

Christopher Richmann: Welcome to Professors Talk Pedagogy, a podcast from the Academy for Teaching and Learning at Baylor University. I'm your host, Christopher Richmond. 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 Dr. Rishi Sriram, Associate Professor of Higher Education and Student Affairs, Graduate Program Director for the Department of Educational Leadership in the School of Education and Residential College Faculty Steward of Brooks Residential College at Baylor University. Dr. Shriram researches student affairs practice collaboration between academic and student affairs and college student retention, achievement and learning. He is the author of the book *Student Affairs by the Numbers*, and his work has been published in respected journals such as the *Journal of College Student Development*, the *Review of Higher Education Journal*, *Student Affairs: Research and Practice*, and the *Journal of College Student Retention*. He is currently at work on a book about the development of talent. We are delighted to have Dr. Shriram on the show to discuss where talent comes from, how students and instructors think about talent, and how higher ed faculty and student affairs can cooperate to improve student outcomes.

[A quick note before we dive into the conversation. Our apologies for the audio crackling throughout this episode. We had some software equipment issues. We cleaned it up as best as we could, but we really thought that this conversation was so rich that our listeners would be to power through the minor annoyance.]

Rishi Sriram, thank you for joining the show today.

Rishi Sririam: Hey, it's a pleasure to be here.

CR: I am so delighted to have you as a guest on this show because you are working on a topic, I know it's not the only thing that you research, but it's really where a lot of your work and your head is right now. And that is the issue of talent and talent development. Maybe to set the stage for us here, could you give us an idea of how you got interested in this beyond just basic curiosity to the point where you're publishing on it and you're looking at the research and doing some of your own research as well on it?

RS: Yes, I would love to. I remember distinctly in the first week of my PhD program, a professor and mentor of mine handed me what was new at the time. This was 2006, Carol Dweck's book *Mindset*, and Dr. Carol Dweck is a Stanford psychologist and faculty member, well known researcher, and since then her work has really taken off. At the time, it was just entering into the mainstream. With her book, she talks about these two mindsets. A growth mindset, this belief that your talent, intelligence abilities can substantially increase and grow. Or the fixed mindset you have, what you have, and that's that you're fixed in your ability and in your talent. This struck me because I had no idea that people could even have a growth mindset. I was such a fixed mindset. I read her book cover to cover, which isn't like me, in a short amount of time. Immediately, I said, this is what I'm doing my dissertation on, and I did my dissertation on it. But one of the things that fascinated me in that process is that Carol Dweck is a psychologist, clearly and rightly, she's studying the psychology of talent development. But I wanted to know, is it true Dr. Dweck is saying, hey, what you believe about intelligence, Your talent matters. But she doesn't really delve into the question of, can your intelligence actually, can your talent really increase and to what extent?

The next thing I knew after my dissertation as a new faculty member, I was trying to learn everything I could about what intelligence is and how the brain works. With a PhD in education, I was a little embarrassed how little I knew about the science of learning. Yeah, brain development. This got me on a road to learn as much as I could about intelligence. The more I learned about intelligence there, I became convinced that learning is in and of itself is a skill that's developed. I looked at a lot of the studies that we refer to that talk about intelligence being somewhat innate nature, nurture thing. And the more I read, the more I became increasingly convinced that nurture was winning the battle. And even the studies that were proclaiming nature, I was just very underwhelmed by when you actually get into the weeds of how they're done and why they make their conclusions. While the studies that we're making the case for nurture, I found to be much more compelling.

Next thing I knew I was like, I'm not just studying mindset and I'm not just studying intelligence, I'm really studying talent development. And, and so it just led me on this unexpected journey to make this provocative claim that I make in sincerity, not just to be dramatic or to exaggerate, to make a point. I've come to the conclusion that there is no such thing as innate talent. That talent is cultivated, developed, and learned.

CR: Yeah, that is a bold claim, and I want to circle back to that. But first, I want to just ask like, what difference has this realization made for you in both your teaching work and just like everyday interactions? Because this is such a fundamental aspect of just human living that because I've read too, and come to a similar epiphany about this. In my experience, it's so hard to adjust your behavior personally and in the way that you talk to other people because the fixed mindset is so ingrained. You have kids, I have a four year old. And it's like it's so hard to praise in the right way. Because you want to praise, but you don't want to praise in a way that reinforces a notion of innate intelligence. I try to not tell my daughter, she's smart. I try to tell my daughter she's done this well or she worked hard at this and all that growth mindset stuff. What's your personal experience then?

