



### **Tierney King (0:01)**

This is the Faculty Focus Live podcast sponsored by the Teaching Professor. I'm your host, Tierney King. And I'm here to bring you inspiration, energy and creative strategies that you can utilize in your everyday teaching.

Today on episode one, we're going to talk about classroom assessment techniques or CATs, and how you can use various CATs to assess content knowledge in your own classroom, both

online and face to face. To start, have you ever asked your students a question and the hum of silence rings across your classroom? Let's say you just got done lecturing for the past hour. And you ask, "Does anyone have any questions? Is everyone following along? Does this make sense to everyone?"

It's never a sure thing and how to interpret the silence that follows these questions. Maybe your students are all geniuses, and actually do understand everything. Maybe they're too afraid to ask out of fear of looking dumb. Or maybe they are so utterly lost, that they don't even know what to ask. According to Pete Watkins, author of the Faculty Focus article, "Everybody With Me and Other Not-so useful Questions," these vague prompts can actually encourage overconfidence bias in students. This means students believe they understand the material when you're up at the podium explaining it to them. But when that same student is faced with a specific homework problem, or a question outside of the classroom, they don't know how to proceed. This isn't just a student problem, though. Professors are also prone to this known as the Dunning-Kruger effect, where if one student answers a question correctly, then the whole class was to understand it. So next time, instead of asking, does this make sense to everyone? Try an alternative way by using a classroom assessment technique. In Stephanie Delaney's 20-Minute Mentor, "How Can I Use Classroom Assessment Techniques Online?" she addresses a CAT called the muddiest point.

### **Stephanie Delaney (2:07)**

So, a classroom assessment technique is an approach to determining what students have learned, and how well have they learned it. One example is the muddiest point. And you may have heard about this one. It's the least clear points or most confusing thing that the students encountered in this lesson or topic. And it's a simple yet powerful way of determining what did the students learn or more focused in this one is what didn't the students learn what was challenging for them, I like to do something like the muddiest point after every module. And when students know that this is coming, they actually begin to think about the class and the lesson differently, they start looking for things that are confusing, and then it's more easy for them to ask or to raise that issue. When they get to it or they're more and more able to say Actually, there wasn't anything confusing. It's not because they couldn't pull up anything at the end, but because they had been looking and hadn't found anything. So regular use of a tool like the muddiest point can be really valuable. It's a way to like all CATs away to see what students are learning as they're learning it away for faculty to engage with the student. And it helps to build trust, because when the faculty hear where the students are getting challenged, and then do something to respond to that the students know that the faculty care about them, that they want their student learning to go forward.

**Tierney King (3:40)**

There are numerous CATs you can use in the classroom or online. Thomas Angelo and K. Patricia Cross address a number of different CATs in their book, *Classroom Assessment Techniques*, where they offer tips and guidelines for using CATs. Some of the specific classroom assessment techniques include directed paraphrasing, where students restate the main points of a lecture lesson entirely in their own words, or a pros and cons grid. A pros and cons grid will ask students to compare the benefits or disadvantages of two choices. Angela and Cross give the example of how to use a pros and cons grid in a variety of courses, such as comparing design ideas in an engineering course, or tackling an ethical dilemma in an anthropology course, application cards can also be useful in showing students how the content is relevant to their everyday lives. After teaching a theory or principle, you then ask students to write down at least one real world application pertaining to what they just learned. Once you collect their ideas, read through them and categorize them according to their quality. Pick out the ones you believe will be most relevant to your students and present them in a way that makes them excited to use their newfound knowledge in the real world. So one of the reasons why classroom assessment technique can be beneficial is that it can actually suggest some strategy for adapting your teaching throughout the course. In Thomas Pusateri's, *20-Minute Mentor*, "Getting Started with Classroom Assessment Techniques," he mentions that after a midterm or final exam, it's often too late to adapt your course structure.

