

Christopher Richmann: Welcome to Professors Talk Pedagogy, a podcast from the Academy for Teaching and Learning at Baylor University. I'm your host, Christopher Richmann. Professors Talk Pedagogy presents discussions with great professors about pedagogy, curriculum and learning in order to propel the virtuous cycle of teaching. As we frankly and critically investigate our teaching, we open new lines of inquiry. We engage in conversation with colleagues and we attune to students experiences, all of which not only improves our teaching, but enriches and motivates ongoing investigation, and so the cycle continues.

Today our guest is Nadine Welch, associate chair of residential academic programs, Clinical associate professor and undergraduate program director in the Department of Communication Sciences and Disorders at Baylor University. Professor Welch researches augmentative communication and language and literacy disorders and teaches a range of courses in speech language pathology, audiology and technology in communication and sciences and disorders. In 2022 and 2023 academic years, she was also a double-award winner in her teaching. She simultaneously served as an Active Learning Lab Fellow and a Baylor Teaching Fellow. We are delighted to have Professor Welch on the show to discuss these fellowship experiences, supporting first-generation students, and how the principals of Universal Design undergird nearly all she does.

CR: Okay, Nadine Welch, thank you so much for joining the show today.

Nadine Welch: Thanks for having me.

CR: Well, one of the reasons that I was really excited to have you on the podcast was to talk about what we call, in the teaching and learning world, Universal Design for Learning. But if you do any reading in UDL, or Universal Design for Learning, you find out pretty quickly that it didn't emerge as a construct in the teaching and learning sphere. It harkens back to some earlier developments in American legal issues and our access and disability. So, I think you have some perspective on that and can maybe fill it in for us, like where does universal design come from. And as a communication sciences and disorders professor, maybe you can talk about how it intersects with your own field too.

NW: Okay. Yeah, I can't tell you. It just delights my heart for you to say we in the teaching field know UDL to be Universal Design for Learning because I think that's awesome because it used to be, as you said, those of us who worked with individuals with disabilities knew UDL. So, when was the first time you remember hearing about UDL or reading about it?

CR: It was probably 2017. So, I feel like I came to the game late, but, you know, you...I heard it a couple of times in faculty development scenarios and then I thought I definitely have to do some research here.

NW: Yeah, yeah. So, I think you probably came to the second game, honestly, pretty early in 2017.

CR: Okay.

NW: So, the first game started about 30 years ago, and when I say game, it really isn't a game, but, you know, when UDL first got its name at its birth, and it was about giving people with disabilities access, access to instructional material, access to the world. And some of the hallmark examples of UDL are ... First, let me tell you the principles of UDL. UDL is based on three principles. It's multiple means of representation, multiple means of engagement, and multiple means of expression. Let's... I'll go a little bit later, we'll talk about what that means, but as far as teaching, and in our world, it meant access, as I said, and some of the hallmarks were the curb cuts. So, I remember when all of a sudden, all of the sidewalks had to have curb cuts. And there was construction going on on every city street corner and to give that access. And that was primarily for those who were in wheelchairs and needed access to whatever store, whatever sidewalk. But it also benefited the mom who was pushing the stroller, the person riding a bicycle to work, the skateboarder on campus. Of those, yeah ...

CR: We do the electronic scooters now.

NW: And they benefited too. And then another example is that of closed captioning. So, you know, I asked actually yesterday in my class, who, because I was telling them we'd be using UDL principles this semester. And so, I said who uses closed captioning? And more than half in a class of 60 individuals raised their hand. So, I just started to say, okay, who's willing to say why they use it? I actually had two individuals in my class. One said that, said they were hard of hearing. And the other one who volunteered said I have ADHD and I need that as an extra input. And of course, you had, well, if you can't understand the accents, there were lots of examples there.

