Dead Ideas in Teaching and Learning Podcast Series

Season 2, Episode 7: One Year Later: Learning in a Pandemic with Two Columbia Undergraduate Students

Center for Teaching and Learning, Columbia University

Catherine Ross (00:00):

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. Let's get started. I'm speaking remotely today with two undergraduates from Columbia University who have served as undergraduate teaching and learning consultants, as part of our center's Students as Pedagogical Partners initiative. We are joined today by Michelle and Sajan, who will now briefly introduce themselves. Michelle, why don't you kick us off?

Michelle Yao (00:49):

Hi, I'm Michelle, I'm a junior in Columbia College studying biology with a concentration in Hispanic Studies.

Sajan Bar (00:59):

Hi, I'm Sajan, I'm a junior in SEAS studying Chemical Engineering as well as Education.

Catherine Ross (01:08):

All right. SEAS is our School of Engineering and Applied Sciences, for those of you who may be listening, who are not from Columbia. So, welcome Sajan and Michelle. I want to set the stage a little bit for our listeners and just share why we decided that we're going to close out this academic year with a conversation with you two. I think partly it's because we do think that student voices are really critical, particularly at this time of disruption. But also, in May 2020, we interviewed four Columbia undergrads and we released that episode in fall of 2020.

Catherine Ross (02:00):

I believe it was Episode 4 in Season 1, and we thought, well, now we're a full year out. We're getting to the end of the spring 2021 semester and we thought it would be really interesting to check in again with some of our undergraduate student consultants. Disruption, like we have experienced in this last year, can often expose dead ideas. It gives us an opportunity to rethink how we do things, like teaching and learning. So, we thought it would be really fun to end this academic year, again, checking in with the student experience and learning more about how dead ideas surfaced in this extended time of disruption.

Catherine Ross (02:46):

So, with that said, I'm going to move right into the first question, which is, in this time of disruption, was there an opening for you to discover any dead ideas about learning that you may have been holding? Can you describe any aha moments about your learning or a time maybe when you realized, "Oh, this isn't working for me as a learner." And what you decided to do about that?

Sajan Bar (03:17):

I can go first. I think for me, one of the biggest moments that I sort of realized is just going through all my classes, the concept of failure and being okay with failure. I think that a lot of my time at Columbia, especially when it was in-person, is always like, oh my goodness, if you fail, it's the end of the world. That's not okay. But as I've been going through this pandemic, everything switching to remote, it just made me realize that it's okay to fail. Especially in a lot of these classes, if you're not failing it's really hard to learn and grow from that experience.

Sajan Bar (03:58):

So, that's one thing I've noticed, especially with my teachers, is that it's okay if we don't do so well. Because teachers are trying to be more supportive and understanding, and in doing so it allows students to be more creative in their thinking and what they're interested in.

Catherine Ross (04:15):

That's a pretty powerful insight, and one that I think I've heard from other undergraduate students anecdotally talking with them. So, it seems to be one of the good things that may have come out of this pandemic, that instructors perhaps opened up spaces for students to not fail in the sense of you're getting an F in the course, but to really be more honest about assessing your own work and learning from it. Using it as a learning, a step in the learning, not just saying, "Oh, this is bad." Michelle.

Michelle Yao (04:59):

Yeah. I definitely agree with what Sajan's saying about just having that ability to just step back and not be so focused on the grade. Then, just actually take the chance to learn and actually think about what you're trying to understand, which is very powerful. I was also thinking that at least during this pandemic, from my own personal experiences, I actually had more, I think, realization about methods about how to study as opposed to maybe the content that I'm learning. So, I think what I was always doing before going remote was just bringing all my stuff to the library and just sit and camping out in Butler library for five to six hours straight.

Michelle Yao (05:50):

I wouldn't leave my desk at all because I always thought that maybe as long as I just had longer times of focused concentration on just one concept or something, or I'll just hammer it into my brain, it would somehow just stick. But I think what I started realizing was that being remote, since you're sitting all the time, it's just physically is not a very healthy thing to do anymore. So, I think what I started doing was just taking more smaller breaks, like 20, 30-minute breaks in between.

