

MTN Ep 17 Transcript

01;00;00:01 - 01;00;26:06

Erin Hagar

Welcome to Moving the Needle. Casual conversations about ways big and small to impact student learning. Brought to you by the Faculty Center for Teaching and Learning at the University of Maryland, Baltimore. I'm Erin Hager. Let's move the needle. Hi, everybody. And welcome back to Moving the Needle. I'm Erin Hager, one of your hosts. Yes, you heard that right.

01;00;26:19 - 01;00;53:04

Erin Hagar

Starting today, I'm going to be sharing hosting duties with my colleague, Dr. Scott Jay Riley, the second I'm so excited to introduce you to him. Now, as I go through his bio, you'll see just how much he cares about teaching and learning and why he's the perfect person to join us here. Scott is a faculty member in the School of Pharmacy at the University of Maryland, Baltimore, where he develops courses to marry the fields of data analytics and pharmaceutical sciences.

01;00;53:22 - 01;01;23:19

Erin Hagar

He's been an educator for the last ten years. Always pursuing opportunities and certifications to expand his knowledge about teaching and learning. He earned a certification from Circle, the Center for the Integration of Research, Teaching and Learning during his graduate studies at UMBC. He was named an outstanding teaching assistant not once, but twice there as well. He's taught middle school, high school, undergraduate and graduate students, and we're so lucky to have him on the Moving the needle team.

01;01;24:04 - 01;01;24:28

Erin Hagar

Welcome, Scott.

01;01;25:14 - 01;01;49:07

Scott Riley, II

Hello, everyone. I'm so excited to be here today and I'm really looking forward to talking about a topic near and dear to my heart. And I'm not the only one who thinks this is important. Recently, there has been increasing interest in the benefits and effects of developing graduate students ability to teach in and outside of the classroom. As with any new foray into research, many questions have arisen about the best approach to take.

01;01;49:19 - 01;02;21:17

Scott Riley, II

Is there a best way to train grads in the art and science of pedagogy? Could it be personal mentorship? Peer to peer observations, classical vertical teaching, or perhaps communal training? Today's episode focuses on a platform that tries to combine all of these approaches and what it takes to implement it at a university. The Center for the Integration of Research, Teaching and Learning, also known as Circle, is a platform that is becoming ubiquitous in our nation's universities due to its multifaceted and accessible approach to STEM education training.

01;02;22:00 - 01;02;56:03

Scott Riley, II

Because there is so much material to cover today's episode will feature two guests with a wealth of

experience in this field. I'm excited to introduce our first guest, Dr. Tracy Irish. Dr. Irish is a clinical assistant professor in the STEM Master of Arts and Education Program at UMBC. Dr. Iris's research focuses on STEM education and the development of professional learning communities to assist K-through-12 schools in advancing STEM education for all students while committing time to teaching both STEM and education focused classes.

01;02;56;11 - 01;03;04;04

Scott Riley, II

Dr. Iris was chosen to lead the development of graduate student focused style content at UMBC. Welcome, Dr. Irish.

01;03;04;16 - 01;03;07;09

Dr. Tracy Irish

It's good to be here. I was I was honored to be invited.

01;03;08;09 - 01;03;28;02

Scott Riley, II

We really appreciate it. So I'd like to start things off by covering what certainly is so a lot goes into training graduate students for the outside world. And one thing that's recently got a lot of attention is preparing them to become educators. So certainly one way to do that. But can you tell us more about Circle? What is it?

01;03;28;19 - 01;03;55;29

Dr. Tracy Irish

Sure. Circle or the Center for the Integration of Research, Teaching and Learning is a national network comprised of universities across the country, as well as, I believe, Puerto Rico and Canada at this point. It's a network of 42 different universities. And like most things in academia, it was started with four universities with the National Science Foundation grant and has really grown into what it is today.

01;03;56;16 - 01;04;45;00

Dr. Tracy Irish

And it's all about universities working collaboratively together to enhance excellence in undergraduate STEM education. Specifically, we see that, you know, we're not producing the numbers of STEM professionals that our nation needs to really be at its global economic best. And one of those issues has to do with with education, of course. And so this is all about looking at future faculty at the graduate school level and giving them more information and more knowledge and more experiences in teaching and learning and using, you know, quality strategies to really enhance the learning of the graduate students as they do their undergraduate work.

01;04;45;15 - 01;05;05;27

Scott Riley, II

Wow. That sounds like a great program. And from what you've said, the mission sounds like it's there to enhance the abilities of graduate assistants and faculty in teaching STEM to undergraduates. How does Style achieve that mission? What kind of methods does it employ to get there?

01;05;06;13 - 01;05;35;02

Dr. Tracy Irish

Well, it has a very good structure. All the universities involved go to network meetings. They share what's happening. They share success stories. They share what didn't work so well. And so universities do things within the network that they can offer their graduate students. So there is a lot of of these massive online courses that students can go to to learn a lot about.

01;05;35;13 - 01;06;15;06

Dr. Tracy Irish

Then there are specific online courses that students have to register for that are opened to all graduate students across all the different universities. And they they might be specifically about developing a teaching as research project, or they might be specifically about evidence based teaching and learning in STEM teaching STEM courses. So there's over the years they've developed all of these resources that they the small group that got together that started out, did a lot of co-development of these resources that they knew that they wanted to make available to all the universities that joined.