CR: That tracks pretty well. I was just reading an article, I think, in The New York Times about... about audio on TVs because our TVs have gotten so thin, and everyone wants their TVs really... really kind of thin. It has pushed the speakers ... in the olden days, I remember when the speakers used to face us. And now because of the design on TVs, they mostly just face outward or sometimes just down. And so, our audio experience is not as good even if you don't have a hearing challenge. And so, the statistic was about 50% of Americans use closed captioning when they're streaming TV.

NW: Yeah, that's amazing. I had not heard that statistic, but I believe it. Just like I said, the show of hands in my class, we said about 50%. So, that matches up. So, why do I know about UDL? Why did I know about it 30 years ago? Because as you said, I do work in the field of communication sciences and disorders. I'm a speech language pathologist and right out of graduate school, I started to be involved in augmentative and alternative communication. So, I was working with individuals who needed some alternate or augmented form of verbal speech. So, with that also came, well, if you can't speak because maybe you have cerebral palsy and you have a motor speech disorder depending on the severity. You may also not be able to walk. You may also not be able to hold a pen. You may also not be able to hold a textbook. So, the idea of how can we give access to instructional material for these individuals and level the playing field is how UDL was born. I think back to just some of the original examples of UDL now. And I think my husband, let me think, oh, I've got to think of the name of the Twitter feed that he follows, 70 sports something, and it always has things from the 70. So, do you remember... I'm

showing Dr. Richmann a picture here. Do you remember this? Did you ever have an overhead projector ...

CR: For our viewers, for our listeners at home and in their cars, we're looking at an overhead projector, yes.

NW: Yes. So, my husband showed me one of those and said actually what the caption with that was is, "one piece of technology that has put more people to sleep than Ambien, Tylenol PM, or anything else." So, it was boring to listen to a lecture that way. But when you think about why professors used this, it was to give input, right? So, to augment their verbal speech. So, let's put it in writing also. And then also, what else happened with that knob? They magnified it. So, if you're doing a math formula, they could magnify it and everyone in the class could see it. It was an early example of Universal Design for Learning in the classroom. So, let's go back to the three principles right there. So that multiple means of representation when you're thinking about this in higher ed, when I'm thinking about it in my communication sciences and disorders classes. I'm not teaching my CSD classes with UDL because I have 60 individuals with disabilities. I don't know who has disabilities and who doesn't. I'm teaching it because I know there are a lot of needs out there. When I give that multiple means of representation, I can say, do you want the e-text or do you want the paperback text? It does not matter to me. Do you want to listen to the text? That's fine, if you want to listen to the text. When I'm teaching during class, we'll do some textbook reading. We'll talk about the content there. I'll give a lecture on it. And then I try to get some video representing whatever the matter is. Because some people are going to gain more information just from watching the video rather than reading the textbook. The second principle is that multiple means of engagement. How do we interact with it? That could be from your own studying. Are you someone who makes an outline? Do you take notes while you read? Are you a highlighter? How do you go through in the classroom? Are you using whiteboards? Are you doing discussion? So, when we move to canvas discussion boards, especially during the pandemic, and we're like, oh, we need some alternative form to interact with our class in the discussion groups and message boards, and those are all ways that we engage in the material. And then that multiple means of expression is how is your student demonstrating their knowledge. And that's where I find the hardest sell to other people in the field of, yes, that's great and that's creative, but how do I know that they know what I'm charged with teaching. And so, our traditional means are what? Scantrons, canvas exams...some people still using blue books. You know, tell me what you know, a very, for the most part, objective measure.

CR: Or in projects like assignments like in my field in humanities, write a research paper of some kind.

NW: Right. Right. That research paper is that traditional means, but when you use that word project, I was going to say, oh, you're about to do a UDL. When you think about some of the projects of creating things, that is that multiple means of expression. That's allowing a student to say, I understand this concept, and this is why in the building...

