[00:00:00] Bonni Stachowiak: On today's episode of Teaching in Higher Ed, Michelle M. Miller joins me for Your Must Remember This episode 348.

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[00:00:21] Bonni: 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.

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Michelle M. Miller is back for today's episode. Dr. Miller is a Professor of Psychological Sciences and President's Distinguished Teaching Fellow at Northern Arizona University. Dr. Miller completed her PhD in Cognitive Psychology and Behavioral Neuroscience at the University of California, Los Angeles. Her research interests include memory, attention and the impacts of technology on learning and the mind.

Dr. Miller co-created the first-year *Learning Initiative* at Northern Arizona University and is active and course redesign serving as a redesign scholar for the National Center for Academic Transformation. She is the author of *Minds Online, Teaching Effectively with Technology,* and has written about Evidence-Based Pedagogy in scholarly as well as general-interest publications, including *College Teaching, Change, The Magazine of Higher learning, The Chronicle of Higher Education* and *The Conversation*.

Michelle is currently working on a book for the University of West Virginia press tentatively titled, *Remembering and Forgetting In The Age of Technology*, what the science of memory tells us about teaching, learning and thriving in a wired world. Michelle, welcome back to Teaching in Higher Ed.

[00:02:15] Michelle M. Miller: Thanks. It's great to be here.

[00:02:17] Bonni: I saw on Twitter, you sharing that you had developed a new talk and I instantly had a song come into my head, do you know what song it was by chance?

[00:02:26] Michelle: I think I have a feeling.

[laughter]

[00:02:29] Bonni: You must remember this.

[laughter]

I have to know did you think of the song first or the title first or it's a chicken-egg thing we can't quite identify here today?

[00:02:41] Michelle: Well, you know, it did grow out of some talks that I even did in the community years ago for our science on tap event, which is on pause right now. Years ago, I called it Everything You Wanted to Know About Memory But Forgot to Ask.

[laughter]

There are lots of different ways. This is a little bit more refined version of this same kind of topic that I've been talking about for years, but it's really come together in this brand new way. Yes, you must remember this.

[00:03:09] Bonni: There's so much that we could talk about and I know we're already both thinking, "How do we do this?" Because it's designed to be a 75-minute talk when this podcast is not designed to be a 75-minute podcast. I just want to start with you sharing a bit about some of the ways in which conversations around lower stakes testing, what that has helped with and small stakes assignments and a lot of these emerging practices in teaching.

Sometimes then I know from learning from you, makes us think, well, then, it's not important than to memorize things. That's quite the opposite of what you'd like to share. Talk a little bit about what we're learning about learning, but how that doesn't mean that we have to then say memorization, just isn't important.

[00:04:01] Michelle: Right. Finding that great middle path, that's so often what we're doing when we try to bring learning sciences into our teaching, but still make it absolutely unique to our teaching so unique to our students. I think it's perhaps part of a familiar dynamic in a way. Some of this also goes back to the very first

conversations that I started having with fellow faculty and when I was lucky enough to reach out to some leaders in the teaching and learning space about this topic.

Even when I first started really saying, "Oh, I want to reach out to fellow faculty about Cognitive Psychology, so the findings of my discipline of psychology and flow that out into this great stuff and marry it with some of the really neat innovations and new ways of looking at teaching and learning in higher education."

Right away, I knew that memory was a hot topic. You're right, it did sometimes come up. We talked about more concrete things like, why should we have frequent low stakes testing in a course? I would notice when I would be able to be in front of a group, this is maybe 10, 12 years ago, that I really started doing this work. I'd started talking about memory and memory research.

In cognitive psychology, that is what we have studied more than anything else. This is really at the core of it and so naturally, I'm jumping into that. I would say the M word, memory or memorization, there'll be a few people in the group who would start-- you'd feel that disapproval coming off of them. I'd say, "Oh, I must have said something wrong." For some people, they had this very negative reaction to it of saying, "Oh, shouldn't we be moving away from that in our teaching and learning?"

