Using Classroom Assessment Techniques (CATs)

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Dr. Linda Lujan
South Mountain Community College

Background Knowledge Probe

• What is a CAT
• Have you ever used a CAT?
• Why are CATs useful?

Your Learning Goals

• Learn (or learn more) about CATs
• Identify the purpose for CATs
• Integrate CATs into your student success strategies
• Identify categories of CATs
• Practice using a few CATs

Effective Teaching

• Effective teachers use a variety of classroom assessment techniques, some formal and others informal, to determine how much and how well their students are learning. To evaluate classroom learning informally, faculty use these techniques to make quick adjustments to their teaching, slow down or review material, respond to questions or misunderstandings, or move on.
**CATs**

Classroom Assessment Techniques (CATs) are a series of “informal research” tools and practices designed to give teachers accurate information about the quality of student learning. Information gathered isn’t used for grading or teacher evaluation. Instead, it’s used to facilitate dialogue between students and teacher on the quality of the learning process, and how to improve it.

If all you’re doing is talking, you are not teaching and they are not learning.

- How do you know they’re learning?
- How do you know what they’re learning?
- How do you know whether what you’re doing, and how you’re doing it, is effective?
- We know you know it, do they know it?

**Why CATs**

Teachers are researchers; always checking, monitoring, and learning more about learning and teaching – natural curiosity

1. What are the essential skills and knowledge I am trying to teach?
2. How can I find out whether students are learning them?
3. How can I help students learn better?

**For the Teacher**

- Gives immediate feedback about the day-to-day learning and teaching process while it is still possible to make mid-course corrections.
- Not expensive, complex, or time-consuming
- Helps to foster good rapport with students and increase the efficacy of teaching and learning.
- Encourages the view that teaching is a formative process that evolves and improves over time with feedback.
For the Student
• Helps them become better monitors of their own learning.
• Helps break down feelings of anonymity, especially in larger courses.
• Points out the need to alter study skills or seek additional help.
• Provides concrete evidence that the instructor cares about their learning.

Basic Steps in the CATs Process
1. Choose a learning goal to assess
2. Choose an assessment technique
3. Explain and use the technique
4. Analyze the data and share the results with students
5. Respond to the data

CATs can be used to:
1. Check for student background knowledge
2. Identify areas of confusion
3. Enable students to self-assess their learning level
4. Determine students’ learning styles
5. Target and build specific skills

CATs Categories
| What do students come to my course knowing (or thinking they know)? | What are they thinking at any moment in class? |
| What did they get out of today’s class compared to what I wanted them to get? | What are they thinking when they study (or how did they go about answering a problem)? |
Course-Related Knowledge & Skills

- Background Knowledge Probe
- Focused Listening
- **Minute Paper**
- Muddiest Point

### Minute Paper

At the end of class have students answer just two simple questions:

1. What was the most important thing you learned today?
2. What important question remains unanswered?

Use the results during the next class period.

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Assessing Skill in Analysis & Critical Thinking

- Categorizing Grid
- Pro/Con Grid (or T-grid)
- Analytic Memos
- Content, Form, and Function Outlines

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Assessing Skill in Synthesis & Creative Thinking

- **One-sentence Summary**
- Word Journal
- Concept Maps
- Annotated Portfolios
One-Sentence Summary

Ask students to answer the following about the topic:

*Who does what to whom, when, where, how, and why?*

Answer in a single, informative, grammatical, and long summary sentence.

Assessing Skill in Problem Solving

- Documented Problem Solutions
- Problem Recognition Tasks
- Audio- and Video-taped Protocols
- What’s the Principle?

Assessing Skill in Application & Performance

- Directed Paraphrasing
- Application Cards
- Student-generated Test Questions
- Paper or Project Prospectus

Student-Generated Test Questions

After a learning activity, ask students to write one or more test-questions (specify the format T/F, multiple choice, matching, etc.) on the most important points.
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**Group Instructional Feedback Technique (GIFT)**

- Ask a colleague to hold a feedback session with your students
  - What works?
  - What doesn’t work?
  - What can be done to improve it?
- Ask your colleague to summarize and synthesize responses

**Assessing Learner Reaction to Class Activities, Assignments & Materials**

- RSQC2 (recall, summarize, question, comment, and connect)
- Group-work Evaluations
- Reading Rating Sheets
- Assignment Assessment
- Exam Evaluation

**What You Learned**

- Learned (or learned more) about Classroom Assessment Techniques
- Identified the purpose for CATs
- Integrated CATs into your student success strategies
- Identified categories of CATs
- Practiced using a few CATs

**Muddiest Point**

The muddiest point about CATs is
Resources


Thanks!!