CR: Well, I'm hoping that there are signs that these are the case. I'm hoping that the conversation around AI in our teaching and learning helps us to refine some of these things and maybe be more open to the principles of UDL in our classes. Because we're starting to realize that those

traditional assessments...they are not actually showing us necessarily what students know. They are our proxy for what students know. And oftentimes, we unintentionally award points, takeaway points. However, we think about like the grading of it, not based on the knowledge that they're showing us, but based on how well they can follow directions on a particular kind of assignment, and..or maybe even the deadlines of a particular kind of assignment. There're all sorts of reasons why those things might be important, but a lot of times they're not actually the learning objective. And so, sussing out like, well, there are different ways for a student to show you they know the thing is the research paper the only acceptable way to do that, right?

NW: So, when you're communicating with fellow professors, what.. how is that being received?

CR: There's more openness to things like maybe oral exams and thinking about more authentic assignments... blogs and things like that. I still think there's so much room for movement on this, but it really does have to be, I think, not a conversation of like, what's the new cool thing that you could ask your students to do and more like let's really talk about whether or not there's more than one way for your students to show you that they know something.

NW: Right. And I think that is... I asked that question because UDL has been a hard sell, and I hear both sides. So, when I first heard about UDL 30 years ago and I was 30 years younger and still, you know, not hadn't lived enough life to really understand differences. Even, you know, at that point I didn't have to wear glasses. So, you know, even understanding a small thing like that, now I'm living that. But I was raised in a very loving family with very high expectations, with a very rigid kind of, this is the way you do it. So, my dad was a Marine, he was an FBI agent. I mean, he had some protocols and that's what we followed. So, if I was to say to him, I want to listen to this textbook instead of reading it, it would have been a no go with that. And that's kind of how I kind of my initial reaction to UDL, even though I worked with people with disabilities, it's kind of like: oh, I don't know. I mean, I think that we're going to have to find a way for them to take this traditional test. And that's what I hear from my colleagues. It's like, you know what? We are at R1 university, and we have our reputation to uphold. Our students leave with academic excellence. It's part of our mission statement. They know when an employer hires a Baylor grad, they know they're going to get someone great. We don't want to water that down. I'm going to say, to your point, I could have articulated it better. We don't have to water it down. I mean, we can keep that same rigor now. There're some challenges to it for sure. And we can talk through some of those that I've found as we've developed some of that. But I love the way you said, are we really assessing their knowledge? Is it just, you know, they're getting you to end on time or they followed these directions because points are lost for those things. Can we open up the way they communicate?

CR: So much of what we associate with academic standards or the R word "rigor", which I hate, I hate that word, are actually just conventions. They're just longstanding traditions. At a recent workshop, we got the question of dealing with accommodations, and that's the word we haven't used yet, but factors into this discussion of higher ed too. And I made a quick pivot when I responded to this question, to principles of UDL, the question was like, what kinds of accommodations and how do I handle those as a brand-new instructor and instructor at Baylor? And I said, well, okay, so let me give you the most common accommodation that I've seen as an instructor here through our office of Access and Accommodations. It is extra time on exams and

perhaps also a separate location to take exams, so you can design a course in such a way where you don't actually have to deal with that as an accommodation. You just think about whether or not a timed exam in a required physical location is really a necessary part of achieving the measurement or assessment of your learning objectives. And then everything starts opening up for you, right? You might still have a student who requests that, but they don't actually ever have to cash it in. Right? Because that's not how you're doing things in your course. Is that necessarily more rigorous than some other kind of assessment? Well, it depends. It really just depends.

NW: Yeah. Great thoughts with that. It happens organically is what you're saying. It's by your design that everyone can access that. And some of those barriers and walls that we put up are no longer there. I have those numbers actually, we, as far as Baylor students, so at our university last spring. So, this does not count. These numbers will not count those who graduated or the incoming freshman, which I'll say is going to increase the number just based on my freshman class. The trends, yes. But we have 149 students who need an alternative format of textbook. So that could mean everything from Braille to an audio book. We have 12 students who require closed captioning and transcript of videos. We have five students who have the accommodation for real-time captioning in class. And we have 91 who request a reader for test. So, there is a real need here on our campus and everywhere. And if we change some of that where they could use a screen reader to have the questions read to them on canvas, it could easily be done that immediately levels that playing field. They don't have to go to an alternative place for someone to read a test to them. So, you know, the other thing that you said when you're talking about just pedagogically speaking is Bloom's... I go back to Bloom's taxonomy, and I just think this UDL makes Bloom come alive. Because what's the top tip of the triangle?