At the same time, people would come up to me after talks like this and say, hey, I teach Anatomy and Physiology or I teach electrical engineering or something like that, and my gosh, you came out and said it, what I have not said for all this time, I've avoided asking about, which is the memory component of teaching and learning.

There's a lot of different dynamics that go into it but at the end of the day, I recommitted to saying, okay, I'm going to find a way to frame this in a way that's appealing to people who really do care about teaching and learning but to get into some of the nuances and then lastly, to get into the concrete aspects of how we reinforce memory and even memorization sometimes in our teaching.

[00:06:46] Bonni: Now, the second half of the title of your newly developed talk is Why Memory is Important for Learning Even in the Age of Google. I don't know if the track I'm about to go on is going to resonate with you. One of the things I love to teach, I teach a Technology and Leadership class and we talk about personal knowledge mastery. One aspect of personal knowledge mastery is introducing them to the idea of digital bookmarks.

As you can imagine, digital bookmarks can be sorted, they can have tags and I get often a lot of resistance saying, if I wanted to know something, I would just search for it on Google. It's very hard for me to explain, I hopefully, I'm getting a little better at it, Michelle, but it's hard to explain, "Yes, but see, you don't always know

what you want to search for." Your brain just doesn't work that way with some of this stuff.

One very personal example, I think I've given it before on the show, but we had infertility in our family for many years. There's a lot of garbage out there, Michelle, [laughs] on the internet about infertility. I don't need to revisit it.

[00:07:57] Michelle: Oh, yes.

[00:07:57] Bonni: I found those treasures and then not only did they help me both from just a personal standpoint, the grief of it and that kind of thing, but also from an informational standpoint, but then I had this top collection of things that would be helpful. Again, that's a very personal thing but within our disciplines, of course, building that network of knowledge.

Now, again, I mentioned, I don't know if this is gonna resonate, I sense, Michelle, that the next thing is then, memorization because having it tucked away in my digital bookmarking tool, there's still love a barrier for me in terms of that opportunity for that deeper learning. I'm I on the right track that this is on the way to what you're advocating?

[00:08:40] Michelle: Yes. You're bringing out yet another kind of layer that's introduced by technology and yes, that I was alluding to in my own way with that little tagline of "even in the age of Google", we need to know things, but you're talking about this other layer of, even knowing what the best sources are and the way to search is also something that is part of knowledge and learning and knowledge is knowledge management in a way in today's world.

Yes, if students are, Heaven forbid, they're researching for things that they're going to need over and over as they progress in a discipline, there's many reasons why it's not going to work. I will say that what you're describing does remind me of one intriguing line of research we're actually going-- it's funny, we're going to talk about this today in one of my seminar classes. A line of research that quite provocatively and pretty convincingly showed that when we expect to be able to get back to something, like if we've saved in a particular folder, it dampens or inhibits our memory for it in the moment.

We don't, what we call, encode it as readily and this was very systematically manipulated in this series of studies where people were told some things about trivia facts. It really obscured stuff and they worked it all out and they said, okay, you can either save these in your folder and you can have them later but you have to remember the name of the folder. Just so you know, we're going to erase all this, but we will have a test at the end of this study. If you're really good at remembering

and saying, okay, it was in the folder called, bird facts or something, then you didn't remember the facts themselves.

Is this a huge hefty effect that it's going to leap out in real life? Maybe not. This is not the converging lines of lots and lots of evidence, but it was a well put together study. We have to keep that in mind too, that while that may have suited your purposes, to have those bookmarks, memory for the facts themselves might have been a little bit inhibited by going through that process. As those authors also pointed out, I thought-- one of the reasons I assign my students to read that article is that they say, you know what, memory has always been collective. It's always been shared.

The net is not necessarily dramatically different than knowing, hey, my dad knows the brand of paint that I should buy or there are certain things that I'm never going to remember because my husband remembers them and vice versa so may be ... it may be part of that too not just some one time thing of it's just specific to Google. What you're describing is a very deliberate way of talking about what do you need to know, at what level do you need to know it and you've really thought that through as part of your teaching.