RS: It has been quite a journey. I would say that on a personal basis, I started to reevaluate revisionist history thing. Yeah, my childhood and the things that I would have said I'm naturally good at, and the things that I would have said I was naturally bad at. I really started to wonder within this new framework, does my experience explain why I was good at particular things? Why I was bad at particular things? I started to really think, yes, I feel like going back into my own past, reliving some of my greatest successes and failures. I really started to see how I created self-fulfilling prophecies by my own beliefs about what was innate and what was developed. My spouse, she's smarter than I am and she's an educator through and through. I started to share these ideas with her. She's a little bit more of a skeptical mind than I am. So it was really great to bounce these things off of her. She started to really come on board as well. We have four children and the natural thing for a professor to do when he or she doesn't want to go through IRB is to experiment on your own children, Right?

CR: It's a pilot study.

RS: Yes, that's right. It was fascinating to see through some pretty crazy experiences. Like my son was in love with baseball and was batting right-handed. And we switched him to batting left-handed when he was nine years old. And people said it couldn't be done, it shouldn't be done. And he became really successful batting left-handed. Our daughter, she was a fine reader but wasn't as good of a reader as her older brother was. And I was a little concerned, and teachers told us some kids are good readers and some kids aren't, and worked with her to improve her reading scores. And I feel like we released the Beast in her because she's taken this talent development model so seriously and is just excelling in

anything that she chooses to excel in again, because she understands how this all works. When it goes to my other two, Stella. Stella's eighth grader and Levi is our bonus baby. He's just three years old. It's been interesting to see how with my oldest, it was a new idea that talent could be entirely developed with Stella and Levi, they've grown, grown up with this. This is the paradigm that they've always known. And people tell me all the time, Stella is so athletically gifted, I don't even argue with them because it's like, well actually, based upon this decade of research.

CR: Yeah.

RS: But she would never say that, Right. She knows what it has taken and what it requires. It has absolutely been transformative, as a teacher, as a parent, and just personally with my own goals, dreams, and desires to rethink how I want to live my life. What I want to be good at, for what purpose do I want to be good at? Anything is at all about me and my success, or is there a larger purpose here? And I actually think that it creates some complexity and sophistication that believing in innate talent doesn't have. Because when you start to understand where talent comes from and why you have to make some hard choices about where you're going to invest your time and your resources. You can't just say, well I'm good at this or I'm not good at that. You actually have to say within my abilities of resources and time, where do I want to place my investment?

CR: Yeah, yeah. That fixed mindset is so ingrained that I think a lot of ways trying to develop the growth mindset is countercultural in a lot of ways. I don't know what your experience has been like with teachers or coaches and that kind of thing, you're trying to instill this particular thing, but they might be hearing all that kind of traditional stuff that it reinforces the fixed mindset or overhearing it.

RS: Oh, there's no doubt I completely agree. One of the most shocking things I learned on my research journey is Alfred Binet, who invented the IQ test. Invented it because he so firmly believed that intelligence was developed. Right after developing the IQ test, after he took children who had been kicked out of French Public Schools as unteachable because they had fallen more than two grade levels behind their peers, Binet takes them into his own makeshift school, and in one or two years has them performing at or above the normal kids. And French congresspeople start to visit Binet. He's so passionate about the development of intelligence that he wants a way to measure it so that he can actually prove that intelligence is developed. He dies tragically, shortly after developing this test. And it's an American who comes over to France, takes this test, translates it to English, and then says to his fellow Americans, I have a test that will tell you who's smart and who's not. The only reason we believe that IQ is fixed is because of Lewis Terman bringing that over with a fixed mindset, not because of the inventor of the IQ test and what he thought of intelligence...

CR: Completely misunderstanding the original intent of the tool.

RS: Yeah, I think it is part of the American culture. We want the superstar, and we don't want to hear that the superstar worked really, really hard. That can be part of the story, right? We want to know that there's something that makes this person a demigod, that makes this person truly amazing, that is inspiring, that takes responsibility off of me to do anything differently. There's just something appealing about.

CR: Yeah, that gets us to that bold claim that you make on your website. There is no such thing as innate talent. How do people react to this when you laid out that way? What feedback do you get from folks?

