7 - How to Help STEM Faculty Help Students Learn - Full Audio

[00:00:00] **Ashley McNeil:** Hi, this is Ashley McNeil. I am an assistant professor of Chemistry at Springfield College and the host of today's episode of The Centering Centers Podcast, which features a conversation I facilitated as part of the Pod Fest event that took place in December, 2022. On the topic of helping STEM faculty help students learn.

[00:00:23] I am a third year chemistry professor. I'm pretty early in my career and one thing I can tell you for sure, having a PhD in chemistry. Is that there were no sort of official opportunities for me to learn about my current role as a professor. Back when I was in graduate school, I did receive a GaN fellowship, and that really helped, but it just wasn't really a topic of conversation.

[00:00:54] We were busy doing chemistry. As I imagine most STEM professors will tell you that's a pretty common experience. In addition to my voice, you will also be hearing from Elizabeth McDonald. She will be introducing herself the start of our conversation. She is from the other side of this conversational coin.

[00:01:15] She is an instructional designer at the University of Alabama. Hope you enjoy our great conversation. We end up talking a lot about different assignments and whether they work well in a large or a small STEM classroom. We talk a lot about how instructional designers can help new faculty really get to know the ropes of writing a good syllabus, designing their online platforms and assignments in order to really support students instead of just.

[00:01:51] Kind of sticking with the status quo of what we learned when we were students, and we spend a good bit of time talking about those healthy interactions with students and building trust and really being vulnerable with one another so that you can start to kind of get to the heart of what they need from you, not only as their instructor, but also really as a mentor.

[00:02:14] I hope you enjoy. We are here to have a conversation about. Learning how to help students learn. Basically help for new STEM faculty. I'm Ashley McNeil. I am a third year professor of chemistry at Springfield College in Springfield, Massachusetts. And just a little background, my PhD is in physical chemistry and.

[00:02:38] Besides graduate fellowship that I had specifically for teaching, there was no preparation for what my life was going to be like as a professor. And so I've been really utilizing center resources to help me learn how to do that. My name

[00:02:54] **Elizabeth McDonald:** is Elizabeth McDonald. I am a instructional designer at the University of Alabama, and I also am a PhD candidate in the higher education administration department on the College of Education at the University of Alabama.

[00:03:11] I will defend next semester. I'm very excited about that and my research interest is, Exactly what Ashley mentioned as far as the idea and concept of faculty preparedness for teaching and the level of faculty preparedness. And my background does STEM primarily from higher education. I have worked in housing and residential life as also as well as advising, though I also have a very strong background in student success.

[00:03:45] As well. So also, ha, I feel that's a really big benefit for this kind of conversation is understanding the student perspective and how important that is for faculty preparation for teaching and how our students perceive faculty teaching and in this arena as well. So that's a little bit about me. Yeah, I

[00:04:04] **Ashley McNeil:** think it's, I think it's really interesting actually.

[00:04:07] I. Also got my degree from the University of Alabama back in 2020. Wow. So small world roll,

[00:04:12] **Elizabeth McDonald:** roll tide. We gotta, we gotta insert that at least once in here, so. Mm-hmm.

[00:04:17] **Ashley McNeil:** And probably at the end. Yeah. Yes. I, you know, it's an R one research university and I personally went into my PhD knowing I wanted to be a professor.

[00:04:28] At a fairly small school, so I knew I wanted to teach, and that would be my primary goal, right? Yes. I still conduct research on the side, but it's not my major job description. So Springfield College, where I teach now is a fairly small school, not a ton of active research going on, but it's something that we're working on.

[00:04:49] It's a direction we're moving in. So I sought out what opportunities I could. To learn about the students, but it is definitely not part of the [00:05:00]

pervasive culture for STEM students. For STEM PhD students, many of us have to teach like a lab or something for our stipend, our graduate stipend. But beyond that, we really never have conversations about the word.

[00:05:16] Pedagogy, which I had never even heard before. I was applying for jobs and I was a teaching fellow. We, I don't remember the word pedagogy ever being murmured in the chemistry halls. It's been a trip and I would not have been able to do what I've done so far in my position without the support of a center.