[00:11:46] Bonni: Yes. I didn't know about that study but it doesn't surprise me at all because I can see it in my own brain. That is not necessarily a bad thing if it's not something that you need to know. Like you said, all of these is in terms of degrees. If we have decided that something is central enough to a discipline, to a skill, attempting to be taught, what have you, what then does your research tell us about the best ways to go about that?

[00:12:19] Michelle: Right. As with a lot of aspects of very mindful learner-centered teaching, it does first come down to that process of very consciously deciding, okay, what do students need to know like the back of their hand? You do not pull out a phone, thinking that through. For many of us, we may not have done that for particular courses. Even if we've taught these courses for years and years, we maybe have never reflected on that so I think it does start with a reflection component.

We're not just saying, well, I'm going to be-- What I did when I was a beginning teacher, I used to say, what am I going to put on this test? I'm going to open up the glossary in the back and start picking things so be mindful about that. Now, beyond that, once we've zeroed in on okay, here's what students do need to know, for fluent, good useful practice in a discipline, how do we then make sure that we do not have to spend all of our study time and interaction time just on those things?

Tapping into the findings or core findings of applied memory research, which is this wonderful aspect of the literature that's out there. Top of the mind, retrieval

practice, ask any cognitive psychologists, we will evangelize about this. It's so wonderful because this is such a success story. Again, when I think back to 10, 12, 13 years ago, if I said, hey, retrieval practice is this process where you actively pull information out of memory. It can be a quiz. It can be a formal test of some kind, but it can also be sneakier stuff like, hey, let's all have a brain dump and write down what we remember. All that's retrieval practice.

If I said that, people would stop in their tracks and say that's very counterintuitive. That can't be-- but now when you say it, then more and more hands go up and say yes, I've heard of this or sometimes it's called the testing effect. We found that this is just a super accelerator to memory. These days, I know I'm always referencing this one example about online shopping and you've got your credit card. It's got the three numbers on the back and you always have to type them in.

If you always pull out your card and look at the numbers, you're not going to remember them but if you just leave that card face up for one or two times and just try to pull it out of memory and type it in, actually, you'll start to remember them a lot better. You may make a mistake or two here and there but that's what we find as well is even when students answer a question incorrectly, then if they have the opportunity to go back and review, then you have a better chance of actually picking it up.

That's one of the biggest things we can share with students, we can build into our courses, we can pick technologies that are really geared to retrieval practice, all that. That's a very big one but there are some other principles as well, ones that many skilled teachers have probably hit on intuitively in their own practices.

[00:15:26] Bonni: I'm smiling so big right now because I'm remembering back to, it was a very early episode, I got to speak with Robert Bjork who's at UCLA and runs a memory lab there. Still, I don't forget his quote, "Forgetting is the friend of learning". I recall very vividly standing up in front of hundreds of people and not remembering his name. It is rather ironic to not get the name of the memory researcher you're trying so hard, guess what, never forgotten it since.

I will say that sometimes when we're able to model this with our students because I forget stuff, you forget stuff, for sure, then they can see that, oh, wow, this actually does work. That everybody forgets stuff, but it doesn't have to be this high anxiety-producing thing. The other thing I'd love to have you share a little bit is how the interleaving and how spacing also get together and do a dance with retrieval practice. [laughs]

[00:16:32] Michelle: Love the imagery here. Well, interleaving is one that does spark so much curiosity and so much interest among those of us who are really looking to innovate with teaching and learning these days. Here's the thing though, is that it's

a little tricky. People think the term interleaving, and it's a very evocative term. We think, oh, that means switching it up so 10 minutes on my English class and five minutes on my math class. Here we go back to English and now I'm going to work on my research methods class. That's technically not what interleaving really is. Now, as per the value of taking breaks or setting something aside when you hit an impasse, there's a case to be made for that.

