Asking More Effective Questions in the Classroom

Embrace Curiosity & Cultivate Trust

The #1 factor to successful questioning is **you.** Our goal in the classroom shouldn't be to test students, but to gather information about how they are understanding, connecting, and building knowledge. To help achieve this goal, students need to believe that it is okay if their answers are wrong or for them to make a mistake. To cultivate this trust in the class, we must be mindful of our (1) expert blind spots, (2) word choice when asking and responding to questions, (3) tone of voice, and (4) facial expressions – all of which shape how students interpret our intentions.

Moving From Quizzing to Questioning

	Example 1	Example 2
Quizzing: Checking to see if an answer matches the textbook definition or calculation outcomes. *Typically, close-ended questions requiring student answers such as yes/no, single words, or calculations.*	Which color of light has the shortest wavelength? *Signals to students that you're looking for a single correct answer, which can feel like a test rather than an opportunity to explore ideas.*	What are the main stages of the water cycle? *Students may feel that this is a textbook check-in, where students are expected to recite memorized information.*
Questioning: Asking to *uncover how* students are thinking about the content – i.e., gathering information about learning. *Typically, open-ended questions requiring student answers to be more detailed.*	Which color of light has the shortest wavelength? Tell me more about your answer. *By adding the follow-up -- "Tell me more…" – we signal that we are interested their reasoning, not just the correct answer.*	How do you think the water cycle impacts the environment? *We are inviting students to apply their understanding in a meaningful context shifting the focus from memorization to exploration.*

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Strategies for Inviting Students to Answer

There are two great options for inviting students to answer questions or even ask questions!

1. Cold Calling: Selecting students without random to respond. Works best in smaller classes where there is a sense of community built, and everyone sort of knows each other already.
2. Warm Calling: Giving students a heads up that you are about to call on them. Works best in larger classes and when you are still building trust in the class. (e.g., "the back to two rows" or "the left side of the room" or "someone in a black shirt")

Socratic Question Types and Examples

1. **Questions for Clarification:** Getting students to verbalize HOW they are thinking about concepts
    a. What do you mean when you say _____?
    b. Could you explain that point further? Tell me more about ____?
2. **Questions for Assumptions**: Helps students to identify what they know and what they don't know yet
    a. How can we tell if we have all the information we need?
    b. What assumptions are we making here? What could we assume instead?
3. **Questions for Evidence and Reasoning:** Students identify and evaluate forms of evidence
    a. How can we validate that evidence?
    b. How did you set up this problem? Can you walk me through it?
4. **Questions for Alternative Viewpoints:** Building flexible thinking and challenges students to approach problems from different perspectives
    a. What is another way we could look at this?
    b. How are ____ and ____ similar / different?
5. **Questions on Implications and Consequences**: Great for exploring how students connect prior concepts and scaffold knowledge
    a. How might ___ affect ___?
    b. What do you think caused _____?
6. **Questions Challenging the Questions**: Helping students understand the WHY and adopt a more critical perspective
    a. What do you think was important about that question?
    b. What might be another question you could ask?

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