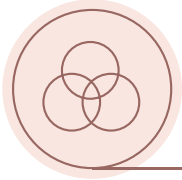# What is Universal Design for Learning (UDL)? Principles and Guidelines

What is Universal Design?

Universal Design for Learning is derived from the concept of Universal Design, which in physical environments means 'designing-in' maximum access for the most amount of people from the earliest stages of the project.

What is Universal Design for Learning?

Universal Design for Learning (UDL) aims to create inclusive educational environments. UDL is best described as a framework of principles and values that can be used as part of an institutional, departmental and/or individual educator approach to inclusive education. The UDL Framework, originated with **CAST, Inc., The Center for Applied Specialized Technology**, but has subsequently been elaborated to address multiple intersectional barriers to learning.

The core idea behind UDL is the recognition that students are different in terms of their motivations, learning preferences, abilities, and needs. The UDL framework aims to eliminate unnecessary barriers to the learning experience. It provides a set of principles and guidelines that encourage educators to adopt an inclusive mindset, considering how students experience learning in a course and addressing challenges that different students may face. UDL can be used as part of an institutional, departmental and/or individual educator approach to inclusive education.

What are the UDL Principles?

There are three UDL principles which relate to Engagement, Representation, and Action and Expression.

1. Multiple Means of Engagement:

Understanding that students have different motivations, challenges to learning, and interests, this principle underscores the importance of providing varied opportunities for engagement. By offering choices and incorporating a range of strategies, educators can tap into students' interests, sustain their attention, and foster a positive and supportive learning environment.

Examples:

- Access note: Invitation to use the learning space in a manner that suits the student
- Make an introduction video for students to view before starting your course
- Embed time to invite different perspectives related to the topic or goal
- Make it relevant
- Read the room (social/emotional contexts, life)
- Embed movement/comfort breaks

2. Multiple Means of Representation:

Recognising that students have different ways of perceiving information, this principle emphasizes the importance of presenting content in various ways. Providing diverse modes of representation ensures that students can access information through different sensory channels, such as visual, auditory, and tactile methods. Furthermore, educators need to consider the materials used to ensure that students see themselves and others represented, bringing relevance and value to their learning.

Examples:

- Subtitles on presentation (language options)
- PowerPoint Live
- Accessible font style and size
- Visuals: relevant and alt text/image descriptor
- Content/Visuals choice: authentic, inclusive, relevant