[00:05:36] So Elizabeth, as somebody who's kind of. Involved in that center side of the world. I know you said UA is working on getting a center now. Yeah. But since you're involved in that work, can you talk a little bit about how a center can support these kinds of new faculty with very little background. Yeah, I think

[00:05:56] **Elizabeth McDonald:** that centers like teaching and learning, or even in my world, my immediate world, which is instructional design, can be wonderful resources for new faculty members.

[00:06:09] And I think the biggest benefit that we can offer is that scaffolding and that structure of. Almost like a compass, so to speak. For new faculty members, you are often being put in. Larger classrooms regardless of your institution type, because STEM majors are some of the most popular majors nowadays. I'm thinking of like Bio 1 0 1, chem 1 0 1, or even like math classes that have hundreds.

[00:06:43] Of students and them, and I can only imagine, I like to talk to people, but like I can only imagine the fright standing or uh, facilitating in front of these students. These large classrooms. Even like I mentioned, at a smaller institution like Springfield, I can imagine those are probably large, large class there's are large classrooms and so helping.

[00:07:06] New faculty members how to scaffold those classrooms, whether that is understanding how to format your syllabi. Understanding how to format your core schedule, how to kind of tackle your content and how to present your content, I think is some really big steps to how to like alleviate some of that nervousness.

[00:07:28] Some of that I know depending on your department is provided for you, but you also want to have some ownership over that as well too. Instead of it just being passed down from person to person, you wanna be able to have

some ownership. And quite frankly, some trial and error of like, does this work for my large scale classroom or does it not work?

[00:07:50] I think the other really big important thing, and this is where I feel I. Like my student success past comes a little bit into play, is the other aspect of pedagogy that I feel like it's overlooked a lot is the emotional connection. Mm-hmm. Um, the aspect of, I think there's a lot of focus on pedagogy of content creation and curriculum structure, the scaffolding that I just mentioned, but especially in STEM majors where students are gonna figure out probably quickly, that's.

[00:08:25] A really hard major to be in or a really tough class. There's a lot of emotional, a pebble or a lot, a lot of emotional turmoil. And so how do you navigate those conversations? Not only knowing like potentially campus resources to connect with students as far as like advisors or counseling centers, but also.

[00:08:48] Quite frankly, like having a human conversation. Mm-hmm. And dealing with those emotions. Not saying that STEM professors need to learn how to be counselors, but also just learning maybe skills and strategies of like how to, one thing that comes to mind, um, an example is having like, A more flexible late work policy or a grading policy that allows to drop X amount of quizzes, um, to help alleviate some of the anxiety of the students so that when a student does come to you and.

[00:09:22] A tizzy, so to speak. You can tell I'm super southern because of my, my phrases. When a student does come to you, you can have some things to be like, well, here are some options. Here are some pathways to success in my class. And then also here are some campus resources. If you do feel that you need to pursue either other major options or other wellbeing options.

[00:09:45] **Ashley McNeil:** Right. And I think that's another, you're hitting on a huge thing that I never even thought about in advance, um, which is advising, right? Mm-hmm. Advising is a huge part of most faculty's lives. Mm-hmm. Academic advising, and [00:10:00] some of us take on special roles. So for example, for my school, I'm the director of pre-health professions advising for anyone and everyone.

[00:10:10] Whatever kind of medicine or health you wanna be in, I'm basically here to help you. What classes do I need to add? You know, what experiences should I be looking for? And it is a lot. Mm-hmm. And there's a lot of pressure

on these young students, first of all to have a life plan at 18. Yes. Which is ridiculous.

[00:10:30] **Elizabeth McDonald:** I'm in my early thirties and I still like, I've changed my life plan probably every year I've been working, right? I

[00:10:36] **Ashley McNeil:** mean, you grow and you evolve, and when you're fresh outta high school, there's no way you can have the wealth of experience to really know what fits for you and what doesn't. But that's a whole other podcast topic, you know?

[00:10:49] Mm-hmm. But yeah, learning to be a good advisor. Is tough. Mm-hmm. And luckily there are resources for that, not only in like centers and things like that, but like I joined ada, which is the National Academic Advising Group, just because I didn't know, you know, I know my personal background and what I experienced in college, but I am a white lady in my early thirties, right?

[00:11:14] Mm-hmm. I don't know what it's like for a minority student or an international student, so I spend a lot of time. Listening. Listening in on other advisors, tell me about what they've done and things like that. But this is another tool set that you just are not provided before. You show up in a faculty position and you're given a group of advisees and told to just go with it.