RS: I've been sharing this message for 15 years now in various forms, to different audiences. And I should start by saying that most experts on talent and on intelligence would say that it is somewhere in the vicinity of 50, 50, 50% nature, what you're born with, genetics and 50% nurture your experiences. Let me start by just laying that out there. That's where I think if I were to simplify where most experts are on this issue, that's where they lie, which is radically different from where I land on this issue. One of the things that I try to do when I share this is to really explain where I think talent comes from and why. Then to give at least a glimpse into how the brain works. Why from a logical perspective, the idea that our brains are born to do things makes no sense and really has no basis in science. You talk to any geneticist, and they'll say we are on the cusp of finding those things. But shockingly, we haven't found those things. What we find is an extraordinary organ, the brain, that can learn whatever its environment requires for it to learn. That's the beauty, that's the awe-inspiring thing. But the idea that some brains are born to throw baseballs even from an evolutionary perspective, right? That it makes no sense. I was just really fascinated to look into that exactly. And there are going to be things that are required of our brains 100 years from now that haven't been invented today. I would say that of course, my audience is correctly skeptical of this guy standing up there saying we've been lied to all this time.

But I do think that they appreciate the amount of time that I've put into studying this, that, that I break it down into. Rather than spending my efforts trying to convince people that talent is not innate, I do make that claim. I spend the vast majority of my time trying to help my audiences understand where talent comes from. That even if they walk away saying, I still think it's innate, if my audience still thinks that way, I've still equipped them with the tools on whatever percentage they want to give to being developed. They know they have a better framework for understanding how to do that. But my worry and the reason that I continue to make the claim is that if talent isn't innate, like I say it is, or like I say it isn't, then even if we give 5% to innate talent, 10% yeah, how is that going to hold us back? That's my concern, that I think that there are consequences to even thinking that some of it comes from how we're born. If that in fact is not true.

I think culturally too so much of our experience, especially when we're young, is the competition aspect of life. And it turns a lot of things into, well, if I don't have like immediate success in this thing, then it's not worth my time. Or if I don't immediately excel in it. And then the explanation is why I don't have the convenient explanation is I don't have the innate talent. But I think there's stories of a lot of people, especially later in life, like happening upon the growth mindset. Because you get to a point in your life where you want to do things for the enjoyment of the things rather than trying to excel at them. You're 50 years old and you pick up the guitar or second or third language or something like that, and you know that you're never going to play the big stadium rock show. But it's like there's developing talent in the language of competency versus like excellence. I don't know what exactly the categories we need, but we need better ways to think about this.

RS: Yes, we certainly do.

CR: Yeah, you've boiled it down to the five Ms, which sounds like you're working on a book.

RS: I'm working on a book.

CR: We've hit one of them, which is mindset. If you want to just briefly lay out, rather than, as you were saying, focusing on "there is no innate talent." The positive side is, well, how do we actually develop talent? And you've got this catchy five Ms for it.

RS: Yeah. To lay them out very briefly, the five Ms are mindset, some stuff in your brain called Myelin that's spelled my M-Y-E-L-I-N, Mastery, Motivation and Mentorship. I believe that talent entirely comes, is entirely developed from those five Ms. Mindset, Myelin, Mastery, Motivation and Mentorship. We've already talked about mindset and the importance of our belief about our ability to change, our beliefs about our ability to develop talent. If we don't actually believe that we can change in meaningful ways, it's not going to happen. Myelin is something that I came across in my study of the brain and how it works - through grade school, we all learned that we have brains. And we learned that brain cells are neurons. And maybe we learned that when we learn it's because our neurons connect. They don't actually touch in their connections. They have these little gaps in their connections, we call those synapses. And I'm guessing that for most people, that's about as much as they know about brain development. Certainly for me that was the case. I was fascinated to learn that only half of our brain is made up of neurons. The other half are made up of these cells called Glial cells. Their job is to latch onto our neurons. And when we think, when we feel, when we do, we're sending signals through our brain. And the neurons, and particularly the axons of the neurons, they're brain wires, right, that send the signals. Okay, well, Glial cells latch onto the neuron and they build this fatty white substance called Myelin. And what it does, Myelin allows for those brain signals to travel faster, stronger, and better. The reason I think this is important is because I think that Myelin is talent, biologically speaking. We as human beings are not born with Myelin. Or at least we're born with very little of it. It is developed through experience. In other words, our brains build Myelin in the places where we send those signals the most. If we do particular activities over and over, our brains are going to myelinate those brain signals. And the ones that we seldom use will remain unmyelinated. We've actually measured this, and a well myelinated brain signal travels more than 100 times faster than an unmyelinated brain signal. When we see someone who's sending brain signals 100 times faster and stronger and better than we are than I am, I call that person talented. This was really eye opening for me because it helped me to understand what's actually happening. Right?

