Dead Ideas in Teaching and Learning Podcast Series

Season 6, Episode 7: The Students Have the Final (and Best!) Word on the Science of Learning

Center for Teaching and Learning, Columbia University

[00:00:00] **Catherine Ross:** Hello and welcome to Dead Ideas in Teaching and Learning, a Higher Education Podcast from the Center for Teaching and Learning at Columbia. I'm Catherine Ross, the center's executive director. As a quick reminder for our listen. In this podcast series, we are exploring dead ideas and teaching and learning.

[00:00:25] **Catherine Ross:** In other words, ideas that are widely believed, though not true, and that drive many systems and behaviors in connection to teaching, exercising what Diane Pike called the "Tyranny of Dead Ideas." Welcome everyone. Today I'm speaking with two undergraduate Columbia University students who have served as teaching and learning consultants as part of our center's Students as Pedagogical Partners Initiative, we are joined today by Emily Glover and Kyle Gordon, who will now briefly introduce themselves.

[00:00:57] **Emily Glover:** Hello everyone. My name is Emily Glover. I am a junior studying neuroscience and behavior on the pre-med track at Columbia College. Um, yeah, and I've been with the staff initiative since fall 2022.

[00:01:09] **Kyle Gordon:** Hello everyone. My name is Kyle Gordon. I have also been with the initiative since fall 2022. I am a senior at the School of General Studies, uh, studying political science. Um, and I am elated to be here today and talk about antiquated dead ideas.

[00:01:26] **Catherine Ross:** Yay. Yay for that. So our theme this spring has, as many of our listeners know, has been around why the science of teaching and learning is often unknown or ignored. And the students who are joining us, Today have been engaging in conversations around dead ideas and learning, particularly in relation to the topic of student engagement, which has been a very hot topic in the last, um, I'd say six months, uh, with lots of people talking about how disengaged students are.

[00:02:01] **Catherine Ross:** But today we're going probe a little more deeply into how our guest speakers think about this and what they have learned from their experiences in higher education. So we'll get right into the questions. The first question, how has your understanding of learning, you know, like how learning works or what constitutes effective learning, how has your understanding developed or expanded as you've engaged with the literature on the science of teaching and learning?

[00:02:34] **Kyle Gordon:** Ever since kind of familiarizing myself with this literature, um, one thing that has kind of had a profound impact on me personally as a learner, um, is kind of grappling with the concept that learning cannot be quantified. Mm-hmm. Um, one grade doesn't depict who I am as a learner, nor what skills and abilities I possess.

[00:02:53] **Kyle Gordon:** But, you know, nevertheless, um, receiving an unsatisfactory grade elicits a, a, a visceral reaction, which I think speaks volume. Um, and during the, you know, it was kind of an era of reflection. Um, and that was kind of the time where I realized that like academic excellence and other accolades played like a formative role, mm-hmm, in my self-conception. Um, you know, and a reaffirmed my intelligence while a B minus rejected it, which is an erroneous mindset. But accordingly, I saw grades more so as prescriptive.

[00:03:23] **Emily Glover:** Mm-hmm.

[00:03:24] **Kyle Gordon:** Telling me whether I was failing as a learner. And, you know, one conception of this conception of learning is kind of predicated on the idea that learning can be quantified. Um, I mean, Jesse Stommel describes creating as a system that emphasizes objective measures of performance. But I believe that there's a fundamental tension between the objective metric and the latent concept that it seeks to measure. You know, learning is inherently subject and complex. Um, and you know, I think that grading focuses so heavily unfair and objective standards that I can't see the forest for the trees and the intricate complexities, which kind of, uh, defines who I am as a learner.

[00:04:06] **Emily Glover:** Hmm.

[00:04:06] **Emily Glover:** That was a really great answer, Kyle. I love that. Um, yeah, kind of building off what Kyle said, um, cause I also thought about it from the assessment practice first, like, um, and specifically like learning versus

assessment and how they affect each other. Um, because like before I kind of had a very tunnel vision idea of learning.

