

## Shifts in Classroom Practice

### Shift 1: From *same instruction* toward *differentiated instruction*.

Same instruction for all students.

Differentiated instruction but same learning outcomes for all students.

### Shift 2: From *students working individually* toward *community of learners*.

Students work individually on tasks and seek feedback from teacher on reasonableness of strategies and solutions.

Community of learners where students hear, share, and judge reasonableness of strategies and solutions.

### Shift 3: From *mathematical authority coming from the teacher or textbook* toward *mathematical authority coming from sound student reasoning*.

Correctness of solutions is determined by seeking input from teacher or textbook.

Correctness of solution is based on reasoning about the accuracy of the solution strategy.

### Shift 4: From *teacher demonstrating 'how to'* toward *teacher communicating 'expectations' for learning*.

Teacher demonstrates the way in which to solve a problem and helps students in solving the problem in that way.

Teacher facilitates high-level performance by sharing learning goals and expectations for products that demonstrate learning.

### Shift 5: From *content taught in isolation* toward *content connected to prior knowledge*.

Content presented independent of its connections to what has been previously learned.

Content presented in ways where explicit attention is given to making connections among mathematical ideas.

### Shift 6: From *focus on correct answer* toward *focus on explanation and understanding*.

Discussions and classroom routines focus on student explanation of how they solved a task and if it is correct.

Discussions and classroom routines focus on student explanations that address why an answer is (or isn't) correct.

### Shift 7: From *mathematics-made-easy for students* toward *engaging students in productive struggle*.

Mathematics is presented in small chunks and help is provided so that students reach solutions quickly and without higher level thinking.

Teacher poses tasks and challenges students to persevere and attempt multiple approaches to solving problems.