Michelle Yao (06:21):

I felt like that actually, contradictory to what I originally thought, it actually helped me be more alert when I was learning and actually sitting down. It helped me to maximize the amount of time that I was really taking in the information. So, that was a very interesting thing that I found out as well.

Catherine Ross (06:42):

Wonderful, and that, I think there's certainly research in cognitive psychology that would support that.

Sajan Bar (06:50):

I think for me, I definitely agree with that and the whole idea of taking breaks when you're studying, but also in this remote setting, the whole idea of being able to re-watch lectures and certain parts of lectures was really valuable to me. Especially because it wasn't like you would sit through all 75 minutes, and if you miss something it wasn't the end of the world. Because I felt like a lot of the time when I was in person, it was always like I was scrambling to write down notes. But now, I definitely feel like I can take information in little bits and chunks.

Sajan Bar (07:25):

Sometimes I want to watch a lecture on double speed and just watch it through to understand where everything is. Then, later on when I'm studying, I can go back and watch things slower, watch things faster. But I think it definitely allowed me to change the way I studied, like Michelle was saying. Take things in bits and pieces, and do them when I could. I also just personally really did like the whole idea of having more open book tests and being able to take my time and not feel like I'm in such a time crunch.

Sajan Bar (07:57):

Because I think I thrive when I'm able to make a study guide, spend my time learning the material and not just trying to memorize it really fast, which is what I tend to feel like when I'm in person and it's only like an hour and 15 minutes. But when I'm giving this 24-hour timeframe, I feel like I have a lot more accessibility and able to dive into the parts of my study guides. Also, I don't feel like I'm not studying as hard. I just feel like I'm able to focus on the things that really matter to me more. I'm able to actually understand the concepts as opposed to just memorizing, "Oh, I did steps one, two and three, and I got this answer."

Sajan Bar (08:40):

So, when I go take the test, I'm going to do steps one, two, and three. It's more of, "I actually get this material and it makes sense." It makes me think of the whole idea of being preparedness and being in the workforce, because I feel like now I'm able to think of ideas as whole ideas, as opposed to thinking of them as just like really small problems, like, "Oh, I'm going to memorize that solution and then write it down." It feels like, is that really preparing me?

Catherine Ross (09:09):

That's pretty powerful. Do you hope that those two features will remain as we go back to face to face classes? Like more assessments that aren't timed and that you can do a take home test as opposed to a high stakes time test and the prerecorded lectures? Michelle, did you have a similar experience like that?

Michelle Yao (09:37):

Yeah, I definitely agree with what Sajan was saying about just be able to watch recorded lectures again, because I remember, I distinctly remember the first time when I went back and watched a recorded lecture for one of my STEM classes. Literally, I was comparing the lecture recording with what I had down in my notes from the live lecture. I was like, "Oh, I realized I missed this part." Or, "Maybe I didn't take notes that were as detailed as they could have been based on the information that my professor was talking about during those time." So, I think definitely just being able to have a recording really helps.

Michelle Yao (10:18):

It helps me to fortify my understanding of something and also to fill in the gaps. Because while you're writing, while you're trying to listen and write at the same time, it's definitely very difficult to be able to take down everything that a professor is trying to convey. So, definitely having that space after class to process and just reinforce your own understanding and learning, that is a very powerful tool, I think, for a student.

Catherine Ross (10:47):

All right. Well, thanks for that. One of the things that we discussed last spring in the episode that I mentioned was the students saying that they realized, maybe for the first time, how much being part of a community of learners was something that was really important to them. By its absence, it became glaringly obvious that having that community, your peers that you're in there with, was really missing. They realized that they had to make some pretty intentional efforts to create and maintain that sense of community in the online space that we're currently operating in.

Catherine Ross (11:37):

Likewise, I've heard from instructors as well, that they also realized that this had gone missing and started to intentionally create activities and spaces for students to be together, not necessarily in a class kind of setting. So, I wonder if you've encountered any examples of this type of community building in the context of your classes that's being done really well by your instructors and/or by the students in the class, doing things to help create their own community.

