

Classroom Demonstration

Student [00:00:00] It's a huge transition from high school to college, and so you do feel like, OK, well, this isn't so easy, I'm not just the smartest one in the top of my class anymore.

Alex, Student, University of North Carolina at Chapel Hill [00:00:09] I definitely wasn't as fully prepared in terms of how much reading I was going to be doing an extra work to be putting into class.

Student [00:00:15] I had to get a lot of help on my first few papers because the expectations were so different from high school.

Kelly Hogan, PhD, Senior STEM Lecturer of Biology, Director of Instructional Innovation, University of North Carolina at Chapel Hill [00:00:21] Students really vary in their preparedness for college-level work. We really have to meet people where they are.

Desmond Stephens, PhD, Associate Professor, Department of Mathematics, Florida A&M University [00:00:39] Today, I would like to start class by giving you a readiness assessment on trigonometry.

Desmond Stephens, PhD [00:00:45] Readiness evaluations are very important so that you actually know where your students are and that you can fill gaps if you need to or you can move ahead if you need to.

Desmond Stephens, PhD [00:00:54] I just wanted to let you all know that this is an ungraded activity.

Desmond Stephens, PhD [00:00:58] I think that when you're giving a readiness test, it's real important that you let students know that it's ungraded so that they will do their best, but they won't have the anxiety that you're dropping something on them that they haven't had an opportunity to prepare for.

Michael, Student, Florida A&M University [00:01:11] It kind of freaked me out because I don't know this material, but by him giving us that test, it told me what I need to learn, you know, like what I didn't understand.

Desmond Stephens, PhD [00:01:21] We'll be starting a unit on trigonometry tomorrow. And so I'm gonna take these results that I have here, and I'm gonna use that to help tailor-make what we'll be doing in the future on this topic.

Gregory Eiselein, PhD, Donnelly Professor of English, Department of English, Kansas State University [00:01:38] Rather than writing an analysis of *The Inferno*, this assignment asks you to write poetry, to write a section of Dante's *Inferno*.

Gregory Eiselein, PhD [00:01:48] One of the most common questions or roadblocks for students is, what does the teacher really want? What am I really supposed to be doing here? And therefore, I find it really valuable to tell them exactly, here's what I'm really looking for. Here's what I really want.

Gregory Eiselein, PhD [00:02:03] When I read these, here's what I'm going to be looking for. Do you seem to comprehend understand Dante's style and logic? Do you understand the character? Who is that character, and how they sinned, and how is their sin gonna bring on its own form of punishment?

Paulette S. Reneau, PhD, Assistant Professor, Department of Biological Sciences, Florida A&M University [00:02:18] The assignment that you will be doing will be looking at how various organelles function and what happens when they actually malfunction. Now, if you take out your syllabus and we look at the learning outcomes. Okay, we're looking at learning goal number two, we're going to summarize and construct the basic structures and functions of cells by explaining how internal membranes and organelles contribute to the cell's function.

Paulette S. Reneau, PhD [00:02:45] By showing them this is what you're gonna actually gain from doing this assignment, they're seeing that they're not just doing something because it's busy work. They're doing something because it's gonna help them learn and make connections throughout the semester.

Kelly Hogan, PhD [00:02:58] We have an exam coming up on Monday. Let's do a typical test question, which gives you a sense of, do I know this? Can I apply this information?

Kelly Hogan, PhD [00:03:06] If the end goal is to have this assessment where I want to see them be able to do this, you really have to work backwards from there and think about all the ways that you're going to prepare them to be able to do that.

Kelly Hogan, PhD [00:03:18] All right, so here was this question relating to diabetes. Can somebody share out with me what you noticed right away about mouse one 10 minutes after eating, 20 minutes after eating, and then after given an insulin injection? What do you notice that's different about mouse one, two, and three?

Student [00:03:37] Mouse one appears to have type 2 diabetes because even after it received the insulin injection, its glucose level didn't decrease by much.

Kelly Hogan, PhD [00:03:46] OK, so that's gonna set us up for doing another question like this. You're not gonna find it as challenging now that you've practiced a question like this.