CR: Depending on which one you're looking at either create or evaluation.

NW: So, the one I'm looking at has "create". Right. And it's hard to get to. But when we allow our students to create something based on the knowledge that they've gained, you know, we are really pushing those higher-level thinking skills and getting there.

CR: So, can you tell us what it... was there a moment where you sort of began to buy into this as a teacher, how did that process happen for you?

NW: Okay, so it was a process. One, even one of the first students that I worked with who was using augmentative communication and was extremely intelligent, was reading, was writing, but couldn't do those things. I started to see that across modalities he needed access. While I was the one focused on his verbal speech, I needed to be focused on his communication. Could he receive communication through reading? I had to help with that. Could he express communication through writing? So, we had to look at all sorts of assistive technologies. But I think one pivotal moment for me was actually not related to education at all. So now it's Enneagram. But way back I did a True Colors assessment, and it was actually, it was a member of the Junior League of Love...

CR: My generation was Myers Briggs.

NW: Okay. Yes. It's kind of that same thing. But even more so with Enneagram, with True Colors you look at... So, I was on a committee and I was very highly organized at that time. I was a gold. As far as True Colors, I would make a checklist and I would write things on there that I had completed just so I could check them off. But I had a decorations committee chairman for a big holiday event we were doing, that was not like that. Is this constant communication of did get ordered, that get ordered? Yeah. Her color was orange. During that training, I really realized I need her and she needs me. She has talents that are not organization, but she has talents that I need to respect and understand. That just infiltrated into my practice of knowing. Wow, I mean that's the same with my learners, is that they may not be able to hold that pen and pencil in a traditional format, but they can still express themselves maybe through typing, maybe through an oral report, whatever ways. That was really... a non-working experience that really made me think it's the same as the individuals I work with. They all have different skills. And then just trying it, it's one thing to do that, but then trying it in higher ed of thinking, okay, we really have to think about this and how to do that. Luckily, I had a push last year to do that.

CR: You did. Well. What were the things that you tried? Do you remember, like rolling some things out?

NW: Yes. So, the first thing I thought was just multiple means of representation, giving some freedom, were, before we'd say here are the chapter pages that would go with this. So, I still would say in the book, here are some pages that correspond with the lecture material. But then I also found some different articles and just said, if you don't want to read the traditional textbook, here're some articles. Just more of a less technical writing, but still on the same subject. And when I could, I would find a video. Now, I was not doing all three things for every topic, but I was trying to rotate through how can I give them a different representation in this month of teaching. Then the multiple means of engagement. Something very nice happened for me last year that kind of helped launch this. I applied to teach in the active learning lab and was accepted for that. Any of you out there, any of you Baylor professors out there, here is a plug for the active learning lab. Those applications open each semester, and you can apply for a spot and talk about your class and why this would fit well with your teaching style and what you're trying to get across. But if you haven't been in the active learning lab in Moody 104, right behind the check-in desk. It's a large classroom with pods. And each pod has its own monitor. The tables are arranged, all the students that are around a rectangular pod tables. And you kind of teach around. The professors in the middle there, but it has lots of different perks. The monitor at each pod was helpful. They had rolling whiteboards and they had a Catchbox microphone, so I could actually throw the microphone from one pod to the other. But that really helped me understand that multiple means of engagement, because it lent itself to conversation with the students. It allowed students who wanted the whiteboards to use the whiteboards. It allowed students who wanted to put their slide up on the projector to use that. It just lent itself in design to conversation. I don't have that classroom this semester, of course. But it did teach me enough to say, okay, if I want my students to engage, how about a shared slide deck? And so all of my students who are working in small groups at their long, traditional tables are working on slides, and then they all go together and I'm presenting them at the front. Even the microphone. The ability to throw that Catchbox made me realize how important it was that every student here, and how much engagement, like some of the students would say, if I didn't throw the mic, could you, could you

give the mic? I can't hear her. And it made me realize that even in our traditional classrooms, most of those have sound and being able to get that mic and pass that around.

