



Getting the Most Out of Assessment

Beyond the Podium Podcast

Alexandra

Welcome to the Beyond a Podium podcast series at the University of Florida. My name is Alexandra Bitton-Bailey, and we're here today with Dr. Corinne Huggins-Manley, an assistant professor in the School of Human Development and Organizational Studies in the College of Education.

Dr. Huggins-Manley teaches challenging courses in research and evaluation methodology, courses that make most of us pause and ask ourselves questions like what exactly does this mean? Actually, that is her favorite part of teaching. She relishes being asked questions and exploring possibilities with her students.

Dr. Corinne Huggins-Manley

I really like traditional class format, because I like conversations with the students. I like the students to ask a question I've never been asked, so that's a heavy task, especially the more I teach, but it happens, and it teaches me in return. I love it when I end up saying, I never really thought of it that way.

Alexandra

In this episode, Dr. Huggins-Manley helps us to explore assessment and measurement. What are we actually measuring when we assess our students?

Dr. Corinne Huggins-Manley

We tend to look at things like test scores or when we even look at research, and it has some sort of title, such as the relationship between aggressiveness and behavioral something, you name it, we tend to just kind of assume that somebody can put numbers on those things, and those numbers are meaningful, just as if I measure the height of this building that we're in.

But it's a lot harder of a process. There's many more gray areas. Collecting evidence that your numbers have some sort of valid interpretation that you can draw from them is a long, difficult

process compared to measuring something that's more of a physical construct. So we have entire measurement theories based around how do I know if I did a good job?

Right, so I give you a test. I add up your scores on the items. It's a math test, let's say. How can I call that math ability? Right, or we give you some sort of a test that's supposed to figure out your aptitude for college, right, so the SAT or the GRE. How do we know if the numbers have any kind of meaning given that we can't actually put a ruler on your brain and say this is your aptitude? There's very few ways to directly, there's no ways to directly confirm that we've done that well in the present, at least. Although we can follow people over time and see if we predict those things. But it's a much more difficult process than measuring the height of this building even though that's not as easy as it sounds, I presume.

There's a lot of measurement theories. They are each a formalization of a process to understand if there is validity to what you say about the numbers you've collected on some tester scale and how you use those numbers that you've collected, can have some questions about validity, as well. So there's a lot of theories of how do I get at that, how do I collect evidence for validity there?

Alexandra

Creating assessments and writing tests requires a lot of thought. A useful question to ask before creating any assessment is what is the purpose of this assessment?

Dr. Corinne Huggins-Manley

You're going to have to make a lot of decisions. Which items do I want on this test? How long do I want this test to be? How long do I give them to do it? Do they get a day to do it? And it's a lot easier to make those decisions if you know why you're giving the assessment, and you've made a decision about that.

So if I've made a decision that the purpose of this assessment is to encourage them to learn, then I can make those decisions around that core idea and it can become whatever assessment it has to be to achieve that, but if I don't know really why I'm assessing, except that I'm a teacher of a course, and I have to do it, and I try to think about how long should this test be, I'll usually just end up at something that was practically feasible, but it might not actually serve a purpose beyond that.

So I think anybody can take the process of every time I make a decision about assessment, first reflecting: Why am I doing this? How am I going to use this? What's the purpose? And then moving it forward from there, it should kind of take a life of its own to help serve that purpose for the person.

Alexandra

Classroom assessment is challenging, but it's also an incredibly valuable part of the learning process. Dr. Huggins-Manley provides some really valuable suggestions and strategies, because she understands that one single assessment doesn't paint a full picture of a student. She uses a number of strategies, including low stakes assessments and revisions to develop a better understanding of her students and focus on their overall learning.

Dr. Corinne Huggins-Manley

Classroom assessment is the hardest by far, so typically, my research is talking more about large scale measurement. But of course, as a teacher, we all teach in time, in class, and assess in time in that semester. That is difficult, because I don't necessarily have the sample sizes that I would need to apply a lot of the measurement theories that we have. I also don't have the time to apply them right there in that semester. I can't stop at the end of every assignment and try to gather a study's worth, a year's worth of validity evidence.

