

Classroom Assessment Techniques (CATs) for Flipped Learning

by [Amy Roither](#)

Classroom assessment techniques (CATs) are “relatively quick and easy formative evaluation methods that help you check student understanding in ‘real time’” (Iowa State University, n.d.). CATs provide a valuable tool in the feedback loop between instructor and students. These techniques show instructors where there are gaps in learner comprehension, yet unlike formal quizzes or assignments, they are meant to be low-stakes assessments and activities. (See examples of eight CATs on the [Indiana University Bloomington Center for Innovation Teaching and Learning website](#).)

One way for teachers to introduce flipped content into their classrooms is to flip the CATs they employ. The fact that many of the guides to these techniques, including the seminal text, *Classroom Assessment Techniques: A Handbook for College Teachers* (Angelo & Cross, 1993), were written in the late 1980s or early 1990s suggests that it is time to update them to the current technological resources available. Traditional CATs were designed based on face-to-face classroom time with the instructor delivering content and students providing feedback during class, and then the instructor responding to their feedback in a subsequent class. The increasing adoption of online and flipped classrooms indicates that traditional practices such as CATs are due for revision.

Using a flipped approach to CATs serves several purposes: first, replacing the need to use face-to-face class time; second, providing more time to give answers to common questions; and third, giving an introduction to the technological resources used in flipped lessons. Because the time and effort needed to create a fully flipped classroom can be intimidating to many teachers, especially those who are new to the classroom or teach part time, partial flipping or even just flipping a specific type of lesson provides an alternative to making more intensive curriculum adjustments. Flipping even just one activity, such as CATs, allows both teachers and students an introduction to flipped content.

Toolkit for Updating Classroom Assessment Techniques

The two technological resources that I rely on the most when using CATs in my courses are [Spreaker](#) and [Google Drive](#). Spreaker, a podcasting app and online program, is user friendly. Teachers can record podcasts on their smartphones and their students can access them via the app itself or a URL link that can be posted on a course website or in an email. Spreaker is free to use for up to 5 hours of recordings. Because my podcasts tend to be fewer than 3 minutes in length, I have not found this time limit to be a problem.

The platforms that I use most often in Google Drive are Google Docs and Google Forms. Both of these can also be accessed via smartphone. Teachers can share the documents or forms with students through Google Drive itself or a link that can be posted anywhere. The ease of use, adaptability, and potential for creativity make Spreaker and Google Drive excellent resources for flipping CATs.

Example 1: The Muddiest Point

One traditional CAT that teachers can easily flip is the “muddiest point” (Angelo, 1993, pp.154–158). The traditional “muddiest point” simply asks students to briefly describe the most difficult or confusing part of a lesson, task, or assignment. The teacher then collects their responses and makes adjustments or provides feedback to the students in the subsequent class.

I have used this CAT for many years in my university ESL classes. For the past few years, as I have created more flipped lessons, I have modified this CAT by recording my responses to students’ muddiest points in the form of a podcast. Whereas I used to address their responses with a brief in-class lecture, I now use Spreaker so my students can access the information individually via a link embedded in our course webpage, listen to it on their own time, and save it for future reminders. This saves us class time for other activities, and—for recurring muddy points—it saves me the time of having to repeat myself.

Example 2: Student-Generated Test Questions

Another traditional CAT that teachers can update is the “student-generated test questions” technique (Angelo, 1993, pp. 240–243). As its name suggests, this technique focuses on having students write test questions and answers in order to show how well they understand a topic or perform a skill. The questions that the students create may or may not be used in actual quizzes or tests. In fact, they are better as review materials before a test. This activity has traditionally been conducted during class time, but with Google Forms, it is easy to shift it away from the classroom.

Google Forms facilitates collaboration between students as they work together to create and edit test questions. It has templates for several types of assessments, including multiple choice and short answers. Flipping this CAT through the use of Google Forms benefits instructors because it is easier to give comments and feedback to students outside of the time constraints and distractions that can occur in a classroom. Students who may be reluctant to contribute ideas for test questions during class also benefit.

Example 3: Double-Entry Journals

Double-entry journals are a commonly used CAT in reading and writing courses (Angelo, 1993, p. 263–266). The original technique requires students to read an assignment, then divide a paper in half and write quotes from the reading on the left side and reactions or paraphrases of the quotes on the right side. The technique works very well for determining reading comprehension and engaging students in the reading material. However, the traditional method requires a lot of time between reading the assignment and writing the journal and the feedback the teacher gets and gives. By shifting the technique to an online platform, the cycle of feedback is faster and more efficient.

Google Docs is my preferred platform when using this CAT, although any cloud-based program will work. The most important feature for this adaptation is the ability for the teacher to type comments on the students’ online journals.

Conclusion

CATs provide vital feedback on students' abilities and comprehension. They were originally designed to be used in classes that relied on face-to-face instruction and content delivery. The advent of flipped classrooms provides an opportunity to reshape aspects of these techniques and adapt them to changes in technology and instruction, benefiting both student and teacher.

References

Angelo, T. A., & Cross, K. P. (1993). *Classroom assessment techniques: A handbook for college teachers* (2nd ed.). San Francisco, CA: Jossey-Bass.

Iowa State University. (n.d.). Classroom assessment techniques: Quick strategies to check student learning in class. Retrieved from <http://www.celt.iastate.edu/teaching/assessment-and-evaluation/classroom-assessment-techniques-quick-strategies-to-check-student-learning-in-class>

Amy Roither has been an ESL instructor at Webster University in St. Louis, Missouri since 2007. Her workshops and presentations on how to use technology in ESL courses have been given at regional and international conferences. She aspires to know the entire Hamilton libretto by heart and travel as often as possible. You can find her on Twitter at @aeroither.