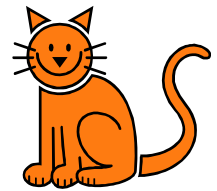


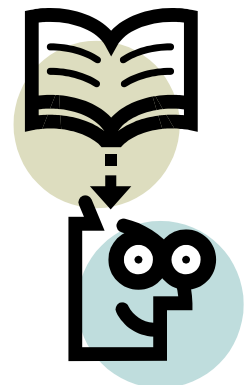
Classroom Assessment Techniques

(commonly known as CATs)

Classroom Assessment Techniques are just one type of “classroom research” that you may do every semester. Another type might be giving your students the Myers-Briggs Type Indicator, Kuder career inventory, or the LASSI so that you and they can learn more about how they learn best or what kind of job they might enjoy. Or you may perform item analysis on student assignment and test results so that you can tell what areas you need to re-teach.



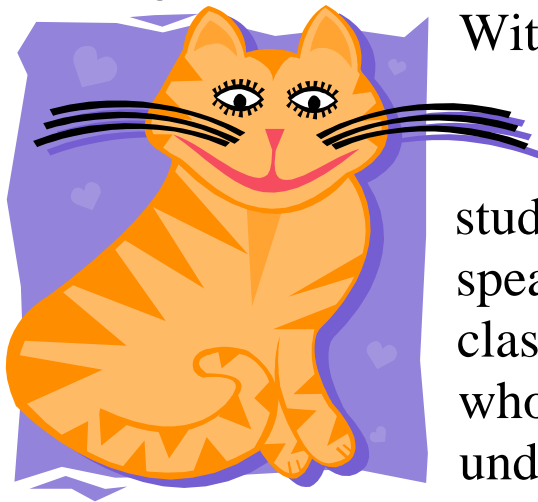
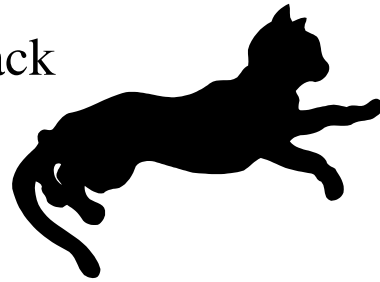
Unlike most educational research, classroom research doesn't expect to find the answers to big, overall issues in teaching and learning. And it doesn't require knowledge of statistics,



sampling techniques, or standards of validity and reliability, like standardized testing requires. Instead, it's all about getting at the specific, localized "truth" about what's happening in YOUR classroom.

Classroom research is *the disciplined, systematic study by faculty of the effect of their teaching on student learning*. Its purpose is to increase teachers' understanding of the relationship between how they teach and how their students learn. CATs are a simple way to explore learning in one specific classroom, on one specific day.

You can use CATs to collect feedback **EARLY** and **OFTEN** to calibrate your teaching to your students' learning.

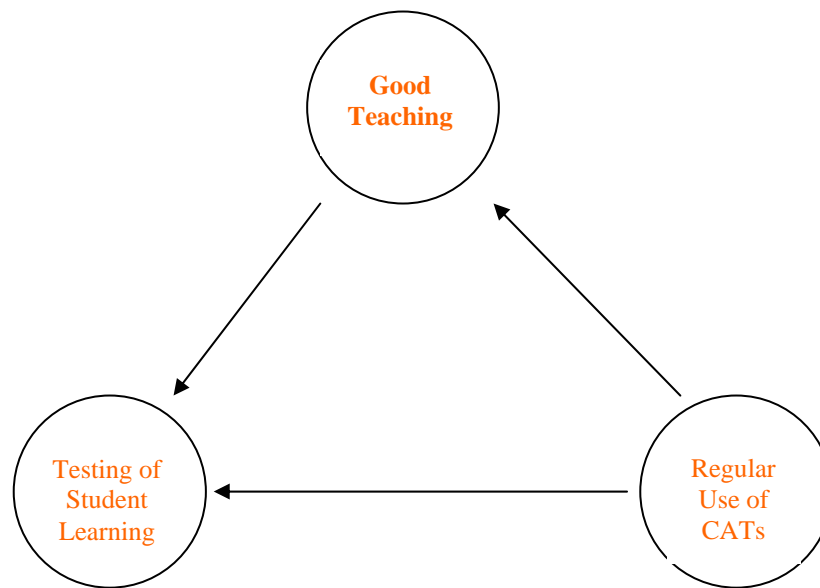


With CATs, you collect data in written form for analysis later. You gather data from ALL students—not just the few who speak up or answer questions in class. The quiet ones or the ones who are uncertain about their understanding or who are afraid of being embarrassed can ALL give you some information about what they understand—or don't understand, which is probably even more important if you want to be sure everybody is "getting it."

