Universal Design for Learning

What is UDL?

Universal Design for Learning or UDL is a set of principles for curriculum development that give all individuals equal opportunities to learn.

UDL provides a blueprint for creating instructional goals, methods, materials, and assessments that work for everyone--not a single, one-size-fits-all solution but rather flexible approaches that can be customized and adjusted for individual needs.

Why is UDL necessary?

Individuals bring a huge variety of skills, needs, and interests to learning. Neuroscience reveals that these differences are as varied and unique as our DNA or fingerprints. Three primary brain networks come into play:

Recognition Networks	Strategic Networks	Affective Networks
The "**what**" of learning	The "**how**" of learning	The "**why**" of learning
How we gather facts and categorize what we see, hear, and read. Identifying letters, words, or an author's style are recognition tasks.	Planning and performing tasks. How we organize and express our ideas. Writing an essay or solving a math problem are strategic tasks.	How learners get engaged and stay motivated. How they are challenged, excited, or interested. These are affective dimensions.
Present information and content in different ways.	Differentiate the ways that students can express what they know.	Stimulate interest and motivation for learning.
Resource Help: http://www.udlcenter.org/aboutudl/udlguidelines/principle1	Resource Help: http://www.udlcenter.org/aboutudl/udlguidelines/principle2	Resource Help: http://www.udlcenter.org/aboutudl/udlguidelines/principle3

Source: http://www.udlcenter.org/

Universal Design for Learning, continued

1.   What- Recognition Networks-Present information and content in different ways. Multiple Means of Representation: (a) Present information with different modalities, (b) Present information with multiple representations.

a.   Options for perception. Ensure **key information** is equally available to all learners: (a) different modalities, (b) flexible formats (e.g., enlarged text, audio with volume control).
b.   Options for language, mathematical expressions, and symbols. Provide different forms of **representation**. Inequalities arise when information is presented to all learners through a single form. Words, graphics, symbols may carry very different meanings for learners.
c.   Options for comprehension. Proper design and presentation of information provides the scaffolds necessary to ensure that all learners can transform **accessible information into useable knowledge**.

Summary: Key information is equally **delivered** with scaffolds as necessary using different forms of representation to ensure all learners can transform accessible information into useable knowledge.

2. How-Strategic Networks-Differentiate the ways that students can express what they know. Multiple Means of Action and Expression: (a) Environment navigation, (b) Express knowledge.

a.   Options for Physical Action. Provide an environment, curricular materials, and activities that provide individuals with impairments an **alternative means to navigate, interact, and respond**, including a seamless interface with common assistive technologies.
b.   Options for Expression and Communication. Curricula should offer **alternatives in the degrees of freedom and provide alternate media for expression**, including a flexible and accessible toolkit, to allow the learner to express knowledge, ideas, and concepts in the learning environment.
c.   Options for Executive Functions. Providing scaffolds for lower level skills so they require less executive processing or providing scaffolds **for higher level executive skills** and strategies, that is goal setting, planning and strategy development, management of information and resources, and progress monitoring with feedback, so that they are more effective and developed are two approaches to expanding executive capacity.

Summary: Students are provided alternative means to navigate, interact, and respond to **tasks** that offer alternatives in degrees of freedom, provide alternate media for expression, and scaffolds to support higher level executive functioning.

3.   Why-Affective Networks- Stimulate interest and motivation.
Multiple Means of Engagement

a.   Provide Options for Recruiting Interest. Information that is not attended to, that does not **engage learners' cognition**, is in fact inaccessible; therefore, it is important to have alternative ways to recruit learner interest, ways that reflect the important inter-and intra-individual differences amongst learners.
b.   Provide Options for Sustaining Effort and Persistence. The *external environment* must provide options that can **support and sustain the effort and concentration** of learners who differ in initial motivation, self-regulation skills, etc.
c.   Provide Options for Self-Regulation. The learner must develop *intrinsic* abilities to regulate – to strategically **modulate one's emotional reactions or states** in order to be more effective at coping and engaging with the environment – their own emotions and motivations.

Summary: Information must be **engaged** by an interested and motivated learner who has developed intrinsic abilities to self- regulate their own emotions and states or receives external environmental support which sustains their effort and concentration.