
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 (In-Person)

<p style="text-align: center;">Welcome and Opening</p> <p style="text-align: center;"><i>Establish a collaborative learning environment and introduce, at a high level, the Pre-AP Program.</i></p> <p style="text-align: center;">45 minutes</p>
<p style="text-align: center;">Why All the Questions?</p> <p style="text-align: center;"><i>Connect personal experience to classroom questioning through professional dialogue.</i></p> <p style="text-align: center;">60 minutes</p>
<p style="text-align: center;">Zooming In – Pre-AP Mathematics Areas of Focus and Shared Principles</p> <p style="text-align: center;"><i>Examine the Pre-AP mathematics areas of focus and shared principles to determine how they support a classroom culture of questioning.</i></p> <p style="text-align: center;">70 minutes</p>
<p style="text-align: center;">Experiencing a Culture of Questioning</p> <p style="text-align: center;"><i>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.</i></p> <p style="text-align: center;">90 minutes</p>
<p style="text-align: center;">Building a Classroom Culture of Questioning</p> <p style="text-align: center;"><i>Connect the Pre-AP shared principles and mathematics areas of focus to the participant's own classroom instruction.</i></p> <p style="text-align: center;">50 minutes</p>
<p style="text-align: center;">Reflection and Closing</p> <p style="text-align: center;"><i>Synthesize the day's learning to connect best practices and support participant action steps.</i></p> <p style="text-align: center;">15 minutes</p>

Agenda at a Glance: One-Day Model (Virtual)

Below is a sample agenda of a Pre-AP Readiness Workshop scheduled for one day. One-day workshops are 6 hours total (5 hours of instructional time, 1 hour of break time). There is a maximum of 28 participants per workshop.

Day One Schedule – 6 hours	
Segment 1	Welcome and Introduction to Pre-AP
Segment 2	Exploring the Pre-AP Shared Principles and Areas of Focus
Segment 3	Model Lesson and Classroom Application
	Lunch
Segment 4	Model Lesson and Classroom Application
Segment 5	Collaborative Planning
Segment 6	Group Share
Segment 7	Reflection and Next Steps

Agenda at a Glance: Two-Class Model (Virtual)

Below is a sample agenda of a Pre-AP Readiness Workshop scheduled across two classes. Participants meet twice within two weeks for 2 hours 30 min each class. There is a maximum of 28 participants per workshop.

Class One Schedule – 2.5 hours		Class Two Schedule – 2.5 hours	
Segment 1	Welcome and Introduction to Pre-AP	Segment 4	Welcome Back
		Segment 5	Model Lesson and Classroom Application
Segment 2	Exploring the Pre-AP Shared Principles and Areas of Focus	Segment 6	Collaborative Planning
Segment 3	Model Lesson and Classroom Application	Segment 7	Group Share
		Segment 8	Reflection and Next Steps