Innovation Configuration Map: Engaging in the Formative Assessment Process to Accelerate Learning in the Mathematics Classroom

Clarifying TEACHING: Engaging in the Formative Assessment Process (Clarify learning; elicit evidence of student thinking; interpret evidence of student thinking; respond to evidence of student thinking)

Ideal State

Teachers:

- Communicate learning goals; establish how goals connect to prior and future learning.
- Facilitate ongoing discourse around how learning experiences contribute to the attainment of learning goals so students understand the purpose of the work and provide opportunities to reflect on progress towards goals.
- Strategically elicit evidence of student thinking and reasoning focused on goals.
- Attend to and interpret evidence of student thinking to assess methods, understanding, and reasoning.
- Respond in the moment appropriately to support student or extend student thinking, and/or deepen conceptual understanding while moving students toward procedural fluency and advanced mathematical reasoning.
- Use misconceptions to maximize deep conceptual learning and reasoning.

Teachers:

- Communicate learning goals to students and refer to goals throughout the lesson.
- Provide students with opportunities to reflect on their progress towards learning goals.
- Elicit evidence of student thinking and reasoning focused on goals.
- Attend to and interpret evidence of student thinking to assesses methods, understanding, and reasoning.
- Address the range of student understanding and misconceptions with appropriate prompts, questions, or strategies, using some opportunities to extend and deepen student thinking and reasoning in support of goal attainment.

Teachers:

- Communicate learning goals to students at the start of the lesson and reflect on goals at the end of the lesson.
- Facilitate experiences aligned to the learning goals.
- Elicit evidence of student misconceptions.
- Attend to, filter, and interpret evidence of student misconceptions.
- Address misconceptions with appropriate prompts, questions, or strategies.

Teachers:

- Post learning goals aligned to the standards.
- Facilitate experiences partially aligned to the learning goals.
- Elicit evidence of student misconceptions.
- Correct student errors.

Teachers:

- Post learning goals.
- Elicit evidence unrelated to criteria for success.

Innovation Configuration Map: Engaging in the Formative Assessment Process to Accelerate Learning in the Mathematics Classroom

Clarifying LEARNING: Engaging in the Formative Assessment Process (Explicitly communicate their own mathematical reasoning and methods related to learning goals; adjust methods and reasoning; explicitly respond to mathematical reasoning and methods of others; monitor progress towards learning goals)

Ideal State

Students: • Explain current goals and how they link to prior knowledge while building more sophisticated understandings and anticipate future connections. • Engage in discourse around the mathematical purpose and goals related to their current work. • Explain, represent, and justify math understanding, reasoning and methods verbally, in written work, or using concrete models. • Reveal understanding by making revisions to methods, adjusting explanations, or modifying arguments. • Ask and answer clarifying and advancing questions and make suggestions in response to the mathematical reasoning of others. • Demonstrate and justify self-assessment of progress toward learning goals, addressing and connecting immediate and long-term goals.	Students: • Explain current goals and how they link to prior knowledge while building more sophisticated understandings. • Explain the mathematical purpose of the current learning experiences, and how the experiences contribute to and support goals. • Explain, represent, and justify math understanding, reasoning and methods verbally, in written work, or using concrete models. • Reveal understanding by making revisions to methods. • Ask and answer clarifying and advancing questions in response to the mathematical reasoning of others. • Represent and justify self-assessment of progress toward learning goals.	Students: • Explain how current goals link to prior knowledge as they build knowledge and skills. • Explain the mathematical purpose of the current learning experiences and make connections to learning goals. • Explain and represent math understanding, reasoning and methods verbally, in written work, or using concrete models. • Ask clarifying questions and/or respond to methods of others. • Represent self-assessment of progress towards learning goals.	Students: • Explain learning goals. • Explain the mathematical purpose of the current learning experiences. • Explain or represent solutions verbally, in written work, or in concrete models. • Ask for correct answers or methods.	Students: • Identify learning goals. • Represent solutions verbally, in written work, or in concrete models.