Michelle Yao (12:15):

Yeah. So, I definitely think that professors have been more deliberate in terms of the classroom space, trying to help students get to know each other more. Also, just to also build the professor-student relationship too. So, in one of my smaller discussion in courses, normally, a lot of my professors have never done this before actually. But now, during this time, before we first started class, my professor sent out a mini-profile sheet to everyone to basically fill. It's like a little introduction sheet where you write down, "Oh, this is what I'm majoring in. These are what I like and dislike. This is why I am studying or taking this class."

Michelle Yao (12:59):

Stuff like that. Then, basically my professor would then, on the first day of class, would put us into breakout rooms with maybe a couple of other students. We would just literally share what we had written down on our mini info sheet. So, it was a very interesting icebreaker activity. I think that originally it might've been a little bit awkward, because you're just reading off your own. It was like a little profile introduction. But over time, the fact that my professor uses breakout rooms actively even for a discussion class, where we get to see maybe two or three students at a time as opposed to like 10 students, it's like you see familiar faces and over time you develop a relationship. I think that helps with, definitely, community building within the classroom itself.

Sajan Bar (13:49):

Yeah. I think for me, very similar, I really loved breakout rooms and I thought they were really valuable, especially ... even in my STEM classes, where they tend to be lectures. I think some teachers have shifted it to make it more like it's partially lectures and it's partially more of problem solving. Just being in those smaller groups like Michelle was talking about have been really helpful. Even just making a few

friends, in my major, and especially in a major, like for me, it's chemical engineering. But when at Columbia you tend to do more of your major requirements in your junior and senior year.

Sajan Bar (14:30):

I felt like for me, being able to meet groups of people, even if they were small this year, for me, especially was really valuable because I was really hoping to meet those people in person. Obviously, I can't really do that right now. So, that was really valuable. The other thing I really enjoyed was having my professor, our professors bring in other real world professionals. One example of this was, in my intro to economics class with Professor Gulati, he brought in Ron Klain, who's the current White House Chief of Staff. We got to Zoom him and speak to him.

Sajan Bar (15:11):

Just seeing these really, I guess, powerful people all around the world being in our class and speaking to us, it makes you so much more excited to be part of a classroom experience. So, I really enjoyed this concept of bringing in professionals from the real world. I hope that even if we do go back in person, we still have these experiences, because I think that Zoom has connected us much further beyond just the Columbia campus.

Catherine Ross (15:38):

That's really fascinating because I've done a little survey with some faculty, different faculty groups on campus. When I ask them, what are some things that you hope to keep that you've started using during this time period, but you want to keep as we transitioned back to face-to-face? The two things that come up over and over again are bringing in guest speakers on Zoom and breakout rooms. How can we keep the breakout rooms, particularly for large classes, is there some way? How can we replicate that when we go back to face-to-face teaching? Because they've been so powerful. So, interesting. You picked exactly the same things.

Catherine Ross (16:32):

Another really interesting thing about this whole time period is what's happened with grading, right? It was an experiment in the spring, last spring. You started out with regular grading, letter grades, points, however it was done in your classes. Then, all of the sudden it got turned into pass fail, but then this fall it went back to regular grading. Although, I think you still had a little bit more flexibility in taking, deciding to take certain courses pass fail. Given that one of the original Diane Pike dead ideas was "grades motivate learning", I'm curious what you discovered about yourselves in terms of your motivation for learning

Catherine Ross (17:22):

as you went through sort of grades pass fail, grades again, but I could take it pass fail, did you learn anything about your motivation or your engagement levels with your courses?

Michelle Yao (17:39):

Yeah, I was actually thinking, it's very interesting ... I guess having this kind of experience where you're all pass fail, and then back to grading. I actually felt like at least one, just having the option to do pass fail and have it also count. A lot of the pressure, I think, was off in trying to ... especially because I think a lot of, I'm a biology major, so most of my classes are STEM. I think Sajan might also agree that a lot of some

classes are based around maybe three midterms and then one final that counts for 40 something percent of your entire grade. It's like all time, it's like very high stakes kind of exam.

