Classroom Assessment Techniques

Generally, assessment of student learning refers to a process that is intended to provide the educator with information about a student's progress toward meeting course objectives (McDonald, 2007). Formative assessment of student learning occurs during the learning process. Summative assessment occurs at the end of the learning process.

Classroom assessment is a formative strategy that you can use to determine if students are mastering the content and/or if modifications should be made to teaching strategies. It is completed in class (or online), is usually not graded, and is often anonymous (Angelo & Cross, 1993).

There are several methods that you can use to gauge students’ level of understanding. They can be low or high-tech, quick, or time-consuming. According to Angelo & Cross (1993), the key is to select methods that are learner-centered, teacher directed, mutually beneficial to teachers and students, context-specific, and ongoing. Classroom assessment should be a regular activity in both face-to-face and online courses, as it offers students the opportunity to reflect on and engage in course content. It also allows instructors to determine quickly if instruction has been effective.

The standard reference for Classroom Assessment Techniques (CATs) is Angelo & Cross (1993). Some of the most commonly used CATs recommended by these authors include:

Muddiest point: A method used to determine the points not understood by the students. They are asked to articulate points they did not understand. This gives the teacher a chance to address those points and clear up the misunderstandings. For example: Ask students to write their answer to this question: “What was the muddiest point in the ________?” (What is still unclear?) (e.g., in the lecture, in the book, in the discussion, in the film). This works great using 3 x 5 cards, email, or even e-chat. You can collect these on note cards or have students answer this question in an email. Don’t forget to “close the loop” by re-visited the information later.

Minute paper: A concise summary of the main point of the topic covered in class. At the end of the class students answer questions and summarize the main point (with a given limited time of one minute). Example questions: “What was the most important thing you learned during this class?” “What piqued your interest and why?” “What question is still circling in your mind and needs clarification?” “What important question remains to be unanswered?” “What concepts are you square with and understand completely? Again, you can have them jot this down on note cards or half sheets of paper, or even have them answer an email. (See minute paper exercise worksheet pdf.)

Multiple-choice questions in class: Provide students with sample multiple-choice questions (perhaps similar to an exam). Distribute colored sheets of paper with A, B, C, D on them (each being a different color). Have students simultaneously hold up their answer sheets. If groups of students disagree, have them each explain the rationale for their answer until consensus is reached.

Background Knowledge Probe: On the first day of class or during a new unit, provide students with sample multiple-choice questions or short answers related to the content on the first day of class or during a new unit, provide students with sample multiple-choice questions or short answers related to the content on
a worksheet. This will help you determine students’ baseline knowledge on a topic. It will also help them focus on key concepts. You can repeat this process mid-way or as a unit review to check learning progress. This CAT can easily be adapted to an online survey in a distance-learning environment.

Variations and alternative strategies for Classroom Assessment:

**Poll everywhere** uses multiple-choice questions in class to gauge understanding or start discussion; students may respond online or using text messaging on smart phones: [http://www.polleverywhere.com/](http://www.polleverywhere.com/)

**Audience response system** incorporates automated “clickers” used by students to answer multiple-choice questions during a lecture. The software provides the teacher and learner with statistics on how many students answered the question correctly and incorrectly. Can be used to gauge understanding or start discussion.

For assistance with using Creighton’s audience response systems contact:

College of Arts & Sciences: Chuck Lenosky  
School of Pharmacy & Health Professions: Alynne Wize  
College of Nursing: Christina Murcek  
School of Medicine: Alice Smith

**LINKS:**

Classroom Assessment Technique Examples (Angelo & Cross, 1993)  

**REFERENCES:**
