#### 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.