

Indicator C1.1 High Expectations

Establishes high expectations for the quality of student work and the effort required to produce it. Within a safe classroom environment, encourages risk taking and productive struggle. Models and reinforces ways that all students, including English learners, can master challenging material through persistence, focused effort, and critical thinking.

What Effective Math Teachers Know	What Effective Math Teachers Do	✓ Focus
a. Students need clarity of expectations for acceptable work.	<ul style="list-style-type: none"> ● Engage students in the development of rubrics for assignments. ● Present students with examples of model work. ● Involve students in evaluation of student work (their own and that of others). 	
b. Effort and perseverance are primary factors in mathematical success.	<ul style="list-style-type: none"> ● Reward effort, not correct answers. ● Allow students the time to struggle with difficult problems. ● Teach students to recognize what is correct in their work; encourage students to build on what they know and not be impeded by errors; stress the importance of CCRSAE Math Practice 1 and refer to it during times when students are struggling. 	
c. Making mistakes leads students to make connections, clear up misconceptions, and fully understand mathematics.	<ul style="list-style-type: none"> ● Change student mindset to viewing mistakes as legitimate steps in the learning process. ● Set up safe learning environment where students are comfortable participating without fear of ridicule or anxiety about making mistakes. ● Arrange activities so that common student misconceptions come to light. ● Involve students in examining common errors with a goal toward strengthening critical thinking and increasing conceptual understanding. ● Use small group activities and partnered discussions. ● Expect students to regularly explain their reasoning and critique the reasoning of others. ● Embrace mistakes so that everyone sees mistakes as a learning opportunity. 	
d. Students need to struggle with complex mathematical problems.	<ul style="list-style-type: none"> ● Guide students when they are stuck by posing purposeful questions rather than showing students how to proceed or taking away the challenge of the task. ● Provide the time needed to work on, discuss, and solve complex problems. 	
e. The Standards for Mathematical Practice (CCRSAE) are important in establishing the mathematical community and engaging students in the work of mathematics.	<ul style="list-style-type: none"> ● Present the Standards for Mathematical Practice and their importance in the initial class with an example experience to refer to. ● Refer to practices as they are evident in the classroom (e.g., “You grabbed strips of paper to show equivalent fractions. That’s a great tool for the job.” and “What a great discussion where we heard a variety of strategies and I even heard some challenges to them. Will they work every time?”) 	

Notes to self