

Questioning Strategies that Lead to Higher-Level Thinking Skills

Source: Caught in the Middle. Sacramento: California Department of Education, 1989, pp. 17,18.

The questioning techniques that follow are generally applicable to any questioning model and maximize the potential for a meaningful discussion:

1. **Plan key questions to provide lesson structure and direction.** Write them into lesson plans, at least one for each objective—especially higher-level questions. Ask some spontaneous questions based on student responses.
2. **Phrase questions clearly and specifically.** Avoid vague or ambiguous questions such as “What did we learn yesterday?” or “What about the heroine of the story?” Ask single questions; avoid run-on questions that lead to student frustration and confusion. Clarity increases probability of accurate responses.
3. **Ask questions logically and sequentially.** Avoid random questions lacking clear focus and intent. Consider students’ intellectual ability, prior understanding of content, topic, and lesson objective(s). Asking questions in a planned sequence will enhance student thinking and learning.
4. **Ask questions at a variety of levels.** Use knowledge-level questions to determine basic understandings and to serve as a basis for higher-level thinking. Higher-level questions provide students opportunities to practice higher forms of thought.
5. **Follow up on student responses.** Develop a response repertoire that encourages students to clarify initial responses, lift thought to higher levels, and support a point of view or opinion. For example:
 - “Can you restate that?”
 - “Could you clarify that further?”
 - “What are some alternatives?”
 - “How can you defend your position?”

Encourage students to clarify, expand, or support initial responses to higher-level questions.

6. **Give students time to think when responding.** Increase wait time after asking a question to three to five seconds to increase number and length of student responses and to encourage higher-level thinking. Insisting upon instantaneous responses significantly decreases probability of meaningful interaction with and among students. Allow sufficient wait time before repeating or rephrasing questions to ensure student understanding.
7. **Use questions that encourage wide student participation.** Distribute questions to involve the majority of students in learning activities. For example, call on non-volunteers, using discretion for difficulty level of questions. Be alert for reticent students’ verbal and nonverbal cues, such as perplexed look or partially raised hand. Encourage student-to-student interaction. Use circular or semicircular seating to create environment conducive to increased student involvement.
8. **Encourage student’s questions.** This encourages active participation. Student questions at high cognitive levels stimulate higher levels of thought essential for the inquiry approach. Give students opportunities to formulate questions and carry out follow-up investigations of interest. Facilitate group and independent inquiry with a supportive social-emotional climate, giving praise and encouragement, accepting and applying student ideas, responding to student feelings, and actively promoting student involvement in all phases of learning.