So at some point, I have to make sure that the inferences that I draw are cautious, that the inferences that I draw from how someone did on assessment don't overstep into saying I know everything about them now. It's just pieces of information that they've given me, and I try to keep it at a low stakes and give the benefit of the doubt to the student. In all of my classes, now I offer a revision of the assignments, because it allows me a chance to grade more strictly without knowing that it has some huge stakes on them in case there was some sort of fairness problem. They get a chance to revise it, and some people I've heard say, oh I don't like revision because it inflates grades.

And I say, but wait a minute, to inflate a grade, you have to assume that there was a grade. And then it went higher. What if their grade really is just higher if they're given the chance to do something twice or more times? Maybe that is their true level of achievement, and therefore you're actually approaching the true level instead of inflating what was too low when you only gave people a one time shot and ding points off and whatnot.

But nonetheless, it's my attempt to acknowledge that most likely a lot of the assessments that we give in class as teachers, especially like weekly quizzes, they don't have the kind of reliability that you would need to draw high stakes decisions about somebody. But grades are high stakes for students. So finding a way to give them a lot of opportunities to learn the material and reflect that back to you I think is really important in the class.

Alexandra

So how do we create assessments or tests that provide students with the opportunity to learn more and then demonstrate what they've learned? What then is a good test?

Dr. Corinne Huggins-Manley

There is no one way to assess. There's clearly some best practices that are out there. And then there's just some bad practices. There's no doubt about that. But a lot of times people might look at an assessment and say, is this a good assessment? And I always give the same answer back. What are you using it for? Because validity is about how you use it, not the test itself or test or quiz or whatever it might be.

So I remember, as I was trying to develop assessments when I first came here, out of doctoral school, I stepped right into teaching graduate courses, and I remember thinking, I don't really know. I'm just kind of designing assessments the way that I saw them when I was in my doctoral program. So I thought is this a good way to do it? And then I have to think what's my goal?

And so in our field, often people talk about at least three broad goals of measurement. A lot of times we'll say a prod, which is like a stimulus for learning, right, a nicer word for that, just simple skill assessment. So we just want to see if you have the skills to be a surgeon, so a test to certify surgeons or something. And then also as a contest, there's a limited amount of money here, and who do we give it to? Assessment might help us.

And I quickly, when I think of that framework of measurement, I realized the stimulus for learning is my main goal. So I cannot grade them on everything that I want them to learn, because even if I set that goal to do that, there's not enough time in the day to sit with every product that a student might be able to put out during a semester and give it the time and thought that I would give it if it was my own product or something.

So I decided as long as my assessment prompts them to do all the work that I would want them to do, and I can grade a sample of it, then that becomes feasible for me, and it's a stimulus for them. It's all about how is it best for them to learn.

Alexandra

Dr. Huggins-Manley has developed a method that allows her to get a true snapshot of her students' learning, because after all, no single exam can really give a full understanding of how much students have learned. In addition, her questions require that students have a deep understanding of the material instead of simply memorizing content for an exam and then promptly forgetting it. She focuses on long term critical thinking gains.

To do this, Corinne's unique method provides students with a large bank of items that they're able to access all semester. Students can use this bank to check their mastery of different topics along the way. They have all semester to work and invest in these challenging questions. And when the closed note exam finally rolls around, they've had a chance to prepare for all possible topics and questions. But the exam only consists of a sample of these.

Dr. Corinne Huggins-Manley

So I see a sample of what they were able to do. Of course, they could get lucky. You know, there's one they didn't like, and they didn't spend time on it, and hopefully I don't sample it, or there's a bunch that they didn't spend time on, and they're really making a gamble there. But either way, it's my best prod to say you know you have to do all this work, but I'm only going to grade you on a sample of it.

