[00:00:00] Bonni: Today on episode number 450 of the Teaching in Higher Ed podcast, how to not be perfect in teaching and learning with Dr. Rebecca Price. Welcome to this episode of Teaching in Higher Ed. I'm Bonni Stachowiak, and this is the space where we explore the art and science of being more effective at facilitating learning. We also share ways to improve our productivity approaches so we can have more peace in our lives and be even more present for our students.

Dr. Becca Price fulfill the dream of her four-year-old self to become a paleontologist. When she began her faculty career, however, she realized how little her students understood about how evolution actually works, that inspired her to switch research directions to focus on how students learn science, and how early career scientists learn how to teach with evidence-based practices.

Since 2011, she has run the Science Teaching Experience Program which has the mission to engage a diverse pool of early career scholars at the University of Washington and affiliate institutions in a closely mentored apprenticeship to learn how to teach scientifically with inclusive demonstratively effective student-centered pedagogies. To date, she has mentored 131 postdocs through Step-wise which is an acronym, S-T-E-P-dash-W-I-S-E.

As a professor in the School of Interdisciplinary Arts and Sciences at the University of Washington, Dr. Price teaches students to conduct scientific research and encourages them to think about how they'll use their college and other life experiences in a way that is gratifying to them after graduation. She still dreams about fossils. Becca, welcome to Teaching in Higher Ed.

[00:02:17] Rebecca: Thank you so much. It's great to be here.

[00:02:19] Bonni: I need you to do a little back then and then today, all around you wanting to be a paleontologist when you were four years old.

[00:02:29] Rebecca: Right. As a child of the '70s, I remember when Lucy was discovered. Do you remember that early human?

[00:02:39] Bonni: No. [laughs] Thank you because I instantly started going Charlie Brown, and I'm like, she's not going Charlie Brown. No, this is not where she's going. Tell me more.

[00:02:49] Rebecca: It was such a big moment in my life. It can be hard to forget that it wasn't a big moment in other people's lives. This was an early member of the human lineage, Australopithecus Afarensis is her species' name. She was, at the time, the oldest skeleton that we'd found that we knew walked upright. Paleontologists could tell that because of her hip structure, and her knee structure.

When I was five, there was a museum exhibit about her at the California Academy of Sciences. I loved going to the academy as a child. My parents would take me there quite often. This exhibit just entranced me. One of the things that they did in the exhibit was they had a wall with puzzle pieces. Some of the pieces were present, and those were telling us what we knew about human evolution. Then there were pieces that were absent, too.

[00:03:49] Bonni: Oh my, gosh.

[00:03:49] Rebecca: I remember thinking, "I want to fill one of those pieces."

[00:03:53] Bonni: Oh, my gosh, how vivid.

[00:03:56] Rebecca: It's a very visual memory. His family was there, and it was just a really inspiring experience for a little kid.

[00:04:07] Bonni: Do you in general tend to remember a lot about your childhood, or does it tend to be that there are things that really reverberate, but there's other things where you go, "Wow, I don't," because I'm thinking contrasting Dave, who-- he literally can go kindergarten. This was my teacher, first grade. This was my teacher. How can you possibly do that? I'm curious if you fall into some range in between knowing all those names and having those vivid memories or maybe a little bit more just this really stands out to you.

[00:04:39] Rebecca: It's definitely something in between. This memory stands out, and it's been reinforced over the years because when I did become a paleontologist-- Actually, even before that, when I was in college, I had a research experience for undergraduates at the California Academy of Sciences. It was really neat to launch my career in research at the same institution where I was inspired to study evolution.

Now in that research experience, I was looking at sea slugs, so totally different group of organisms than humans of course. That was such a foundational

experience in terms of my research and to have both of those experiences anchored to the same institution reinforced that visual memory.

[00:05:26] Bonni: I would love to hear a little bit more about how did you learn science?

[00:05:31] Rebecca: I mentioned that going to the Academy of Sciences was a family tree. It was something that we did a lot. I have a traditional background in science, in that I come from a family of scientists. My mom has a Ph.D. in computer sciences. My aunt is a Ph.D. chemist, their cousin is a Ph.D. physicist, and then my grandfather is also a Ph.D. chemist. Really both PhDs and science were part of the family business.