Michelle Yao (18:21):

So, when you're doing that in a graded system, it's very ... I would say, especially if you're stressed out from a lot of other circumstances in your life, it's very hard to bounce back. For example, you do poorly on one midterm, you're going to be like, "Oh, no, this is a bad trend. It's going to ruin the rest of my entire grade in this class." So, that's pretty much all you're focused on. I think when it was pass fail, or having that flexibility, I don't know, I was able to really step back and just think about like, "Okay, so I no longer am being graded maybe on a numerical basis, but I still want to maximize my time in this class."

Michelle Yao (19:07):

I don't want to just sit it through and not learn anything because what I'm here to do is I'm interested in this subject and I still do very much want to do it well. So, in that sense I do have more flexibility to be able to just focus on maybe a topic that I'm more interested in or maybe delve deeper into something. So, for example, if I find something interesting in the textbook that I read, in a pass-fail system, at least what I found when I was doing in the last spring was basically going online and looking up additional research papers. Just trying to explore the subject a bit more.

Michelle Yao (19:43):

But if it was, I guess, on a grading system, it's a lot harder to do that because I'm always just like, "Oh, I got to make sure I'm on time. I have to make sure I finished this homework, onto the next assignment zip, zip, zip." So, there really is no room for the additional exploration. So, I think definitely having the two experiences has made me realize that I need to start taking a step back in my learning and really reevaluating what exactly is it that I'm chasing. Is it the grade or is it the subject itself?

Catherine Ross (20:18):

All right. Interesting question to give yourself.

Sajan Bar (20:24):

Definitely, I'd agree with that. I think for me, I always thought that grades did motivate me and I always thought that, but I didn't actually process that, process what that meant. I think what I've realized over this experience is that grades definitely motivate working. I wouldn't say they motivate learning. I think that they're two very different things. Like graded for my classes, like Michelle was saying, it's like you do something, you're onto the next thing. You study really hard to get the good grade on the exam, but you spend so much time doing that.

Sajan Bar (21:02):

You forget why you're there and what you're learning. I think especially in majors where in the beginning, especially at Columbia, you have a core curriculum, where it's like you get to learn about everything. Then, once you transitioned more into your major specific requirements, when it's more conceptual, focused on what you're learning, I wish that we could learn more how to apply that material. Because something I always find myself sitting there is I'm wondering, "Okay, this is really cool. I learned how to calculate this, but what does that mean in the real world?" Especially in something like chemical engineering, where it's very abstract unless you see a project.

Sajan Bar (21:48):

I wish that some of my classes would, instead of focusing on grading, because I understand that in the world we live in now grades are important, because they're how we assess people. That would require a really big shift, which I hope will come, but I know it can't come in one year. But I would hope that courses more, they created a big project over the entire course of the year. Then, using the material that we learned, we can solve that big problem. Then, at the end it's like, "Oh, you have solved how a full reactor works, for example, from start to finish and the different components throughout."

Sajan Bar (22:26):

I think that would be really helpful for me because sometimes I feel like what I'm currently learning is just nitpicking small things. Because of that, I'm just working to memorize it or working to get something done as opposed to actually learning what this material is and what it means.

Catherine Ross (22:46):

Yes, project based learning is actually a central part of some engineering schools. So, I think it makes sense what you're saying, and it's also proven to work really well for deeper learning and for allowing students to be able to transfer those more abstract things they're learning to a real world setting and apply them. So, that's a great idea that came out of that. So, if you could design a way to evaluate student learning, your learning, in a course, how would you do it?

Sajan Bar (23:27):

I guess I can start. Like I was saying, having just ... My idea is a really big escape room, where the concept is you have the whole entire semester and your goal is to learn the different components to eventually finish the big project. But I think in that same respect, being able to assess students on small parts of a bigger project throughout and then giving them feedback, I think, is something that's really valuable. In one of my education classes, we're learning about the difference between formative and summative assessment.

Sajan Bar (24:07):

Summative assessment tends to be like, what grades are and are you getting good grades versus formative assessment is actually like speaking to people, giving them feedback and seeing growth over time. So, I think that getting feedback, especially in STEM classes, because it's normally like you either get it or you don't, you get a numbered grade and you move on. I think having conversations with your teachers throughout the year of, "You're understanding this, you're not understanding this, here's some material to help you with this, come to my office hours and we can go over that."