01;06;15;17 - 01;06;44;07

Dr. Tracy Irish

And then each university itself developed a lot of resources, including courses, workshops, seminars. And they, you know, sent them to Serval to be a part of this network of resources. And so the other thing that certainly did was they wanted to think about how can students sort of measure their movement and their participation circles. So they developed certificates.

01;06;44;26 - 01;07;07;09

Dr. Tracy Irish

And there's three levels of certificates depending on if you just want to know a little bit or if you want to get more in-depth, or if you want to do everything that you can to learn about circle, there's a highest level. And so it's a way for students to sort of track what they're doing and really make it more meaningful, knowing that they're not, you know, repeating and going through workshops of all the same type of topics.

01;07;07;09 - 01;07;29;23

Dr. Tracy Irish

But they're getting of a variety of of topics and strategies to implement their own teaching methods when they they become the faculty member. And a lot of the students that are involved have also been teaching assistant. So they have opportunities to even get started and do some of these things within their teaching assistant ship programs.

01;07;29;29 - 01;07;48;11

Scott Riley, II

That sounds amazing, especially the part about the certificate you give the students, this tangible thing that they can take with them as a credential, basically, that they can use to secure jobs and show that they've done a significant amount of work in this program. That's awesome.

01;07;48;27 - 01;08;06;05

Dr. Tracy Irish

I think it's really good and I know a lot of a lot of students have told me that they're a part of their portfolio when they go and apply for a job that they they want to showcase what they've done and learned about teaching and learning, which is, you know, I think universities are all starting to look at that now.

01;08;06;05 - 01;08;21;00

Dr. Tracy Irish

Certainly within the social network, there's a lot of students that have graduated from university and gone to universities in other states that also had sort of programs. And so this was a very important to those positions, you know, and then getting those positions.

01;08;22;10 - 01;08;45;20

Scott Riley, II

Agreed. Agreed. So following that train of logic, I'm curious, as a graduate of UMBC, I know that you all had a faculty development center. I think the FDC and I'm curious, why choose this program? Why choose bringing style to your university instead of incorporating graduate students into something like the FTC?

01;08;46:08 - 01;09;10;24

Dr. Tracy Irish

Well, the Faculty Development Center at UNB said does a fantastic job as a faculty member. I go to a lot of the events. I've been a part of faculty learning communities where we work together across the semester on on different types of topics. But I really feel like the leader, the director of the Faculty Development Center feels like some of those conversations weren't really appropriate for graduate students.

01;09;11:07 - 01;09;33;04

Dr. Tracy Irish

And I know that I have gone to some of the ones where it was open to graduate students, and you could see that the graduate student maybe had something to say or wanted to kind of express themselves, but didn't feel comfortable because of the faculty members around them in the room. Like I felt like they they really didn't have a voice there.

01;09;33:16 - 01;10;13;09

Dr. Tracy Irish

And I think what's unique about the The Circle is that graduate students know it's for graduate students. They feel comfortable. They're there with their peers. And they don't have to be worried about what kind of question they ask or what stance that they take on something. And there's a lot more conversation from the graduate students. When I host a shuttle workshop for just graduate students, then when I go to a faculty development center workshop that has faculty as well as the graduate students in there, and I think, you know, that comfort level and having a voice is really going to assist the graduate students.

01;10;13:09 - 01;10;21;09

Dr. Tracy Irish

And in learning a lot more, learning and learning more about the the strategies and how to implement them in their own classroom.

01;10;22:00 - 01;10;34;04

Scott Riley, II

Agreed. There's a lot to be said for something that's made specifically for you. And knowing that everyone around you is a peer, not necessarily a giant with 20 years experience in the field, right?

01;10;34:08 - 01;10;43;10

Dr. Tracy Irish

Well, not that that made them any better at teaching and learning, but it it has that it has that feeling when you're the graduate student and you're not the faculty member, right? Yep.

01;10;43:16 - 01;11;11;21

Scott Riley, II

Oh, I agree wholeheartedly. So with that, I'd like to transition into talking about your personal experience with Circle. So you were kind of the point person for developing graduate content for the UMBC campus. And so I'm curious, how did your journey start with cert or how did you find out about the network? And can you describe the process of how you became the point person for implementing the graduate material at UMBC?

01;11;12;05 - 01;11;39;08

Dr. Tracy Irish

Well, as you know, I'm a faculty member in the Education Department at UMBC, and the inaugural director of Circle was Dr. and Spence. And and Spence and I worked together for over five years on a national science Foundation grant. And so we knew each other well. And I knew she was the director of Circle. I'd asked her questions about it, and she was getting ready to step down from Circle, and she basically said, You'd be great for this.

01;11;39;08 - 01;12;00;11

Dr. Tracy Irish

Are you interested? And so that started several conversations with the dean of the graduate school and one of the people in her group. That was Dr. Janet Rutledge and Dr. Vonetta Tall. And I had some great conversations with them, and they were the the two leaders that really wanted to bring shuttle to campus. And so they told me more about shuttle.

01;12;00;11 - 01;12;26;08

Dr. Tracy Irish

They told me about their vision for it on on campus, but they weren't in the position of of doing day to day stuff and really developing workshops and courses and such. And so once I talked to them, I went to my very first sort of network meeting that was in Wisconsin, which University of Wisconsin was one of the lead universities to start this off.

01;12;26;15 - 01;12;58;20

Dr. Tracy Irish

And, you know, the collaboration, the, the really support from all the different people across the network was just so wonderful that I knew I could do this, that, you know, whatever I needed, they'd be there for me. And, you know, they really walked me through their website and showed me everything that they had. And to me, it made so much more sense to do something like this than just trying to do graduate student teaching and learning development on campus without such a network behind you.