[00:04:29] **Emily Glover:** Like I just go into a classroom. I take in whatever the teacher says and then I go about my day, and then I put that down on a test. Um, but it wasn't until being in the staff initiative where we talked about assessment, um, explicitly did I realize like how much assessment actually impacts the way in which I learn and the way in which I study.

[00:04:50] **Emily Glover:** And this idea of studying for a test versus studying, um, like for the sake of learning a concept. And it was upon reflection that I realized that I was studying for the sake of the test versus studying for the sake of like actually learning the material. And it was upon reflection that I realized, um, when I was giving like untraditional, um, assessments, I realized how much more I was excited to actually like, study.

[00:05:18] **Emily Glover:** Specifically, I had a teacher who instead of like a final, at the end of the year, um, we had a meeting, like an interview where he, um, an exit interview where we just talked about the semester altogether. And then he, um, asked me specific questions about my final paper. And because I had that like face-to-face contact with my professor versus like a very removed action of just writing on a sheet of paper.

[00:05:42] **Emily Glover:** It made me very uncomfortable actually. Um, and I was really scared and at first I did not think I was going like it at all. And I was like, I wish I could just take the three hour exam. Um, but because I was so scared, um, of like letting my teacher down, it pushed me to like push myself further and like really questioned my own ideas because I knew he was going question those ideas.

[00:06:03] **Emily Glover:** Um, and I left that interview like feeling so proud of myself, um, from like how much I realized I actually had learned that entire year and it made me like appreciate like the beauty in uncomfortability when it comes to unknown things, which I think being in the staff initiative has also helped me do, um, cause we do so much reflective work about our own engagement, realizing like wow the times that I'm the most uncomfortable are the times where I feel like I'm actually learning the most.

[00:06:35] **Catherine Ross:** That's really interesting. So it sounds like for both of you, and correct me if I'm wrong, the biggest sort of aha was this distinction between learning and grades that you're getting.

[00:06:50] **Kyle Gordon:** Such like a big dead idea. It's dead.

[00:06:53] **Emily Glover:** Dead, zombie dead.

[00:06:54] **Catherine Ross:** It is. And as Emily said, without even knowing it, it's driving how you approach the work of learning. And you said, um, Kyle, you said something about the complexities. Could you give an example of what you mean by that?

[00:07:11] **Kyle Gordon:** Yeah, absolutely. So, you know, my ability to recite, uh, three months of information in an hour and a half doesn't delineate who I am as a learner. It's my abilities, my aptitudes, my aspirations. Like those are the elements that define who I am as a learner. And, a 94 doesn't quite capture those complexities, and I think it's a little reductive. But at the same time, I understand that we need a method of assessment like unequivocally, undoubtedly. But you know, the fixation kind of focus on like the objective standards.

[00:07:45] **Kyle Gordon:** I think it kind of just takes away any subjectivity and like the main purpose is maybe to rehumanize grading.

[00:07:52] **Emily Glover:** Mm-hmm.

[00:07:52] **Kyle Gordon:** And take into consideration, my background is different from Emily's and vice versa.

[00:07:57] **Emily Glover:** Right.

[00:07:57] **Kyle Gordon:** We have different working knowledges that's not really taken into account sometimes.

[00:08:03] **Catherine Ross:** I heard, uh, professor Uri Triesman many years ago. He taught calculus at UT Austin. He did a keynote address and at the end of the keynote he said, If you want to teach, you have to know who your learners are, and you have to find out what are their strengths, and then you can teach them. And I think that's what you're saying.

[00:08:28] **Kyle Gordon:** Yeah. Some professors have done like, you know, entrance surveys before we even enter the class,

[00:08:33] **Emily Glover:** right mm-hmm.

