

Why Universal Design for Learning?

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Why universal designed for learning? How do educators meet the diverse needs of 21st century adult learners? Today's adult learners are more diverse than ever. They include first generation students, working parents, students with special needs, and international students.

Learners may have visible disabilities, temporary disabilities, invisible disabilities, or learning disabilities. Learner variability is predictable. Educators can take advantage of this predictability using the universal design for learning or UDL framework. Before we see what this looks like in action, let's first step inside the brain.

Variability is a hallmark of the nervous system. Like fingerprints, no two brains are alike. Each brain is a complex interconnected web that is sculpted and influenced by genetics and the environment. Each brain is made up of billions of interconnected neurons that wire together to form unique pathways. Over time, these structures change based on our experiences and interactions with our environment.

The concept of neural variability is important for educators because it reminds us that learners do not have an isolated learning style. Instead, they rely on many parts of the brain working together to function within a given context. There is no single way a brain will perceive, engage with, or execute a task. Variability is not just an important consideration for thinking about differences between learners, but also within learners in different contexts. Learners might be in a quiet room, noisy place, or a dark room. When we provide multiple ways to interact with content, we allow the learner to choose what works for them in each situation.

UDL recognizes neuro variability in its framework by providing multiple means of engaging students, representing information, and even how learners express mastery of learning goals.

So what does this look like in the learning environment? Consider a class learning about water pollution. We can engage students by having them collaborate on a project that aims to convince policymakers to protect the environment. Students start with varied learning resources, including reading articles and watching videos. They can show their learning progress in different ways, such as writing about the effects of water pollution or drawing diagrams. Once base knowledge is demonstrated, students further research ways to mitigate water pollution and present arguments for their solutions. Students work on final projects of creating a video, composing a song, or building a website to make their cases to policymakers, which taps into emotions and the power of persuasion.

Each student learns differently and benefits from a variety of learning formats to choose from, flexible assignments, and tools to organize new information and skills. UDL improves motivation and relevancy by empowering learners to maximize their strengths, focus on areas of challenge, and drive their own learning processes. Students become more persistent, knowledgeable, and satisfied with their learning experience. When we design learning environments for variability, we help foster expert learners, and give them more multiple pathways to success.