01;12;59;12 - 01;13;25;04

Dr. Tracy Irish

It just made sense. And so, you know, STEM education has always been my passion. I you know, I currently work with K-12 teachers, but I feel like as I'm making, I feel like I'm making a difference in the K-12 world in terms of implementing best practices and teaching and learning and doing interdisciplinary teaching and learning through a stem viewpoint.

01;13;25;17 - 01;13;49;22

Dr. Tracy Irish

I feel like the next level for me was to work with people who would be teaching the undergraduates, because these are where all of the K through 12 students are going to end up, hopefully, or a lot of them are going to end up in, you know, in universities in the undergrad program. And, you know, I've been in, you know, in my undergraduate years, I remember going into the large lecture hall on to a course that I was so excited about, you know, genetics.

01;13;50;03 - 01;14;11;08

Dr. Tracy Irish

And I sat there with 280 students next to me, and there's a man in front of the stage talking, not necessarily teaching. He was doing a lot of talking. He didn't engage the students at all. He didn't follow the topics that were in the syllabus. He talked about what he wanted to talk about, and then we had to try to figure out how to study for the exam.

01;14;11;08 - 01;14;28;17

Dr. Tracy Irish

So there was not a lot of teaching and learning going on within the auditorium where I felt like it should have been going on. You know, we were sort of independent learners with the book and trying to figure out what we were supposed to know. And, you know, that's got to be a method of the past. We've got to get rid of that.

01;14;28;17 - 01;14;49;23

Dr. Tracy Irish

We've got to we've got to engage students. We've got to understand if they're learning on the spot, we've got to do, you know, formative assessments. We've got to really worry about whether or not we're really teaching and whether or not anybody is really learning instead of just standing on the stage and talking about, you know, our passions in life.

01;14;50;03 - 01;15;09;27

Scott Riley, II

So I can see why they chose you, Tracy, to be the lead at this project. It sounds like not only was it something you wanted to do, but it was something you're really passionate about. But it's a it's a complex ask to come in and create all this content for graduate students. I'm curious, what did things look like in the beginning for you?

01;15;09;27 - 01;15;16;12

Scott Riley, II

How did you even begin to create a framework for graduate student specific teaching and learning?

01;15;16;19 - 01;15;46;00

Dr. Tracy Irish

Well, I think some of the biggest things that were discussed at certain networks when I first got started was just, you know, evidence based teaching reflective practitioner, I think, is something that was kind of not there that I brought to the table. Because if faculty members as teachers don't really stop and think about what they really want students to know and understand, they're not going to understand what they need to share with their students.

01;15;46;00 - 01;16;13;05

Dr. Tracy Irish

So there's a process of developing curriculum and knowing what you're going to add and what you're going to have the students read about. And so we talked about that, and there was also a lot of teaching about inclusive teaching. And so I knew that these were things that I wanted to bring to campus and share. And then the way I kind of got started to sort of introduce myself to students was I held information sessions about every month.

01;16;13;21 - 01;16;32;24

Dr. Tracy Irish

I'd have pizza, hold it at lunchtime when there were no classes and put fliers up and emails out and invite any student that might be interested to come. And I was amazed at the large number of students that I came, and I was also amazed that each time I had an information session, the same students would still come back.

01;16;32;24 - 01;16;53;16

Dr. Tracy Irish

Even though they understood it and they were doing something with certainly already. They still wanted to come and just be a part of the conversation. And I thought that just shows how dedicated

our graduate students are and how really this is needed on campus. And so I just, you know, started developing workshops. I talked to people to find out who else could develop workshops.

01;16;53;16 - 01;17;23;20

Dr. Tracy Irish

I also definitely, you know, was in conversation with the Faculty Development Center. We didn't want to completely close ourselves off from them, so we still found out what they had to offer and what they, you know, the director of the Faculty Development Center also did two unique seminars just for graduate students. And we had, you know, university UBC also has a very large graduate student and postdoctoral development center where they have what's called promise.

01;17;23;20 - 01;17;43;16

Dr. Tracy Irish

And that has a lot to do with being a successful graduate student and making sure you graduate, not so much about the teaching and learning, but they also had some seminars and workshops that we overlapped with. And so there was a lot of collaboration on campus to make sure that we didn't we didn't offer the same thing. You know, we didn't double up on anything.

01;17;43;16 - 01;17;50;09

Dr. Tracy Irish

But also making sure that we are outreach included all those different venues to make sure that graduate students knew what was going on.

01;17;50;22 - 01;18;11;24

Scott Riley, II

Awesome. Yeah. It sounds like you took a very multipronged approach by creating, by in collaborating and making sure I've heard this a couple of times. And as a former student, I appreciate it making sure there wasn't a lot of redundancy, like there were unique experiences that you could get something from without having to repeat certain workshops. That's awesome.

01;18;12;12 - 01;18;24;11

Scott Riley, II

So with that, I'm curious, how long has certainly been active at UMBC? And looking back you I don't know if you mentioned this yet or not, but you mentioned that you're no longer the director of this program, correct?

01;18;24;26 - 01;18;25;16

Dr. Tracy Irish

That's correct.

01;18;25;22 - 01;18;35;17

Scott Riley, II

So looking back, did you achieve all of the goals that you set out for yourself when you began this program? And did any of them change while you were building the program?