[00:11:40] Like, I know how to look at a list of classes you need to graduate. Anyone can do that. But actually getting to know your students and figuring out what career interests they have and staying in touch if they're struggling with their classes and, you know, developing those relationships. That's not anything I experienced.

[00:12:00] Mm-hmm. As a student, my advisor was not cozy with me and. Did not seem to care a lot about my interests and my goals and in classes, going back to classwork, right? It was very, I'm gonna talk at you, you write down what I'm saying. You're gonna take a test and the classroom is just, especially in STEM these days, I think that's a real disservice to students because I don't think it's how modern students learn.

[00:12:28] Yeah,

[00:12:30] **Elizabeth McDonald:** and I think, you know, we could sit here and talk all day about like how the student demographic has changed so much in the past few years. And again, that would be a whole other like podcast topic. But I

mean, the reality is, is that it's a mission critical statement that students need to be successful in college, and that is at the end of the day, your job.

[00:12:56] And so how are we going to make help? Students be successful. Students need to feel valued on a college campus no matter what size or shape that college campus is. And students want to feel connection. And so like what strategies can we do? I. Here is like the list of strategies, like here. Here are those strategies.

[00:13:17] Here is that podcast. I think as you mentioned, talking with colleagues, really immersing yourself in whatever campus that you are at, getting to know fellow advisors, getting to know fellow colleagues, asking for help is always a great option. I'm a big believer in the only stupid questions are the ones that are left and asked.

[00:13:41] I think those are great. Other really great strategies as well too, so,

[00:13:46] **Ashley McNeil:** Yeah, I definitely agree. The one thing I was going to talk about was some of the tools maybe that I was introduced to by our center at Springfield College that I've personally found really helpful. Our center leader at Springfield College is Chris hok and mm-hmm He has been wonderful at supporting just.

[00:14:08] Ideas, different ideas for how to get in touch with students. I was hired during fall 2020, so mid the height of pandemic and everyone being at home, and I moved halfway across the country. To a new place. Mm-hmm. So I didn't know any of the faculty here and the students and I were all trapped at home and pretty miserable.

[00:14:30] And so my personal brand, I guess as a professor is, I'm transparent, like maybe a little too transparent, but Chris really reinforced that that's not necessarily a bad thing. Right. Be human. Mm-hmm. With the students and then ask for their feedback. So a big part of what Chris introduced to me is asking for really a.

[00:14:53] Frequent student feedback about, yeah, the questions they have and things they're confused about [00:15:00] and that sort of openness to what they have to say and my response to them like, yeah, I think that's a great idea. Let's try that. Or I can't really incorporate this idea, but here's why. That really gets buy-in from them and it makes such a better relationship between the two of us.

[00:15:20] It's building that trust and that confidence, and that was never a part of my classrooms, right. Going, mm-hmm. Going up through undergrad and grad school.

[00:15:30] **Elizabeth McDonald:** So how were some of the methods that you took that

[00:15:34] **Ashley McNeil:** feedback? That's a great question. So one thing I started doing, which actually I've written an I rrb for now, so it's like official research.

[00:15:42] Oh yeah. Uh, scholarship of teaching and learning research is, mm-hmm. I do post exam anonymous surveys. So I start off by asking, you know, did you feel like the content of this exam was fair based on what was done in class? Mm-hmm. Out of all the different resources that I give to them to study, they don't have to use them all or any of them if they don't want to, but I asked them because I found myself in my first year to like, Just creating so much stuff, worksheets, and mm-hmm.

[00:16:14] They have an online homework platform and I also give them not graded practice problems there. Uh, it's a flipped lecture, so I have recorded videos and, you know, we have an in-class project. I'm like, all these things, right? And so I ask them like, which of these did you use? And among the ones you used, which one was the most helpful?

[00:16:34] Right. That way as I go forward, I can provide more of that for them and not waste my time on this other stuff. They're not really using, because I don't know how kids study these days. I don't know. Right. They know. Also, I, I will also tell

[00:16:49] **Elizabeth McDonald:** you from talking with students, it is varied. I, it's so different like, No one can ever really come to a, uh, consensus on how they like to study.

[00:16:58] **Ashley McNeil:** So yeah, I've definitely found that there are. There are factions who like certain different things and that's cool. Mm-hmm. It's all what works best for you, and as we know, not one way is going to work for everyone. Another thing I do that Chris Hocker recommended, we have the Google Suites available to us at Springfield College and I use jam boards.

