

1. Establish mathematics goals to focus learning.

Effective teaching of mathematics establishes clear goals for the mathematics that students are learning, situates goals within learning progressions, and uses the goals to guide instructional decisions.

Research Says:

- Learning progressions or trajectories describe how students make transitions from prior knowledge to more sophisticated understandings
- Both teachers and students need to be able to answer these crucial questions:
 - What mathematics is being learned?
 - Why is this important?
 - How does it relate to what has already been learned?
 - Where are these mathematical ideas going?
- Situating learning goals within the mathematical landscape supports opportunities to:
 - Build explicit connections
 - See how ideas build and relate to one another
 - Develop a coherent and connected view of the discipline

Establish mathematics goals to focus learning Teacher and student actions	
What are teachers doing?	What are students doing?
<p>Establishing clear goals that articulate the mathematics that students are learning as a result of instruction in a lesson, over a series of lessons, or throughout a unit.</p> <p>Identifying how the goals fit within a mathematics learning progression.</p> <p>Discussing and referring to the mathematical purpose and goal of a lesson during instruction to ensure that students understand how the current work contributes to their learning.</p> <p>Using the mathematics goals to guide lesson planning and reflection and to make in-the-moment decisions during instruction.</p>	<p>Engaging in discussions of the mathematical purpose and goals related to their current work in the mathematics classroom (e.g., What are we learning? Why are we learning it?)</p> <p>Using the learning goals to stay focused on their progress in improving their understanding of mathematics content and proficiency in using mathematical practices.</p> <p>Connecting their current work with the mathematics that they studied previously and seeing where the mathematics is going.</p> <p>Assessing and monitoring their own understanding and progress toward the mathematics learning goals.</p>