

# Asking Questions

*Philip Langer, Professor and Chair  
Educational Psychological Studies*

*This article first appeared in the Graduate Teacher Program Handbook.  
Copyright © 1988 by the Board of Regents, University of Colorado.*

Interestingly enough, the most common classroom strategy in public schools is some form of the recitation-question-discussion paradigm. In this paper, I would like to take up several key issues regarding the use of questions. While research does not show any conclusive set of relationships between question types and student achievement, the use of more diversified questions does enable the teacher and the student to ascertain more fully just what everyone knows. In addition to types of questions, teachers make some rather dreadful mistakes in the management of the strategy itself.

To make the most effective use of a questioning strategy in your class, it is worthwhile to keep several guidelines in mind. First of all, the questioning approach is not a good technique for introducing new information; lecture is a much better method. On the other hand questions are very useful in determining what students already (or should) know. In fact, good review sessions are based around questions. Second, questioning should proceed along developmental lines, from simple to complex. And third, the major or basic questions you wish to ask should be written out in advance. This does not preclude the use of questions developed from the discussion, but it is inexcusable for the instructor to conduct the class without any preparation regarding key questions.

## **How should I get students ready for a question and answer session?**

The best approach is to inform the students in a prior meeting that you intend to cover specified content and will be questioning them about it. You then can start out the period by asking questions designed to elicit that information. Students who clearly demonstrate they have not read the material should be called in for a warning, and if such a performance affects their grade they should be apprised of the fact. Do not make requests of students you do not intend to carry out. Most students will recognize you are serious about the process, and very few people want to consistently play the fool.

## **Just what kinds of questions are there, anyway?**

Question types can range from factual to more complex types calling for analysis, evaluation, and problem solving. The key to determining the type you are using lies in an examination of the question stem. Questions that start out with "who is," "what is," "what are," "list," "tell me," are usually designed to get at basic information, and as I suggested earlier serve a very useful function early in the session. The problem is that teachers never get beyond this level to one that forces the students to do some complex processing of the information. The failure to ask more of students means they can operate on a fairly shallow level, and those who take good notes or have fairly good recall succeed admirably.

## **How can I get past the factual level?**

The easiest way for a beginning teacher to demand more of students is to ask them to "explain in their own words" such things as the definition of a concept. The student will not be able to simply present a well-memorized verbal chain. You can then begin to include such key words in your question stems such as "compare," "distinguish," "relate," "analyze," "evaluate," "discuss," etc. In fact, I have lists of key words which I will lend to you. While it is true that not every key word guarantees a more complex

question, it is equally true that questions containing these key words are more likely to contain more complex questions.

### **What about the answer?**

A question is basically a cue, a discriminative stimulus to us operant-types. However, if you want to establish the more complex question in your class as a cue calling for in-depth responses, you must reliably accept (i.e., reinforce) only responses of a quality that match the intent of the question. In short, if the question requires thought, then accept only answers that show cognitive processing at something above the spinal reflex level. That is, a mumbled "Pavlov" to "who is considered the founder of classical conditioning might" be acceptable. On the other hand, if the question was: "what are the critical conceptual differences between behavioral therapy and rational emotional therapy, and you accept "reinforcement" as the answer, you are not asking the student to deal with the question as intended.

### **How else can I cue the students into giving more detailed or complex responses?**

The best strategy is to pause after asking the question, and allow students to prepare a response. Failing to pause will generally force the student to start out with a woefully inadequate response, and only then develop a more complete response. This is not generally considered a desirable state of affairs. In fact, the act of pausing itself will also come to serve as a cue for more detailed responses, in addition to the phrasing of the question.

### **Do I call on volunteers or non-volunteers?**

Call on both types; otherwise students will learn how to avoid getting signaled out if they do not know the answer. That is, if you call on volunteers, they will keep their hands down; if you call on non-volunteers they will raise their hands. In addition, occasionally go back to a student who responded earlier. Otherwise, they will learn that once they have answered a question (and perhaps the only one they knew) they are "safe."

### **Do I ask the question first, and then call on the student, or vice-versa?**

Always ask the question first and then call on the student. This forces everyone to at least mentally prepare an answer. Calling on the student first gets everyone else "off the hook."

### **Any other bad habits?**

There are several. First of all, never prepare student answers. What often happens is that you embellish the initial response to make it acceptable, and then give the student credit for what was really a poor response. Second, do not get into the habit of repeating questions. Asking the question only once demands that students pay close attention the first time.

### **What happens if the students gets the answer wrong?**

There are several things to keep in mind. First, never tie the incorrect response to the student by name. It is a blow to the student personally. Thus "I do not believe the answer was correct" is preferred to "Ms. Smith, you are wrong." Second, if part of the answer is correct, affirm to the student what part is right. Third, help the student derive the correct answer through prompting and other forms of guidance. Sometimes, especially if it is a straight factual question, this may not be possible. However, these are comparatively rare. If it does happen and you must move on, do so with a minimum of fuss. The student will know he "blew it."

This last point about prompting the correct answer is perhaps the most difficult for beginning teachers, since a bad answer is sometimes considered a reflection on the adequacy of our teaching. Indeed, we often move quickly to the student who gives the right answer, and thereby reaffirms our belief we are doing a good job. By showing patience and trying to help the student salvage something, we can maintain a better attitude by the student in class. Simply dismissing the incorrect response neither enhances that student's learning nor increases the likelihood of further involvement.