

Students' Learning: Dare to Dipstick?

What do a thermometer, dipstick, and minute paper have in common? Each is a tool for checking something in order to determine what to do next, be it turn down the heat, add more oil, or revisit a misunderstood course concept at the next class meeting.

At this point in our CSUN courses, we have attempted to untangle student misconceptions, as well as craft meaningful examples and visuals to explain our disciplines. Are they getting it? Do students understand the major concepts discussed in our courses?

The Plan

Ponder the questions above and consider frequently asking students for end-of-the-period feedback in a "one-minute paper" (Angelo & Cross, 1993). This allows students to demonstrate their understanding of the content you have just presented in class. Each student response can be written on a separate 3 x 5 card in order to simplify your task of categorizing similar student mistakes, as you analyze student responses and prepare your feedback for the next class session. On occasion, students respond anonymously to minute papers.

As we continually check our students' learning by observing and listening to them, ask 1 or 2 of the following types of questions in a minute paper.

General Questions

1. What is the big point you learned in class today?
2. What is the main unanswered question you leave class with today?

Discipline-Specific Questions

1. What were 2 main factors that led to the replacement of indentured servitude with slavery by the end of the 17th century?
2. The issue of including students with disabilities in general education is considered highly controversial in the field of special education today. Based on our in-class debates, name two points for the pro side and two points for the con side of this issue. (Wendy Weichel Murawski, Special Education)
3. A variation (for classes meeting 3 times a week):
At one class meeting each week, ask students to write a "10-minute paper" on a question or statement based on key points from the previous lecture and text readings. These writing assignments are scored and cumulatively total approximately 20% of the course grade.

"Writing these short papers keeps students current, encouraging them to take and review class notes, as well as keep up with their reading. What the students understand—or don't understand—is readily apparent."

(Jack Kranz, Geography & Library)

Angelo, T.A. & Cross, K.P. (1993) Classroom assessment techniques: A handbook for college teachers (2nd ed.) San Francisco: Jossey-Bass. See pp. 148-153.

Other online resources for "checking student understanding" techniques (aka, Classroom Assessment Techniques or CATs):

- <http://www.flaguide.org/cat/cat.php>
- <http://www.cte.iastate.edu/tips/cat.html>

Food for thought!

Cynthia Desrochers

Center for Excellence in Learning and Teaching (CELT), CSU Northridge