[00:17:20] Oh yes. Mm-hmm. Which are available to the students 24 hours a day. Every day of the year, I have one for every chapter and for each exam. And

so they can go in there and post like little sticky notes of this question on the homework. I'm super, super confused, or you said this thing in the video and I don't really understand what you mean.

[00:17:43] And so then in class together I can address those questions instead of wasting time on things people feel good about. That was kind of sneaky on my part too, because I know from being in chemistry for a long time that most people trip up on the same concepts. Yeah. But the students are scared to admit mm-hmm.

[00:18:05] That I'm the one who has a question, right? Yes. Mm-hmm. So if you can post it anonymously, I told them, you watch, watch these jam boards and you'll see the question you're thinking will pop up on there. And then if you have the same question, edit it and just say times two, times three, times four. Right. How many of you have this question?

[00:18:24] Mm-hmm. And I think that really helps boost their feeling, again, of belongingness and that they're not alone in their questions, which is probably one of the scariest things in a STEM class. Yeah. So yeah, those are my two major techniques. And then once they get used to talking, giving the feedback.

[00:18:43] They'll just come by my office or just raise their hand in class and be like, that doesn't make any sense. Which is great. Yeah, that's what I want for sure. So I have

[00:18:52] **Elizabeth McDonald:** like a two part question regarding this kind of goes with content as well as grading. I. One thing that I often hear from students specifically in like more entry level bio chem classes is that they really struggle with the amount, like numeric amount of content that they are presented.

[00:19:15] What strategies as an instructor do you, I mean obviously you have learning objectives you need to meet, um, that are set by the department and. You probably also have a textbook. I'm assuming that you probably follow. Yes. You're nodding. You're nodding. So what, if any strategies do you use to try to kind of minimize

[00:19:39] **Ashley McNeil:** that?

[00:19:41] That is a great question. So I largely teach general chemistry, which is that first year intro chemistry course. Yeah. And it is an insane amount of content. Yeah. At Springfield College, interestingly, we don't have a chemistry

major, so we have, uh, a bunch of different health and biology majors, which is [00:20:00] largely who I'm teaching.

[00:20:02] So I try, I mean, I'm giving them all the good chemistry content, but as I'm teaching it, as we're spending time together in class, I'll tell them, first of all, this is why you need to learn it. You're gonna use it in human A and P. You're gonna use this topic in organic chemistry. You're gonna, you know, kind of to make it more realistic for like, Please don't just memorize and then dump this from your brain.

[00:20:26] Exactly. You are gonna see it again. Right. But also incorporating things like examples that relate to those topics is helpful. I tell them, honestly, I'm telling you this background about this chemical concept because it's important chemistry. Mm-hmm. And it's going to be on the exam, but it's not one of those things that you're gonna need forever.

[00:20:46] So I'm not gonna make it worth. A ton of points on the exam because I know that the scope of that for your future is not important. Right. Gotcha. Not that it's not important, but you know what I mean. It's not gonna be critical to your success and. The second half of human A and P. So it's a hard question because there is just a ton of content we have to get through, but I think being more open and honest with them about the things that are more important than others and being transparent about what I'm thinking while I'm writing their assessment.

[00:21:25] I'm gonna put more points on things that you need to know for the long term. Yeah. The other things are not major, and that way if you don't remember them on the exam, it's not gonna completely crash your grade. That's hard though. It's because I know my students and I have a very narrow kind of student.

[00:21:43] Almost all of them are future health individuals or some environmental students as well. But in a, in a classroom where I didn't know that kind of information, I don't know. It's tough. Yeah, that's a really hard question.

[00:21:58] **Elizabeth McDonald:** And you kind of started to allude to like my next question as far as when creating the assessments, like how do you typically structure the number of exams or number of assessments based on this large amount of content?

[00:22:14] **Ashley McNeil:** That's a great question too. For me personally, and it seems to kind of work out this way, I've been at a couple of different institutions and it's not uncommon for undergraduate level classes, especially that intro level. A semester is about 15 weeks, 16 weeks with finals week. Right. That divides pretty nicely into four exam periods.