Technically speaking, interleaving is really most relevant when we're selecting from different ways of solving a problem or a lot of the research is actually on learning to identify and classify examples of categories. That may be a little involved like, for example, a lot of the research, we'll have people study different art styles and different artists and that's a category and there's examples within the category. They're not identical, but they share some features.

Your mind and your brain are doing some computations that are still not totally well understood when you're learning to do that. When I see a new painting and say, okay, how if I have to slot this in a style and an artist, what I would do. Biological categories, bird examples or some neat research that's on? All right, what general bird? Specifically what bird is it? If you've learned on this set of examples, can I show you a new example and can you do that? That's not everything we're doing in teaching but it is occasionally what people are doing and so here's where interleaving comes in.

People do tend to retain more and to pick up this learning more quickly when they study in this interleave fashion, where maybe I'm going to study some paintings from this artist and a few from that artist and I'm going to toggle back over to this kind. Instead of saying, okay, I'm going to sit down with all the impressionists and I'm going to spend an hour on them and then switch gears. That wouldn't be that big a deal, except that that's the way the textbooks are organized and that also tends to give us what a lot of ineffective study techniques do, which is a false sense of fluency or security.

After I've seen the 20th impressionist, I go like I got it, but maybe I don't got it. If I saw that counter juxtaposed against a completely different painting, it would put a little bit more taxing for me to go back and figure that out. The other big thing is that interleaving is still a scientific work in progress. There's research goes back quite a bit. We're not talking about just one or two studies but we're also not talking about this big, deep well of research that we have, for example, with retrieval practice.

That's something I think is also something that I think you know if this is the learning problem, the categories of different ways of solving problems, you know that if that applies to you. If so, yes, take a look at some of the interleaving stuff and see if that would affect how you say set up a homework set or something like that.

[00:20:01] Bonni: What I've tended to do in the past is I'll often create flashcards, maybe using a tool like Quizlet, just as an example, there are a lot of tools out there, but then start with, this is where we just looked at ethical thinkers and frameworks and then we're going to go into this new area, but I keep this in the set. I keep it in the deck and I bring it forward.

A lot of these tools are actually designed to already do this for us, where if I've had a lot of success on one of the cards, I can mark it as, "I got it" or it can mark it for me as, "I got it" and I might see it less frequently and that kind of thing. Should I be thinking more carefully about what goes in that ever-growing deck in the sense of-- Because I think I might be-- I appreciate what you said about it's a growing area. There's no absolute right or absolute wrong, but I think I might be getting bird examples in there with art examples. Is there something I should be thinking about in terms of that as I help to try to support students in this way?

[00:21:05] Michelle: Yes. This is one of those inside baseball issues but it is a very practical one. Just simply, do you drop an example out of a deck if you've answered it correctly once? There is a school of thought that says, actually, no. Even if you've answered a question or a type of question correctly once, twice or something like that, that there's still benefit to the retrieval practice. I might balance it too. If it's key, if it's an absolute core, that might be good to stay in that deck till the last day of the course.

I think, for example, in psychology with research methods or something like that, P-values, that's a statistical decision. This decision but it's not a complicated thing to learn, but you have to know these and students forget. That it is a bedrock thing that maybe should be in there all the time. There are probably other terms I might want to drop out if they're a lower priority. Other people will say, well, from an efficiency standpoint it makes sense to concentrate more on what you miss and keep those in the deck even if the deck is more of a figurative thing.

I think as students get that metacognitive, savvy and insight developing, that's something that they're probably naturally going to do as a function of quizzes and tests. That's yet another wonderful thing the tests do, is we can't just gravitate unconsciously towards the stuff we already got, which I always did that **...** when I was a college student. It's like, "I like this part. I'm going to stay on this. I'll just pretend that this isn't over here." Tests, really, they lay it on the line for you. You look at it and go, "Yes, I got that one wrong again." There's a real balance there.

