Classroom Assessment Techniques: Understanding and Reacting to Student Feedback

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As a result of participating in today’s workshop you will be able to:

1. List an array of tools for eliciting student feedback and describe how to use them.

2. Discuss how to translate student feedback into improved teaching and learning.
How do you know…

If your students are learning?

How your students are responding to your teaching methods?
“Recent research on the evaluation of teaching and learning suggests that students are valid and reliable sources of information on the effects of teaching or its impact on their learning (Cross, 1988)” (Cross & Angelo, 1993 p. 106)
Formative vs Summative Assessment

- What is the difference?
- Which do you typically use?
Formative vs Summative Assessment

**Formative:**
- Students monitored during the learning process
- Low-stakes

**Summative:**
- Students evaluated after learning
- High-stakes
What is Classroom Assessment?

- The process of collecting student feedback during class, in order to understand their learning and their response to your teaching approaches.

- Instructors can learn what, how much and how well students are learning.

- Based on the feedback, instructors can modify their teaching to increase effectiveness.
Why Use Classroom Assessment?

Research suggests that there is a gap between what students think they know and what they actually know (Steadman, 1998; Bell and Volckmann, 2011).

Research also indicates that there is a gap between student background knowledge and faculty members’ expectations of student knowledge (Eckert et al., 1997).
Benefits of Classroom Assessment

Helps *students*:
- Engage in learning
- Become more aware of their learning processes
- Build classroom community
- Experience satisfaction with learning
- Perform better academically

(Angelo & Cross, 1993; Angelo, 1995; Goldstein, 2007; Walker, 1991)
Benefits of Classroom Assessment

Helps *instructors*:
- Understand student learning more deeply
- Connect with students
- Reflect on teaching strategies and effectiveness
- Discover issues while there is still time to address them

(Angelo & Cross, 1993; Lieberman, *et al.* 2001)
Classroom Assessment Techniques (CATs)

CATs are informal, quick prompts that provides valuable student feedback. There are a number of them (see Angelo & Cross, 1993), but a few are easily modified for a number of purposes:

- The Minute Paper
- The Muddiest Point
- One-Sentence Summary
- Application Cards
3-Step Process for Using CATs (Angelo & Cross, 1993)

- **Plan** - Decide what your purpose is. What information do you want to know? What prompts will get you this information?

- **Implement** - Incorporate CAT into your lesson and collect the data. Analyze student feedback.

- **Respond** - Interpret the results. Decide how this will inform your next teaching strategies and share this with your students. Try the response and evaluate its effectiveness.
Planning tips

- Start small. Choose one class in which to implement a CAT.
- Choose a class that you have had a positive experience with and will likely teach again.
- Then ask:
  “Is there something (specific and reasonably focused) I would like to improve?”
  “Am I able to dedicate the time and effort needed to carry out a CAT and follow up on it?”
What do you want to know? Planning the Question.

Identify a teaching or learning goal. Bloom’s Taxonomy:

http://www.odu.edu/educ/roverbau/Bloom/blooms_taxonomy.htm
Implementing the CAT. Some tips:

- Keep it simple. CATs should not disrupt the target lesson.
- Try it out first on yourself, or consult a colleague.
- Plan more than enough time to explain the CATs’ purpose and process effectively and then allow for student responses.
- Make CATs anonymous if it poses any risk to students and regard them as formative, not summative assessments.
CAT example 1: Minute Paper

- Easy to implement
- Can assess background knowledge, recall and understanding

Examples:

“What was the most important concept from the homework?”

“What were the most important points in today’s lecture?”

Questions can be modified easily depending on the purpose.
CAT example 2: Application Cards

Instructor directs students to write one possible real world application for an applicable theory, principle, generalization or procedure they have learned.

- Assesses problem solving/application skills
- Let students work in pairs for difficult applications
- Students might want to discuss their applications
- Can allow students to complete as homework
Analyzing Student Feedback

Example:

In a class the professor asked, “What were the five most important points from class?” Students cumulatively identified over 20 most important points. *What does this tell you? How would you respond?*
Analyzing Feedback and Responding

- Type of analysis depends on the CAT. Plan accordingly considering your time limitations.
- Important to share the feedback with your students (How will it inform your teaching approach?)
- How could you modify your teaching in response to the feedback?
Chart of Various CATs

Review the summary of selected CATs

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Ideas Today That You Can Use Next Week
Designing your Classroom Assessment Project

- Based on the question you are asking, choose an appropriate CAT
- Consider how you will introduce the CAT to students, and how you will integrate it into class activities
- How will you collect feedback? Index cards? Electronically?
- How much time do you need to do this process?
Considering your needs:

Which CAT would you use, for what purpose? What kind of information would you expect to find and what would you do with this information?
Last CAT example: The Muddiest Point

Before you leave, please write the muddiest point of this workshop on a card.
Resources for CATs

- Cornell University

- Iowa State University
  [http://www.celt.iastate.edu/teaching/cat.html](http://www.celt.iastate.edu/teaching/cat.html)

- Vanderbilt University

- Field Tested Learning Assessment Guide
References


References