[00:08:34] **Kyle Gordon:** Asking about our familiarity with certain topics and whatnot. Through office hours, I've kind of seen that like certain professors, many professors actually are truly interested in their students in getting to know who they are. And I feel like it's kind of like a common misconception that we have, like these God-like figures speaking to us, they're pioneers in their respective fields.

[00:08:55] **Kyle Gordon:** But you know, at the end of the day, they're still human. They make errors just as much as we do. Right. Maybe in different contexts, so on whatever.

[00:09:01] **Emily Glover:** And they're still learners. Like a lot of professors are still learning themselves and I think when you talk to them and they're like, oh yeah, sometimes I just had, I had to relearn what I was teaching today because it's been so long.

[00:09:13] **Emily Glover:** Mm-hmm. Since I've like, had to even deal with this because they're so far into their like profession or whatever. The humanizing aspect really is great, I think for teachers, but especially for us as like students and learners. Cause you know, it just, it's nice to feel connected to a professor, and to feel like, you know, they understand what you're going through and they show it.

[00:09:33] **Emily Glover:** They just don't know. They don't just say like, yeah, I get it, I was there. But they actively like, put that into their teaching style, um, to like show you that they understand and that, you know, They're riding for you. Like you're riding for them.

[00:09:46] **Kyle Gordon:** Yeah.

[00:09:47] **Kyle Gordon:** That makes me think about one of the best experiences I've ever had in the classroom here at Columbia. Um, and it was for Spanish, and my professor on the first day of class started off by saying, you know, you're going to make mistakes. Mm-hmm. When I was learning English, I made mistakes. If you don't make mistakes, you're not doing it right. Mm-hmm. I don't want anyone to ever. You know, withhold themselves out of being wrong.

[00:10:10] **Emily Glover:** Yeah.

[00:10:10] **Kyle Gordon:** And making errors. Um, and that was incredible. And in comparison to other like classes that I've taken at the university. The level of

engagement was starkly different. Students weren't, you know, fearful nor were they ostracized. Right. By any sense? Um, in that certain level of like, you know, comradery, like we are all learners and we're going to make mistakes, and that is okay because making a mistake is the surest way to know that you have learned something.

[00:10:38] **Catherine Ross:** So that lands us squarely in the second question. Our students are so prescient. So I think because what I was gonna ask you about was, you know, did you have any examples of how your instructors perhaps have made some moves, or offered strategies that really facilitated your engagement with the class. So I'll just ask Emily to weigh in on that since Kyle gave a great example.

[00:11:11] **Emily Glover:** As far as like teachers tools in the box for getting students to engage, I think the one that was my least favorite, not so much anymore, but you know, still sets me on my toes. Like the classic turn to your neighbor and discuss. Because like all growing up, I used to hate group work. I feel like putting you on the spot, like, okay, I was teaching, but did you hear what I just said? I think it is the most surefire way to decide and for yourself whether you know what just happened and if you know what you're talking about.

[00:11:43] **Emily Glover:** Because it's one thing to passively like listen to when a teacher's talking and like that information, and then it's a whole another thing when they're like, okay, now look at somebody else and say what I just said, or like, do this practice problem. And it can be really scary, but I think that is when I realize how much I know, what I need to know more. But also when I do really, really good learning, because like you were saying, it's that peer like comradery when, okay, I may not know something, but you know it, so then you help me out or you may not know something, so I, but I know it, so we help each other out. And then also, when neither of you know it, it kind of helps the teacher as well. Cause they're like, okay, this is where majority of students are having a problem. Like then you like, ask the group next to you, did you get question four? And they're like, no, question four went straight over my head.

[00:12:30] **Kyle Gordon:** Mm-hmm.

[00:12:31] **Emily Glover:** And so then you're all like, okay, question four is the problem teacher, and then they can go back over that. So I think just kind of forcing yourself to go over the content in class, right when you learn it really like doubles down what you just learned. And I think that is the bain of my existence as a teacher's tool. But they know what they're doing because I'm

always like on a test. Oh, I remember. That's what me and like Susie talked about or whatever.

