# Universal Design for Learning: Removing Barriers Through Options

**Elise Yerkey**

> There's a book I don't remember well, though I can remember precisely where I found it in my elementary school library—three yards to the right of the door, in the middle of the third shelf from the floor. This book was about a solitary little boy who, as I did, had a nervous habit of tapping everything he touched, and counting the combination of taps. One day, he tapped a wall of stone. A door appeared. Behind it was a different world, not better really, but brighter and less dull. ***I read for the same reason that he tapped: to look for doors, to push through walls***. –Ben Ehrenreich

In sharing the reason he reads, author Ben Ehrenreich could have been speaking about Universal Design for Learning (UDL). The framework does for learners what reading did for Ehrenreich: looks for doors and pushes through walls. Except in the language of UDL, doors are known as options and walls are known as barriers.

This growing field of work, pioneered by Harvard University alumnus and lecturer David Rose, builds upon ideas first posited in the field of architecture. Architects who employ inclusive design take proactive approaches to build structures that can be accessed by anyone regardless of ability, age, size, or other barriers. Rose took the ideas from inclusive design and applied them to assistive technology in co-founding CAST, Inc.--a nonprofit education research and development organization based in Massachusetts, USA. As the scope of the work grew, additional applications were found useful among learners without disabilities as well.

In states like California, UDL has been widely adopted and infused into educational code and policy related to high-stakes assessments, curriculum frameworks, systems of support and accountability, and professional learning. The evidence- and research-based practices are widely cited as pathways to inclusion and particularly relevant to a state plagued by achievement gaps among students with disabilities, English Learners, foster and homeless youth, and other significant subgroups for whom data is disaggregated.

To understand how the design framework addresses the needs of such a wide range of learners, one must only examine the foundational concepts upon which it is built: 1) Barriers exist in the design, not in learners 2) Variability is the norm, it is contextual, and can be planned for, and 3) An outcome of UDL is expertise in how one learns. These foundational concepts are based on decades of research in the fields of neuroscience, the learning sciences, and cognitive psychology.

Viewing barriers as existing within the conditions of learning or the design of curriculum and learning environments rather than as inherent deficits within learners themselves speaks to two things: traits such as intelligence aren't fixed, and designers may exert agency over learning environments and conditions of learning.

Rose et al (2014) speaks to this in his book *Universal Design for Learning: Theory and Practice*.

> Think of a seed. You might first consider any seed as having a fixed or standard potential to grow. However, if you move that seed to Antarctica, does it still retain the same potential to grow?

The second foundational concept of UDL involves **learner variability**–the most widely replicated finding in educational research, according to CAST. The UDL Guidelines and principles are based on what we know about the affective, recognition, and strategic learning networks of the brain. The guidelines address the myriad of ways that learners vary when it comes to factors such as executive functioning and sustaining effort and persistence. They provide direction when it comes to options that can be offered during learning. They help ensure that all learners can access and participate in meaningful, challenging learning opportunities (CAST, 2018). The concept of learner variability is echoed by Todd Rose (no relation to David) in his book ***The End of Average: Unlocking Our Potential by Embracing What Makes Us Different***. Rose argues that design should respond to the range of differences in individuals rather than a mythical average person who is a statistical construct.

The final foundational concept of UDL is the one that gives the other two concepts purpose: UDL fosters **expert learning**. This is apparent in the structure of the guidelines themselves. Each row of the guidelines–access, build, and internalize– represent a gradual release of responsibility to the learner for developing metacognitive awareness. Rather than focusing upon an endless process of feeding learners' content and information, the guidelines aspire to what they support: the act of learning itself. Rigor, agency, and self-efficacy are most apparent in the "internalize" row of the guidelines where reflection, transfer, and strategizing reside.

I don't know why Ehrenreich tapped. Perhaps he found it hard to focus or sit still in a structured classroom. Maybe counting the combination of taps comforted him. Or he could have been bored–a common side effect for children who are unchallenged. In the world of UDL, he would have found what he was looking for in the pages of his childhood books: a way to look for doors and push through walls. ■

Elise Yerkey is a CAST Implementation Specialist in the California Collaborative for Inclusive Literacy. For more information on UDL, please visit our website at https://www.cast.org/