Alex, Student, University of North Carolina at Chapel Hill [00:03:54] We'll be lecturing and she'll say, OK, I'm going to give you a typical test question and you're going to answer it and we're going to discuss it and see if you understand what it's about. If everyone's understanding it will move on, or if not, she'll break it down more in detail and talk about that concept again.

Kelly Hogan, PhD [00:04:07] It takes students a little while in college to determine if they feel prepared or not. And often they need an assessment to do that. So I use a quiz within the first two weeks, a second quiz before the first exam, then the first exam. These are all very early assessments in the semester. And I'm using them as much to figure out which students are aware, as much as they are using that data to figure out what they know and what they don't know.

Paulette S. Reneau, PhD [00:04:35] Today we'll be going through a performance prognosis inventory for General Biology 1. That is a mouthful, but all that's saying is that we'll be looking at what types of behaviors you're going to need to exhibit in order to be successful in this class.

Paulette S. Reneau, PhD [00:04:50] I usually start out with giving them a performance prognosis inventory. And that inventory sort of walks them through behaviors that would be best for them to be successful in the classroom. For example, I will study at least five days out of the week for that particular class. I will go back and I will reread and rework my notes. And so it is almost like a checklist of things that they need to do that they might not be aware that they need to actually do these things to be successful, to actually study for a particular class itself.

Kelly Hogan, PhD [00:05:28] You just finished exam one. You took that on Monday. I'd like for everyone to be thinking about your performance on exam one so that we can learn from it.

Kelly Hogan, PhD [00:05:38] I have them do what I call self-assessment or self-reflection with an item analysis. So there are two parts to that. The reflection asks them a lot of open-ended questions. It's kind of like a diagnostic tool for themselves, but it also helps me when I talk with them.

Kelly Hogan, PhD [00:05:54] In the self-assessment and item analysis, here are some of the things we're gonna look at. These are the broad categories that we're gonna see. So, for example, how is your preparation for class? Did you do the guided reading questions? Did you do the homework? How did you approach those kinds of activities? During class, as you're sitting here in class, are you a leader? Are you an active participant? What are the

types of things you might need to think about doing differently, being in a classroom? Post-class, did you review the PowerPoints? How did you review the PowerPoints?

Kelly Hogan, PhD [00:06:27] The other part of that is the item analysis, where they go through each question on the exam and they have to think about, why did I get it wrong?

Kelly Hogan, PhD [00:06:34] So I want to know, did you get it wrong because you didn't understand what the question was asking? Was it that you understood what the question was asking but you weren't quite sure about the biology in the question? Was it, I didn't know the material because I didn't study this?

Kelly Hogan, PhD [00:06:48] A lot of students that transition from high school into college think about, I'll study right before the exam. And we know that that's not the way our brain works, that we need multiple opportunities to practice and learn and retrieve information.

Kelly Hogan, PhD [00:07:01] Let's hear a couple of answers to some of the ways in which you learned from this reflection. So let's take a volunteer over here.

Student [00:07:08] I noticed that I missed question one because I wasn't careful enough while reading it.

Kelly Hogan, PhD [00:07:14] You might want to circle key words like "not," right?

Student [00:07:17] My first test, looking back on it, I was able to see, oh, I should have studied the PowerPoint some more. She talked about specific examples in the PowerPoints. So I was able to go back and pinpoint, oh, I should have studied this a little more.

Viji Sathy, PhD, Senior Lecturer, Department of Psychology & Neuroscience, University of North Carolina at Chapel Hill [00:07:33] You're sitting in this class, new to the class and not knowing what to make of it. Students in the course from last semester, they sat through an entire semester of the class and they wanted to give you some advice. I'm gonna ask you to read through them and just discuss in pairs if you could.

Viji Sathy, PhD [00:07:48] I can tell them what to expect, but it means so much more when it comes from a peer, especially a peer who has just recently gone through the course and is able to say, I was able to have success just by doing X, Y, and Z.

Student [00:08:02] A lot of the cards I saw said watch the videos.

Viji Sathy, PhD [00:08:04] OK, watch the videos. How many of you had something or read something about watch the videos? Can you just, can I see a show of hands? OK.

Shannon, Student, University of North Carolina at Chapel Hill [00:08:13] When you hear someone who's passed the class, you know that that simple piece of advice is the difference between an A and maybe a C.

