

Classroom Assessment Techniques

General Characteristics of CATs:

- geared to providing practice and general feedback that will improve student learning
- designed by the instructor to assess questions of particular concern in his/her course
- intended to assess the whole class' understanding, not to evaluate individual learners
- tailored to content-specific objectives
- allows for ongoing feedback with relatively quick assessment tools

Examples of Questions You Might Address with a CAT:

How familiar are students with the important names, events and places in history that they will need to know as background in order to understand the lectures and readings? (e.g. in anthropology, literature, political science)

How are students applying knowledge and skills learned in this class to their own lives? (e.g. psychology, sociology)

To what extent are students aware of the steps they go through in solving problems and how well can they explain their problem-solving steps? (e.g. mathematics, physics, chemistry, engineering)

How and how well are students using a learning approach that is new to them (e.g. cooperative groups) to master the concepts and principles in this course?

Examples of CATs:

Minute Paper -- Pose 1-2 questions in which students identify the most significant things they have learned from a given lecture, discussion or assignment. The question can be very general or content specific and their answers help you to determine if they are successfully identifying what you view as most important. Give students about 1-2 minutes and ask them to write a response on an index card, or no longer than a half page.

Muddiest Point -- Similar to the Minute Paper, ask your students to answer: "What was the muddiest point in ... (today's lecture, the reading, the homework)?" Students need to identify fairly quickly what they do not understand and articulate it.

Background Knowledge Probes -- Create a short questionnaire to determine how much and what kind of relevant background knowledge students bring to your course. Your goal might be identifying what is familiar to them or determining their level of recall from prior related courses. Be sure to make the questionnaire anonymous and be clear that it is not a quiz and will not be graded.

Problem Recognition Tasks -- Identify a set of problems which can clearly be solved better by one of a few methods that you are teaching in the class. Ask students to identify by name which methods best fit which problems without actually solving the problems. This task works best when only one method can be used for each of the problems.

Documented Problem Solutions -- Choose 1-3 problems and ask students to write down all of the steps they take in solving them with an explanation of each step. Consider using this method as an assessment of problem solving skills at the beginning of the course or as a regular part of the assigned homework.

Directed Paraphrasing -- Select an important theory, concept or argument that student have studied in some depth and identify a real audience to whom your student should be able to explain this material in their own words (e.g. a grants review board, a city council member, a vice president making a related decision). Provide guidelines about the length and purpose of the paraphrased explanation.

Applications Cards -- Identify a concept or principle your students are studying and ask student to come up with 1-3 applications of the principle from everyday experience, current news events, or their knowledge of particular organizations or systems discussed in the course.

Student-Generated Test Questions -- A week or two prior to an exam, begin to write general guidelines about the kinds of questions you plan to ask on the exam. Share those guidelines with your students and ask them to write and answer 1-2 questions like those they expect to see on the exam.

Classroom Opinion Polls -- When you believe that your students may have pre-existing opinions about course-related issues, construct a very short 2-4 item questionnaire to help uncover student's opinions.

Group-Work Evaluations -- Decide what you want to know about the group work, such as how well the group members worked together, how many actively participated most of the time, how many were well prepared for the group's activity, or what the group could do to improve its effectiveness. Distribute a short 4-5 question evaluation form and be clear about the purpose (e.g. to improve group interactions and performance).

Reminders for Creating and Implementing CATs:

- Identify a specific "assessable" question where the students' responses will influence your teaching and provide feedback to aid their learning.
- Complete the assessment task yourself (or ask a colleague to do it) to be sure that it is doable in the time you will give the class.
- Plan how you will analyze students' responses, e.g. grouping them into categories such as "good understanding", "some misunderstandings", or "significant difficulties".
- After using a classroom assessment technique, communicate the results to the students so that they know you learned from the assessment and so that they can identify specific difficulties of their own.

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