

Using Classroom Assessment Techniques & Collaborative Learning Techniques

Compiled by Whitney Myers and Chuck Paine, UNM Department of English

Classroom Assessment Techniques (CATs)

Classroom Assessment Techniques (CATs) can provide instant feedback about student learning. The basic idea is this: **get feedback about the class and student learning *during* the semester, while you can still do something about it.**

There are three steps to implementing a CAT:

1. Decide which CAT will provide the information you need.
2. Implement the CAT.
3. Respond to the CAT, sharing what you found with the class and, when appropriate, making changes.

Faculty Concerns

All of these classroom assessment techniques ask that teachers be open to student advice and feedback throughout the semester. We often feel pretty comfortable giving our students feedback about their learning (aka “grades”) but less comfortable with our students reciprocating. You might consider having a discussion with your class about the difference between “feedback” and “criticism,” asking for anonymous student feedback, focusing questions/responses on behaviors and processes rather than personalities, and lastly, remembering to consciously use the data for improvement. Some important questions to consider before implementing CATs in your classroom include:

- How do I feel about accepting suggestions for change from students?
- How do I typically react when students propose changes?
- How can I develop an approach for discussing assessment results with students that is comfortable to me?
- How can I ensure students that I am open to listening to their suggestions?

One-Minute Papers

Get a qualitative response for determining how well students understand the material or assessing their attitudes toward the class or your instruction, have students write a “minute paper” (for some activities, they’ll need more time). You can do these before class to assess how well prepared students are or what’s puzzling them, in the middle of class to allow students to gather their thoughts, or at the end of class.

Some topics:

- “What was the most important thing you learned during today’s/last session’s class?”
- “What important questions remain unanswered?”
- “What was the muddiest point? “
- “Summarize such-and-such concept in a single sentence.”
- “Paraphrase (for a specified audience) such-and-such concept.”
- Application Cards: Hand out cards and ask students to apply a principle to a real-world situation.

Or you can solicit feedback about how they're responding to your teaching methods:

- "How was the pace of today's class?"
- "Were the examples clear?"
- "Were the topics presented sufficiently?"
- "What other activities could we do that would help you learn the material?"

Email Minute

This is a modification of the minute paper that utilizes technology to create a less threatening manner of communication. It can be approached in two ways:

- For the last two to three minutes of class, professor asks students to respond anonymously to two questions. The professor then reads through comments and looks for similar concerns, themes, or comments. Then, a summary of the themes is sent to the class list via email, or
- Distribute two questions at the end of class and ask all students to respond via email

Benefits to the email-minute CAT include:

- Gets students acquainted with using email to communicate with professors instead of just friends or family
- Allows time for a reflection
- Extends office hours by allowing more time for communication between professor and student
- One message can be sent simultaneously by using a distribution list
- Offers an important "teaching moment" in terms of discussing audience, tone, and construction of ethos

Direct Paraphrasing (or, the "Dear Aunt Hepsy" letter)

Basically, this CAT asks students to write to a specific audience (e.g., a lay audience like Uncle George or Aunt Hepsy) explaining a particular point or theme that was part of a lecture, article, or class conversation. This encourages students to eschew or embrace technical terms and figure out how to convey what they've learned in their own words to different people with different perspectives. In these responses you might look for:

- Accuracy
- Relevancy and appropriateness for audience
- Effectiveness in satisfying the assignment

Application Cards

This CAT asks students to write down at least one way an important theory, concept, or principle could be applicable outside the classroom. We like this one because it anticipates the often heard complaint, "When will I need to know this for anything else in my life?" Share responses the next class period as a way to initiate discussion.

Other Rapid Assessment Techniques

Consult Huba and Freed (chapter 5) for a quick collection of instant assessment techniques. Consult Angelo and Cross for a much more catalog of and rationale for of CATs.

Collaborative Learning Techniques (CoLTs)

CoLTS (Collaborative Learning Techniques) are activities for engaging students in collaborative learning in the classroom. CoLTS generally can be implemented in your classroom easily by looking at what you are already doing in class and seeing if that same activity can be done collaboratively. CoLTs can be organized into five broad categories:

Discussion: Student interaction and exchange is achieved primarily through spoken words.

Reciprocal Peer Teaching: Students purposefully help each other master subject matter content and develop discipline-based skills.

Problem Solving: Students focus on practicing problem-solving strategies.

Graphic Information Organizers: Groups use visual tools to organize and display information.

Writing: Students write in order to learn important course content and skills.

Included below are examples of CoLTS from each category. ¹

Discussion

Think-Pair-Share

Generally, this technique is particularly effective as a warm-up at the beginning of class. In this CoLT, students are divided into pairs for 5–15 minutes. The instructor poses a question to the class, allows the students a few minutes to think of their response, and then asks them to share that response with their partner. Students can then create a joint response before reporting to the class and opening up to larger class discussion.