[00:12:59] **Kyle Gordon:** That precludes that awkward moment where the professor goes, okay. Was there anyone who didn't understand? Single yourself out? I think that's a great tool.

[00:13:10] **Catherine Ross:** Yeah. So rather than, uh, the standard, any questions? Any questions and, um, even, you know, changing any questions to what are the things that, um, still aren't clear? Is a shift. Right? It's not saying that if you have any questions that might be kind of, uh, wrong somehow, right? It's, it's setting it up that I would expect you would have some questions and I wanna open up the space for that. But I think what you said, Emily, to just be able to do that with the person sitting next to you is in many cases, far less threatening than having to say it in front of the whole class. Okay, so I think we're ready for the third question. How do you think you've changed as a learner? You've alluded a little bit to this, but maybe some more concrete examples, how you've changed as a learner since you first started your college journey. And in what ways did the learning about this research, you know, facilitate that change or maybe provide impetus for change?

[00:14:21] **Emily Glover:** So I think I'm really just a lot more intentional about my learning and about how I'm sitting. And I said this earlier, kind of how I used to just go into class, take my notes, go home, like read my notes, maybe do a couple of practice problems, and then go to the assessment, the test, and like put down as much as I know. I think one day we talked about specifically like this idea of, um, what's the word that I'm looking for?

[00:14:47] **Catherine Ross:** Learning styles.

[00:14:48] **Emily Glover:** Yeah, learning styles. This idea that, oh, this is the learning style that I know I am like, before, I'm like, oh, I'm really into visual learning. So I'm like, as many pictures and diagrams as I can get, that's what I'm going to focus on, which is important, but really its using all of your senses and engaging like as much of your brain as you can. So when I'm looking at this picture, like I'm also like watching a video with like audio to like engage both those parts of my brain. Or when I'm listening to something, I'm actively writing out like the diagram and writing it for myself to like invoke that sense as well. Because it's really the combination of those sentences that, um, like helps you. It triggers your brain to like, make multiple pathways to one answer. And so instead of just like hyper fixating on one way of learning, I'm a lot more

intentional on trying to like engage all of my senses and doing multiple different things, even if I feel like one's not working as well, um, doing it anyway.

[00:15:51] **Emily Glover:** Because sometimes when you have a test and it's been a long night of studying and the coffee didn't kick in like it should have, your brain will fail you. But if you have those multiple pathways set up, um, if one pathway doesn't work, you can just go the other pathway.

[00:16:08] **Catherine Ross:** That's great. So you discovered that learning styles is a dead idea, in fact, and the research does not support it.

[00:16:17] **Catherine Ross:** So that's, that's a great leap forward. How about you Kyle?

[00:16:23] **Kyle Gordon:** Emily gave a great example of this and she goes, you know, just pop into piece of chewing gum study. Oh yeah, I did. And then take it while you're, you know, have another piece while you're taking the Quizzer exam. So I sent her a picture, I said, God help.

[00:16:37] **Kyle Gordon:** Let's go. Let's go. A piece of picture of the, a picture of the Gump.

[00:16:40] **Emily Glover:** That was so funny.

[00:16:42] **Kyle Gordon:** Um, but, you know, I had a really similar experience in terms of kind of learning, uh, that, you know, that is a dead idea and that there are specific mechanisms that we can kind of employ and use to kind of make learning more dynamic and kind of create a more robust working knowledge. As someone who studies political theory, you know, there are a lot of, connections, and intersections between my classes. Mm-hmm. Um, CC, Lit Hum, like different interpretive styles, different theories, epistemological thoughts and so on and so forth. One thing I kind of came to is like, you know, mind maps are my greatest studying tool because I can draw connections between outwardly these things that look like binary opposites, but at the end I'm able to draw the two together from something that I learned, um, in CC or something from, uh, origins of liberalism, so on and so forth.

