Classroom Assessment Techniques

Classroom Assessment Techniques (CAT's) help instructors gather information on student learning in order to tweak course delivery for effectiveness.

The following are frequently used CAT's from Thomas A. Angelo and K. Patricia Cross's (1993) *Classroom Assessment Techniques*:

Background Knowledge Probe: a questionnaire or writing prompt delivered at the start of a course, before a new lesson, or prior to an important topic. The point of the CAT is to illuminate the extent of student familiarity and encourage students to recall relevant prior knowledge or experiences.

Misconception/Preconception Check: students answer open-ended or multiple-choice questions that solicit common misconceptions. Alternatively, you could ask students to rate how strongly they agree or disagree with certain false statements. That way, you can identify not only which common misconceptions plague students, but also how stubbornly the students cling to them.

Focused Listing: a writing activity that focuses students on a topic from that day or learning module; asks them to list key ideas associated with the topic; informs the instructor of how much students can identify key ideas; exposes, in Angelo and Cross's words, "the web of concepts students connect with that point" (126); and reinforces student learning.

Defining Features Matrix: an activity that asks students to organize key features under the concepts they characterize.

Documented Problem Solutions: a writing activity in which students not only outline the steps they took to solve a problem, but also explain their process. This CAT enables an instructor to assess students' problem-solving skills, and it promotes metacognitive thinking.

Minute Paper: a one-minute writing activity at the end of class in which students outline on an index card or sheet of paper the most important aspects they learned or what questions they still have about the day's topic.

Muddiest Point: a short writing activity at the end of class in which students identify the "muddiest point" of that day's topic so the instructor knows what to clarify.

While initially exploring, you might modify your assessment needs to better suit the CAT's you know, but hopefully at some point you will modify the CAT's to better suit your real assessment needs. Once you understand how CAT's work, you can revise them, combine them, or even create your own to better assess and, more importantly, intentionally design student learning.