



Project I⁴ Observation Toolkit

Questioning Levels Tool 2.A

Question form and calling on strategies provide **access to** equitable classroom discourse; questioning level starts to "get at" **rigor**. Questioning levels, meaning level of cognitive complexity, has long been a subject of conversation in teaching and learning. However and unfortunately, since the original Bloom's taxonomy of cognition in 1956, levels of teacher questions in most classroom interactions have remained at the basic level of recall, basic comprehension, and application. The original taxonomy: (1) knowledge, (2) comprehension, (3) application, (4) analysis, (5) synthesis, and (6) evaluation. The revised taxonomy altered the language of the six to verbs: (1) remember, (2) understand, (3) apply, (4) analyze, (5) evaluate, (6) create.

What is critical at a school is that teachers and administrators have a common language about questioning levels. Bloom's taxonomy has been the foundation for quite some time, but other ways to understand cognitive levels, like depth of knowledge, are gaining currency in school.

Two other ways to understand cognitive levels or thinking actions with expectations for different levels of **thinking actions** are ThinkTrix from Frank Lyman and **assessing and advancing questions** in the *Five Practices for Orchestrating Productive Mathematics Discussions*. You have the ThinkTrix SMARTCARD from the summer and the book (pp. 44-47).

In observing classrooms for questioning levels, **several variables are important**:

- 1. What is the **cognitive level** of the questions?
- 2. How does the teacher adjust **think time** to **different cognitive levels**?
- 3. How is the teacher **looking for authentic responses** instead of right answers? Question form comes into play here by focusing on:
 - Is the question a yes-no question?
 - Does the question start with a question word?
 - Is the question a fill-in-the blank question? (often an afterthought of the teacher instead of a question).
 - Does the teacher listen to the student response to form the next question?
- 4. What **verbs** does the teacher use to support student thinking the verb typically indicates level of rigor and academic task (see revised taxonomy and Think Trix thinking actions below).
- 5. How does the teacher **scaffold student responses**? Examples:
 - use of think-pair-share in a systematic way to support student dialogue as rehearsal for participating;
 - use the student responses to ask the next question either a clarification or probing question; or
 - use student responses and student questions to create more student-to-student dialogue.





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- 6. What is the **purpose** of the question? Is the teacher **assessing** basic student understanding or **advancing** student thinking to a higher level toward the desired goal of the lesson?
 - Assessing: The teacher waits to hear the students' answer to questions to see the current level of understanding. These questions tend to match lower levels of Bloom taxonomy and recall of ThinkTrix
 - Advancing: The teacher pushes the students to higher cognitive levels by posing
 questions that are more analytical or asking the student to be evaluative or creative.
 Typically, the teacher poses the question and walks away, leaving the student(s)
 to consider a deeper question, but not always. Teacher judgment call.
- 7. **EQUITY concerns** are always in the forefront when we are "amping up" the **rigor**: To whom does the teacher address which level of question? Who in the process gets ignored or supported for their thinking? (See Calling On Tools 1.A and 1.B).
- 8. Finally, the teacher varies to whom s/he addresses questions -- asking questions of whole group, small groups, or individual students. How the teacher asks those questions and supports student thinking, scaffolds to the next level of thinking (or abstraction), and uses student responses to form the next question (aka Socratic questioning) are critical processes. As in the leadership coaching conversation with a teacher, the same types of paraphrasing apply: Acknowledging and Clarifying, Summarizing and Organizing, and Shifting Levels of Abstraction.