**Thomas Pusateri (5:21)**

We all have had experiences in the classroom where we see the results of an examination of paper or other assignment. And we're just unhappy with the quality of student product that we're seeing how well our students are learning in our course. And it's might suggest some strategies for adapting our teaching. One of the difficulties with looking at examinations and papers is it's too late to do much intervention. If you are on a 15 week schedule, it's very difficult to give an exam and then to try to redo that material for classes in which it's unsuccessful, otherwise, you might get behind and so the classroom assessment technique is an attempt to get you some information about how well prepared students are for doing well on future examinations and future papers.

**Tierney King (6:11)**

Sometimes implementing a classroom assessment technique only needs to take a minute. The minute paper gets students thinking about what the most important point was, that they heard from your lecture. And you can do this at the end of class or anytime during class that you want to collect some data. You could do this online with an online discussion board or with a polling system as well. If you want to make sure that your students have a strong grasp on a topic, and really understand the meat and potatoes of the lecture, a minute paper allows you to assess if the majority of your students are on the right track. Lastly, Thomas pusateri mentions just in time teaching, often referred to in terms of a flipped classroom.

**Thomas Pusateri (6:54)**

Basically, in just in time teaching, what you're going to ask students to do is some type of assignment outside of class that you are not going to present in the class, you're going to expect them to get the information outside of the class. And then they're going to produce some type of assignment prior to your class that enables you to assess whether students got the assignment. And then you can develop devote your time in the class to problems associated with the students understanding of the material.

**Tierney King (7:25)**

So, for this assignment, you could ask questions about what your students agreed or disagreed with when researching what they had difficulty understanding if they've heard of any of the concepts prior to this. And if anything they learned was different from what they've heard in previous classes, you'd then have your students turn in the assignment and responses before you reconvene for class.

**Thomas Pusateri (7:47)**

I asked the students to do this prior to the class 6 pm, before my 8 am class, and what I then do is read them at night, again, doesn't take me very long to read them. I have relatively small classes, but it takes about half an hour to an hour. I sometimes comment if I know that a student is making a factual error, I can comment to the student in the discussion board. And I do allow other students to see each other's comments, I give them a little bit of extra credit for doing the work prior. And this gives me rich data that I can then bring into class the next day, I can use some of the examples that students provided I can address some of the misconceptions that students have, it is a really helpful strategy for giving students some feedback or getting feedback for for yourself from the students before the class.

**Tierney King (8:40)**

Overall, using CATs on a regular basis only requires as much time as you want to put into it. And it can help you adapt your assignments and lectures over the course of the semester. It's also important to document the changes you implement.

**Thomas Pusateri (8:54)**

If you're changing your syllabi as a result of that data, you can show the syllabus prior to and after. If you're changing any of your assignments, or the pedagogical approaches that you're taking, like the PowerPoint slides, or the instructions that you provide to students as a result of the classroom assessment provided indication of here's what I did prior to the use of the classroom assessment. Here's the classroom assessment technique. Here's what I've done after a simple couple of documents with a short narrative, a paragraph in your annual review or your promotion and tenure can really show that you are taking seriously the student feedback that you're getting. You can also do this, of course at the end, of course evaluations, but I think there's a richer data source here from the classroom assessment techniques. So you can document the student learning gains in your class as well. If students are performing better as a result of this, why not indicate that you've used this data. And here's the results of actual student performance as a result of the use of classroom assessment techniques that differs from how you've done it in the past. At some point you might have a rich enough data source that you Be able to share this with colleagues outside of your department in a publication or a presentation at a teaching conference.

**Tierney King (10:07)**

Whether or not you eventually want to share your classroom assessment technique data to a widespread audience, or maybe just a few colleagues. Start by trying to implement just one CAT within your own course. You may no longer be listening to the hum of silence after asking your students if they understand the content. So does this make sense to everyone?

Whether you're driving to work, or you just need a 10 minute think session, we hope faculty focus

live will inspire your teaching, and offer ideas that you can integrate into your own course.

For more information on the resources included in this episode, please check out the links provided in the episode description.

Transcribed by <https://otter.ai>