I'm exactly the student who, now in my teaching, I'm not necessarily reaching out to because I was the kind of student who would be in science regardless. I think it's much more important to broaden participation in science and to help everybody see how they are inherently scientists because people inherently have questions about the natural world. I'm fortunate enough to be at an institution with a lot of first-generation college students and spend a lot of time working with them to hone their skills and interests in science.

[00:06:46] Bonni: You told us how you learned science but tell us more about how should people learn science today.

[00:06:54] Rebecca: I actually want to jump back just a bit to everybody being a scientist because that became solidified for me when I became a parent. I read this wonderful book by Patricia Kuhl, called Scientist in the Crib. It's about how babies start acquiring information, and so much of it is through experimentation. I remember when my kids discovered that they had hands, and they would look at them and start moving them, and then realize they were in control of that movement. That's the scientific process right there. That's testing a hypothesis. That's predicting outcome.

I think when I say that science is an inherent way for people to think, it's because those are some of the first thoughts that we have. I also wanted to add that I've been really lucky to all my life know women scientists. I mentioned my grandfather is a Ph.D. chemist. He worked with a number of women chemists. I saw my grandfather quite a bit growing up.

These were people who he established friendships with and who I encountered throughout my elementary school, and middle school, and high school days. There wasn't really any question about whether I could do that. Of course, having my mom as a computer scientist helped with that, too. I remember

thinking how funny it was that my parents would get mail for Dr. and Ms. Price when they got it backwards.

It was my mom that had the Ph.D. and my dad that didn't. It was really Dr. and Mr. Price, and we just thought it was funny. It was more of a reflection of naivete that was more understandable than it would be now. It was just a chuckle to see mail addressed like that.

[00:08:52] Bonni: Oh, yes. Was it to the extent that you would have called it normal, but it wasn't at the time normal? Would it have seemed at the time normal to you, but you know in society, it wasn't?

[00:09:02] Rebecca: That my mom had the Ph.D. and my dad didn't?

[00:09:04] Bonni: Sorry, seeing women scientists.

[00:09:07] Rebecca: Oh, it felt very normal to see women scientists.

[00:09:10] Bonni: Tell us more then about how should people- because as you already have inferred, people don't always today even see the women scientists in the context in which they are, people today don't always have people offering fostering a mindset that we are all scientists. What should we be trying to do today?

[00:09:32] Rebecca: I think this ties into my teaching philosophy quite a bit which is to explain to students what they need to succeed in science. I work on the quarter system. We only have 10 weeks with the students. One of my favorite courses to teach is one on science methods and practices called, and students conduct research projects from start to finish. They jump into paleontology. There's a wonderful database online called the Paleobiology database, and all of the fossil occurrences that have been able to be entered into this database have been entered. It's through time, throughout the globe, and students can dive into the database and ask research questions that nobody's ever asked before.

We learn some very basic statistical tests, and they jump into the primary literature to justify the question that they're asking to interpret the results that they get. Some of the students come into the class with previous statistical experience, but few come into the class having done stats on their data. The ownership element of learning statistics in an applied way really pays off. I do this class now with an ungrading philosophy or specifications grading philosophy because I'm still bound by needing to give them a grade.

Just like Linda Nilson suggests, I offer tiers. The main tier in the course gives them a B, and that is all work related to finishing the research project. They finish the research project which means writing a scientific paper, going through the peer review process, and then resubmitting the paper along with the cover letter explaining the changes that they made. Then there the other tiers allow them to think a little bit more about science and society or to go deeper into the research process by learning more statistical techniques and reading more literature.

The trick is that everybody can do it. Because I'm using specifications, the students know right away that my expectations are for them to succeed. I'm not grading on a curve. I am constantly collecting data on what they understand so that they can respond to the feedback that they get and meet the goals. I hope that that is increasing people's understanding of an appreciation for science more broadly. That's my intent in the course.

[00:12:21] Bonni: I enjoyed so much the way that your voice naturally modulated as you said ungrading, but then it's not really, it's really specifications grading. I chuckled because I do that a lot. We want to be precise in our language. Although I think if some of the people who are really at the grassroots of ungrading, they would probably say that what you're doing is a form of that because I think they're really trying to resist being put into like you have to do it perfectly because there is no perfectly and context really does matter.