So are CATs just another form of testing?? And if you test, why should you also do CATs? No, they aren't the same, and here is why they might be valuable to you:

Differences between Tests and CATs		
Purpose	To assess individual students' learning	To give you and your students a snapshot of what is happening right now in class
Focus	What the student has learned	What needs to be improved
Timing	End of a unit, mid-term, final	Regularly, all throughout the semester
Outcome	Assigning grades to individual students	Gaining relevant feedback for future improvement of teaching and learning

Teaching and learning will be at their best when 3 things are happening in the classroom:





Teachers must know **how much learning is taking place at initial and intermediate points—not just at end points**—to be sure that learning is, in fact, occurring.

In higher education, learning takes place across 4 dimensions:

- Declarative Learning
- Procedural Learning
- Conditional Learning
- Reflective Learning

Declarative Learning

Declarative learning is all about **WHAT**—that is, the basic facts, principles, and vocabulary of the discipline or field. As a 2-year college, MSCC provides a great deal of declarative learning as we introduce students to new subjects. This kind of learning is often tested with multiple choice or short answer kinds of questions.

A good CAT asks what did you learn today? What were the most important points covered today? What did you really not understand about what was covered today.

Procedural Learning

Procedural learning is about **HOW**, and this is what we are doing when we teach skills—whether it's putting commas in the right place, studying effectively, creating a spreadsheet, changing oil, connecting cables, or learning to work together as a team.

A good CAT for teamwork, for instance, is asking students what they got from the group today—and what they gave to the group.

Conditional Learning

Conditional learning is about **WHERE and WHEN**, or how students can apply what they have learned in class to their own

lives. You want students to understand that what they learn in class has practical value. The connection is easy in skills-oriented classes, but in more theoretical or historical classes you may need to help them see how they can and do apply what they are learning.

A good CAT is to ask them how what they have learned today can help them in everyday life. When you share their written responses at the next class, you can stimulate a discussion, if you have time, or at least get your students thinking.

Reflective Learning

Reflective learning asks **WHY** and stimulates critical thinking. Students become more aware of their attitudes and assumptions. CATs can address subject matter (like racial prejudice or why something as “*boring*” as opera or art or Shakespeare was part of the popular culture of its day) or classroom behavior.

A good CAT might be pre/post surveys about attitudes. One teacher surveyed students about attitudes toward the elderly before and after a visit to a nursing home. The instructor was surprised to see that the post-survey revealed that stereotypes had been reinforced. A new assignment to visit places where healthy seniors were active resulted in post-survey results revealing new understanding and reduced stereotyping.

A CAT related to classroom behavior reduced disruption and improved the climate for learning when one teacher asked students to write down one example of classroom behavior that

helped them learn and one example of behavior that hindered learning. He then compiled the results and reported them back to his class at its next meeting. The disruptive students quickly learned that most students found their behavior annoying, not funny, and the number of disruptions declined dramatically.

The Memory Matrix

Here's a CAT for you to use to discover what you have learned from the previous slides:

On a piece of paper, sketch out a matrix like this:

Type of Learning	Question It Answers	Example from My Classes
Declarative		
Procedural		
Conditional		
Reflective		

Fill it in to see how much you remember of what you have just read.

So how did you do? Can you think of ways you could use the Memory Matrix CAT to tell if your students understood something you presented in class?



For more examples of how teachers from around the country have used CATs to **track** what their students are learning and to

improve their own teaching, watch the video that will be circulating among full-time MSCC faculty soon (it should show up in your mailbox within the next week or so). Interested adjuncts may request the video from dtebbetts@midsouthcc.edu.