[00:17:37] **Kyle Gordon:** Um, and kind of taking that and putting visuals to it because, you know, a theory of societal function, I can put pictures to it. I can think of people linking hands, you know, the little, uh, diagram, whatever in hospitals where it's like little figures holding hands. Um, so I can think of these things.

[00:17:54] **Kyle Gordon:** Uh, but you know, it's about engaging different sensory perceptions. Mm-hmm. Um, and that has really, uh, catalyzed my learning and establishing my working knowledge.

[00:18:06] **Catherine Ross:** Great. Could you just, um, tell our listeners what CC stands for?

[00:18:11] **Kyle Gordon:** It's Contemporary Civilization. We examine the rudiments of Western political thought.

[00:18:16] **Catherine Ross:** Great. And it's part of the core curriculum.

[00:18:19] **Kyle Gordon:** Yes, Emily's favorite.

[00:18:23] **Emily Glover:** Don't let him be sarcastic, like it's just as a STEM person. Um, I, it, I feel like it was actually one of the classes I learned the most in, but like I said earlier, it was one of the classes that made me the most uncomfortable as a learner because I'm very comfortable with my like chemistry and my biology. But CC, also discussion-based classes, which Columbia loves it is at the root of all of our teaching is discussion-based classes. Yes. Um, yes, really, really pushed me out of my comfort zone at times, which was very scary, but, I think I walked away a better person or more well-rounded learner. And I have much love for the Columbia core.

[00:19:08] **Catherine Ross:** You know, a lot of STEM classes use active learning as well where students talk to each other and work through problems, right?

[00:19:15] **Emily Glover:** Yes. I quickly learn that no matter what discipline you go into at Columbia, you will be in discussion-based learning. And I had to come to terms with it very quickly.

[00:19:26] **Catherine Ross:** Well, it sounds like for the better.

[00:19:28] **Emily Glover:** Yes.

[00:19:29] **Catherine Ross:** All right, so given how you both have changed, if you were going to advise one of your peers on a dead idea that they might have about learning, which idea would you target and what, what advice would you give them? What would you tell them about the research?

[00:19:48] **Kyle Gordon:** Listen, I don't mean to harp on this, but grading a grade does not define who we are as a learner. Sometimes we will make mistakes. There's no effort without error or shortcoming. Mm-hmm. Um, and that, that might sound cliche, but you know, by nature we make mistakes, we're fallible.

[00:20:06] **Emily Glover:** Right.

[00:20:07] **Kyle Gordon:** And I think that's also one of the biggest misconceptions here. Like if you're wrong, you are not intelligent. Mm-hmm. Because we have such, you know, this is a really rigorous institution. And there's, you know, grading actually puts us in ranking and competition against one another. Mm-hmm. And sometimes I feel like that kind of creates an environment that's not conducive to learning, and makes us fearful of being wrong and the implications of such. But you know, in all reality, one of the beauties of being wrong is that it gives us the freedom to keep on learning. Mm-hmm. Um, and to quote one of my favorite authors, Adam Grant on "Think Again," he said " if you don't get good at rethinking, then you end up being wrong more often."

[00:20:46] **Emily Glover:** Mm.

[00:20:47] **Kyle Gordon:** He thinks it's one of the greatest paradoxes of life. The quicker you are to recognize when you're wrong, the less wrong you become.

[00:20:55] **Catherine Ross:** Yeah. And there's a good bit of literature about how to encourage students in risk taking, because being wrong is, you know, it's taking a risk. Right? And, and how grading does disincentivize students' willingness to take risks for obvious reasons, right. A lot of the things like your internship or the scholarship or access to grad school oftentimes depend on those grades to some extent. So, um, there's a lot of fear, so I think it's very powerful that you have overcome that fear and that that's what you would choose to share with your peers.

[00:21:38] **Catherine Ross:** Yeah, em, Emily.