CR: I mean, I was just leading a grad seminar yesterday and 12 students, 13 with me in the room. And one of them was just a real quiet talker, and I'm not sure that he could be heard, you know, on the other end of our seminar table. I thought I need a Catchbox microphone for my graduate seminar.

NW: Yeah, you do, and you'll see student engagement really increase when everyone can hear what someone else is saying, not just the professor with that. So anyway, that's kind of how we started with the engagement. Then the expression was the challenge. So first, I started just with article assignments. This particular class was technology, and science and communication sciences and disorders. Because technology changes daily, we do lots of article readings and lots of research readings rather than a traditional textbook. So, I ... We had several assignments during this semester when the students had to demonstrate their understanding of what they read that article assignment. So, I gave them a choice of, here's our traditional template which is, you know, cite the article, give the highlights of the article, tell how you would apply it clinically, something like that. So, you can use this traditional format. You can create an infographic. All of our students love Canva, so you can create an infographic, you can write a book, you can do a video and give me a lecture on what you learned and what the content was. And it was so wildly well received, the students absolutely loved it. And the products I got were incredible. Now, there were some fails, and the first, an adjustment that I've made this semester is the first assignment is going to be an ungraded assignment because it was hard as the professor grading, looking at some of these and thinking that student really didn't get this. I don't know that they read the article from this infographic. They have not gone deep enough with this. When it was one of three article assignments and they did not do well, that hurts the grade and yeah, I felt like some of that had been my fault with that.

CR: Yeah, so how do you deal with that on like the student facing side? Did you include additional language about how it would be graded? Did you change rubrics or how did you...?

NW: I beefed up my rubric, so I knew enough to start with that rubric if this is what I need to demonstrate. And then I also did a better job of coaching. And that's what I'd say if you're listening to this and you're thinking I would like to do this, I would like to give my students multiple means of expression, I would say the amount of time you spend in your rubric is really important. Just really pinpointing exactly what you want out of there. I need at least three facts or just you can give it a numeric number of what you need and then that clinical application for me. So just applying that knowledge to your field was really where I saw and it was worth more points than anything else on there. That's really where I saw whether they understood or not and then giving those examples and coaching. So, I said to my students this summer then, so that was the spring course, this summer when I did it. If you're not sure, please send it to me and let me take a look. And I was so glad with one of the first students who sent it because she really did not get the message, even though I'd given some examples. So, it took that, oh, I feel so bad giving this grade, but this is what grade this particular project earned. It took that pressure off of there. So, it takes a very subjective... sounding a subjective assignment, and that rubric makes it very objective.

CR: Yeah. And there're other ways that you can kind of do the grade manipulation on that two to take the pressure off that first one. Either ungraded like you do or if you're worried about like will students put forward their best effort. Maybe you say, well, this first assignment is a trial for everyone. It's kind of a pilot for everyone. So, whatever grade you get on this, if it's lower than the next two, it'll just be replaced by your better one, you know, or something like that. We're just take some pressure off.

NW: Yeah. Give some grace that there's learning through it. And that's what we're doing. We're teaching. Right. So, we can't expect them to just know that we're teaching those UDL principles too. With that, so, I told you it went over well, actually just because I feel like I can encourage other people to try UDL, but this is where it really mattered to me. So, these were some of the statements. This was mid semester, spring, midterm. I gave a survey and I just said, I want to know how you're feeling about UDL. So, one of them was the use of UDL within this classroom has absolutely had a positive impact on my retention of the course concepts. Also, the multiple means of expression and engagement help keep class exciting and interesting. You know, out of the 23 students, I had 22 respond to the survey. There was no extra credit point. There wasn't anything that was going on with that. So, I knew that they had buy in, just the fact that they were answering the survey. At the end of the semester, there were a few of the statements. I love how students are able to choose how they want to display what they have learned in whatever form is best for them. Another one said, we truly engaged with the material in new and innovative ways. UDL was really incorporated in our learning. The most valuable aspect of this course was the interacting we did during class. When we did different activities as a group, that was beneficial to us grasping the topics, but it was also fun.

