

Table 1
QUESTIONING TECHNIQUES

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 (50, 53, 67, 96, 113).
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 (25, 50, 53, 67).
3. *Adapt questions to student ability level.* This enhances understanding and reduces anxiety. For heterogeneous classes, phrase questions in natural, simple language, adjusting vocabulary and sentence structure to students' language and conceptual levels (50, 53).
4. *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 (50, 53).
5. *Ask questions at 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 (50, 53, 67, 113).
6. *Follow up 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 (25, 67, 113).
7. *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 (17, 50, 53, 67, 94).
8. *Use questions that encourage wide student participation.* Distribute questions to involve majority of students in learning activities. For example, call on nonvolunteers, 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 (17, 25, 50, 53, 113).
9. *Encourage student questions.* This encourages active participation. Student questions at higher cognitive levels stimulate higher levels of thought, essential for inquiry approach. Give students opportunities to formulate questions and carry out followup investigations of interest. Facilitate group and independent inquiry with a supportive social-emotional climate, using praise and encouragement, accepting and applying student ideas, responding to student feelings, and actively promoting student involvement in all phases of learning (17, 64, 67, 113).

Table 2
SAMPLE QUESTIONS CATEGORIZED ACCORDING TO SANDERS
AND GALLAGHER-ASCHNER (ADAPTED) SYSTEMS

QUESTION	SYSTEM	
	Sanders based on Bloom	Gallagher-Aschner (based on Guilford)
Who invented the sewing machine?	Memory	Cognitive-Memory
What is the definition for photosynthesis?....	Memory	Cognitive-Memory
How many colors are on the chart?	Memory	Cognitive-Memory
In your own words, according to the story, how did the dog get loose?.....	Translation	Convergent (Low)
How would you say this in German?	Translation	Convergent (Low)
What is the meaning of this political cartoon?.....	Translation	Convergent (Low)
How would you compare the climates of Miami and San Francisco?.....	Interpretation	Convergent (Low)
What are the similarities between these two points of view?	Interpretation	Convergent (Low)
How are these three members related?.....	Interpretation	Convergent (Low)
According to our definition of revolution, which of the following conflicts would be considered revolutions?	Application	Convergent (Low)
How would you solve this problem using the accounting procedure provided?	Application	Convergent (Low)
What is an example of cooperation in your home?.....	Application	Convergent (Low)
Why did the girl run away from home?	Analysis	Convergent (High)
Now that you have completed the experiment, what is your conclusion as to why the substance became denser?.....	Analysis	Convergent (High)
What evidence can you provide to support your view that the constitutional power of the president has diminished over the years? ...	Analysis	Convergent (High)
How can we raise money to support the recycling center?	Synthesis	Divergent
Suppose that England had won the American War for Independence, how might pioneers' movement to the west have been affected? .	Synthesis	Divergent
What is a good title for this story?	Synthesis	Divergent
Did you think the plot of this novel was well developed?.....	Evaluation	Evaluation
What is your favorite orchestral instrument? .	Evaluation	Evaluation
How would you rate the effectiveness of the Environmental Protection Agency?.....	Evaluation	Evaluation