[00:21:41] **Emily Glover:** Yeah, I've been calling it legacy learning, um, because I've heard it, um, initially about different teaching styles, like this idea of legacy teaching where a professor, um, when teaching a class will go well, that's how it was taught to me and that's how my professor learned it. So that's how I'm going to teach it to students which we know perpetuates dead ideas.

But then I thought about it from the learner's perspective and I think learners do it as well. Um, and we've talked about this in the staff initiative a lot. How, when you've been in school, not for as long as we have cause we are undergraduate students, but I've been in school since I was three. When you've been in school, you kind of like crack the code, especially cause we've been being assessed very traditionally on a quantitative scale. And so you kind of like break this code of how to learn so you can be like, so you can do the best on traditional assessments. But a lot of the times I found upon my reflection that that's not conducive to like real deep learning, like I mentioned earlier.

[00:22:47] **Emily Glover:** So this idea of, oh, that's how I've always done it, and that's, I know what's best for my learning. It's really just, me personally I don't want to speak for everybody, but I learned that that was like an excuse for me to not leave my comfortable circle. Like, oh, well I've been doing it this way and I know this is what works, so I'm only going to do it this way. Um, but when I was forced out of that comfortability circle, I lashed out. At first, I was like, I hate this. I don't think I like this professor. They don't teach for me. Um, but by, but by the end of the semester, I realized I was completely wrong and actually learned a lot. And it made me realize, well, maybe I don't always know what's best as a learner. Even though I have been learning for so long, this is a completely different institution. This was a completely different class. So just being open to new ways of learning, even if you feel like you know what's best for yourself, just don't get so stuck up in the usual.

[00:23:44] **Kyle Gordon:** Yeah, that is so true. And I feel like that is just a byproduct of gradings fixation with results over efforts.

[00:23:50] **Emily Glover:** Right.

[00:23:50] **Kyle Gordon:** And that's what discourages learning. You know, it also stifles originality in taking risks. Right, right. So, you know, learning new things and approaching it in a different manner. cause it's like if you fail, yeah, why would I do that?

[00:24:02] **Emily Glover:** Right.

[00:24:04] **Catherine Ross:** You know, it's very interesting that you've, honed in on this point because there's a good bit of research now that shows that even when professors are willing to try out active learning in science classrooms in particular, and there have been very strong advocates for this, for many years. Um, people like Carl Wyman and Eric Mazur at Harvard who have for years been saying we need to have students talking to each other, working problems

together. But there's a lot of research that shows that students push back and don't like it. And I think it speaks to the grade thing, right? Students have gone through systems where they get rewarded because of the grades they get and when, when they're in this new context in college and the professor is trying to do things differently because we know that it promotes deeper learning, as you said, Emily. But it's scary for students because they're so grade oriented and they don't know if they can succeed this way, and so they often push back to the point where some instructors just abandon it and it's confounded by the ways in which we evaluate teaching which can harm a professor if the students really don't like it and keep pushing back. So, you know, it's a complicated issue, but I'm so happy that you are able to highlight that and really put that at the forefront. So thank you.

[00:25:39] **Emily Glover:** Of course. It's very scary from the student's perspective, as I said before, but I think one of the greatest ways to combat that is when a professor understands that it's scary and like goes over time to let a student know that they understand that is scary and being like very, upfront with how assessment is going to happen.

[00:26:03] **Kyle Gordon:** Mm-hmm.

[00:26:03] **Emily Glover:** Which we've also talked about, like, I know this is something new, I know this is not traditional, but this is what I want to do cause I feel like it's going to be good for you, but don't think that I'm going to blindside you at the end of the semester because you've never been assessed like this. So this is how this assessment is going to go. Like, you may not even be assessed on this part, but I'm going to assess you from X, Y, and Z. So I think it's scary, but when a teacher is willing to like, acknowledge that it's scary and really sit down and talk with their, their students about how that assessment is going to go, even though it's still uncomfortable for students, I think it helps them relax a little bit more to put their trust in that teacher that they won't blindside them with some crazy grade at the end because as much as we don't want to put our, not necessarily worth, but think about grades a lot. They are important.