Shannon, Student, University of North Carolina at Chapel Hill [00:08:25] I had two index cards that both said to take advantage of the TAs and the office hours, if you have any questions to go to those people and that they're there for a reason and it's to help us.

Viji Sathy, PhD [00:08:35] It's our job to help you learn the material. We can't learn it for you, but we can help you learn it.

Kelly Hogan, PhD [00:08:41] You can come to my office hours. We've got sign-up hours. I don't look scary, right?

Kelly Hogan, PhD [00:08:46] Many students are still very intimidated by office hours, so I encourage them just to come in and shake my hand if that's what they want to do, and then I'll ask them questions and draw them in.

Kelly Hogan, PhD [00:08:56] All right, so, the exam. Overall, what was your feeling about the score on the exam?

Student [00:09:01] I think I got a lot of answers wrong, just because I'm seeing now that my study habits weren't the best.

Kelly Hogan, PhD [00:09:08] I often will say, is your first office hours ever? And they say, yeah, and sometimes they're really nervous. And I say, congratulations, you did it! Go see another professor now.

Desmond Stephens, PhD [00:09:21] And finally, I will be making videos throughout the semester that I will post for you all as we go through and I start to see that you're having some issues or challenges, OK?

Desmond Stephens, PhD [00:09:30] The videos give students an opportunity to rewatch and rewatch things that I have posted for them. And they can stop it. They can take notes, they can try things. And it teaches them that there's a whole array of resources that are available on the Internet for them that can help them in any courses that they might be taking.

Student [00:09:49] He'll take the time out of his schedule to make his own videos of stuff that we learned in class, and he solves them step by step, and he'll post them online in Math Lab, so that's another resource. Like besides the textbook, we can go and watch a video and learn instead of, like, reading and taking notes.

Kelly Hogan, PhD [00:10:10] All right, I want to take a few minutes and remind you about the resources that are available to you on campus. One-on-one, you can also go to the Learning Center. Your student fees pay for this. You get free tutors, right? This is a really big class. And this is your chance to get some personal attention. Bring any questions you have.

Kelly Hogan, PhD [00:10:30] I find it's really helpful for students if I bring the learning specialist in because they need a face. They're often intimidated and they need to really have a face that goes with that resource.

Learning Specialist [00:10:42] The peer tutoring that Dr. Hogan talked about is Tuesday and Wednesday nights from six to nine. And it's a drop-in service. So you can meet with a tutor for a few minutes, migrate to a table, work through a few problems, and meet with the tutor again just to make sure you've locked in your understanding.

Desmond Stephens, PhD [00:10:55] And I know sometimes it's a little scary going to these tutorial labs, so I'll be happy to go with you all as a group. I'll help you get introduced and acclimated so you'll see that it's not a scary place. It's a place where you can get some help.

Desmond Stephens, PhD [00:11:06] I think it's important that you take them so that they can build a comfort level and they understand that the people are there to help them and not to judge them.

Desmond Stephens, PhD [00:11:14] Because I want you to understand that there's nothing wrong with you if you think you need help, right? I keep mentioning this is a challenging subject area.

Gregory Eiselein, PhD [00:11:23] I recommend the Writing Center for all of you. It's a great resource. Wherever you are in your writing development, it will help you.

Gregory Eiselein, PhD [00:11:29] Some people have a wrong idea that tutoring or visiting the Writing Center are for weak students, for students that are way underprepared, they're not ready for college yet, and so they need extra help.

Student [00:11:40] It does help us students realize, you know, maybe we do need to go in. You know, it's not for just students who are failing.

Gregory Eiselein, PhD [00:11:46] You know who uses tutoring a lot? Good students. B students who want to be A students. People who are trying to go from good to great.

Kelly Hogan, PhD [00:11:53] I do think that all students are underprepared in some way because it's a new environment. And so I really try and get them to see that everybody can grow and become more prepared, no

matter where they started. We know that if we don't reach these students early on and give them some confidence and some success, they're more likely to leave school. The risk of losing those students is losing the diversity of all of the educated people in the world. We want to make sure that everybody is educated and reaches their potential and contributes to society.