CR: Fantastic.

NW: Really well received by the students, and I felt like I taught that class one other semester. And just the level of understanding and the use of those technologies was demonstrated every day.

CR: That's great. Any other thoughts about what challenges are... were there for you or that you might foresee for other instructors who are venturing into UDL and their teaching?

NW: Yes. So, a couple just real life. The grading? You can't run it through. The scantron machine? Canvas doesn't grade it for you. So, the grading time really does increase with that, and I found it difficult to hand any of that off. I wanted to see what this creation was and, you know, maybe training some GAs at a later time might be my next step in doing some of that training. But the other thing is... is I believe that our students also still need some traditional means of testing, so balancing that out. And I did do that with their exam. So, they had these projects of article assignments, but the only UDL principle I really incorporated with the exams were twofold, I guess. One, I did a combination of multiple choice and short answer, which I have always done. Just some people can express themselves better, some people just want to memorize that. So, that was one. But then the second one was how they would take the exam, do you want to take it... I put it on canvas, and then also had a paper copy. So, in the Spring, thirteen took it online, and ten took it on paper. This summer was a class full of graduate

students, a different course. Eight took it online, and 15 took it on paper. And I would have thought it was opposite. You know that more... So anyway, that was one of the principles, but it was still with that idea of, so our particular field, you have to take a national exam to be certified. It's a multiple-choice exam. There's some content that just should be tested that way because they're going to be tested again.

CR: That was going to be my next question is: there're many professional fields that have those licensure exams, so, you are... it's a professional responsibility, right, in their courses to prepare them for that too.

NW: Anyway. You know, just some of the things starting out of just knowing if you have a class of 60, which I do this fall, there's going to be less assignments than in my class of 30 where I'm allowing those projects based, and there probably will be more traditional exams with some of that, but some of the vocabulary quizzes we're changing to demonstrate your knowledge of this vocabulary in these formats. And they'll include an infographic or a conversation with a friend, explaining some of these vocabulary.

CR: So, you had a very busy year last year because not only were you an Active Learning Lab Fellow using that active learning classroom in the library, but you were also a Baylor Teaching Fellow. So, the theme for the Baylor Fellows last year was first-generation student success, or some variation of that, if I'm not getting the exact nomenclature right, but did you see any overlaps? Was there... did you have to work hard to kind of make both your UDL commitments and targeting success for first-gen students happen or was that more organic for you?

NW: It just... it was... we were made for times like this. You know, I was just like, oh my goodness, I can't believe how these worlds are marrying. First of all, thank you for the program. To get to learn alongside of nine other Baylor professors from across campus was awesome. But also thank you for the challenge. So, my understanding is the Baylor Fellows Program used to not necessarily have a theme. But this was a challenge, and the provost chose the theme. And it was teaching the first-generation learners. So, you know, what the Baylor Fellows did initially was... will tell us about the first-gen learner because that first-gen learner isn't necessarily who you think the first-gen learner is. And then kind of what is the first-gen learner saying to us. And what we found out about the first-gen learner was, like many of us, they have impostor syndrome. So, you know, that's like one of the number one threads that you'll hear. A lot of our first-generation learners are working. And that is actually not just first-gen learners. I looked up a statistic on Baylor's campus. I wish I had looked that up right before because it was in the spring when I looked it up. I think over 70% of our students are working. So, you made not full time but are working. And so, balancing was difficult. And then the first-gen learners talked about the hidden curriculum, and of course, you've probably read about that. And that there are, you know, people say study hours or S. I, you know, we may know what that is because our older sibling, you know, when or because our parents said, make sure you got to supplemental instruction. But they don't have that benefit. And so, you know, just thinking about that impostor syndrome, I really focused on... do they feel like they can't write a research article review, well, let's give them another way to do a research article review, still demonstrating their knowledge. So, taking out some of those traditional means, like you said, timed test, some of the things that have just been traditionally part of how we teach, how we test, and being able to take those out, I