01;18;35;27 - 01;19;02;16

Dr. Tracy Irish

Okay. So the first part you and B joined started in 2016 and I believe and Spence was named the inaugural director in 2017. And then I joined in the fall of 2018. I did a lot of what I wanted to do. I got students excited about it. I got students involved, and I did get some students that went through all the different levels and completed a teaching as research project.

01;19;02;16 - 01;19;27;07

Dr. Tracy Irish

One of them was even able to travel with me to a forum in 2019 to present her work, as was pretty much the sort of national conventions called a Circle Forum. So that was very exciting. At that forum, I was also on a committee to help establish and organize the forum and come up with the schedule and certainly with Dr. Janet Rutledge, the dean of the graduate schools assistants.

01;19;27;07 - 01;19;56;27

Dr. Tracy Irish

We got Dr. Hrabowski to be a keynote speaker at the 2019 Forum, which I really felt like showed that UMBC was truly invested in the teaching and learning development of our graduate students. So that was very important to me. And I was certainly, you know, in the in the workshops that I gave, in the course that I taught I could, I could see the students growing and I could see them starting to think about things.

01;19;56;27 - 01;20;27;10

Dr. Tracy Irish

And the one online workshop I did at the beginning of COVID was on inclusive teaching and STEM. And I, I got just such great feedback from that that, you know, students really thought about, you know, the, the small comments you can make that make a big difference where one of their students in the classroom feels like they're a part of the a part of the group, or they feel isolated from the group.

01;20;27;10 - 01;20;58;24

Dr. Tracy Irish

And it's not that we mean to say things, but it's just those, you know, really thinking about those ahead of time and really making sure what we what we say is not alienating anyone or making anyone feel like they don't belong. And I think that happens a lot and people don't realize it. So that was one of my, I think biggest successes was having that workshop, being able to do it online at the last minute and getting really just such good feedback from the graduate students about it.

01;20;58;24 - 01;21;19;09

Dr. Tracy Irish

I didn't really accomplish all that I wanted to do. I loved being the civil director, but my department chair didn't really feel like it was working out. He felt like there wasn't enough time devoted to my my faculty position. And I do think a certain position needs to be a full time position to really do everything you need out there.

01;21;19;09 - 01;21;45;18

Dr. Tracy Irish

I don't think it can just be a percentage of your work day or a percentage of your workload that, you know, most of the universities and the network have a certain director that's full time and sometimes they even have an office around it to support it sort of was a part of the the graduate school graduate student and postdoctoral development sort of umbrella.

01;21;46;08 - 01;22;10;20

Dr. Tracy Irish

But since we did different things, you know, I was I had sort of staff support and a grad student support, but I was the only one developing the workshops and and trying to also do things for the Circle Network. And it was a lot, but it was so rewarding and so a part of who I am and what I want to accomplish.

01;22;10;22 - 01;22;12;19

Dr. Tracy Irish

So it was very important to me to be the director.

01;22;13;00 - 01;22;38;00

Scott Riley, II

Yeah. And it sounds like it was really rewarding on multiple levels for you and the school that you became the director. So talking about your successes, I'm curious. I think I know the answer, but I want to ask it anyways. Do you think the Circle program at UMBC, especially for graduate students, was successful, and how do you think you can measure that success or how would you measure that success?

01;22;38;25 - 01;22;42;18

Dr. Tracy Irish

I think it was very successful. I think it probably still is.

01;22;44;18 - 01;23;05;01

Dr. Tracy Irish

I think by the number of students that started participating in events was a good sign of the success. I think the feedback that I would get, I would always have some sort of an evaluation to get feedback from the students as to how relevant it was. You know, what more they would have liked to have had what they thought wasn't necessary.

01;23;05;13 - 01;23;32;20

Dr. Tracy Irish

I always tried to get feedback from them and it was always positive feedback that it did make a difference, that they've learned a lot and it was something that, you know, they're not getting from anywhere else, which was important. If I were still Circle Director, I would want to go and talk to people who have graduated UMBC and are in academic slash faculty positions and find out, you know, what are they using that they've learned?

01;23;32;20 - 01;23;52;09

Dr. Tracy Irish

I would love to love to have been able to do sort of that kind of study once people were out of you. NBC. I think that's a true measure of whether new faculty are able to utilize the the information and the strategies that they gain through, certainly in their own classrooms.

01;23;52;18 - 01;24;18;17

Scott Riley, II

And student engagement. I agree. I think that's the number one metric about whether or not a program is successful. With that, we've kind of gone through your story about what it takes to be a director of Circle, and you gave some great advice. It really does need to be its own position. I'm curious if there if there's anybody listening to this that's thinking about bringing circle to their school, could you give them any more advice?

01;24;18;17 - 01;24;21;02

Scott Riley, II

Besides, you know, it definitely needs to be its own position.

01;24;22;28 - 01;24;47;25

Dr. Tracy Irish

I think that it can seem overwhelming when you get started and you think of all these things that you need to do. You know, you want to offer your students as much as you can. And my biggest is this

to talk to people at the Circle Network and make sure they've done over the last five years, they've really done a great job of organizing and categorizing all of their resources.

01;24;47;25 - 01;25;10;00

Dr. Tracy Irish

So if there's a specific topic that you want to cover at your school, you as a member of Circle, you know, as one of the leaders of a circle, you can go in there and you can access all of the resources and now you can search it by topic area and you can really see all the different things that all these other universities have done within that area.