[00:22:55] Bonni: I like your example of the teaching a research methods class. You mentioned the P-value. I don't think that you're saying keep the quantitative stuff separate from the qualitative stuff because how it's going to show up to me in real

life as a researcher, I might be doing a mixed method. Because, again, I think I might be caught up on the categories of stuff, okay to mixed categories, yes?

[00:23:19] Michelle: Yes, mixing categories during the study phase or maybe a way to make this intuitive for some, say, in STEM disciplines. Ecuador's working with a lot of faculty in one of our first-year programs. I would hear some version of this from different STEM faculties. They say, well, students come into my course, a chemistry course, and they're like, they've got all this math coursework under their belts. They've got the pre reqs. They've got good grades. We know that they can do the mechanics of the problem. The issue is when I haven't set the problem up for them and said, okay, it's this kind of problem. That's where they get stuck. They'll be so frustrated, like, why? What is it with today's students?

Well, that's a practice issue. You can just say, well, that is a skill unto itself, identifying and setting up the problem. We see versions of that. I saw it at research methods too, just like, first, you got to figure out how to break this down and identify the parts of it or figure out what statistical test is appropriate, then you can go run and do the test. Well, if students are never in that position of, I got to set it up for myself and it's messy, and it's frustrating, and I just want to get to that solution part, if they're not sitting in that stage, well, what do you know? Like anything else, we don't practice it, it doesn't happen.

[00:24:46] Bonni: That's such a good example too because we wouldn't want to be giving the impression that retrieval practice is only practiced in something akin to flashcards, that there's different ways. It's that practice part or what is it that you're trying to practice? Anyway, I know you had something to share about spacing as well and now that we've touched on these other dance partners for retrieval practice.

[00:25:10] Michelle: Spacing is another one of these that I think a lot of students hit on for themselves, faculty hit on for themselves, although they may not really have this full grasp of why it works. It works for various reasons. Now, spacing is sometimes called distributed practice. That's a really descriptive term. It's the anti-cramming principle that if you recurs or retrieve or study something in small, small bites more distributed over as much time as you can, that each one of those bites will deliver more than it would if it were aggregated into one big mass.

We tell students, **…** they may not really understand that it's not just about an organizational issue, it's also a memory issue and they're getting more out of the time. You've described Quizlets, for example. Those are great because you can do those while you're waiting for your Zoom meeting to start. I think, as students, they can start to develop some of these neat techniques for themselves and practices for themselves. They also hit on, "Well, hey, I can fit this in here and fit that in there."

If we're talking about academic work where I'm really getting involved in producing something, I'm writing a paper, I'm setting up a study, I'm conducting analyses, well, there, the takeaway is not memory. I'm not saying, "Work on your paper for 10 minutes and then put it in." There are times when you do need momentum and you do need that, I guess, what Cal Newport calls the Deep Work. We're just talking about, let's establish, get those basic facts down in this course. That's where spacing is absolutely your friend.

[00:26:57] Bonni: We've talked about different ways of enhancing our memory. I know a big part of your work then is that that's not where it's over. It's not an either/or. It's not that I either focus on memorization or deep learning. Could you talk about the connection between memorization and that deeper learning?

[00:27:18] Michelle: Right. Or another metaphor is higher learning. I think it's wonderful that Bloom's taxonomy, that now-famous pyramid, it's set up like a pyramid for a reason, there's a hierarchy here and that's fine. It's great that we all know about Bloom, and we're thinking about it, but it does, I think quite naturally, we want to shoot straight to the top. We want to hit the good stuff. I want my students to be doing critical thinking and analyzing and finding different ways to interpret or critique articles that they read and setting up their own studies someday. I want that. I want that really badly.

I do think that many of us have absorbed, I know absorbed early on, a real false dichotomy. Well, do you want this lame thing where they can tell you where Sigmund Freud was born, or do you want this thing where they can critique his theory? This is a timely example. We actually touched on this a week or two ago in one of my *Introduction to Psychology* courses. Well, if I say, hey, I want you to be able to look at Sigmund Freud's psychodynamic theory of the mind and look at how that really reflects his culture and it's not universal, you need to know where he was born.