When we're thinking about context, both disciplinary as well as within our context in which we teach it makes a difference. All this to say, I get curious because I literally could have said the words that you just said in exactly the way that you said them to describe mostly how I'm approaching a lot of assessment these days.

I do get curious because my values are very much aligned-- They're 100% aligned with what you just said. Truly, I haven't done as good of a job whatever good means here at being able to say if what you want is the B here it is. Then if you want is the A and having that be clear, and my limitations that feels like is so much because of the learning management system. I'm not even going to name which one I use because I happen to think it's the best I've ever used. I don't want to be critic. It's just that they in general aren't designed to accomplish that. What I do get out of the current learning management system which I wouldn't want to give up is I haven't had a question about what is my grade in your class, where do I stand, what do I need in years. I forgot what that's even like because I have it so dialed in. Then when I hear things like you just said, I'm like, oh my gosh. In including a recent conversation with David Clark which I still treasure so much I should go back and listen to it again. It was about

deadlines and all of that. Then I'm like, oh my gosh, I want to do what you're doing, but then if I do it, oh, I got to do it in a spreadsheet and then they're not going to see it. Anyway, I'm just curious if you have any advice for those of us who would love to do what you're talking about but can't figure out how to bend our learning management system to do it and all of that.

[00:14:42] Rebecca: I use a learning management system where I can have categories of grades. The core groups add up to 80% of the grade, and then there's 10% for the science and society and 10% for the going deeper into the research process. The learning management system then just then does the math.

[00:15:07] Bonni: I would be going along in your class, and I'd be adding up to 80% all the way. If I got my 80%, I know that's a B. Then if I wanted to there are two more modules or however you have them organized, and I could do those, and then I would see it, literally when I would log in I would see it then potentially move up to 90 and then potentially move up from there. You still accomplish everything I'm accomplishing, and then you get that added people can dial [crosstalk]

[00:15:36] Rebecca: That's exactly right. One of the things that I like about this approach is if students do some of the assignments in science and society, but not all, they're still getting a 5% grade boost instead of the 10% grade boost. That work is still getting recognized. Also am quite flexible with deadlines. I am still trying to figure out how much of that flexibility to share with the students in week one.

I also recognize that the pandemic-- every quarter of teaching since the pandemic started has been different. That's not a decision that I can make at the beginning of the quarter, how much strictness, how much flexibility to offer. What I need to do is make sure that everybody in the class understands the degree of flexibility. If some people are turning in assignments a week late, and other people are turning them on but not passing them, that's not fair. It's actually one of the things that makes specifications grading easier because if somebody wants to resubmit an assignment, go ahead. You can resubmit. That's fine.

[00:16:54] Bonni: That's so important to be articulating those things out loud or otherwise we introduce those inequities inadvertently. I feel that same tension that I'm hearing you describe of-- I just talked about it last week. It was, "Hey, what is important to me, I want you to not just survive, but I want you to thrive." What thriving looks like to me is that we could be curious about these things together and learn a lot and have some fun.

If you turn something in late, our learning management system, I can't say, "Oh, after a week, do this." It will start to do 1% deduction and it has a minimum threshold at which it will not deduct anymore. Theoretically, you could wait until the end of the semester and have a three day, but that's not how this class is designed.

I get it. That could for someone end up being the case. That is possible. I want them to know that. Then I also talked openly about not knowing what I'm doing when it comes to deadlines because what do I want them to do the same thing I want to do when I agree to meet a friend to go for a walk because I know that some synchronous agreement will be more likely that I will walk more.

Some kind of a synchronous agreement that you turn it in on that time means you get to experience the class in a somewhat similar way to how it was designed in terms of scaffolding, getting to practice these skills and play with them and all of that and get to know each other, get to know me because otherwise, you miss that stuff.

Admitting it feels clumsy. I tell them like, "Oh, if you turn it in two days late there's a little thing where I can just click on the thing and say--" because there's something psychological about if it was specifications and you met all of them, I explained it to them without saying specifications. It's like I don't play games with you. If you do these things that are right here you're going to get a hundred points. That is just like, "See? No games."

