



# ACTIVE LEARNING IN THE CLASSROOM

## Classroom Assessment Techniques

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Classroom Assessment Techniques: A Handbook for College Teachers

### *Muddiest Point*



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#### Estimated Levels of Time and Energy Required for:

Instructor to prepare to use this CAT:	<b>LOW</b>
Students to respond to the assessment:	<b>LOW</b>
Instructor to analyze the data collected:	<b>LOW</b>

## DESCRIPTION

The Muddiest Point is just about the simplest Classroom Assessment Technique imaginable. It is also remarkably efficient, since it provides a high information return for a very low investment of time and energy. The technique consists of asking students to jot down a quick response to one question: “What was the muddiest point in \_\_\_\_\_?” The focus of the Muddiest Point assessment might be a lecture, discussion, homework assignment, play, or a film.

## PURPOSE

As its name suggest, the Muddiest Point technique provides information on what students find least clear or most confusing about a particular lesson or topic. Instructors use that feedback to discover which points are most difficult for students to learn and to guide their teaching decisions about which topics to emphasize and how much time to spend on each. In response to this CAT, learners must quickly identify what they do not understand and articulate those muddy points. Consequently, even though the technique is extremely simple to administer, responding to it requires some higher-order thinking.

## SUGGESTIONS FOR USE

While this technique can be used virtually in any setting, it is particularly well suited to large, lower-division classes. Since students’ responses to the Muddiest Point questions usually consist of a few words or phrases, an instructor can read and sort a great many in a few minutes. The Muddiest Point question should be posed at the end of a lecture, at the close of a discussion or presentation, or immediately after a reading assignment. This CAT can be used quite frequently in classes where a large amount of new information is presented each session – such as mathematics, statistics, economics, health sciences, and the natural sciences – probably because there is a steady stream of possible “muddy points.” On the other hand, the Muddiest Point is best used sparingly in courses where the emphasis is on integrating, synthesizing, and evaluating information.

## STEP-BY-STEP PROCEDURE

1. Determine what you want feedback on: the entire class session or one self-contained segment? A lecture, a discussion, a presentation?
2. If you are using the technique in class, reserve a few minutes at the end of the class session. Leave enough time to ask the question, to allow students to respond, and to collect the responses by the usual ending time.
3. Let students know beforehand how much time they will have to respond and what use you will make of their responses.
4. Pass out slips of paper or index cards for students to write on.

5. Collect the responses as or before students leave. Stationing yourself at the door collecting “muddy points” as students file out is one way; leaving a “muddy points” collection box by the exit is another.
6. Respond to the students’ feedback during the next class meeting or as soon as possible afterward.

## **PROS**

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- The muddiest Point is not only quick, simple, and easy to administer; it also requires very little preparation. This is one of the few CATs you can successfully use on the spur of the moment.
- For students who are hesitant to ask questions in class, this technique is a safe alternative. For students who are list, it can be a “lifeline.”
- This technique can give the instructor a “snapshot” diagnosis of what students are finding difficult to learn. As a result, the instructor can focus subsequent lessons and assignments much more accurately and effectively.
- This technique enables instructors to see the material through their students’ eyes and reminds them of the range of intellectual and perceptual diversity present in each classroom.
- If students are regularly asked to identify the “muddiest point,” they will tend to pay more attention to how well they are understanding the relevant session or assignment because they expect to be asked about it. This expectancy can lead, on the simplest level, to more care in listening and learning. Because of the nature of the question, however, this technique also promotes introspection and self-assessment.
- This is a simple technique that students can easily internalize, making self-assessment a regular part of their own classroom and study routines.

## **CONS**

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- As Mosteller (1989) points out, there are drawbacks to asking students to focus only on what they don’t understand. Such an emphasis can undermine both the students’ and the instructor’s motivation and sense of self-efficacy. To restore some balance, instructors need to focus on what students do understand as well as the muddy points.
- It can be disconcerting to realize that even your best-prepared, most lucid lecture or lab will be misunderstood or poorly understood by some of your students.
- Initially, a number of students may have difficulty explaining, or even naming, what it is that they don’t understand. Becoming effective self-assessors takes time and practice, and you may not wish to develop that skill on class time.
- As students become more adept at identifying and explaining the points they find “muddiest,” they become more likely to raise difficult questions that you may be unable to answer on the spot.

## **CAVEATS**

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- Don’t become angry or disappointed when students identify something as a “muddy point” that you’re positive you presented with absolute clarity. At least, don’t respond to the class until you have dealt with those feelings. (Remember, don’t ask if you don’t really want to know.)
- Don’t spend so much time responding to “muddy points” from past sessions that you risk losing the momentum of your course.
- Don’t give students the impression that all confusions and questions can be cleared up in a few minutes – or even in a few days. Make it clear that some points are “muddier” than others and that a few are real landslides that will take a lot of digging out.