Sajan Bar (24:42):

I think setting up meetings with each student throughout the semester and then constantly engaging with them in smaller groups or one-on-one, I think that would be something that I would hope would be in more courses or in a course that I could design.

Catherine Ross (25:00):

Very, very solid ideas, I think. Do you want to add to that Michelle?

Michelle Yao (25:06):

Yeah, sure. Actually, I 100% agree with what Sajan's saying about just being able to maybe do more group work or more evaluative work in the sense of not so much numerical stuff, but more applicable maybe to real world applications of what you're learning. I would definitely say, I think something that I've noticed or that I think that I think is interesting is that a lot of my professors, especially when it comes to grading exams, is that, for example, either for my statistics class or for my organic chemistry class, oftentimes after everyone takes an exam, there's maybe a hundred, close to a hundred something students in the class.

Michelle Yao (25:52):

Then, the professors, every single time, after you have to start grading, most of them are sending emails that are like, "Oh, sorry, I have to push back our homework or we have to push back this other assignment because I am too overloaded on grading or overwhelmed." I think at least my impression from that, is that professors are not actually enjoying grading exams either as an evaluative form for students. Then that just makes me think, "Well, then what's a better way to do it?" Maybe instead of having that stress of having to grade a hundred something different exams, that time could actually be spent into something like what Sajan was saying, about having more informal meetings with students, about maybe research projects, for example.

Michelle Yao (26:41):

Or, more long-term projects that are built on smaller step checkpoints for courses as opposed to just getting a number and then slapping it on a piece of paper and then just moving on and then never returning to the topic again. So, I think maybe reallocating the time that we're currently using for course assessment to maybe having conversations with students about what they're interested in and different more exploratory projects, that could potentially be an interesting way to go.

Catherine Ross (27:16):

There's also a lot of techniques around collaborative testing, where you might do a test individually and then you get together with a group of other peers in your class and you take the same test. Then, you see how you do when you have four people talking through the test and helping each other and you learn what you got wrong on your individual tests. Because you're talking to your peers, you're talking through it with your peers. So, if it's a large class, that means the instructor doesn't have to meet with every student. You're getting feedback just by virtue of taking the test again with a group of peers.

Catherine Ross (28:02):

There's a lot of different ways you can work it in some classes. I've tried it in some of my classes that I've taught in the past, where I had the individual score would count for a certain percentage of the grade. Then, the group's score, assuming it was better, would count for a certain percentage of the grade, so that your overall grade could be improved by the group's score, but it wouldn't allow somebody who was completely slacking and just didn't study and was like, "Oh, I'll just wait and get an A with my peers." So, that couldn't happen, but it's another way to get that kind of feedback that you want.

Sajan Bar (28:45):

Yeah, I actually experienced that for the first time in one of my classes this semester, where we took the test individually and then our teacher allowed us, we had 24 hours to work with our peers or friends and you would get a third of the points back. So, it didn't really affect the grade that much. It could've, it could've helped you for sure. But it allowed you to talk over what you weren't sure about, what you

were confused about, with your peers and see if they have a different way of approaching the question. I feel like there are definitely times where I'll take an exam and if I just take it on my own, and then afterwards they'll give me the answer key.

Sajan Bar (29:28):

So, I'll just look at it and be like, "Oh, I got this, this, this wrong." But I think the opportunity of trying to correct my work before I get the answer key telling me, like, "This is how you do it." It allowed me to think through the questions. I think that's something I wasn't always doing before and it helped internalize the material and it helped me actually learn it as opposed to just looking and saying, "Yup, I got it moving on."

Catherine Ross (29:55):

Right. Or, yup, no, I didn't get that one. I love that. I'm so happy that you had that experience. Thank you for sharing that with us. So, let's end with a big question. If you could reinvent higher education, what would you wish for? What dead ideas would you hope to leave behind for good? Sajan, you want to start this one?

Sajan Bar (30:24):

Sure. I think for me, the biggest thing I would say is I hope that if we reinvented the curriculum, we'd focus more on what people do in the real world and sharing those experiences. One, just with professionals in the real world, having guest lecturers, but also just preparing students for the workforce. Because I feel like so much of the time gets spent on the nitty gritty details of, what do you need to do to get the grade? You forget why you're learning all of this. So, learning what people actually do with these degrees, where they can go, different opportunities like that, I hope there's more of that.