It might be 98 because you turned it in couple days late and then I'm just going to go boop, boop, and it's going to be back to 100. None of us have to go dang it. If only I would've turned it in on time because that's not my intent behind the deadline. That's really hard to explain to people who don't know yet if they can trust me on these things because they've been so used to the games for so long that like, "Whoa, what is this? This is a whole new thing I've not experienced before."

[00:19:22] Rebecca: In my learning management system, we can grade on complete or incomplete. I do all my grading on complete. That's one of the ways that I have.

[00:19:32] Bonni: I need to look into that. I have a feeling it might be using the same one. You could put it in the chat if you want. No, you could say it out loud. I think the audience can be trusted.

[00:19:43] Rebecca: We use Canvas.

[00:19:45] Bonni: Same. I have a feeling.

[00:19:47] Rebecca: There's a complete, incomplete option.

[00:19:50] Bonni: I thought I had heard that. They even have the whole mastery grade book that there's so much that can be done. That's why I didn't want to seem like I was-- Sometimes it's on us because I haven't learned it yet how to make my values show up in the learning management system.

[00:20:08] Rebecca: I just wanted to get back to one idea that you mentioned, Bonni, because I think it's really important for inclusivity. That's when is it okay to say, "Oh, I made a mistake, or oh, this is clumsy." I'm the kind of person that I cannot do clumsy. There's just an inherent part of my teaching and the way my brain works where I'm making mistakes. I embrace that, and it's one of the things that I tell my students about why I use this approach to grading.

Perfection doesn't mean learning. Perfection means that you have usually a very low-stress life and a lot of privilege. What I want to see is learning, and I'm learning too. How do you build a community that allows for mistakes, and learning from those mistakes? I was listening to one of your podcasts recently, where you talked about just the beauty of learning from mistakes. That resonates with me so much.

One of the things that happened in my class last quarter, the science research class was that most of my students scored under an 80% on an exam about statistics. With my implementation of specifications grading, 80% is my threshold so that meant that most of the class did not pass the exam. We had a class meeting about it and I said, let's approach this, like a research project.

I moved it into third person to offer a little bit of distance to us, like, "Here's a professor who thought her most of her students would pass an exam. They didn't. What went wrong?" Then I mentioned different hypotheses. People didn't do the practice test. Is that true or false? We made a little survey to address some of the hypotheses that we generated. The students looked through the data, and the survey came up with interpretations of what might have misfired.

Then came up and voted on a strategy for how they wanted to proceed. They asked for a makeup exam that would be a take-home exam that they would complete by the end of the term. In the take-home exam, I asked them what they'd learned from this discussion. One student's answer in particular, was deeply, deeply meaningful because what they wrote was that not doing well in an exam wasn't about blaming the students, it was about a discussion about what miscommunication happened, and how to address the miscommunication.

This student got the intent of the discussion perfectly and was able to move from a situation where they were used to feeling some kind of shame to, 'Oh, this really is part of the assessment feedback loop." That cycle became misaligned at the assessment stage. Let's give feedback to improve the assessment. It was just a really beautiful experience, one of the most moving experiences I've had, and rethinking my pedagogy in a long time.

[00:23:24] Bonni: It's so powerful. I can only imagine what that would have been like for you and for that student because sometimes to me, it's we catch these glimpses, and then you go, "Oh, my gosh-- it helps me just go how misguided I have been, and so grateful for where I sit today, such that I can be some tiny, tiny sliver of not having people experience exams in such unproductive, unhelpful and unkind ways. I wanted to ask a quick clarifying question. I think I'm getting it but so 80% is the threshold, that gets marked as complete?

[00:24:05] Rebecca: Yes. One person got a 79. Tat was so hard. That was so so hard like, "Sorry, this didn't quite get there."

[00:24:19] Bonni: Do they then need to resubmit, or is that not an option for an exam?

[00:24:23] Rebecca: What the class decided was that they could take a makeup exam if they wanted to.

[00:24:29] Bonni: One big, big category we haven't discussed yet is a big one. [laughs] Let's see how we do because we only have a couple of minutes before we get to the recommendations segment. We'd love to hear your thoughts about our tendency to think about active learning in binary ways and the extent to which that is helpful or not helpful.