[00:22:36] Mm-hmm. We cover here at Springfield about 11 chapters in gen Chem one, so it's about three chapters per exam. That's how we do it. Three chapters. We have an exam on those three. Three chapters. We have an exam, et cetera, right? The last exam's, only two chapters. And here at Springfield, because they're not chemistry majors, our finals are not cumulative.

[00:22:59] That brings down the stress for them a little bit, but you know, that depends on who you're teaching and how you're teaching. That's all fine. And chemistry by nature is a little bit cumulative anyway. But they don't have to go back and re-study the gas laws chapter, but that's how we do it. Uh, we've played with having quizzes each week in between.

[00:23:18] It just depends on how we're feeling. Luckily, I'm not the only one who teaches it, so I have a very ex. Experienced partner who's been teaching at Springfield College for over 20 years, and she has tons of great feedback from how it's gone before I got there. So we work together to kind of figure out what's best for the students.

[00:23:39] Yeah.

[00:23:40] **Elizabeth McDonald:** And you know, coming from. My perspective working students here at this large R one students, typically they follow the same kind of pattern as far as like those three to four large mm-hmm. Exam blocks. And students oftentimes get really very nervous about those large, kind of like looming exams and.

[00:24:04] Managing the content in between each one, which I understand is oftentimes probably an instructor preference as far as like how they structure the content in between each of the exams. And then also it's up to the instructor discretion as far as how. Like, do they do quizzes or other assignments in between each of those exams?

[00:24:28] In my instructional design mind, and I'm also not a STEM person, so like I'm coming at it from like a very like instructional design framework as well as a person who is studying scholarship of teaching and learning, it makes

sense to do. Alternate assignments to help dampen the impact of the exams and help lessen that impact.

[00:24:53] So I'm curious if the years that you have done the quizzes and assignments, how [00:25:00] students have managed those?

[00:25:01] **Ashley McNeil:** That's a great question. For us, since I'm sort of the coordinator of general chemistry lecture, I'm the one who decides for all sections of general chemistry, right? How much the exams are worth versus other things.

[00:25:16] And as we've moved through my few years at Springfield College, the exams are getting to be less. Of a major chunk, but they're still the biggest chunk of the final grade. Mm-hmm. I think this semester we have it at about 75%, but we do make sure we build in other assignments that are not that kind of like summative, sit down in the silence and answer a bunch of questions.

[00:25:39] One thing we've do, we've done for this is the third semester we've done it is an infographic project, so, oh yes. I love that one. Yeah. They're so. Fun and they're creative. I actually have a student this semester who's an art therapy major who wants to go to medical school. Mm-hmm. And her infographic was so nice.

[00:25:57] I wish I could show it to you. It's so good. But it's kind of a creative way for them to. Explore an idea. We have them pick a chapter from all the chapters we're going to do for the semester at the very beginning of the year. So that diviv up the grading a little bit. Mm-hmm. I only have to grade about a quarter of the class at a time, which is very helpful with a large class.

[00:26:18] Our classes are among the very largest on campus here at Springfield College. As you mentioned earlier, uh, STEM classes being large, and they get to pick a chapter and then they can do any topic inside that chapter. But the goal is for their infographic to help. Other people study and some amazing stuff has come out of that, and that's 5% of their final grade.

[00:26:39] Just being creative and making this cute little image, you know? And a lot of them really, really love it. We also do online homework just because there's no way to keep up with grading otherwise, but we use the active system, which gives incredible intelligent feedback on. What they've done wrong to help correct them.

[00:26:59] Mm-hmm. And the students ask me all the time for extra practice problems on there, which we give them that are ungraded. So they do that. The homework, I think this semester we bumped it up to 10% just because of the feedback from students that they spend so much time on it. Mm-hmm. So they should, it should be a larger percentage of their grade.

[00:27:17] I agree with them. So we changed that. Another thing I do, because I think writing is important. Is even for STEM majors, right, is we do discussion board posts where for Gen chem one, I will give them the first two. There's three of them. The first two, I'll give them an article for them to kind of read and ponder and then write about, and it's not super science heavy.

[00:27:40] The first one is on the importance of being wrong sometimes, and the second one is on the importance of diversity, using diverse examples of chemists in a chemistry class. Right? Um, so they get to kind of explore a chemist who. Isn't a white man. Um, and talk about that chemist. And the third one is a choose your own adventure.