think really helped my first-gen learners. I had six first-gen learners in the spring, and they were huge advocates for you to yell.

CR: Yeah, yeah, I'm curious... because one of the discussions that's under the rubric of first-gen is actually just defining it. Did you all like figure out a good way to define this? Because there's different definitions at work at different institutions in terms of like, you know, if you are the first person in your family versus if you're of the generation of the first in your family to go to school. Whether your parents went to university in the United States is sometimes brought into the definitions too. So, did you have interesting sort of discussions or debates about that?

NW: I think we just had education on that. That it could be viewed different ways. But we looked at that first-generation learner as their generation above had not gone...to college. So, we didn't count. I use siblings as an example, but we did not count that as, oh, well that counts you out. If the generation above your parents had not gone to college, then you are a first-gen learner...we kind of used that.

CR: Yeah. I've thought about this too. Just from my own life experience because both of my parents went to ...did their undergrad when I was in elementary school. And so, in many ways I felt like when I read the descriptions of what goes through the first-gen experience, I felt very first-gen because my parents didn't know anything about like campus housing or, you know, the traditional like application process because they didn't do any of that, like, they were nontraditional students. So, at some institutions, I would have been considered first-gen and at some not. So that's an interesting kind of influx thing.

NW: Yeah, it's a real thing not knowing that. Our oldest daughter is a medical doctor and when she was applying for medical school, she said to my husband and I: I was at a great disadvantage in this whole process, the fact that neither you nor Dad had ever gone to medical school. So, you know, we laughed but said, sorry, you know, we're doing the best we can. But it was true because we didn't know all of the things she should be doing. And, you know, she... she got into medical school, she's done great.

CR: But I'm sure so many of her peers came from families where it was like a legacy.

NW: Yes, yeah. They knew they needed to be doing undergraduate research and all the shot and she knew some of that. But anyway, it was interesting, and it resonated with me because I thought that's just a tiny example of what our first-gen learners are going through.

CR: Yeah. And so maybe we ought to think about it as a spectrum of like, you know, what you're comfortable with, what you're familiar with, what you know about the college experience prior to coming, rather than a binary like you are or aren't, you know. And then that can bring in UDL principles again too, like if we talk about, as you were saying, student hours instead of office hours. Because some students who just don't have familiarity with higher ed speak might not know that office hours means professor wants students to come, instead of thinking, oh no, that's when the professor wants to work in their office and get stuff done. I don't know. But if you just say student hours like everybody understands that. Like well maybe not everybody that's, it's much more easily understood that that's what the purpose of this is. And it might not just be first-

gen that that benefits. Well, tell me something ...I asked you this in advance, so I didn't put you on the spot too much...so, tell me something about your teaching practice that you've been wanting to try, that you haven't or maybe something that you've tried and you haven't quite landed on the right way to do it yet.

NW: Yeah. I was glad you told me you were going to ask me that question because it made me, you really think about what is it. And sometimes we don't pause. And I think what I came up with was... I'll go back to my daughter in medical school. She said the medical school teaching model, and I've heard this many times since then, basically is watch one, do one, teach one. Some of this is because clinically focused, I can do some of that and we do some of that in clinic where... ok, I'm going to demonstrate this for you and then you're going to do it. I don't get to that teaching part very often, so I'd like to incorporate that even in my undergraduate classes of doing some advance notice of let's learn this and then let's turn around and you teach it to the person next to you, or you teach it to the group next to you. Because I do think that's important. That application, we all know, really for all of us, helps that knowledge stick.