Sajan Bar (31:04):

Then, with regard to grading, let students fail but make them realize it's not the end of the world. Don't penalize them for taking the opportunity, I guess, taking the opportunity to fail, but allowing themselves to not get everything right and learn from that. Especially, like I was saying, that experience I had with the getting one third points back and getting to work with people. That's something I loved and I hope there's more of that. Then, online office hours and Zoom office hours is probably my favorite thing ever because it's so much more accessible.

Sajan Bar (31:43):

I really love being able to connect with my teachers and meet them, even if I don't have the time to run all the way to their class or if I'm not on campus for some reason.

Catherine Ross (31:55):

Those are all really great ideas. I want to maybe elaborate a little bit on the point about the failing. So, when you're saying, let students fail, I think another way we could say that might be, can we let students be free from judgment, free from evaluation, be in a space where they can be creative and have fun, like a sandbox kind of space? Just try things out and see what happens and learn from that without fearing a penalty of a grade. Is that right?

Sajan Bar (32:31):

Exactly.

Catherine Ross (32:31):

Okay.

Sajan Bar (32:31):

Yeah.

Catherine Ross (32:32):

Okay. Great, Michelle.

Michelle Yao (32:35):

Yeah, I would really say, Sajan pretty much just said it all, but also I would say maintaining lecture recordings, if that can be a continued practice as well. I think that would help a lot of students, just even as a study tool in the future, like in-person, because oftentimes for a lot of students it's hard to both write and listen at the same time. So, oftentimes, it's very helpful to go back and figure out, "Oh, this is something I might've missed a little bit. So, I'm going to go back and relearn this." Or, "This is something that I didn't catch earlier that I'm going to go back and understand as well." So, I think in that sense having those is very helpful.

Michelle Yao (33:20):

Then, the other point about, that you mentioned, about having professors just really focusing less in on the number but just allowing students to fail and not having the pressure or not really emphasizing that if you fail, this is it, you're doomed. I think what I noticed with a lot of my current professors already is that whenever they're, during office hours, whenever we're talking about certain concepts you ask them, "What is the approach for understanding this question?" They're just like, "Oh, my only approach is that I go and try something new or I go and explore, or if I'm not sure about this option, I go in, maybe write the mechanism for this chemical reaction in this way or something, and see if it works or not."

Michelle Yao (34:12):

So, I think having more of that emphasis, because since a lot of professors are already doing that or showing students how to do that, bringing that more, bringing that kind of exploration more into the actual grading process as opposed to just the learning process, I think would be very helpful for students to realize like, "Oh, this is the reason why I'm learning this and this is how it can be applied in the real world as well."

Catherine Ross (34:42):

So, the dead idea we could let go would be that failure means the end of learning as opposed to failure is part of learning, right? That exploration, risk taking, trying stuff out, and failing is actually beneficial to learning and should not mean the end of learning, is that accurate? Did I get that?

Michelle Yao (35:10):

Yeah. That's the basically the main idea here.

Catherine Ross (35:12):

So, that's a really good dead idea, I think, to just put away, and like, let's just not let it come back when we go back to face to face. So, thank you both. This was really wonderful and I'm really excited to share this out with people. I hope you have a great rest of the day.

Michelle Yao (35:36):

Thank you so much.

Sajan Bar (35:37):

Thank you. Have a nice day.

Catherine Ross (35:39):

You too. This episode concludes our spring 2021 season of Dead Ideas in Teaching and Learning. To everyone who has helped make the show possible, our brilliant guests, our dedicated listeners, and our industrious producers, thank you. We hope you'll join us next fall. In the meantime, if there are dead ideas you would like to hear about or talk about on our show, please send us an email at ctl-podcast@columbia.edu. 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 podcast.

Catherine Ross (36:33):

Dead Ideas in Teaching and Learning is a product of Columbia University Center for Teaching and Learning and is produced by Stephanie Ogden, Laura Nicholas, Abie Sidell, and Jon Hanford. Production support from Kate Tighe-Pigott. Our theme music is In the Lab by Immersive Music.