[00:28:00] I tell them like, go, go find a peer reviewed article, which they need to learn what that means, right? Many of them are first year freshmen on anything. It doesn't have to be chemistry. So pick something from your interest if you wanna do physics or astronomy, or. Medicine or whatever, and then come back and write a post about it and explain why you picked it and what did you get out of it.

[00:28:22] And I think that's really good for them too, because they really need to practice talking about science. It's not enough to do a a math problem that's not that useful if you can't explain to other non-science people what the heck you're talking about. So for sure.

[00:28:38] **Elizabeth McDonald:** Yeah, and I think something to kind of note to like whoever ends up listening to this mm-hmm.

[00:28:45] Is that. The ideas of like what we're generating here in this conversation may or may not work for your specific context of your STEM classroom, but like maybe one idea would really work. Mm-hmm. So like you mentioned the infographic, like I'm already thinking of one science course that I work with that I think that would be like a perfect idea for, and I'm like literally like jotting it down, but in another context.

[00:29:15] Maybe I don't think the discussion post would work. Right. And so I think also to like thinking in a nuanced context of like what could or could not

work in your classroom and that trial and error aspect of hoping that whatever we do kind of present or talk about in this context could. Work for their STEM class.

[00:29:41] So

[00:29:42] **Ashley McNeil:** Yeah, for sure. And it's very, I mean, there is no one size fits all for any of this, other than I will say, I think you could probably use active in any size classroom, but it's an online platform. I could go on and on about that too, but I won't. But some of these other things, you really do have to.

[00:29:56] Think about the size of your classes. So sometimes I [00:30:00] teach a chemistry survey class, which is a one semester like gen ed level, and it's even bigger than my general chemistries. I would argue probably the largest class we teach on campus. There may be one other that's equally large. I do the infographic project with them too.

[00:30:17] I don't have them pick chapters because the book is only recommended, not required for that class. But what I do for them instead is I have them form groups of four. And then I have them pick a chemical from some broad category. It might be an artificial sweetener or a toxin or some kind of plastic chemical or uh, whatever.

[00:30:38] And then as a group, there are sections of information I ask them for that they can divvy up however they want. Hmm. Which is nice because they get to know people in a large class that normally they'd never speak to anyone. Unless they already knew each other, and then at the end, a good percentage of that grade is a self-evaluation and a peer evaluation of how everyone did as a group member.

[00:31:05] And so they get a chance to give that feedback, which really helps the students who. Felt like they had to do everything, be able to express that to me in sort of a formal way. And it gives me sort of a formal way to have that effect. The scores of people who everyone else in the group said they really literally just wouldn't help.

[00:31:26] And so I think it helps with that sense of fairness. The students feel like, I really do care about how. The experience was for them and not just the final grade. Yeah. Things can be tweaked for sure, and there are things that don't work. When I taught before I got my PhD, I was an adjunct and a temporary full-time instructor for a few years at another small school, and I had a research paper.

[00:31:53] That they did instead of this infographic project. Cuz I had never even thought of that at the time. And it was on an element, pick an element, do a little research paper, you know, certain number of citations. And then I would let them turn in a rough draft to me. I would give them some tips, they would redo it.

[00:32:09] That was all great because my whole class was like 40 or less people. Mm-hmm. So I tried that my first semester here where I had three times that many students and. Never again. I will never again. Uh, I

[00:32:25] **Elizabeth McDonald:** hate that. I, I do, I do teach, it's not in stem, but I can definitely identify with the feeling of like, that crashed and burned so bad.

[00:32:36] **Ashley McNeil:** I wanna run away from this classroom. You know? And I, I did it. I held up my end of the bargain. I spent my entire Thanksgiving break doing feedback on these papers and, At the end of the semester, one of the questions is like the open-ended questions on evaluations, right? Like, you know, how were the, how were the assignments in the class?

[00:32:57] Did it help you learn? And so many of them were like, why did we even do this? Like, why did I need to learn this much about one element? And you know what, you're right, you're right. That was a answer.

[00:33:11] **Elizabeth McDonald:** You'll answer that jeopardy question in a few, right? About that.

[00:33:14] **Ashley McNeil:** Absolutely correct. That did not actually help you learn any of the things that were actually important other than I wanted you to practice writing.

