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Welcome to the education table, where your burning questions about innovative and inclusive education are answered in ten minutes or less with stories, stats, and concrete strategies. I am your host, Katie Novak, and today we're diving into the question, how does the myth of learning styles differ from the reality of learner variability? We're going to unpack the learning styles myth and then explore how embracing variability can transform both teaching and learning. So if you've ever seen me present, you will know that I am a heels person. I love heels. My favorite pair of shoes is this amazing red pair of high heels. It has a four inch heel on it, and I just love the way it clacks around and it's my absolute fav.

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But even though I would say that I am a heels person, I clearly don't wear heels all of the time because when I run, sneakers are more appropriate. And when I'm at the beach, I like flip flops. And even sometimes, as much as I love heels, it's not the right choice because my ankle is hurt or maybe I have a blister. So even if I'm presenting sometimes, the most responsible choice is to wear flats. Now, why am I telling you about all the shoes that I have? It's because we often say things like, I'm a visual learner or I'm a kinesthetic learner, just like I say, I'm a heels person. But it turns out that this is because we learned that there was something called a learning style and since has been totally debunked. There is no such thing as a learning style.

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Certainly, we might have preferences and we might have strengths, but it turns out that we have to make really good decisions for ourselves based on context. And sometimes the thing that we prefer or the thing that is a strength is not the best choice. So let's dive into the stats and the research to clarify what we're actually critiquing. When we discuss the learning styles myth, the foundation for Economic Education helps us to draw that line. They explain that researchers, of course, are not denying differences among students. There are numerous differences. Students have different strengths and needs and background knowledge and interests. And this is not only what makes students unique, but they're also incredibly dynamic and they're always changing. There is absolutely no denying that.

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This is really critical to understand because we do have to recognize the differences between and among students so that we can design instruction that will increase learning outcomes. But there is a really critical distinction. The myth in question, the learning styles myth, is the belief that every student has a fixed most effective learning style, like they're an auditory learner or a visual learner or a kid aesthetic learner, and that teaching in that style will improve their outcomes. This has been debunked in a study. For example, in 2018 in the Journal of Anatomical Sciences Education, aptly titled another nail in the Coffin for Learning Styles, found that regardless of what students perceived to be their learning style, whatever came up on a quiz, certain specific study strategies.

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For example, in this study, the use of a virtual microscope were really positively correlated with the final class grade. So in short, context is everything that as we're working towards goals, sometimes there will be more effective strategies, and students have to understand that and can't get stuck in this fixed mindset that they're not able to do it in a certain way. So how does this idea of a fixed learning style differ from learner variability? Variability is the unique and dynamic nature of our strengths and needs. And as I shared at the beginning of this episode with the heels analogy, this changes based on context. So although I am a quote unquote heels person, when I am running a race, I need to wear sneakers.

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And when I am skiing, I want to have ski boots, even though if I took a quiz about my favorite type of shoes, heels might come up as the winner. So when students are making choices about their learning, they really have to think about what is the goal and what is the context and why are they learning it, and then ultimately look at the resources available. And so the most important thing to know is that we are not wired to learn in only a single way. Rather, we need to adapt and find out what works best for us given each unique situation. And we need to be able to do this based on evidence. And so that is what we focus on when we are UDL practitioners.

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We embrace student variability, both interpersonal variability, how students are different from each other, and intrapersonal variability, how a single student's needs change based on context. And this requires that we and students try very different approaches and use data to inform our decisions. Now let's talk strategies. First up, start every lesson with a diagram. Diagnostic assessment. This is not just about testing or grades, but it's about helping students reflect on their starting points. Understanding where they are in their learning journey will help them to identify their strengths and also indicate areas for growth. And it will also allow you to better understand student variability so you can design options and choices that students may need so they can work towards mastery of those standards. It's also a really great idea after a diagnostic assessment to tap into social emotional learning.

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This involves asking students to reflect on the goal and the task at hand and the context in which they're working and also their feelings about it all. And this self awareness is really crucial for making informed choices about learning. When I was in the classroom, I would often share with students the goal and the available options and then encourage them to try different ones and to take a no, thank you bite of each of them. And then I would have them make a decision. And I loved to ask them the question, what are you going to choose today? And why are you choosing it? And allowing for that interaction where students are reflecting and they're sharing what they feel works for them.

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And after students make a decision, we have to keep going back to that reflection because they have to reflect throughout the learning process and especially after each formative assessment, because we want them to better understand are they making responsible choices that allow them to be both supported and challenged, and how do they know what is their evidence? And when we have this reflective piece built into our assessment cycle, it helps them to evaluate the effectiveness of their choices and begin to learn more from their experiences. And it's not just about making a choice. It's about recognizing the relationship between the choice you made and then the outcomes you experienced. And as a teacher, your role is crucial at this point to provide feedback to encourage students to try different options.

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And of course, we might need to redirect students if necessary, because ultimately we are responsible for their learning outcomes. A great concrete strategy at the college level, which can be used or adapted with younger learners, is called an exam wrapper. Like, it wraps around the exam, and this is a tool that students complete before they take an exam. And also after they take an exam. And before they do it, they reflect on their preparation and how they studied and ultimately what they feel really confident about. And they go through the process of predicting how they're going to do. And then after they take the exam, they get their exam wrapper back and they review their performance, and they know where they performed really well and what they might have missed.

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And ultimately, they need to begin to make connections between their choices and their outcomes. And ultimately, the most important question on an exam wrapper is, what will you do differently next time? So in this, we're helping students embrace variability. We're fostering social and emotional learning, and we're also creating a huge culture of feedback and monitoring progress, which is critical for learning. In this episode, we explore the difference between the debunked theory of learning styles and the concept of learner variability. Thank you so much for listening at the education table. If you loved this episode, please subscribe and stay tuned for more insights on making education inclusive, innovative and effective. Our channel.