



ACTIVE LEARNING IN THE CLASSROOM

Classroom Assessment Techniques

Thomas A. Angelo & K. Patricia Cross

Classroom Assessment Techniques: A Handbook for College Teachers

Minute Paper

Estimated Levels of Time and Energy Required for:



Academic Technology
DIVISION OF INFORMATION TECHNOLOGY
UNIVERSITY OF WISCONSIN-MADISON

Instructor to prepare to use this CAT:

LOW

Students to respond to the assessment:

LOW

Instructor to analyze the data collected:

LOW

DESCRIPTION

To the best of our knowledge, no other Classroom Assessment Technique has been used more often or by more college instructors than the Minute Paper. This versatile technique – also known as the One-Minute Paper and the Half-Sheet Response – provides a quick and extremely simple way to collect written feedback on student learning. To use the Minute Paper, an instructor stops class two or three minutes early and asks students to respond briefly to some variations on the following two questions: “What was the most important thing you learned during this class?” and “What important question remains unanswered?” Students then write their responses on index cards or half-sheets of paper – hence the “Half-Sheet Response” – and hand them in.

PURPOSE

The great advantage of Minute Papers is that they provide manageable amounts of timely and useful feedback for a minimal investment of time and energy. By asking students what they see as the most significant things they are learning, and what their major questions are, instructors can quickly check how well those students are learning what they are teaching. That feedback can help instructors decide whether any mid-course corrections or changes are needed and, if so, what kinds of instructional adjustments to make. Getting the instructor’s feedback on their Minute Papers helps students learn how experts in a given discipline distinguish the major points from the details. The Minute Paper also ensures that students’ questions will be raised, and in many cases answered, in time to facilitate further learning.

Despite its simplicity, the Minute Paper assesses more than mere recall. To select the most important or significant information, learners must first evaluate what they recall. Then, to come up with a question, students must self-assess – asking themselves how well they understand what they have just heard or studied.

SUGGESTIONS FOR USE

Minute Papers are probably most useful in lecture or lecture/discussion courses, although the technique can be easily adapted to other settings. For example, the Minute Paper can also be used to assess what students have learned from a lab session, study-group meeting, field trip, homework assignment, videotape, or example. Minute Papers work well at the end or the beginning of class sessions, serving either as warm-up or wrap-up activities. Like other simple techniques in this section, Minute Papers can be used frequently in courses that regularly present students with a great deal of new information. Because it is quick to administer and easy to analyze, the Minute paper is well suited for use in large classes.

STEP-BY-STEP PROCEDURE

1. Decide first what you want to focus on and, as a consequence, when to administer the Minute Paper. If you want to focus on students' understanding of a lecture, the last few minutes of class may be the best time. If your focus is on a prior homework assignment, however, the first few minutes may be more appropriate.
2. Using the two basic questions from the "Description" as starting points, write Minute Paper prompts that fit your course and students. Try out your Minute paper on a colleague or teaching assistant before using it in class.
3. Plan to set aside five to ten minutes of your next class to use the technique, as well as time later to discuss the results.
4. Before class, write one or, at the most, two Minute Paper questions on the chalkboard or prepare a slide on your presentation deck.
5. At a convenient time, hand out index cards or half-sheets of scrap paper.
6. Unless there is a very good reason to know who wrote what, direct students to leave their names off the papers or cards.
7. Let the students know how much time they will have (two to five minutes per-question is usually enough), what kinds of answers you want (words, phrases, or short sentences), and when they can expect your feedback.

PROS

- Minute Papers provide immediate mid-course feedback to instructors and allows quick response to students.
- This advantage is especially important in college classrooms, where many issues and questions have limited life spans and time is always in short supply.
- The responses – even from a very large class – can be read, tabulated, and analyzed quickly and with limited effort.
- Instructors using the Minute Paper demonstrate respect for and interest in student feedback, thereby encouraging active listening and engagement, which are often lacking in large classes.
- Feedback on the Minute Paper allows individual students to compare their responses to those of the class as a whole.

CONS

- If Minute Papers are overused or poorly used, students will begin to view the technique as a gimmick or a pro forma exercise in polling.
- It is more difficult than it may seem to prepare questions that can be immediately and clearly comprehended and quickly answered.

CAVEATS

- Not all learning experiences can be meaningfully assessed by an instrument that asks learners to note significant points or remaining questions. In other words, this technique is flexible but not universally applicable.
- When students seem to confuse trivial details with significant themes, or pose questions that you have already answered several times, remind yourself that they see the material through different eyes and make sense of it differently than you do. Hold off responding until the irritation has faded. Accepting their starting point is often a necessary step in getting them to the desired learning goal.
- Responding to Minute Papers often takes longer than planned, because questions lead to further questions. Build in some flexibility but set clear limits for the time you will spend on feedback.
- To temper expectations and prevent disappointment, let the class know in advance that you may not be able to comment on every important point and question submitted. It is often wise to promise less feedback than you think you can deliver. Let students know in advance, for example, that you will respond to the three most commonly raise points and questions from their Minute Papers even if you hope to do more.