I had a student I always talk about from Austria and blah, blah, and they'd chat, go, "Wait a minute, he was from Austria? What? I didn't know that." These things do naturally go together. I would invite all of your listeners to, again, reflect, sit back and think, "Where are those touchpoints between things that I really just know, again, not without googling it, and things that have the complements, these higher things that I really want students to know?" There's that kind of really intuitive way we can come at this and start to break down that dichotomy and see how these complement each other.

There's also, again, more emerging research out there. A lot of it is actually anchored in looking at retrieval practice, but I guess the bottom line of some of these newer studies is that they show when students are doing study practices that

are more efficient for memory, like retrieval practice instead of just passively review. When they're doing that, you see a quicker shift towards some aspects of higher thinking that we can actually pin down. Things like being able to draw inferences when you're given a set of facts saying, okay, you're looking at this, therefore, this.

I want to caution people here that there's not really a study or a line of research emerging about thinking skills in general. In fact, I'm not sure that that sort of global, I can think about anything ability exists. I'm just going to say that. In these very specific things that we can pin down, we can measure, that's pretty exciting. Probably what's going on is I'm establishing this more strongly, I've got down past these facts about Freud or I know about the Impressionists. Now I can think about them more. There's also that argument to be made.

[00:30:31] Bonni: I experimented a bit with having students memorize the *Seven Habits of Highly Effective People*. That's from a book by Stephen Covey from long ago. The reason why I had them do it-- and you talked about this, Michelle, the importance of reflecting on what's important, it wasn't important. I never gave them a test that was a graded test that they had to show me that skill, but we would do regular practice. You can do that pretty quick within our class sessions, but the reason why I did it was because, otherwise, I was not sure that it would be enough in their mind to be able to look in for the ways that these habits did or did not show up in their life.

Because a lot of what was graded, what was assessed, one of them is, be proactive. Being able to see examples of that showing up in their lives and in the lives of other people that they know, it's really hard to do that kind of reflective work, and again, I'm speaking not as a researcher, this is very anecdotal, but if they're not already in your mind to be thinking about.

Since I don't have the opportunity to send them all little messages to their phones or-- those studies where they're like, "How are you feeling right now?" That wasn't set up for this given class, it seemed like that was a way from my understanding of how to help them have the deeper reflection. I don't know if that sits well with this example. I just thought I'd throw that out there and see what you think.

[00:32:05] Michelle: Well, among other things, I think you hit on other than retrieval practice, one of the powerful things that we do do to get students to really, really remember. Stephen Covey's principles, five years later, 10 years later, they're going to know that and understand them. You asked them to link it to their own lives. I think you're doing both. Here, there's that dance again. We're doing the tango, and here's, "Okay, I remember what the principles are. Here's what they look like. Here's why I care about them."

Both of those are going to carry each other forward. We call it self-reference effect, hugely powerful. Who couldn't stand to bring this into their classroom more to say, "Okay, you give me three examples of whether this has ever applied to you and if not, let's talk about that too." You are getting those, down-pad. I think a really conscious teacher too, they'd it's not just enough to say, "Okay, now my exam's list of principles." Maybe it has that, but it's both-and, and we also want to look at the application of it.

My money would be on the active learning that your students, years from now, will have that deeper understanding and also be able to characterize it. Even if they don't remember all seven, they can probably get a few of them and they can characterize that group in general. That's what we want.

[00:33:36] Bonni: The reflection is just so key, and we also need to be doing it with each other, with colleagues. I say colleagues specific to our universities where we work, but also collectively in our disciplines, to be having an inter-discipline-- Is there a place where this kind of reflection doesn't bode well? Really so crucial to be thinking and talking about those things. That's, I think, one of the ways that your research in this area is just so hopeful because we can get so many different examples that can both challenge us and inspire us in these areas.