If CATs are so loveable—well, maybe “useful” is better in this context—what are some of the **problems** involved in using them?

Student Concerns

Students may think CATs are a test that will affect their grade.

- Tell your class the purpose of CATs—improving your teaching and their learning so they can make better grades.
- Begin using CATs early in the semester.
- Share the results of each CAT at the next class meeting so that students know you are taking their responses seriously and reacting to what you find out.

Teachers who use CATs regularly report greater class participation and better attendance.

Faculty Concerns

Faculty worry about the time involved in doing CATs—with lots of subject matter to cover, they are concerned about how long it takes to “do” a CAT—and how they need to react if they find out students aren’t “getting” what is being taught.

- Most CATs should take no more than 5 minutes at the end of class to complete and another 5 minutes at the beginning of the next class to report. Compiling and analyzing the results should take about 1 minute per student.
- If a CAT shows students didn’t understand key concepts or can’t perform required skills, you may have to cut back in some areas to re-teach areas with deficiencies. It’s not easy to prune away material you thought important enough to be part of the semester’s assignments.

Benefits of CATs for Faculty

Besides having a better grasp of what your students are actually learning, there are other benefits:

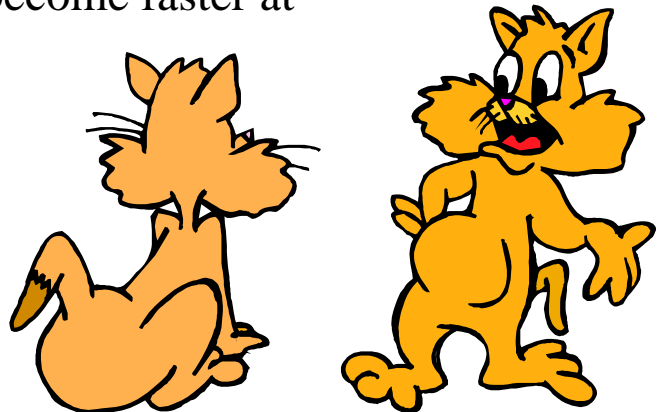
- Sharing your findings with other faculty members who are using CATs will build collegiality and professionalism.
- Students will respond to your class more enthusiastically.
- Your own personal intellectual excitement will grow as you get involved in discovering what really works in your classroom.

Getting Started with CATs

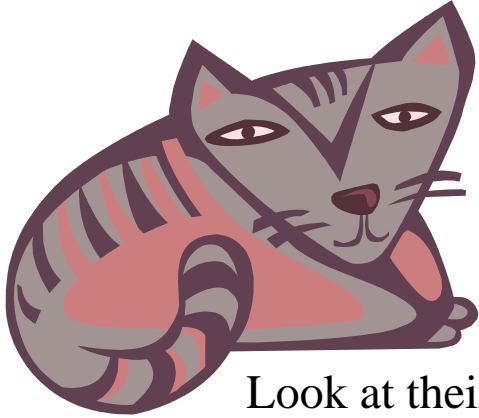


Start small. Pick one of the simpler CATs, like the Focus List, 1-Minute Paper, Muddiest Point, or others in your CAT manual. Pick the one class where you are most concerned about student learning, and explain what you are going to be asking them to do and what you will do with the results. Use the same CAT at least once a week for the rest of the semester. Repeating the same CAT will reduce the time you have to take away from instruction because students will quickly learn what to do and become faster at producing their response.

Share Your Findings



Partner with 1 or 2 other faculty members who are doing CATs. Meet regularly over coffee or lunch and share what you are learning. Talk about the changes you are making and what results you are seeing. For the last 15 years, as the Classroom Assessment movement has grown, faculty who use CATs say this is the best part of the process—the growing friendships and professional excitement they share.



Want to know more?

Take a look in the MSCC library. Check out the book that started it all, *Classroom Assessment Techniques* by K. Patricia Cross and Thomas Angelo.

Look at their Teaching Goals Inventory to clarify what it is that you really expect to accomplish in your classes and which CATs can help you find out how effective you are being. And watch that video! You may just decide that you want to join faculty across America who are using classroom assessment as a **CATalyst** for change!