Buzz Group

This activity encourages teams of 4–6 students to form quickly to discuss course-related questions (for example, “Can you recall a situation in which you experienced or observed gender-based discrimination?” or “What is the difference between a consolidation and a merger?”) and are often used as “warm-ups” for larger class discussion. Many instructors have found buzz groups help alleviate superficial class discussion in lower-division classes because they allow students to “practice” responding in small groups before expressing their thoughts to an entire class.

Groups are given a discussion prompt and asked to spend 10-15 minutes discussing their answers to the prompt. After the time limit expires, discussion is opened up to the entire class. This is a good technique for introducing a new topic to the class and prompting students to engage in semi-structured conversation.

¹ These examples are adapted from Barkley, Cross and Major (97–272).

Reciprocal Teaching

Note-Taking Pairs

This activity allows students to acquire important information they have missed during lecture, correct inaccuracies in their own notes, and improve their note-taking skills. Students are divided into pairs for 5–15 minutes at the beginning or end of class. After individually taking notes for the duration of the class, the partners compare what they have recorded, alternating between summarizing their own notes and correcting the notes of their partner.

Problem-Solving

Send-a-Problem

This CoLT involves a larger amount of in-class time. In this activity, each group of 2-4 students receives a different problem that they are to discuss, generate possible solutions, choose the best solution, and record and place their best solution in a folder. The teams pass their folders to the next group and receive a new folder with a new problem. The process continues for each new problem (discuss, respond, and evaluate) until every group has received every problem. Students in the final group receive all the answers to the problems, review and evaluate the responses, and present the information to the class. This CoLT works well as a review before an exam, especially if you use old tests to generate the problems. Additionally, this is a particularly effective CoLT to use for problems that do not have singular answers.

Graphic Information Organizing

Affinity Grouping

This CoLT takes approximately 30-45 minutes of the class period. You should bring enough 3x5 cards for students to use and have a blank wall, table or board in the room for students to place their cards on.

Students are given a complex topic (i.e. terminology used to identify plants, identifying significant changes to characters and plot within a novel, major themes found in transcripts of interviews, for example) and organized into groups of 3-5. Students separately brainstorm answers to the topic given and write one idea on each slip of paper or index card. Students are then asked to give their cards to a team leader and together the team discusses and arranges ideas into related groups. Groups then come up with a title or heading for each grouping that best describes the theme of that group of items. This CoLT is particularly effective when students have to organize and retain a large number of ideas important to the class.

Word Webs (also called “concept maps”)

This CoLT helps students organize facts and principles they are learning into conceptual networks and identify relationships between these things that are often difficult to understand from words alone. Word Webs are helpful when students are at the beginning of learning new information because they visually relate new information to older concepts.

After breaking into groups of 2-4 people, the instructor gives the central concepts students will graph to the class (for example, WWII’s effects on the continental United States). Student teams brainstorm terms and phrases related to the topic and sketch out a diagram with the central concept in the middle and primary, secondary, and tertiary ideas linked through arrows and lines demonstrating the connection between ideas.

Writing

Dialogue Journals

In this CoLT, students keep a journal in which they record reactions, questions, and comments to reading assignments, lectures, or experiences in-class. Journals are periodically exchanged with a class member who reads the entries and responds with comments, suggestions, answers, and questions to the entries. This CoLT can be used as an ongoing class activity during the semester, be completed outside of class, and does not necessarily require an instructor's response to entries.

Paper Seminar

This CoLT allows students to formally present a paper they have written to a small group of peers yet avoids the often tiresome and time-intensive nature of multiple student presentations to the entire class. While the time needed for this activity is still extensive, the seminar allows students to discuss, exchange, and question ideas prompted by their research and also gives individual students focused immediate feedback on their work.

Students are divided into groups of 4-6, write their papers, distribute copies to group members, and develop a five to ten minutes summary of their paper for their group. One formal respondent is identified for each paper. On the day of paper presentations, groups split up, the first presenter gives the summary of their paper to the group, and the formal respondent has ten minutes to respond. The rest of the group then has twenty minutes to discuss the paper. The same sequence of activities is followed for each group member. However, do not try to do all the papers in one class session. Student response will suffer. This activity is best completed over several class sessions.

Note: This CoLT can be used for material other than seminar papers, such as feedback and responses to drawing, paintings, performances, and music compositions.

Sources:

Angelo, Thomas A. and K. Patricia Cross. *Classroom Assessment Techniques: A Handbook for College Teachers*. 2nd edition.

Barkley, Elizabeth, K. Patricia Cross, and Claire Howell Major. *Collaborative Learning Techniques: A Handbook for College Faculty*.

Huba, Mary E. and Jann E Freed. *Learner-Centered Assessment on College Campuses: Shifting the Focus from Teaching to Learning*.