

00:07 So I think learning theory is an area where it's hard for me to really advise teachers because this is where background knowledge is so complexly vast and the gaps are so different.

00:20 Some teachers have a lot of gaps in learning theory as it relates to instructional design. And it's not necessarily by grade level or any.

00:29 I think there's some misconceptions that like elementary school teachers are less likely to be able to apply adult learning theory than high school teachers.

00:38 I've run into that in a positive sense, like people being like, oh, you taught high school so you're good. So there's a lot of like, I think complexity to who actually knows this and doesn't.

00:50 And I think you have to know yourself. So if you are one of those teachers like myself who was really interested in the cognitive science aspect of it, who read academic research on learning theory, how people learn, who redesigned your lessons, who challenged when you got feedback that

01:08 you thought didn't fit with how people learn, like administrators or programs suggesting you do X, y, Z and you're like, Hey, but that actually violates the basic way that people learn how to do this thing.

01:21 And especially if you've taught maybe multiple age groups, like I think that I thought about learning more because I started overseas teaching kindergarten and primary students, and then I taught middle school students and then I taught high school students and teaching a variety of levels from

01:35 like English Language Learners and struggling readers to AP and IB kids who could, you know, kind of run circles around most adults in their learning and were sort of voracious learners and we're very focused on relevance.

01:54 A gifted education itself is its own challenge in that way. So I, there's just, there's so many different settings of learning in a school.

02:04 And then even in the same setting, one third grade teacher may have a really good foundation of learning theory and how people learn, including adults.

02:12 And one third grade teacher may have gone through like, say a teacher education program that used outdated ideas like learning style myths.

02:20 Because while those aren't in a lot of teaching programs, still they are in some, and they certainly were five, 10 years ago, depending on your age.

02:27 And if you haven't brushed up on foundations and fundamentals of learning theory since then, you might have some connections to make.

02:37 One thing I suggest people start with is Julie Dixon's book Design for How People Learn because it kind of covers both adult learning theory and pedagogy really well and branches the terms between the two.

02:48 It's very teacher friendly. A lot of teachers will find it like a complete review, but it will also give them ID situations and language from that review.

02:57 So it's still something new just kind of by pivoting that into a new setting. So that's a book that I personally recommend and think is good for that.

03:05 And I also think it's really helpful to read academic research. There's a lot of academic research on instructional design, people getting their PhDs in instructional design, doing their own research.

03:15 Heidi Kirby, the next speaker is just releasing her PhD research in another talk at I Dtx in 2023. And I've seen so many people release their thesis information.

03:25 And then of course you can go on any academic database and kind of study these things and see what is going on and what's up to date.

03:33 There are some common ID theories. Sometimes you'll find the theories kind of mixed together. I kind of consider the learning theories separate from the evaluation theories.

03:41 Like Kirkpatrick, I would consider an evaluation theory. And the project management theories like Addie well aren't really theories even like models like Addie and Sam for learning theories.

03:51 I mean, I'm talking about old school like constructivism, behaviorism, like those are learning theories. But then there's also things like specific to adult learning theories or media theory.

04:02 Like you have EZs events, you have adult learning theories that are like applying specifically to adult learners in a particular setting like Knowles.

04:16 You have media theories like Meyers. It kind of depends on what you're making. There are some basics, like if you just Google like Id learning theories that everybody should know.

04:26 You'll get like a few theories to learn and that can be a starting point, but then what you're interested in from there can kind of vary.

04:32 Like I'm definitely a constructivist, but I'm studying more now. Constructivism is really good for like hard skills training, like software training, but I'm studying more now as I make more soft skills training.

04:44 Like how the brain reacts to emotional stimuli and how that interacts with learning. And that's especially important for me because I'm neurodivergent so my brain doesn't necessarily do what other people's brains do.

04:57 And I wanna see kind of that io psychology aspect as well. So this isn't like a one time like, okay, now I know it all, I have this bulk of ideas.

05:08 This is like a foundation and it's a foundation. You're continually refreshing and it may be a foundation you have really strong.

05:15 Like I didn't find that I had to do a lot of upskilling here to be able to meet the kinds of questions that they ask in interviews, but I still have so much I can learn because it's, it's science.

