

Classroom Assessment Techniques

In 1993, Thomas A. Angelo and K. Patricia Cross published *Classroom Assessment Techniques*, an outline of 50 formative assessments “to improve the quality of student learning, not to provide evidence for evaluating or grading students ...” (p. 5). Classroom Assessment Techniques (CAT’s) help instructors tweak course delivery for effectiveness.

For instance, an instructor might want insight into student preconceptions before introducing a concept. Student misconceptions—such as the common belief that a thesis statement is a list of three topics the essay addresses—can govern students’ interpretations of new information or otherwise undermine the learning process. By identifying and raising students’ awareness of misconceptions early, the instructor can work intentionally to help students overcome them.

The CAT for identifying them is the “Misconception/Preconception Check”: students answer open-ended or multiple-choice questions that solicit common misconceptions. But you can modify any CAT to collect additional information. In a composition course, an instructor could ask students to rate how strongly they agree or disagree with certain statements: “Paragraphs are groups of three to five sentences,” “When crafting an essay, you should write the first sentence first and the last sentence last,” “You should imagine you are writing your essays to ‘everyone,’” etc. This modification of the CAT will allow the instructor to identify not only which of these common misconceptions plague students, but also how stubbornly the students cling to them. That extra insight will clarify how much time or effort the instructor should dedicate to each one. When used effectively, CAT’s help instructors improve course efficiency.

Here are other frequently used CAT’s:

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.

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.

Intentionally designing student success requires that you complete the assessment cycle. The assessment cycle begins with your identifying what you want to know about your course. Through a classroom assessment technique, you then gather evidence. To complete the cycle, you finally have to respond.

For more information or to schedule an individual teaching consultation, please contact [Dr. Gray Kane](#).