We focus when it comes to talent, particularly with something like athletics. We focus so much on our bodies, but it's all our brain. Talent is in our head. It's our brain that's controlling our feet when we watch the World Cup. It's our brains that are controlling our hands. When we're playing the piano. There's no such thing as muscle memory. Muscle memory is not a scientific term. It's a colloquial term that's describing well myelinated signals that even though it feels like our bodies have learned and that they're doing things on their own, what's actually happened is that our brain signals have been so well insulated, so well myelinated that we can do those activities without thinking. It's still our brain, it's still our brain in control. We can now put our attention elsewhere and create a grocery list or whatever else it might be while still doing those activities. I think this is so critical because we can talk about talent as some aerial ambiguous thing out there. But when it's like, hey, we're talking about particular skills that can be done at varying degrees of excellence. What is happening in us when we become good at that? Things like mammals, all mammals are born with their brains mostly developed and then go through a little bit of development. Human beings are the only mammal that reverses that, where our brains are mostly unformed and the vast majority of development occurs after birth. I just think that that's so fascinating that humans have the longest period of childhood. That's why I say no, we are not born with talent, clearly. We're born, we're called, were created to develop that talent. Because we're so helpless. More helpless than any other animal. Right. And yet we have these brains that will quickly give us an advantage because we're capable of learning anything.

CR: So the next one, there, Mastery, what's meant by this?

RS: Mastery, simplified, is the quantity and quality of practice necessary in order to become talented. When I was first embarking on this talent development journey, people would bring up similar names in making their case against my theory. Wolfgang Mozart came up a lot, Albert Einstein came up, Michael Jordan came up a lot. I clung to those three individuals in particular because they represent varying forms of talent. Mozart with music and creativity. Einstein's become the face of intelligence. Michael Jordan is arguably one of the greatest athletes of all time. Their lives have no overlap, interestingly enough. And I studied those three people in particular and found that the five M's really do apply. We mythologize these people, we make them giants. But when you actually look at their journeys, they're very normal journeys of struggle, of opportunity, of luck, of people investing in them in extraordinary ways. I was really fascinated to learn that there are, of course, scholars, that study talent and expertise, and they have found this pattern that it takes somewhere around 10,000 hours of practice to become an expert. So this was popularized in Malcolm Gladwell's book, *Outliers*. And the scholar Anders Ericsson, whose research Gladwell used, he really shies away from that or shied away from that because he felt like it was too much like a light switch, right? Like if you hit 10,000 something magical happens, right? It doesn't mean it might not take 7,000 or it might not take 12,000 but shockingly, weirdly, there is a pattern there. What I think is even more critical to understand is that we have never, in the history of the world, found someone that we admire for their talent, that did not put in thousands of hours of practice. Not one example. that's shocking to me.

Well, but we can't just talk about time. I think time on task is really, really important. But it has to be matched with the quality of practice. You can do an activity and not get any better at it. It has to be practice for the sake of improvement. Anders Erickson, the term that he used was deliberate practice. The term that I like to use is difficult practice. Because I ask myself if it's not difficult, it doesn't count. Is what I'm doing, is it stretching my abilities really pushing me, or am I just going through the motions? And it's thousands of hours of difficult practice that leads to talent and expertise.

CR: Yeah, for those interested in more reading on that, this has been popularized in the book, *Make it Stick*. Roediger, and I forget, like three authors...

RS: Yeah, Brown

CR: ...in the show notes, Bob Bjork's Desirable Difficulties talks about the same thing. For a sports metaphor, if all you're doing is you're swinging at fastballs and practice over and over and over and over and over again. Not only you're not getting much better at hitting fastballs, you're not getting any better hitting the curveballs and the slider.

RS: Exactly the weird knuckleball.

CR: Knuckleball. Because part of being a good hitter is recognizing quickly what pitch you're getting. For that particular example, it's the discernment that's just as important as being able to hit a fastball when it comes.

RS: That's right, Yeah. I'm glad that you described it that way.

