

Meaningful Assessment Dialogue

Phase I: Cognitive Lab – Read the problem and think aloud. Predict and explain what students will choose. Explain why.

Phase II: Explore Student Thinking - What does the Attractive Distractor reveal about student thinking?

Phase III: Develop an Action Plan - What causes students to think this way? What should we do about it? How will we monitor our progress?

Why a Cognitive Lab?

A cognitive lab exposes the potential thought processes we experience as we read, interpret and formulate a response to any question. When working with content area teachers during a professional development workshop, you may find a range of content expertise within the group. Alternatively, when working in a cross-content setting, you may be able to expose common misconceptions within the content area. It is ideal if the cognitive lab is conducted with people who demonstrate a range of expertise in the content area in order to understand levels of sophistication (e.g., novice, partial, expert) that may be present in our classrooms.

When conducted the cognitive lab with pairs of people, Partner A will read the item aloud and think aloud as they answer the item. Partner B will listen and take notes.

As you conduct these sessions, you will need to help participants understand the purpose of each phase.

Why Phase I?

The purpose of Phase I is to extract teachers' prior knowledge about student thinking and generate assumptions for why students think the way they do.

When conducted Phase I with pairs of people, Partner B will generate their predictions and explain why. Partner A will listen and take notes.

Why Phase II?

This phase zeros in on students' misconceptions as evidenced by the pattern/trend in the data (i.e., attractive distractor). In this phase, you will need to explain that when you investigate the percentage of students who answered the item incorrectly, and an overwhelming majority of those students choose the same wrong answer, then this data reveals a potential misconception, misreading, or missed learning opportunities for students.

When conducted Phase II with pairs of people, this phase will be completed as a think-pair-share.

Why Phase III?

This is the heart of the meaningful assessment dialogue for teachers, because it has implications for immediate use in the classroom. During this phase, teachers share promising strategies for undoing prevalent misconceptions and determine their next steps for instruction. The instructional implications for this phase help us answer what we need to keep in mind when we initially teach the curriculum and what we need to consider when re-teaching and re-assessing. When conducted Phase III with pairs of people, this phase will be completed as a think-pair-share.