CR: Yeah, I think it might be in the book *Small Teaching* by James Lang. I think he's got a whole chapter devoted to peer teaching. Just the studies are pretty convincing like, you know, and we all know this, we learn at a deeper level when we actually have to teach it to somebody. Right? And I don't know about you, but I'm always telling my students like that should be part of your study routine is teaching somebody. Figure out somebody, you know, maybe they're in the class, but even better if they're not in the class. Then you really have to interrogate, like whether you know the function of the words that are coming out of your mouth. Right?

NW: So, how about you?

CR: So, one of the things I've been thinking about doing, but I haven't had maybe a large enough class to do it in. Is what's known as a value affirmations exercise. I suppose I could do it in a smaller class too. But all the literature has looked at how this has a positive effect in large classes and an outsized effect on women, especially in STEM courses and underrepresented minority students. What's intriguing about it is it, it's just about the simplest thing you can imagine. There're different ways to do it. But at some point, early on, maybe the first day class, you give the students a sheet that lists many different things that people value. So, family, free time, worship community, you know, all the things you can just run down list. You probably make up your own list of 20 or 30, but I'm sure there's versions of them out there if you were to Google Value Affirmations exercise, and then you ask them to write a few sentences about the things that they care about essentially, and that simple exercise has been shown to increase student performance in these gateway STEM courses. They haven't ...the research doesn't seem yet that it has arrived at like a good theory for what's going on. But the suggestion seems to be that when you allow students to bring their full selves and remind them that we're here to do this chemistry or this biology, but it's going into a whole package of who you are and that matters I don't want you to forget of who you are. Because we're not talking about it every day. Does something about, I don't know, self confidence, self efficacy. It seems crazy simple, but... but I've wanted to try. So, in the spring I think I'll teach a bigger class, and so I'm thinking that I'm going to give it a try there and see what happens.

NW: It's that ...to me what I think about... it's that saliency component. It's, you know, there's a lot of neuro research out there talking about saliency and that's part of UDL to when you give a student the ability to do something that's important to them, communicate, choose their own article, for instance, here's six articles, you choose the one. But you know, when you think about that, when you've made it important to them. When you've said these are your values and we're going to use it.

CR: Yeah, yeah. I think that there's an undercurrent maybe, you know, for students who are traditionally not represented or successful in a discipline that maybe that translates for the student thinking like I have to leave behind those parts of my identity that sort of translate to not succeeding in this field. But you're flipping the script on that by doing this exercise, you're saying no, like all of you belongs here. Like all the things you care about belongs here too. So, yeah, very interesting.

NW: I'll be anxious to hear how that, how that turns out.

CR: I'll try to do as much of a control study as I possibly can on it. Anything else you'd like to add to the conversation? Anything we didn't get to that you were thinking about sharing with us?

NW: No. Just, you know, I guess one more 'rah-rah' for the UDL of just encouraging professors, you're thinking about it to, you know, start maybe even just with one step, an alternate way that you're giving information or one project that you allow the student to express in, in a different way and just see where it takes you there. You know, no one likes to be told what to do. I know when I'm giving freedom on a project, I perform better. It gets to be, you know, my project. And so, just letting that student be heard, letting that student use their God given skills to demonstrate their knowledge is just a good thing. We are Baylor. You know, that's we are here to educate that whole student and to respect the gifts that God has given them.

CR: Great way to end. Nadine Welch, thank you for joining the show. And thank you for all the work that you do with our undergrads. And also now speaking about this more broadly for faculty too.

NW: Thanks so much.

CR: Our thanks again to Professor Nadine Welch for joining the show today. In our show notes, you'll find a link to CAST, the major Clearinghouse for Universal Design Principles and Research, and James Lang's Small Teaching, which has a chapter devoted to self-explaining which dovetails with the peer instruction Nadine and I were discussing in the show earlier. Well, that's our show. Join us next time for Professors Talk Pedagogy.