CR: It's quality as much as it is quantity. To think about our students in colleges and universities. I think a lot of times they're thinking primarily about time on task. How many students have come to us and said, oh, I don't like the way I performed on this exam and I study for X number of hours. The thoughtful instructor says in the back of her head, like it doesn't matter. Like that's not the first thing I want to ask

you. It's not the first thing I want to know. I want to know how you study. I don't care that you study for 13 hours

RS: That's right. That's right.

CR: Let's talk about how you study, how it makes a world of difference. Somebody can study using particular strategies and learn twice as much in half the time.

RS: There's research that really backs that up. *Make It Stick* really summarizes a lot of that research. But if we don't know that, if we don't really understand that this is developed, that talent is developed, then we're not going to put the emphasis on the strategies and the how like we should. We'll always in the back of our mind say, well, maybe I just wasn't cut out for this.

CR: The next one is motivation. Here's a slippery one, right?

RS: Yeah. With talent Development, there's a fascinating cost benefit analysis. I don't play golf. If I were to take up golf, it would be really fun, I imagine for the first six weeks. Because any investment I would put into golf, I would immediately see improvement, right? From somebody who has no idea what he's doing to learning how to hold the club. Take a swing, starting to learn some differences between good form and bad form. This is the joy of being a beginner. You get to see so vividly your progress. Motivation comes into play when you're no longer a beginner. And when I think of motivation, it's not the motivation to do something. It's the motivation to improve at something. And we all tend to lose that motivation to improve. Because it gets harder and harder to improve, the better you are, no matter what you're pursuing. There really is such a thing as talent plateaus, right? Where no matter how much time you invest, you hit this plateau over a period of time. It's this phenomenon and you have to get through it before you finally see progress. Motivation becomes really important. Particularly among the most talented individuals. Because at some point you're going to get to a status where the people around you are saying you're so good. Why are you practicing all the time? Like, aren't you satisfied? It's like everyone is discouraging you from improving because they see how great you are. Whereas you are looking at how great you have yet to become. Motivation, I think is really critical. Because who's going to spend thousands of hours of difficult practice on something that they don't love?

Yeah, I've learned to think about strengths and weaknesses differently. An author on leadership and a thinker on leadership, Marcus Buckingham, has really helped me in this journey. But he talks about how we need to stop thinking about strengths as the things that we're good at, and weaknesses as the things that we're bad at. He says instead we should think about strengths as the activities that make us feel strong, energized, excited, and weaknesses as the activities that make us feel weak, or drained, or empty. Because if we put the vast majority of our time and effort into activities that make us feel strong, then we're going to invest ourselves fully into improving. Whereas, if we try to do that, to some extent this is appropriate, right? Because we want to be at minimum standards for everything, but we can't be excellent at everything. We really have to think in sophisticated ways about where am I going to invest myself. Motivation becomes, I think, a really complex element rather than do you care or do you not. It's how much do you care with all the competing cares that you have in your life. If you want to be rock star guitarist, are you willing to quit your job? Are you willing to play the guitar 40 hours a week? Are you willing to invest in the best teachers? What if those best teachers are across the country? Are you willing to move there? These are the things that we see people do when they end up being the people that we admire most for their talent development. It's been really interesting to see how much motivation

matters, particularly when you're getting through, Okay, well I've gone from bad to average, but do I really want to be great at something.

CR: For college instructors, I think struggle often is not in the plateau in their students of talent, but getting them like that first lift. Has your research helped you to conceptualize how an instructor teaches a freshman level course that's required by the university? And there's just like so many motivational things stacked against.

RS: Yes, there are two scholars who often write together, their names are Deci and Ryan. And they have done the most work on motivation. And they talk about three things that, that can help to improve anyone's motivation. Now, I'm not using their language because like the five M's, I like alliteration. I call them the three C's. But the first is competence. When students can see themselves becoming more competent, progress really is the best motivator. Well, how can you do that as an instructor? I think by lowering the stakes and increasing the frequency of exams. Long ago, I wasn't really a fan of quizzes or reading exams. It's rare for me to have a class session where I'm not giving a test, and it's a 15 minute test, a 20 minute test. But I want students to see the progress that they're making or not making, and they need multiple opportunities to do that. If our classes are structured where there's a big test halfway through and a big test at the end, or three tests scattered throughout a semester, those are high stakes, and it's going to be difficult for them to see their progress and their competence. That's the first C.