[00:24:53] Rebecca: Oh, Bonni, you mentioned how our ideas about what an exam means has changed over time, and my idea of active learning has changed over time as well because I think I used to fall into that binary. I wanted to just eliminate the lecture entirely, and only be doing activities in class. Since then, I've been trying to figure out how much lecture do I add back in, and how do I do it in a way that's responding to students' needs.

I think I feel excuse the play on words, it's an active process for me. It's a dynamic process of trying to figure out how to balance and then what context to balance the amount of active learning with more passive instruction. One thing that I like to do is that if I do give a mini-lecture on something, it's after there's been a hook. I start by giving students a task to complete or a problem to consider, instead of frontloading and saying, "All right, you're going to need to remember A, B, C, and D in order to complete this activity."

They start with activity, and then they get stuck because they don't know A, B, C, and D. Then they're curious and ready to pay attention to what I'm going to say and parse out the information they need. In my work with mentoring new instructors, this is really a tricky balance to help them find, too. They're so used to learning by lecture, and they've developed their strategies for making lecture active for them, for example, through note taking, through learning how to study from lecture materials after the lecture instead of during the lecture that it is a really big switch in how they frame teaching to begin with a worksheet, to begin with here's something that's going to guide a series of activities.

The basic information you need is on the worksheet, but that knowledge level blooms work is presented on the worksheet because we don't need class time to get a lecture on that. There are still parts that are confusing. Those emerge from whole class discussion, those emerge from student questions. It's also a very powerful way to wrap up class. "All right, here's what we reviewed. Maybe revisit the learning goals. This is how we achieved these learning goals," as a recap, and as a comprehension level or understanding level of Bloom's Taxonomy summary of what happened in class.

[00:27:44] Bonni: Becca, it helps so much. I know that we're just skimming the surface. I love hearing you talk about all of the ways that you're taking your values, you're taking your disciplinary knowledge, and you're helping people to be more curious about that. You were reminding me a little bit of an article, I'm not sure if you've heard of this one but Derrick … had told me about it a time for telling.

I'll put a link in the show notes to that article because you were just talking about that very thing, how do we get people to be curious about these things. I definitely see, it being more of a continuum, and you're describing that as active learning is not you're doing it or you're not. Active learning, there are ways in which we can get closer to having people be 100% of the time active, and that's probably not a goal anyway.

We're not aiming for 100% and depending on when strengths context, a whole bunch of factors, we also don't want to be at 0%, so somewhere along that continuum. We're asking people to go from 0 to 100 when 100% I don't think we think is ideal. Then you're asking them to leave everything that they have known to be effective when some parts of it probably were and could be enhanced if we then add in active learning.

[00:29:07] Rebecca: Yes. It reminds me of a couple of things. One is that students are transitioning from lecture to more active learning, too. It can be a real challenge for them, depending on what their experiences have been prior to coming to our classrooms. I also wanted to mention a paper by Kimberly

Tanner's team, I believe Owens is the first author. It's a PNAS paper Proceedings of the National Academy of Sciences paper, about the … which is a decibel rating of classroom noise.

In the paper, they are connecting the decibel level to the amount of activity in the classroom. If it's really quiet, students are doing individual work. If it's one person talking, the algorithm interprets this as lecture. Then lots of voices ends up being group discussion. They show profiles of different instructors. Even the instructors in the sample who use the most evidence-based teaching have a large portion of the class at that one-person level of talking. I think that's really thought-provoking. It's a higher percentage of the class than the-- Let me see if I can say this correctly. The lowest percentage of lecture is higher than I would've predicted. It would've predicted the lowest amount of lecture to maybe be 10% of the class. It's not, it's much higher than that. I think it's a really interesting paper to look up for thinking about how much active learning versus lecture goes on in a classroom.

[00:30:53] Bonni: Wonderful. I had forgotten all about her work. As soon as you said her name though I instantly harken back to some past episodes. I'm looking forward. We'll put that in the show notes, too. It'll be fun to continue the conversation as people have a chance to look at it and think through that. It's fascinating. Of course, I instantly start thinking about what does that look like when the class is being held on Zoom because the decibel level is probably not the appropriate measure.