[00:33:23] But there are other ways to do that. And so now I have these like read a journal article, respond to it discussions instead, where they're required to respond to each other as well. That is much closer to a useful thing than. Write about an element that like no one's ever gonna ask you about, and we don't have time for you to present.

[00:33:42] So no more busy work. I want the work to be meaningful because they will call you on it with a quickness, which I appreciate. Yeah. I think it's

[00:33:53] **Elizabeth McDonald:** also kind of going back to this concept of like being called out and kind of crashing and burning. I do think that is a kind of

necessary experience. Maybe not necessary experience, but like maybe necessary.

[00:34:07] Skill to kind of go through your first time teaching because it does help you refine yourself and like very much so when you're in your example of like, that was like, we need to change this assignment. We need to do something better, we need to do it differently. But I also feel like it helps you become more confident mm-hmm.

[00:34:30] In your interactions with students of like, You know what? Like it's okay to fail. It's okay to, because like, I've already felt that feeling. It's almost like a ripping off of the bandaid Oh sure. Type of thing. And so you're like, you know what? I got my first fail out of the way. I have, I've had those feelings.

[00:34:46] I've processed those feelings. Now we can move on.

[00:34:49] **Ashley McNeil:** Right. Yeah. I tell the students all the time, if you hear me or see me do something that's wrong, say something. Everybody makes mistakes. Everybody [00:35:00] does. Um, and I will say, the one thing I say a lot about my PhD not preparing me for this job, the one thing my PhD prepared me for is criticism.

[00:35:09] Not in a negative way necessarily, but have you thought about this? We'll, have you tried it that way? But this doesn't really seem like it's working out, so how would you change it? Those kinds of questions. You have to be able to field on the fly to get your PhD right? You'll find out that's your defense, right?

[00:35:28] It's, mm-hmm. Scary, but it's useful. Yeah. And honestly, it's not as bad as you think it's gonna be. It's never as bad as you think. But anyways, it's the, it's the lead up to it's, it is. It's the nerves. It's the nerves. Yes. But yeah, in my classroom, and this is kind of my teacher persona, I guess I'm gonna make mistakes.

[00:35:44] Call me out or if I like, cuz I give them worksheets and then I'll put like my key up for those worksheets so they can see my logic, which some problems, there's lots of ways to solve the problem. This is just how I do it. Right. But sometimes there are errors on there because I did it really quickly when I was multitasking and whatever.

[00:36:03] And so they'll ask me in class like, well, you said you got this for your answer, but I think it was actually supposed to be this. Am I wrong? Like,

can you show me where I'm wrong? You're not wrong. You're totally right. I was wrong because this is where I missed it. You did a great job. And so then I'll say it in front of the whole class, like, just so everybody knows, there's a correction on this question, on this worksheet that your fellow student pointed out.

[00:36:29] I made a mistake. Yeah. And I think, again, I think they really appreciate that. Now, there are some students, there are always gonna be students who are bitter, right? Because like, your class is hard and they've never struggled before and they don't appreciate that. Mm-hmm. Which, who does? I get it. They, those are the students in your evals who are gonna be like, there are all kinds of errors on all of her stuff and blah, blah, like, Cool.

[00:36:52] You have to just roll with it. But I think a lot of the students will see the value in you just being honest and human right and, and vo and vulnerable to

[00:37:02] **Elizabeth McDonald:** you vulnerable. Right. It it allows them to feel that vulnerability back with you, so.

[00:37:07] **Ashley McNeil:** Exactly. Exactly. And I tell them too, like, I can probably guess where you're going to make errors.

[00:37:15] So if you're struggling with an online homework problem or one of the worksheet problems, take a picture and email it to me and I bet you I can find the one tiny error in about five seconds because I've seen it all before. I've made the errors before. Hmm. So as long as you're willing to show me where you're at, I promise the confusion is probably insignificant.

[00:37:38] It is a tiny thing, but we can correct it and move on. Well, I think that's probably the time we have for today. Yeah, this is, this was really good. This was really fun. Thank you so much, Elizabeth. Thank you so much for having this conversation with me. I so appreciate people in your field helping people like me who are just walking out here blind.

[00:38:01] **Elizabeth McDonald:** No problem, no problem. It was so great chatting with you and I hope you have a

[00:38:07] **Ashley McNeil:** good rest of your week and good luck on your defense.

[00:38:11] **Elizabeth McDonald:** Thank you. I really appreciate that.