01;25;10;04 - 01;25;42;28

Dr. Tracy Irish

And what's nice about it is they're not proprietary at all. So you can download a couple of them and you can modify and mesh them together and really make it what you want. So I think the biggest thing is just you don't have to start from scratch. You have all of these resources and even if you think, okay, I don't even know where to begin, just go through all the different topics within the resources and think about, okay, I could do something on inclusive teaching, I could do evidence based teaching and learning, I could do something about bullying, I could do something about anti-racist teaching.

01;25;42;28 - 01;25;57;04

Dr. Tracy Irish

There's all these different topics so that if you don't even know where to begin, you can start looking at some of these other topics and get an idea and then have the resources there to help you develop, you know, one that works at your own campus.

01;25;57;29 - 01;26;21;15

Scott Riley, II

I like that. I like that. As if you're deciding to bring in circle to your campus. You have a lot of the agency about the theme and how it starts at your campus. And it sounds like there's almost an infinite well of resources to pull from way, which could be daunting. But, you know, someone who wants to bring a whole teaching and learning program to university is already ambitious, right?

01;26;21;15 - 01;26;38;20

Scott Riley, II

So absolutely. Last question. What do you think is moving the needle in education? Is it programs like Circle? I mean, we're both probably pretty big advocates for circle, but what do you think is moving things forward or pushing things forward in education right now? What should we be looking for?

01;26;39;04 - 01;27;06;19

Dr. Tracy Irish

I think programs like Circle, anytime we talk about improving the teaching and learning is going to move the needle in education. But I also think we need to think about equality and equity. Are students really getting everything that they need? To me, education is, you know, a quality. Education is something that all students at any grade level should be able to get all the time.

01;27;06;19 - 01;27;32;29

Dr. Tracy Irish

And that's something that, you know, we have these pockets of great, great programs. But then there are some areas that have nothing. So we really need to you know, I think having programs like you guys have with moving the needle where people can listen to different things that people are doing helps because I think everybody's intentions are good, but they don't know how to get started.

01;27;32;29 - 01;27;47;00

Dr. Tracy Irish

They don't have the resources to get started. And the more we can share and collaborate and, you know, get it into more places, no matter how large or small the population, the bigger difference that's going to make.

01;27;48;03 - 01;28;03;06

Scott Riley, II

I agree 100%. And so with that, Dr. Irish, I want to thank you so much for coming on the show and sharing not only your experience, but your story as someone who pioneered graduate education at UMBC. Thank you.

01;28;03;17 - 01;28;04;03

Dr. Tracy Irish

Thank you.

01;28;04;26 - 01;28;32;03

Scott Riley, II

Now I'd like to shift the conversation closer to home by bringing on a second guest, talk about what opportunities are available for students on our campus here at UMD. To do that, I will be speaking to our resident expert, Jennifer Miller. Jennifer holds a master's degree in education and is pursuing a Ph.D. in health professions. Education. She's also the director of the Career and Professional Development Office of Postdoctoral Scholars in the School of Medicine.

01;28;33;01 - 01;28;45;21

Scott Riley, II

In addition to spearheading comprehensive career development for students leading skills seminars and grant writing workshops, she also utilizes certain resources in her work. Jennifer, thank you for being here today.

01;28;46;00 - 01;28;47;16

Jennifer Aumiller

Thank you so much for having me.

01;28;47;21 - 01;29;12;16

Scott Riley, II

I'd like to start with the first question and the topic of this episode is that a lot goes into training grad students for the outside world. And one thing that's gotten a lot of attention recently is training them to become educators. And so we've talked about sort of a little bit with Dr. Irish at the UMBC campus. But, um, be is not an official cert on campus yet.

01;29;12;16 - 01;29;31;09

Scott Riley, II

You've been able to utilize some of its resources to help students with education training specifically. I think it's certainly massive open online courses. Would you tell us a little bit more about them and kind of how you discovered these courses and why you thought they'd be useful for grad students? I know there's a lot of questions. Sorry.

01;29;31;20 - 01;29;54;20

Jennifer Aumiller

Now I can do all of those. That's fine. So actually I found out about the massive online open courses are MOOCs from CERT all in 2016. So I was working. We have a program that we started in 2014,

which is a collaborative Teaching Fellows program. And that's an opportunity for graduate students and postdoctoral fellows to get teaching experience.

01;29;54;20 - 01;30;26;19

Jennifer Aumiller

But my collaborator at Hopkins, they were a several institution, and so they're students were getting trained in subtle techniques. And I wanted our students to have a similar opportunity. So I had reached out to the CERT all team to find out about applying as a campus. And at that time, they weren't taking any new applications, but they did have a new thing that they were starting to do, which were these massive online open courses that were facilitated by someone on a campus.

01;30;26;20 - 01;30;52;12

Jennifer Aumiller

And so I was really interested in doing that for our graduates students. So I signed up and became a facilitator. They sent me like a facilitation packet and they had two MOOCs that they had at the time. One was called an introduction to evidence based undergraduate STEM teaching, and the other one was more advanced, and it was called Advancing Learning through evidence based undergraduate teaching.

01;30;52;24 - 01;31;17;26

Jennifer Aumiller

So these are really focused on undergraduate teaching. But what was really wonderful about them as a kind of as a flipped classroom format, so the students would watch and they had they have them broken down really nicely into certain segments that you're not sitting down and watching like an hour and a half of like lectures. But there's a lot of really great conversations about different active learning techniques.