I think it would be like a combination of factors. It's just fascinating. Anyway, thank you so much for that. Before Becca and I get to the recommendations segment, I just wanted to take a moment and thank today's sponsor and it's TextExpander. TextExpander by a long shot, is the longest-running sponsor. I'm so glad that they continue. They just signed up for 2023. We've just signed the agreement. I'm excited to continue to share things about TextExpander. Today I actually have someone named John who wrote to me and said, "Thanks for the podcast."

He talked about how he's learned so much, and he now has a recommendations segment in his class once a week, where a few students give recommendations similar to our guests which I thought that was such a clever idea. Thanks, John, for writing to me. Specifically to TextExpander, which by the way is a service that lets you easily type in a few characters and they expand to something that's either lengthy and would take a lot longer to type or something that's hard to remember like for me my work phone number.

For John, he talks about how he's picked up using TextExpander from the show, and he says it's great for Greek letters and mathematical symbols. Then he gave

some examples and I'm embarrassed to say although you'll never know that I only recognized one or two of them. I think one is Sigma and that maybe all I recognize so only John will know the other ones that he sent to me.

I don't know how embarrassed I should be, but he says that having those mathematical symbols and the Greek letters have saved him a lot of time. Now, John, I want to go in and find even more ways that Text Expander can save me because I just continually do that. I hadn't really thought about that. I will say that I suspect that if we go up and look, they probably already have these mathematical symbols and Greek letters.

Someone probably has a database or a little thing we can download inside of TextExpander, that we don't even have to create those shortcuts ourselves. Anyway just something to think about for saving times because TextExpander isn't just a piece of software or service, it's also a community. They're constantly gathering together people that are in different industries and different professions and disciplines.

We help each other geek out a little bit about how TextExpander can help us. Thanks, John, for helping me geek out. Thanks to those of you who head over to textexpander.com/podcast. Give it a try. Give it a try. You can get a free trial and then redeem 20% off of any subscriptions. Please do let them know that you heard about TextExpander from Teaching in Higher Ed. Thanks once again to TextExpander, head over textexpander.com/podcast.

This is the time in the show where we each get to share our recommendations. I just have two quick related ones. I recently got to attend a series of intentionally equitable hospitality sessions from Equity Unbound. What they did during the breaks as a woman from Kenya named Irene would lead our breaks, and it would be Dance with Irene. My recommendation to you is to Dance with Irene whether you've met her or not.

She had herself off camera, and the woman would dance for five minutes through a song, and it would just absolutely provide me energy not just during the session but throughout the rest of the day. Thank you to Irene from Kenya for leading us in dances. I just think we could do that more in life and be better. Specifically, I wanted to share this song that Irene shared on the first session. I'm not sure I'm going pronounce this all right, but I'm going give it my best go Oskido's Candy "Tsa Mandebele kids"

This is a YouTube video, and it has this musician and all the kids and them singing. I think it's now probably going to be my most listened-to song for 2023. We are only in January at this point. My goodness gracious I've listened to it so many times. Yes, I have danced with Irene in my imagination because she's not

there every time I listen, but she's there in my heart and in my soul, and in my imagination.

I'm thankful for all of those experiences and specifically for doing things in unusual ways to uplift other people's spirits from all over the world. She certainly did that for me with the music and with her vulnerability to just-- it's inviting when-- and by that, I'm not saying she looked foolish dancing because the woman knows how to move but no, just inviting to be human with me.

Dancing is such a natural human thing to do. Speaking of babies, babies dance in their own ways and things like that. Inviting people to do very human vulnerable things just seems what we all need more of-- Becca you were talking about how every semester with the pandemic is different, and I concur with that experience and Irene's just nourishing my soul as we speak, and the idea of just showing up in the fullness of ourselves in lots of ways including dancing. Now I get to pass it over to you, Becca, for whatever you would like to recommend.

