

Interweaving the Standards for Mathematical Practice into the Classroom

For K-12 Teachers

Whether a teacher works with struggling learners or gifted students, the Standards for Mathematical Practice can foster mathematical proficiency in the classroom. This workshop will assist teachers to gain a better understanding of the Standards for Mathematical Practice (SMP) while learning instructional strategies that will help students develop the level of expertise indicated in these standards. At the end of each session, participants will have ready-to-use research-based instructional strategies to use with their students. This workshop addresses aspects of the PGES Framework for Teaching.

Essential Question: How can you support student engagement in the Standards for Mathematical Practice through your mathematics program?

Big Idea: Mathematically proficient students demonstrate the eight Standards for Mathematical Practice.

Learning Targets:

Elementary

- We are familiarizing ourselves with the SMP.
- We are learning instructional strategies that will help students develop the level of expertise indicated in the SMP.
- We are learning strategies that foster student engagement and “math talk” through the SMP in the classroom.
- We are learning how our current classroom instructional practices can tie into the SMP.

Middle School

Day 1

- We are familiarizing ourselves with the SMP.
- We are learning instructional strategies that foster the SMP.
- We are learning strategies that foster better student communication.

Day 2

- We are learning how our current classroom instructional practices can tie into the SMP.
- We are learning additional instructional strategies that foster the SMP.
- We are learning how to incorporate mathematical modeling into our classroom practice.

High School

- We are learning to familiarize ourselves with the language and intentions of the SMP.
- We are learning to self-assess the extent our school promotes students’ proficiency through the SMP.
- We are learning instructional strategies that foster the SMP.
- We are learning strategies that foster student engagement and “math talk” through the SMP in the classroom.

