning is fundamental to knowing and doing mathematics.
8. Concepts of numbers, operations, and computation should be broadly defined, conceived, and applied.
9. The concept of geometry and measurement are best learned through experiences that involve experimentation and the discovery of relationships with concrete materials.
10. The understanding of statistics, data, chance, and probability comes from real-world applications.
11. A major purpose of evaluation is to help teachers better understand what students know and make meaningful decisions about teaching and learning activities.