**Teacher Pre-Workshop Reading**

UDL aims to create physical environments and tools that are usable by as many people as possible. A classic example of universal design is curb cuts. Though originally designed for people in wheelchairs, they are now used by everyone from people with shopping carts to a parent pushing a stroller. Since our focus was on learning and not buildings or products, we approached the problem via the learning sciences and not through direct application of the original architectural principles.

Over time, we came to understand that learning involves specific challenge in the area to be learned, and so for it to occur, we have to eliminate unnecessary barriers without eliminating the necessary challenges. Thus, the UDL principles go deeper than merely focusing on physical access to the classroom; they focus on access to all aspects of learning. This is an important distinction between UDL and a pure access orientation.

This work has been carried out in collaboration with many talented and dedicated education researchers, neuroscientists, practitioners, and technologists. As the UDL field has grown, so has the demand from stakeholders for Guidelines to help make applications of these principles and practices more concrete and applicable to curricular design. It was because of this call from the field that the UDL Guidelines were created.

The goal of education in the 21st century is not simply the mastery of content knowledge or use of new technologies. It is the mastery of the learning process. Education should help turn novice learners into *expert* learners—individuals who want to learn, who know howto learn strategically, and who, in their own highly individual and flexible ways, are well prepared for a lifetime of learning. Universal Design for Learning (UDL) helps educators meet this goal by providing a framework for understanding how to create curricula that meets the needs of all learners from the start.

The UDL Guidelines, an articulation of the UDL framework, can assist anyone who plans lessons/units of study or develops curricula (goals, methods, materials, and assessments) to reduce barriers, as well as optimize levels of challenge and support, to meet the needs of *all* learners from the start. They can also help educators identify the barriers found in existing curricula. However, to fully understand these Guidelines one must first understand what UDL is.

# What is Universal Design for Learning?

## The Concept of UDL

Universal Design for Learning (UDL) is a framework that addresses the primary barrier to fostering expert learners within instructional environments: **inflexible, “one-size-fits-all” curricula.** It is inflexible curricula that raise unintentional barriers to learning. Learners who are “in the margins”, such as learners who are gifted and talented or have disabilities, are particularly vulnerable. However, even learners who are identified as “average” may not have their learning needs met due to poor curricular design.

In learning environments, such as schools and universities, individual variability is the norm, not the exception. When curricula are designed to meet the needs of an imaginary “average”, they do not address the reality learner variability. They fail to provide all individuals with fair and equal opportunities to learn by excluding learners with different abilities, backgrounds, and motivations who do not meet the illusive criteria for “average”.

UDL helps address learner variability by suggesting flexible goals, methods, materials, and assessments that empower educators to meet these varied needs. Curricula that is created using UDL is designed from the outset to meet the needs of all learners, making costly, time-consuming, and after-the-fact changes unnecessary. The UDL framework encourages creating flexible designs from the start that have customizable options, which allow all learners to progress from where they are and not where we would have imagined them to be. The options for accomplishing this are varied and robust enough to provide effective instruction to all learners.

## The Three Principles

Three primary principles, which are based on neuroscience research, guide UDL and provide the underlying framework for the Guidelines:

* **Principle I: Provide Multiple Means of Representation** (the “what” of learning). Learners differ in the ways that they perceive and comprehend information that is presented to them. For example, those with sensory disabilities (e.g., blindness or deafness); learning disabilities (e.g., dyslexia); language or cultural differences, and so forth may all require different ways of approaching content. Others may simply grasp information quicker or more efficiently through visual or auditory means rather than printed text. Also learning, and transfer of learning, occurs when multiple representations are used, because it allows students to make connections within, as well as between, concepts. In short, there is not one means of representation that will be optimal for all learners; *providing options for representation is essential.*
* **Principle II: Provide Multiple Means of Action and Expression** (the “how” of learning). Learners differ in the ways that they can navigate a learning environment and express what they know. For example, individuals with significant movement impairments (e.g., cerebral palsy), those who struggle with strategic and organizational abilities (executive function disorders), those who have language barriers, and so forth approach learning tasks very differently. Some may be able to express themselves well in written text but not speech, and vice versa. It should also be recognized that action and expression require a great deal of strategy, practice, and organization, and this is another are in which learners can differ. In reality, there is not one means of action and expression that will be optimal for all learners; *providing options for action and expression is essential.*
* **Principle III: Provide Multiple Means of Engagement** (the “why” of learning). Affect represents a crucial element to learning, and learners differ markedly in the ways in which they can be engaged or motivated to learn. There are a variety of sources that can influence individual variation in affect including neurology, culture, personal relevance, subjectivity, and background knowledge, along with a variety of other factors presented in these guidelines. Some learners are highly engaged by spontaneity and novelty while other are disengaged, even frightened, by those aspects, preferring strict routine. Some learners might like to work alone, while others prefer to work with their peers. In reality, there is not one means of engagement that will be optimal for all learners in all contexts; *providing multiple options for engagement is essential.*

*The UDL Guidelines were compiled by David H. Rose, Ed.D., Co-Founder and Chief Education Officer at CAST, and Jenna Gravel, M.Ed., doctoral student at Harvard.*

***Additional Information on UDL***

*Teachers are also strongly encouraged to go to the CAST website as well as the National Center on Universal Design for Learning, for additional information.*

[www.**cast**.org/**udl**/](http://www.cast.org/udl/)

<http://www.udlcenter.org/aboutudl/udlguidelines/downloads>