Using Higher-Order Questioning to Support Conceptual Understanding

Overview: The Pre-AP shared principles of higher-order questioning and academic conversation support student engagement in mathematical argumentation and building connections among multiple representations. These then act as tools to develop fluency through conceptual understanding. In this workshop, participants examine the characteristics of a classroom culture of questioning in which both students and teachers are actively engaged in the questioning process. Participants will actively engage in a Pre-AP model lesson focused on purposeful questioning and academic conversations to examine characteristics of questions that motivate student thinking and promote student access to grade-level content.

Teachers will:

- Connect the Pre-AP shared principle of higher-order questioning to student engagement in grade-level content and the development of mathematical thinking through conceptual understanding.
- Plan to support conceptual understanding through incorporation of higher-order questioning into daily instruction.

Agenda at a Glance

Welcome and Opening

Establish a collaborative learning environment and introduce, at a high level, the Pre-AP Program.

45 minutes

Why All the Questions?

Connect personal experience to classroom questioning through professional dialogue.

60 minutes

Zooming In – Pre-AP Mathematics Areas of Focus and Shared Principles

Examine the Pre-AP mathematics areas of focus and shared principles to determine how they support a classroom culture of questioning.

70 minutes

Experiencing a Culture of Questioning

Experience a Pre-AP model lesson from a student perspective to analyze evidence of the Pre-AP shared principles and mathematics areas of focus within the lesson.

90 minutes

Building a Classroom Culture of Questioning

Connect the Pre-AP shared principles and mathematics areas of focus to the participant's own classroom instruction.

50 minutes

Reflection and Closing

Synthesize the day's learning to connect best practices and support participant action steps.

15 minutes