The second C is choice. This is hard as an instructor, but to whatever extent we feel comfortable in giving students choice. It increases their motivation. Maybe they have to do this project, but the particular topic underneath the umbrella assignment they're given choice on or, or different ways of approaching an assignment. The more freedom we can give students, autonomy, as Deci and Ryan call it. More, they're going to be motivated. It might even be, hey, you have to do these six things but you can choose the order in which you do them. Yeah, as instructors, depending upon the class, that's going to be easier or harder to do. But even at the micro level, when you give students choice, it is bumping, boosting their motivation.

The third C is community. We are motivated by our community, and particularly by our peers. Yeah, I think instructors as instructors can overemphasize the influence that we have on our students and under-emphasize the effect that students have on each other. I've seen this in my classes when I ask students to submit something to me, and I'm the only one who sees it, there's a difference than when I ask them to submit something that their fellow peers are going to see. There's an added bump and motivation. If they want to look good in front of their peers, they want to impress their peers, they want to be validated by their peers. And so it doesn't necessarily have to be group work, but it could be presentations in front of the class or sharing any way of sharing your work with other peers. The more we can make it a communal experience, the more motivation is going to follow.

CR: Yeah, really that's just a more natural learning environment when you're outside of so much of the artificiality of K through 12. And even higher ed learning happens in community, learning happens socially. There's somebody who's holding you accountable, or someone that you have to submit it to, or someone who's going to read a draft before you send it along. That's just the way it's more natural to do it that way.

RS: Yeah, teaching classes over Zoom was really interesting during Covid because at first I was like, wow, I can't believe how effective Zoom is, or any virtual platform in being able to teach classes. I was immediately impressed. And then you realize, my goodness, the intangibles of not seeing each other, of



not having side conversations, of not touching base before or after class or during breaks or anything like that. We lose so much the fact that someone has to make more of an effort to speak on Zoom versus in the classroom. I can hear someone inhale like they're going to speak, and I know that they want to speak or just make eye contact. Those kind of things have really made me cherish community in the classroom in a whole new way.

CR: Yeah, that's well said, and That last M, mentorship, and I think the social aspect of learning, probably details pretty well with that too.

RS: Yeah, yes it does. Again, as a teacher, in the same way I'm a PhD in education and I feel like I knew so little about brain development and the science of learning. Then I've been a faculty member for some time. I started to realize that I didn't know that much about what really makes someone a great teacher versus an average or mediocre teacher. I really started to dive into this because it was clearly apparent to me that Mozart, his father, was a composer, obsessed with him becoming a composer. Mozart wouldn't have been Mozart if he didn't have his father from the moment he was born. Einstein similarly, had these opportunities to be mentored by people in very peculiar places that you think, oh, he never would have won that Nobel Prize if it wasn't for this unheard of teacher that he lived with for a few years. Michael Jordan. There are some coaches that we don't associate with Michael Jordan. Like Bob Knight in the Olympics. Michael Jordan only won his six championships under one coach, Phil Jackson. Any year that he played where Phil Jackson was not his head coach, he did not win a championship. Just see these patterns.

So I started to go into the literature on great teaching, and long story short, I found that three things that seem to really separate great teachers from average teachers. I should start by saying that personality had nothing to do with it. Great teachers are extroverts, great teachers are introverts. Great teachers are charismatic. Great teachers are far from charismatic. Great teachers give great speeches. Great teachers give awful speeches, or would run away from ever giving a speech. Also, some great teachers are kind and nurturing, and some great teachers are mean and not nurturing. All those things that you might prefer in a teacher, rightly so, aren't necessarily what separate them as great. The three things that really rose to the surface was how much great teachers get their students to perform. And depending upon what the activity is, this is easier or harder to imagine. If it's basketball, if it's ballet, if it's music, of course, performance is so obvious. But even with things like history or math, using problem-based learning, using case studies, whatever you're wanting your students to do, great teachers are obsessed with getting their students to do it often. Again, from a more practical perspective, as an instructor, this has caused me to give many more assignments that are shorter because I want my students constantly doing well.

The flip side of that, the second thing, addition to performance, is feedback. We might be all familiar with the acronym SMART for Smart Goals. I think what we really need is SMART feedback. Smart standing for specific, measurable, attainable, relevant, timely. Students need specific feedback that is directly connected to the performance that they just went through. If it is a quiz, they need to know immediately what they did well on what they did not. If they're doing an activity, a presentation, the more specific we can be about, you need to do this, not this, is fundamental for their improvement. Performance is first, feedback is second.