05:25 So a, it's always changing. We're making hypothesis is we're trying to like decide if that hypothesis is correct. Like how do people actually learn what actually helps them, what actually impedes them?

05:36 What are some new things we can do as technology evolves, you know, so it never ends. But just I think that that is why the reflection component of this is so important.

05:48 And I like to save research on a Google doc where I just kind of copy in the study, like reference links and stuff because sometimes that come, sometimes I'm like trying to remember things.

05:57 I don't have the world's like best memory, but I have good organizational systems, so I'm like, oh, I know I read something about that.

06:04 And then I can go back and kind of see, oh yeah, I was reading this and it was really interesting.

06:10 I also think there's some things that are like rooted in so many studies that they're, there's definite truth. Like constructivism is a broad enough thing, rooted enough studies that we know that people do construct knowledge, we know certain things about it.

06:26 We, there's nuance to that truth where it may evolve with science, but there's like a foundational thing. And then there's like kind of one off studies, like on a random thing like nobody else has really studied this yet.

06:35 Here's an idea. And that happens across every field. And I'd like to save those to kind of see like over time, do we have studies that contradict this?

06:42 Does anybody try to replicate this? Like that kind of stuff. So I think this is where a lot of teachers who like really liked getting their master's degree or their Ed ds or you know, really liked getting those specialist educator degree, like really liked studying learning can really excel

07:01 . But I do think there's biases that we have to overcome to show that we, yes, we understand how adults learn to yes, we understand how, how to apply our learning theory to training as an event or training programs.

07:15 Like spiraling learning is really important in say, elementary school. You wanna spiral the learning throughout so that kids have reinforcement over time.

07:22 It's important at other grade levels too, but it's especially important foundationally in like foundational numeracy and literacy. But spiraling learning's actually really important in training programs too.

07:30 If you wanna do like a full skill orientation program that's multifaceted and complex and you want people to remember a lot of things, the best way to do that is spiraling the learning and having somebody who understands curriculum design as a whole which organizations may or may not already have

07:45 . And that can be a strength that you can bring in different ways. So like understanding how it applies to different settings based on the purpose I think is useful as well.

07:56 But I do think like the foundational knowledge you may have, you may need to brush up on. And also, it's not like we go around saying like, well, gag says like, that's just not how we use learning theory.

08:07 It is this foundation. It's kind of like everything builds upon it, but it's sometimes invisible. But it's really, really important as a professional development, I think, to keep that up.

08:18 And so that's why I suggest kind of jotting down common theories, jotting down common myths when you see them too, I think is really important because then you don't get lost in the myths cuz it is easy to believe in myths.

08:29 Sometimes they sound convenient and they sound like they make sense sometimes. Like learning styles makes sense to some people because they're like, yeah, I do prefer to read a video or read a video to watch a video then read a book.

08:43 But it also like doesn't hold up to scrutiny. Even just basic common sense. Like nobody ever learned to tie their shoe from a podcast cuz they were an audio audible learner.

08:52 So, and then when you look at the research and you see how the original research was done that posed it and like the limitations and research that's been done after you kind of see that, oh, what they really probably were picking up on is that in a UDL framework, multiple modalities can be really helpful

09:09 , but not that like this person is an audible learner and they'll always learn best through audible routes. Like there's more complexity to learning than that and that's just something that comes from foundational understanding of learning.

09:22 But the myth is easy to believe because it feels true to people. A lot of things that aren't true, not just in learning but everywhere feel true.

09:30 And it's very hard to break that sense of a myth even in yourself sometimes when you don't continually build your foundational knowledge.

09:43 And I think that's a big part I think as to like changing other people's views on mitz. You don't need to worry about that so much as long as you're presenting your why clearly when you're suggesting your solutions, it doesn't matter if like somebody in C-Suite thinks learning styles are real and asks

09:58 you like, oh, how are we addressing the learning styles? If you come back with like how you're addressing multiple modalities and you know that learning styles isn't really true, you don't have to be like, Hey, big director, man or lady, like learning styles is a myth, dude.

10:12 Like you don't have to be rude, you just have to approach it with like, oh well we're addressing multiple modalities through this.

10:19 And then you're talking to the truth of it and giving them new language for something. And also speaking to their concern, which is probably more about multiple modalities than it is about learning styles.