01;31;18;05 - 01;31;39;22

Jennifer Aumiller

They'd go into some pedagogical skills, like learning about Bloom's taxonomy and those types of things. But then every after, every section you get together as a group and have a facilitated conversation, diving deeper into the topics and actually applying some of the active learning strategies so that they can actually be part of it and see what that looks like.

01;31;39;28 - 01;31;45;06

Jennifer Aumiller

Like think pair shares and jigsaws and those types of things. So it's a really great program.

01;31;45;22 - 01;31;56;25

Scott Riley, II

Yeah, that sounds amazing and it sounds like there's a lot of benefit to the grad students. I'm curious you. I forgot. When did you try your first MOOCs in you?

01;31;56;25 - 01;32;17;10

Jennifer Aumiller

And I did it in 2016. And I've offered I've offered both of them. So I've done both the introduction and the advancing learning, I think, for our students and for what they needed. The first one really was more what they were interested in. The other one had a kind of a research component to it, and I think that was diving a little too deeply into it.

01;32;17;10 - 01;32;23;20

Jennifer Aumiller

So since I've done both, I've then offered the introduction every year.

01;32;24;01 - 01;32;43;10

Scott Riley, II

So I'm curious. That's since you have these years of experience with the introductory MOOC, how is it has it changed any for you? Have you seen a large increase in participation in what are some of the things that have changed since the first year that you taught this MOOC?

01;32;43;23 - 01;33;06;15

Jennifer Aumiller

Absolutely. So I I've kind of added some more pieces to it as we've done, like as I've seen like some of the as it was done in 2016. Some areas seem to be a little dated, so kind of interjecting some more current things into it. Obviously, when we went into COVID and some of our students were starting to teach in a virtual format, like we started talking about with how to apply these in a virtual format.

01;33;06;27 - 01;33;35;01

Jennifer Aumiller

So kind of tailoring as we go. And then also like students are really interested in learning about, you know, how to teach because we know if, if our PhD students are interested in becoming faculty at a primarily undergraduate institution or apply, having teaching experience is really important and having some of this foundational knowledge is really important. So we have a pretty steady interest in these types of programs.

01;33;36;02 - 01;33;52;11

Scott Riley, II

So yeah. So even though it is primarily geared towards teaching undergraduates, you're saying there's still a lot of merit in teaching our graduate students to, you know, learn how to teach, even though most of the students here are graduate level or above.

01;33;53;02 - 01;34;18;27

Jennifer Aumiller

Correct. I think active learning techniques can be applied in any educational setting. I think there's been a lot more movement in the undergraduate setting for active learning techniques, but in recent years you see more and more of these entering into the graduate student space. So just thinking about how to have an interactive classroom I think is good for anybody at any stage of whoever they're teaching.

01;34;19;27 - 01;34;27;18

Scott Riley, II

Yeah, I agree wholeheartedly, and it's definitely the way that I prefer to learn and the way that I prefer to teach. So I'm right there with you.

01;34;28;02 - 01;34;28;11

Jennifer Aumiller

Yeah.

01;34;29;04 - 01;34;45;09

Scott Riley, II

So it seemed really important that you received feedback from the students about How to change workshop shapes or how to incorporate new and relevant material. Can you discuss some of the methods that you employed or how you created that feedback structure, a feedback loop for these workshops?

01;34;45;27 - 01;35;13;05

Jennifer Aumiller

Yeah, absolutely. I think it's mostly done in the conversations where we would talk about the way that the facilitated conversations are done is asking them to kind of reflect on their own experiences or if they're currently teaching what their current experiences are, or if their current student what their current experiences are. So By hearing some of those things and some of their concerns, we could actually start to tailor that program as well.

01;35;13;05 - 01;35;15;25

Jennifer Aumiller

So we were able to kind of respond to that.

01;35;16;06 - 01;35;37;13

Scott Riley, II

Yeah, I like that. It sounds like you give students the agency to almost mold some of this program to fit their needs. It creates that buy in that you want from the students. That's awesome. So I could sit here and talk about sort of all day. But the truth is, there are a lot of different ways that we as faculty can help students learn how to become educators.

01;35;37;13 - 01;35;59;23

Scott Riley, II

And I know that you are involved in several other things. Are several other initiatives on campus. You mentioned earlier the collaborative teaching Fellows program, and I read that you also lead discussion groups where student education on mentorship is one of the primary topics. Can you talk? Let's let's start with the the discussion groups. Can you give us a little insight into what those discussion groups are like?

01;36;00;09 - 01;36;31;27

Jennifer Aumiller

So as far as mentoring is concerned, I'm actually trained as a facilitator for entering mentoring, which is a program that's out of the University of Wisconsin, Madison. And in that we actually talk about and offer the workshops for faculty, but we also offer these workshops for students and postdoctoral fellows because not only are they themselves being mentored, but we're also, you know, they could be mentoring, you know, undergraduates or other people in the lab as well.

01;36;32;04 - 01;37;05;28

Jennifer Aumiller

And as future mentors now know, no matter what type of position they're going to go on, they are going to serve in a mentorship role. And so we actually these are facilitated conversations so they can talk about like things that are actually going on for them right now and kind of get kind of group, think about them. But what's really powerful about these two is a kind of the program follows really important steps in the mentoring process like communication and you know, setting expectations.

01;37;05;28 - 01;37;30;10

Jennifer Aumiller

And, you know, when is somebody independent? You know, how independent? How do you promote professional development, diversity, equity and inclusion, all of these things? We talk about them in a facilitated way and also give them some resources, but also they get to share their experiences and kind of use it as a place to learn from others as well and hopefully create a mentoring community.