And then the third thing that has been very convicting to me as an instructor is that great teachers measure progress by what is learned rather than by what is taught. I had to swallow my pride and realize that just because I've said something or taught something doesn't mean that I've done my job as a

teacher. As John Wooden, the UCLA basketball coach famously said, you haven't taught until they have learned. And this is true of great teachers. They don't move on to step three until they're convinced that their students have learned step two. Whereas I might have said in the past, I'm moving on to step three because I've taught step two, and it's on them as to whether they've learned it or not. Well, I understand that students should be accountable and that they have a responsibility in learning process. But it actually hurts everybody because yes, I've moved on to step 4,5,6 but we're all suffering. Because some of us didn't quite grasp step three, and I wasn't patient enough. Really say, hey, this will benefit all of us if all of us understand step three before moving on to step four. Really thinking about, okay, I'm not going to move on, I'm not going to consider myself as progressing as a teacher until I'm convinced that my students have learned.

CR: Yeah, yeah, I think I've said this before and I've actually mentioned it to your colleague, Nathan Allman, it really makes the idea of the course schedule on your syllabus a little bit of a pious lie that you know where everyone's supposed to end up after 15 weeks when maybe you've never met these students before. But just based on, what are you basing this idea that you'll know where everyone should end up?

RS: Yeah, I call this the learning paradox. I think we greatly underestimate what we can learn. But then we greatly overestimate how fast we should be able to learn something. Say, as an instructor I've really had to, again, swallow my pride and reduce the breadth of what I want my students to learn so that I could increase the depth on what really matters. I constantly ask myself, and it's painful, what really matters? And I don't have time to teach what doesn't because it's such a hard process.

CR: Yeah, that's great. Last question for you, if you have any thoughts about how your experience as a faculty steward or faculty in residence has helped you formulate these ideas and really see how they work on the ground with college aged folks.

RS: This is my tenth year living on campus in a residential community of more than 350 students. My community has first year students through seniors, and some of them live in the community all four years. I get to journey with them their entire college career. And I have become so convinced by living with students in community that learning is so much, as much, an emotional process as it is an intellectual or academic process. If students don't believe that they can really accomplish something, they are constantly doubting their own validation. They're constantly battling their insecurities. And faculty, I think, have no idea how powerful the small things we do and say are for students. They are watching. They're listening. Like to borrow from Carol Dweck, she's learned the difference between saying you can't do this versus you can't do this yet. That word "yet" transforms that sentence to, I believe that you're going to be able to do this, but I'm not settling for where you are now versus what could be translated as you're not cut out for this. You weren't born for this. You're not innately gifted at this. Find something else. It's really humanized, the whole experience of learning. For me, what happens out of the classroom is just as important and powerful for the learning process is what happens in the classroom when students connect with one another on ideas. When they study together, maybe not even studying the same subject, right? But they just feel connected.

As somebody who studies college student success, it has been really fascinating to see that sense of community. How students feel about their connection to the community is literally the most powerful predictor we have of their thriving. And whether it's socially or academically, even in terms of the academic effort they're putting forth. When students are connected in community, everything works better in the learning process. And when they're not connected, when they're feeling alone, study

strategies or any support we give isn't going to help much with that until that issue of community is resolved.

CR: Yeah. Well, I feel like we could probably do a whole show on each of the five Ms, but for the sake of the time, I think we'll have to leave it there. When is the book going to be available? Well, you've been working on it.

RS: Yes. This has been a multiyear project. And it has humbled me because I would have said, oh, this is going to take a couple of years to write, and the more I got into it, the more I've learned. My hope is that this book will come out in the next three or four years. I've written 80% of a draft, but I'm enjoying the opportunities I can to share, and I'm really grateful for this opportunity.

CR: Yeah. Well, thanks again for coming on.

RS: I really appreciate it. It's been a pleasure.

CR: Our thanks again to Dr. Schram for joining the show today. In today's show notes, you'll find links to several resources as we discussed, including Carol Dweck's book *Mindset*, the book, *Make It Stick*, and Malcolm Gladwell's *Outliers*, and the website for talent expert Marcus Buckingham. That's our show. Thanks for listening and join us next time for Professors Talk pedagogy.