Speaking of which, I guess before we get to the recommendations segment, I'd love to hear from you if there's anything that's really inspiring you. You've already shared a number of examples in this episode, but is there anything that I didn't ask you about where you think, "Wow, this practice is inspiring me or this person is inspiring me or here's some of the thinking I'm doing in these areas that's really creating a spark" in your own work?

[00:34:38] Michelle: The faculty who are so patient with my follow-ups that I do get to work with now remotely, that is a big inspiration. Each group that I get to work with bootstraps me up to bring more insights to the next group and so on. We've really done a good job I think in the professional development area and in higher learning in general to make the most of these remote events. I would say to all the folks who've sat with me on many a Zoom conference or a workshop that we did in Teams and you responded to the key questions that I asked folks are, "Okay, you tell me, what are the key things in your discipline?"

It's so amazing that every single time, well, not as frequently as I used to, but I'll get to talk to somebody in a discipline that I'm not familiar with. I teach Civics and Government or I teach Air Conditioning Repair. There's always a first. That ties in as well to my great love of and advocacy for whenever we can, working across disciplines and across specialization. That's a really, really big one.

[00:35:55] Bonni: I don't know if you've seen this but I can't imagine that you wouldn't have. So much of it prior to the pandemic was, "Oh, you could never do that online." Or technology would never provide those affordances. While I do not want to dismiss the devastation of the pandemic and I always have to be very careful when I say this because it's had awful effects all around the world, and so I never want to be a silver lining kind of person, that's not at all.

In this very bad time, in this very time of devastation, there are still those people, though, that conversation feels like it's shifted to me to "How could I do this?" Those have been some really interesting conversations, and so much with our colleagues and faculty.

[00:36:45] Michelle: Yes, I agree too. The silver lining narrative is going to be one that we are going to need to counter that for a long time going forward. Absolutely. With a lot of online learning, with our online interactions, it's also sometimes not, oh, here's this completely other thing that we never could do before, now we can. How do we hang on to that? Now we go back, and many people say, "After I taught online, I picked up things I took in my face to face classrooms." I think that you're absolutely right. There's things that we can take. Instead of just a straight replica, making everything just like it was face to face, sometimes you can find hidden gems.

[00:37:37] Bonni: I've got a perfect segue coming up for the recommendations segment, but I can't quite get to it until I start by thanking today's sponsor, and that is TextExpander. If you've been listening for a while, you know that they are the longest-running sponsor and are a big part of my productivity system. In fact, I just got my annual 2020 report of how much time I saved with it. Let's just say it confirmed, I didn't need it to confirm, it confirmed that it really does save a lot of time.

Also, I noticed that it sends out, not just how much time you save but your common snippets, what they call snippets where you have these easy to remember letters or numbers or whatever it is. For me it's the letter Z, often, followed by a series of letters. Z-E-S-I-G is going to get my electronic signature, for example. It showed me all the ways in which it helps me be more consistent in terms of my writing and correcting things as I'm going. T-H-E is often spelled apparently T-E-H by me as I'm typing. It's just a wonderful tool.

It works across a number of platforms, including Windows and Mac and also on the iOS operating system, so your iPhone and any tablet, if you've got an iPad, for example. It just helps us save time, be productive and it's really easy to set up and get started. You can have it make suggestions to you. It can notice when you are repetitively typing the same thing. I've turned that setting off. Although, maybe I

should turn it back on. I find that, if I put my mind to it, I can find really easy ways to save a little bit of time on something simple.

It could be something a little bit more complex. It's not hard to set up but I've got the show notes in there. I just type T-I-H-E, as in teaching in higher ed, S-N as in show notes, and it pops up and says, "Who's the episode with, and when's it supposed to air, and what other information do you have?" It just saves that time of inputting the information so I can spend a lot more time in preparing for the conversations I'll have with the guests and also in putting together the resources for the show.

Once again, I'd like to thank TextExpander for sponsoring today. If you head over to textexpander.com/podcast, you can get 20% off your first year. You also can just try it out for a while as well. Thanks once again to TextExpander for being such an integral part of my computing life and productivity. Thanks for supporting the show in this way.