[00:26:55] **Catherine Ross:** And I think trust is the key word there, but also the transparency around what the expectations are and exactly how and when you will be graded. Right. And thinking about ways to make that safer. Like your first exam might only be worth 25% and your second exam might be 40%. Right? And so that if you don't do well on the first exam, you're not, it's not over, it's not game over for you. Right?

[00:27:25] **Kyle Gordon:** Yeah. I think providing reassurance to students is the key to enacting this like pedagogical shift

[00:27:32] **Emily Glover:** right

[00:27:32] **Kyle Gordon:** um, that you, you won't be penalized for deviating and kind of going a different route. And that kind of will encourage people to kind of go outside of their comfort zone and try out different methods and so on and so forth.

[00:27:44] **Catherine Ross:** Right. I want to ask you the final question about what is it that inspires you or motivates you to keep believing that we can change higher education and sustains your motivation to be in programs like the student initiative that you're involved in.

[00:28:03] **Kyle Gordon:** Honestly, this initiative has really sparked that within me. Kind of like the idea that like there is possibility of change in higher education. The conversations that we have had, um, specifically Emily and I have had extremely enlightening conversations. And I think, I mean, I can only speak for myself, but I think that is kind of enacted a kind of seismic shift in my own personal thoughts and how I perceive learning,

[00:28:28] **Emily Glover:** right.

[00:28:28] **Kyle Gordon:** Um, what academia means to me. Mm-hmm. Uh, how to assess it and what it means to approach it in a sense. And just having these simple conversations just demonstrated like, you know, we are students who have definitely internalized dead ideas, but just like through having these like con simple conversations we've become aware of them, like they've come to the forefront of our thought, and our approaches. And I think that is just a key indicator that having these conversations, just like anything else going outside of the realm of academia is the key to kind of affecting change.

[00:29:01] **Emily Glover:** Yeah. I think what inspires me to know, like, you know, change is coming within higher education is really just being in higher education and being in that classroom every day and learning from my professors, because I think before the SAPP initiative, I didn't really notice how much professors were actively fighting these dead ideas. Um, But like after like going to our meetings talking about, oh, a specific dead idea and like, here's some ways to combat it. And then I went to class that Tuesday and then it was the exact thing we talked about in our meeting, and my professor was utilizing that in their teaching. Um, because it was brought to my fore mind. I was like,

wow, like this isn't just something that we talk about, um, like in theory in classes, but teachers are. Putting in the work to make themselves better teachers, but not just make themselves better teachers, but to make us better learners and to push us out of our comfort zones. And that's really inspiring to me because I think it's very easy to have these conversations, but it's not as easy to put them into practice, especially because things like dead ideas have reigned for so long and we are so used to a certain way of learning and being assessed in teaching. Um, so to see like these professors, especially some of my professors are really young come in and like, just want to change the scene and like stop the tyranny of these dead ideas it's very inspiring to me and it makes me want to be a better learner and a better student.

[00:30:33] **Catherine Ross:** Wow. With that inspirational ending, I think we can sign off. Thank you both so much.

[00:30:41] **Kyle Gordon:** Thank you so much. It was a pleasure.

[00:30:43] **Emily Glover:** Thank you. This was so much fun.

[00:30:45] **Catherine Ross:** If you've enjoyed this podcast, please visit our website where you can find any resources mentioned in the episode, ctl.columbia.edu/podcast. Please like us, rate us and review us on Apple Podcasts or wherever you get your podcasts. Dead Ideas is produced by Stephanie Ogden, Laura Nicholas, John Hanford, and Michael Brown.

[00:31:13] **Catherine Ross:** Our theme music is *In the Lab* by immersive music.