01;37;30;28 - 01;37;55;09

Scott Riley, II

So yeah, this sounds like a great program. I'm, I think, I need to join to get some of this mentorship myself. On that note, I'm curious, we talked about some of the benefits and the activities that go on during these disco, these group discussions for mentorship. But the relationship between a mentor and a mentee is a very difficult one to get right.

01:37:55:09 - 01:38:07:00

Scott Riley, II

And so I'm curious, is there a selection process that you use to pair mentors and mentees together, or is it more of a first come, first serve basis? We have a mentor. We have a mentee.

01:38:08:12 - 01:38:44:21

Jennifer Aumiller

So actually what our program is mostly doing is already addressing established mentorship. So when we're talking about mentors in the biomedical sciences, we're talking about the primary investigators that are their supervisors, but also their mentors in their academic research. So it's actually a big part of education for our scientists because they do classes for about two years on average, and then the rest of their time, about three years or more, is spent in the lab learning from their peer, their mentor, about how to be a good scientist and do that project.

01:38:44:21 - 01:39:10:12

Jennifer Aumiller

So we're not actively matching, we're actually more helping mentors, be good mentors for their students and postdocs, and then also students and postdocs when they get into that role, which isn't typically assigned, it's just more either natural. Like the person comes in the lab and they start working with them, or later on if they become faculty, that they will be mentors like that, that they can be effective in those roles.

01:39:11:06 - 01:39:28:26

Scott Riley, II

Oh, that's that's perfect, right? You don't have to do the what I would think is the hardest part. It's done for you. And then you can just foster and cultivate those relationships, helping them become better mentors and helping future mentors with the tools that they are giving them, the tools that they need to succeed when they leave for their careers.

01:39:28:26 - 01:39:29:12

Scott Riley, II

That's awesome.

01:39:29:22 - 01:39:43:23

Jennifer Aumiller

Yeah. So yeah, we're not doing mentoring matching. There's a lot of really great programs I know on campus that kind of do that, like the umbrella program and those types of programs. But we're really more dealing with the functionality of the mentorship relationship.

01:39:44:11 - 01:40:05:13

Scott Riley, II

So thank you so much for that comprehensive overview of how these mentorship discussions go. These work groups go. I'm a little curious. We briefly mentioned it before and I'd like to touch base on it now. Could you go into the Collaborative Teaching Fellows program? I know that that's a cross campus program between you, UNB and Hopkins, right?

01:40:06:02 - 01:40:37:24

Jennifer Aumiller

Right, exactly. And actually, the National Institute of Aging just recently joined. So it's a really great program that was started in 2014 and it was just myself, I or my office and another office that was my counterpart at Hopkins. We joined forces because we realized that our graduate students and postdoctoral fellows needed a teaching experience if they wanted to be competitive in the primarily undergraduate institution faculty market.

01;40;38;16 - 01;40;56;08

Jennifer Aumiller

And we were both approaching different undergraduate campuses separately, and that wasn't the most effective way because we'd both approached, you know, say like Goucher and say we would like to have this. And then they were like, Well, why aren't you guys working together? So we ended up having a meeting and decided that that really made a whole lot of sense.

01;40;56;08 - 01;41;38;15

Jennifer Aumiller

And so we started partnering with different regional institutions Stevenson University, Gautier, Loyola University of Notre Dame of Maryland, and also Baltimore Underground Science Space as well as Baltimore City Community College. So we have a bunch of partners and we're always adding more and they have different types of experiences that our graduate students and postdoctoral fellows can have to have, like active learning and active teaching experiences so they can actually get some hands on training in that.

01;41;38;15 - 01;41;46;15

Jennifer Aumiller

And they also have a mentor that works with them in each of those institutions. So that's another program that we have been running since about 2014.

01;41;46;25 - 01;42;00;25

Scott Riley, II

Are you looking for members from other schools from you? Because the School of Pharmacy happens to have some deans teaching fellows that would greatly benefit from that. That might be something that I try to collaborate with you on later, if that's okay. Oh, yeah, absolutely.

01;42;00;25 - 01;42;20;21

Jennifer Aumiller

We actually allow anybody can apply for the collaborative Teaching Fellows program. In fact, our applications are open now, so I'll definitely send that over to you so you can send it out to your fellows because we'd be more than happy and we have had some school of pharmacy postdocs for sure be part of the program.

01;42;21;14 - 01;42;39;25

Scott Riley, II

Well, that's awesome. It sounds like a really great program. I love this idea of collaborating with a network of undergrad universities that provide unique experiential learning for anybody who's part of this program. That sounds like invaluable. That's an invaluable resource for us to have for our teaching fellows.

01;42;40;04 - 01;42;41;00

Jennifer Aumiller

Absolutely.

01;42;42;05 - 01;43;03;04

Scott Riley, II

All right. Well, with that, I'm curious, one of the things that always runs through my mind when I think about programs like these is how do you measure their success? So from your perspective, because you seem to be the spearhead or the point person for a lot of these programs. How do you measure the success of these programs that you're a part of?

01:43:03:10 - 01:43:07:24

Scott Riley, II

And do you feel like but do you feel these programs are successful?

01:43:08:08 - 01:43:32:13

Jennifer Aumiller

Yeah, so I mean, we do surveys. I always survey to see, you know, what worked, what could we do better, those kinds of things. That's always a really helpful thing. We do that for the societal MUC and you know, obviously it's open discussion. So we make it like, you know, an open place where people can share, you know, what's working, what's not working, but also with a formal survey and the same with the collaborative teaching fellows.