[00:36:36] Rebecca: Thank you so much. This actually ties very nicely into one of my recommendations because I think that dance is a form of nurturing well-being. I've been incorporating some mindful practices into my classroom. I wanted to recommend a resource that the University of Washington has put together called The Well-Being for Life & Learning Guidebook. It has a number of resources that help instructors think about their student's well-being and mental health and the way we can promote those in our classrooms. I also wanted to recommend a couple of journals to you.

One is CourseSource, and it's an opportunity for right now biologists and physicists to publish peer-reviewed lessons.

[00:37:34] Bonni: Oh, wow.

[00:37:35] Rebecca: It's really helped me in some of the professional development work I've done when I'm working with junior faculty or postdocs about demonstrating the seriousness with which they think of teaching.

Sometimes we put so much time into a lesson, and we find that it's one that works really, really well. This is an opportunity to publish that. There are different classes within-- there are different courses within biology and within physics, and they have a professional development course too which might interest you and some of your readers. I've been able to publish a lesson about women in science and how to support women in science.

I have colleagues, and I have published another lesson in the professional development about starting to use active learning. I find it just a really rewarding

way to join a conversation, about teaching and to have it that part of the conversation recognized academically, by promotion committees, by hiring committees. The other journal I wanted to recommend is Life Sciences Education and Kimberly Tanner who we mentioned earlier is one of the editors.

The other is Jeff Shinsky. I am one of the monitoring editors for the journal. We have a feature called Anatomy of an Education Study. I'm one of the editors that works on that particular feature. It's annotations about papers that have been published in the journal that feature different kinds of methods. A lot of us interested in learning in higher education might not have been trained in education.

We're gaining our proficiencies and our research experiences on the fly. This is a way to introduce folks specifically in the context of biology to what it's like to do education research. We go into background, we go into writing tips, and teaching tips, but also research methods and vocabulary. It's a really fun place to start thinking about educational research that anyone might want to do. Do I have time for one more recommendation?

[00:39:57] Bonni: You bet. You have time for 10. Sorry. I'm trying to stop talking so I can hear all these but everyone, I just want to go like, "Could we pause so I can go look at this and …

[00:40:10] Rebecca: … talk about it. They're all so much fun to use.

[00:40:12] Bonni: They sound so fun. I can't wait to hear what's next, but I'm sure we have time. [laughs]

[00:40:17] Rebecca: This is in a different direction, but I really wanted to mention it because we've talked in email about how much I've appreciated recommendations that I've heard on your podcast. I learned about a wonderful young adult author named Nnedi Okorafor from a previous guest. She has a trilogy, the first book of which is called Akata Witch that is some wonderful young adult fantasy that goes into a different kind of magic that those of us in the West typically read it.

It's just a whole nother way of processing magic and thinking about how magic and culture can be intertwined. The influence of the West on this magic just because of the dominance of Western culture. I just got such joy from reading this trilogy. I hope that some of your listeners will, too.

[00:41:14] Bonni: You and I exchanged emails, and you referenced the Binti series, and I instantly just went buy it instantly. I haven't had a chance to even start waiting, but this was one where I'm so looking to diving in in. I realized my

own lack of knowledge about magic and culture and the ways in which I'm sure I have a completely limited and misinformed appreciation.

This sounds even that I would get educated about even other things that I would like to learn more about because I hear references to and I know I'm not getting this. That just sounds amazing. Thank you so much for all of these recommendations. Becca, what a pleasure it has been to have this conversation and then have the ones that have taken place offline. I am so looking forward to the next one.

[00:41:58] Rebecca: Thank you so much, Bonni. It's been a pleasure to be here.

[music]

[00:42:03] Bonni: Dr. Rebecca Price, what a pleasure it is to be connected with you. Thank you so much for your current contributions and for all the ones forthcoming. Thanks to each of you for listening to today's episode of Teaching in Higher Ed. If you've yet to subscribe to the weekly update, I encourage you to do that because you'll receive the show notes and recommendations in your email once a week along with some other goodies that don't show up in the regular episodes or on the website.

You can head over to teachinginhighered.com/subscribe. Today's episode was produced by me, Bonni Stachowiak. It was edited by the ever-talented Andrew Kroeger podcast production support provided by the amazing Ciara Smith. I'll see you next time on Teaching in Higher Ed.

[music]

[00:43:03] [END OF AUDIO]

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