Speaking of finding hidden gems, I've got one for you. It's time for the recommendations segment, Michelle. I heard about this television show so many different places, and I just resisted it and I resisted it because the premise is that it is based no something about sports, and I'm not a big sports person, so I thought that's not the show for me. I finally succumbed to the temptation and loved it and binged watched it. It's Ted Lasso, which is available on the Apple TV Plus network.

It's an American sitcom television series. I'm reading now from their show description by Bill Lawrence, Jason Sudeikis, and Joe Kelly and Brendan Hunt based on a character of that same name, Ted Lasso, that Sudeikis first portrayed in a series of promos for NBC Sports coverage of the Premier League. The premise of it is that a guy is a coach in the United States and then he ends up being selected to be a coach in a totally different sport that he doesn't know how to coach. There are so many great leadership lessons in this show. It is so uplifting.

It's funny and it's heart-wrenching. It is just a delight, but it also is very difficult to describe. Well, in fact, if I just read that description to myself, I'd be like, "There's plenty of other things out there that I'd really want to watch." I just really recommend it. Again, it's one of those things I know not everybody has subscriptions to all these services, but if you happen to have a subscription already, you can't miss it. It's just so, so very good. Michelle, I'm going to pass it over to you for your recommendations.

[00:41:51] Michelle: Oh my goodness. Well, as a psychologist, I would be remiss if I did not tell people that in as much as people are able, exercise, movement, this is just absolutely the thing to keep doing. It's close to a magic remedy for just a cognitive, staying sharp cognitively, mood, memory, that included. There's nothing else like it. Sorry, guys, but brain games don't do it. Crossword puzzle are fun, but it

doesn't really "exercise" your brain, but that does. I'll say that in my household, it's mostly teenagers and young adults. We do enjoy the Les Mills OnDemand exercise subscription service.

It's streaming of a variety of different programs. I can usually get somebody in my house to agree to get up a session of yoga Pilates fusion or cardio, weights or something like that. We really enjoy it. It's a lot of the same classes that I was taking at the local gym when that was open, so it's really nice to have that carry over into, yes, an online format. It's form New Zealand. It's a lovely New Zealand company, so it's very international. There's every delightful version of English that's out there. The New Zealand accents are always a kick, so we love that a lot. That's a really, really big one that I would put out there for people.

Brain games may not help you, but some games are just for fun. I think that's okay. I am not a gamer. I have never really liked games, board games, video games, you name it, but one finally got me, SpellTower. I know I have a limit on a phone playing SpellTower. It's a cross between Tetris and Boggle and Chess. It appeals to my very, very word and verbally oriented self.

[00:44:03] Bonni: These sound spectacular. [laughs] They sound just wonderful. I haven't heard any of these. I've never heard of this exercise thing you speak of. Oh my gosh. I tell you what is keeping me going, it does make such a difference and so, thank you so much for joining me today for the episode and for these wonderful recommendations. It was so great to reconnect. What I love about us ending this episode, Michelle, is I know you'll be back because [laughs] you always do so much good stuff.

I now you'll have a book coming out at some point, as of this recording, we don't know exactly when, but I'm just looking forward to our future conversations and just love getting to continue learning from you all these years.

[00:44:46] Michelle: You as well. Thank you for all that you're doing to help people keep growing and developing and doing everything we can for our students.

[music]

[00:45:00] Bonni: Thanks so much for Michelle Miller for joining me on today's episode of Teaching in Higher Ed. It was great to reconnect and be inspired by your work in memory. Thanks to all of you for listening to this episode of Teaching in Higher Ed. I'd like to encourage you to subscribe to our newly rethought, redone, reconceived weekly updates. They are now weekly. If you have yet to subscribe, head on over to teachinginhighered.com/subscribe. What that will get you is highlights of the most recent episode along with some related episodes and some

resources, quotable words, and such. Thanks so much for listening and I'll see you next time on Teaching In Higher Ed.

[music]

[00:46:00] [END OF AUDIO]