01:43:32:22 - 01:43:56:25

Jennifer Aumiller

We do with the mentorship as well and with the Collaborative Teaching Fellows program. That program we actually survey a number of times. We survey the primarily undergraduate institution mentors as well as the fellows that are part of the program. And we also have periodic meetings with the fellows so that they can kind of also learn from each other, like kind of having a peer, you know, place to come in.

01:43:56:25 - 01:44:19:26

Jennifer Aumiller

Like, Oh, I'm having a problem with this in my teaching, you know, what are your experiences? And then some of us who are also involved in the teaching space can also be there to help them. So we use that. And then we also look at for the collaborative teaching fellows to see if anybody was successful that wanted to be placed in a primarily undergraduate institution as a teaching faculty.

01:44:20:17 - 01:44:26:16

Jennifer Aumiller

And we have had people placed. So we feel like that's also an instrument to kind of show like success of the program.

01:44:27:00 - 01:44:55:05

Scott Riley, II

Sounds really thorough, like you get a lot of information from a lot of different sources to determine whether or not your programs are beneficial. Yeah, that's great. So the next question that I'd like to ask you is we've gone over the circle. We've gone over mentorship, the mentorship programs, the Collaborative Teaching Fellows program. I'm curious, do you think that there are any gaps because this sounds pretty comprehensive so when I ask this, it might be a loaded question.

01:44:55:05 - 01:45:04:18

Scott Riley, II

Do you think there are any gaps in education or mentorship for graduate students at U and B? Any other initiatives you'd like to see brought to the campus to maybe fill in those gaps?

01:45:04:24 - 01:45:27:14

Jennifer Aumiller

I think it would be really great if we could be an official circle institution because I think that would

kind of create more programming. Like so I'm, I'm offering like one eight week program, but that's just like one part of a life cycle of all the learning that could be happening for students and postdocs about teaching. So I think the circle programming actually is really fantastic.

01:45:27:14 - 01:45:53:19

Jennifer Aumiller

So that would be something that I think moving towards it would be great just to give more resources and you know, even just, you know, if someone's teaching, having kind of a place that they can go and maybe even mentorship around teaching for those types of students and post-docs that are interested in that would be great. So I think there's still always room for enhancing and creating more space for things.

01:45:54:17 - 01:46:01:22

Jennifer Aumiller

Yeah. And I think even more collaborations around campus on a lot of these different things would be really great too.

01:46:02:11 - 01:46:24:02

Scott Riley, II

Yeah, I agree wholeheartedly. I'm a firm believer that a subtle initiative that you can be would be a great benefit to the grad students. And if you need somebody to help you out with writing the application, let me know. I also think that we could do a lot with collaboration because until I did a little bit of investigating and I'd like to thank Erin Hager for introducing me to you.

01:46:24:02 - 01:46:34:07

Scott Riley, II

I didn't even know that circle was on you and be in campus in any way, shape or form. So I think it'd be great if the schools could do a little bit more collaboration from these workshops.

01:46:34:23 - 01:46:35:17

Jennifer Aumiller

Absolutely.

01:46:35:23 - 01:46:59:18

Scott Riley, II

All right. So with that, I like to wrap up with two fun questions. I mean, these are all fun questions, but these are more personal perspective questions. And so I'd like to start with my second the last question, which is each one of us, an educator, brings something unique to the table. And my perspective and I'm curious from your experience, what do you think your teaching superpower is?

01:46:59:18 - 01:47:29:10

Jennifer Aumiller

I'm going to say, I think seeking out collaborations for our students and postdocs, because I feel like you can't do everything by yourself and you can't be everything for everybody. So I think having collaborations creates a much richer, much more dynamic and adds so many things for our graduate students and postdoctoral fellow. So I think I would say seeking out collaborations and being open to those collaborations would be what I would consider.

01:47:29:22 - 01:47:32:05

Jennifer Aumiller

If I had to call it a superpower, that would be it.

01;47;32;19 - 01;47;48;18

Scott Riley, II

Yeah, I think that's a great superpower and I definitely think you should call it a superpower because not everybody utilizes that ability, right? Yeah. So the the last question that I'd like to ask is, what do you think is moving the needle in education?

01;47;48;18 - 01;48;10;12

Jennifer Aumiller

I'm going to come back to collaborations, honestly, because I think the more we are learning about education, the more we can learn from different spaces. So like I'm in the Health Professions Education Program and I'm learning how those things really can apply to like a more basic science, biomedical space and kind of thinking about how that can maybe move the needle there.

01;48;10;12 - 01;48;33;09

Jennifer Aumiller

And I think also looking talking to other people in other fields and looking around campus and seeing other people we can collaborate with, I think can just create more opportunities and just a richer and more robust environment for education and teaching. So that's really where I think really could help move the needle.

01;48;33;24 - 01;48;44;12

Scott Riley, II

And you've made a really strong case for it with this interview. So I want to thank you again, Jennifer Miller, for being a guest on the show for moving the needle.

01;48;45;06 - 01;48;49;25

Jennifer Aumiller

Absolutely. Thank you so much for having me.

01;48;49;25 - 01;49;06;15

Erin Hagar

Thank you for joining us today on moving the needle visit us at U. Maryland dot edu slash FC TRL to hear additional episodes, leave us feedback or suggest future topics. We'd love to hear from you.