I don't see it as a major downfall, because even if I graded everything they did that semester, that semester is still just a sample of your learning process. You never fully see somebody's learning process. That's not possible. So it's always a sample. It's just a question of at what level am I going to sample for this classroom, sample their knowledge. But I try to make sure that the items they do select for the final, which again, are just a couple from what they studied in full, intended, I try to make sure that they cover, that they're not all three from the same topic or something like that. So they have a little bit of coverage, but with three topics, there's no way to fully cover it.

But I do make sure that every one of the items also has some sort of critical thinking component, which I think is important too. It's always important that I don't want them to just regurgitate material to me. So none of the items look like fact-based things that they have to push back to me. It's forming an opinion on one of these things or connecting multiple theories or drawing some sort of criticism about something, one of the areas.

So it requires them to not just regurgitate material to me, as well. I don't want to send them off on a mission of memorize everything as we go through the semester, and I'll sample your memory later.

Alexandra

This is so valuable, because real learning, deep understanding happens over time. It requires revision. It starts with a strong foundation that is continuously reinforced and developed. Learning is a process, not a one time event.

Dr. Corinne Huggins-Manley

There's a million other ways to develop an assessment that stimulates learning, but in that particular example, the student is required to consistently review the material, and that, to me, is really critical and something, especially in statistics, maybe it's critical in every field, but I don't know, but in applied statistics, I always tell our students, as they go through our courses, that once you've learned up to some level, when you go back and see where you were, see our first level that you were at, the first class you took or the first lecture of that course, it's all going to make about 50 times more sense than it did the first time around.

You know, that's just the nature of learning statistical analysis. You're becoming a better analyst as you go. You're understanding these concepts

better. Going back, you see them in a much more familiar light because you've been building on this foundation, and now you're just looking back at the foundation. So if I can get them to go back and study what we've done, I'm a happy camper. But I think that's the main benefit to them.

If you just go through it in a linear fashion and never return, chances are you're never going to be the great at statistics or data analysis. But if you treat it more as everything's all interconnected, and we just have to start here. But ultimately, it's really more of a circular process here, then they're going to get much more out of it in the end.

Alexandra

Ultimately, all of this just informs us on the kind of teaching that Dr. Huggins-Manley does in her classroom and what it is that she envisions for her students.

Dr. Corinne Huggins-Manley

I will say that I can get bothered sometimes by even the notion that I'm supposed to give somebody something. To me, it's more of, because I'm at the graduate level, so I won't speak for undergrad because I don't know. Like at what age is it that the teacher is not really giving you something. You're coming together in a learning environment, and you can take away more than I might offer you through, as a student, like doing a lot of reading, really sitting and thinking about stuff, connecting what's going on to your own research or your own life in ways that I'm not going to hand you.

So what I want them to take away is a lot of knowledge, but I don't see it as something that I'm handing to them in any way. It's just growing mentally every time you take a graduate level course, and you're asked to think deeply about it. I hope that what they come out with is their own opinion, and that opinion could be I don't really buy any of this statistical stuff, or it could be, this is amazing, and it's going to change the world.

But I hope that they come out of the classroom with their own informed opinion about the topics that we're teaching, because 300 years from now, what we're teaching will be seen as old discarded theories probably. You know, I mean that's true in most fields. Who knows what's going to stand the course of time? A lot of what I do is going to change due to computing power. And so the methods are going to change based on that.

So I just hope that people come out with some sort of deeper thoughts about the area and maybe some critical opinions on any of them.

Alexandra

At the end of the day, actually at the end of each semester, what we really hope for is to have helped our students learn to think more deeply about the subjects we introduce them to. And assessments are one of the tools we can use along the way.

Thank you for listening to this episode of the Beyond the Podium podcast series. We're so happy you joined us, and we hope to see you next time for more tips, strategies, and ideas on teaching at the University of Florida.