3. Multiple Means of Action and Expression:

Acknowledging that students have different ways of expressing their understanding, this principle focuses on offering diverse options for communication and expression. Students are provided with various means to demonstrate their knowledge and skills, accommodating different capacity, approaches to learning and learning preferences.
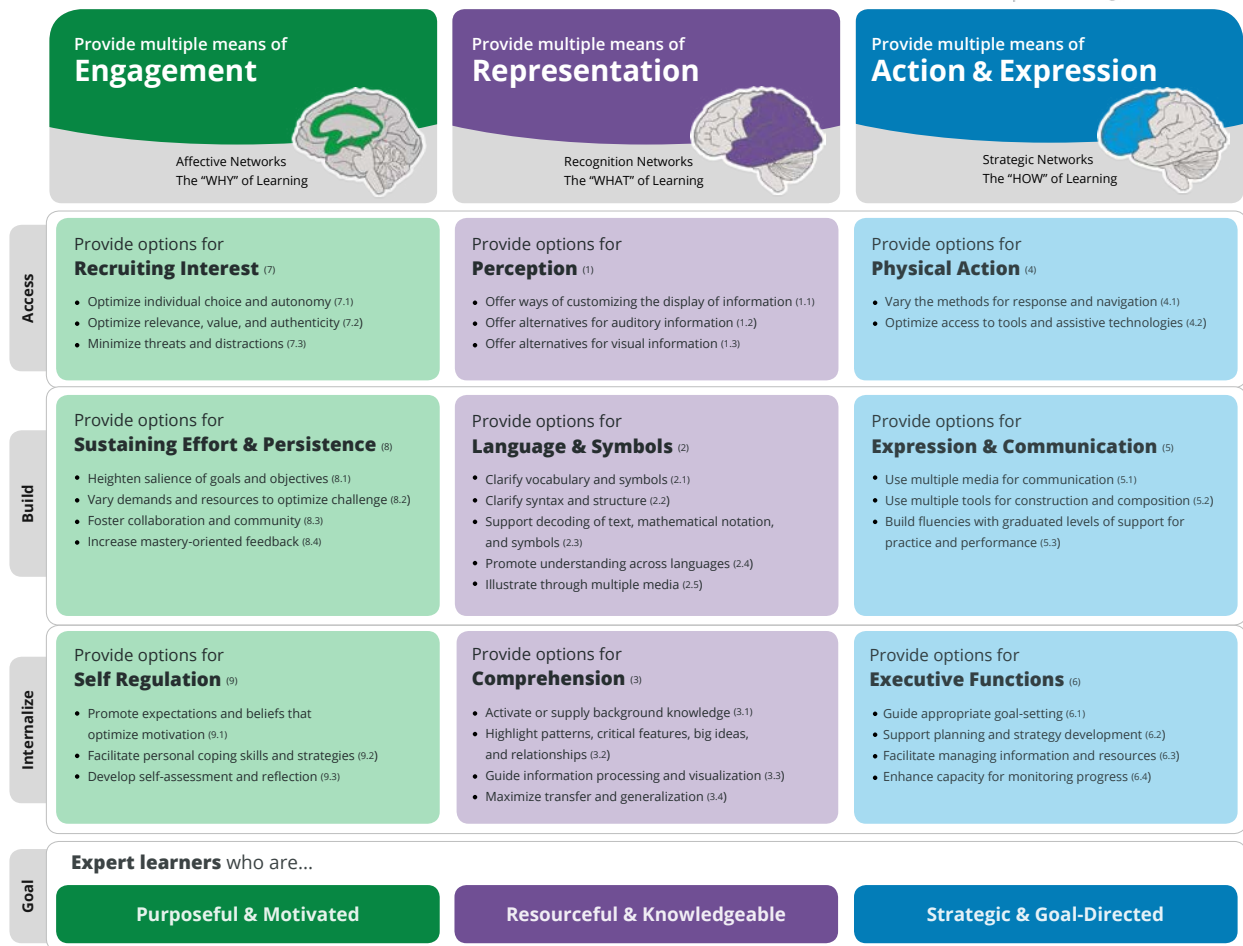
Examples:

- Continuous assessment
- Choice of written, poster, or audio/visual (as assignment gets larger, poster is removed).
- Flexibility with timelines where feasible
- Opportunities for critical peer feedback

What are the UDL guidelines?

In order to help educators apply the UDL Framework, CAST developed the UDL Guidelines. There are 9 UDL guidelines. The chart below from CAST outlines the guidelines under the different principles and describes possible ways the educator could apply that guideline. There are checkpoints to help the educator evaluate if they are applying the guidelines.

Provide multiple means of **Engagement** Affective Networks The "WHY" of Learning	Provide multiple means of **Representation** Recognition Networks The "WHAT" of Learning	Provide multiple means of **Action & Expression** Strategic Networks The "HOW" of Learning
Access Provide options for **Recruiting Interest** (7) • Optimize individual choice and autonomy (7.1) • Optimize relevance, value, and authenticity (7.2) • Minimize threats and distractions (7.3)	Provide options for **Perception** (1) • Offer ways of customizing the display of information (1.1) • Offer alternatives for auditory information (1.2) • Offer alternatives for visual information (1.3)	Provide options for **Physical Action** (4) • Vary the methods for response and navigation (4.1) • Optimize access to tools and assistive technologies (4.2)
Build Provide options for **Sustaining Effort & Persistence** (8) • Heighten salience of goals and objectives (8.1) • Vary demands and resources to optimize challenge (8.2) • Foster collaboration and community (8.3) • Increase mastery-oriented feedback (8.4)	Provide options for **Language & Symbols** (2) • Clarify vocabulary and symbols (2.1) • Clarify syntax and structure (2.2) • Support decoding of text, mathematical notation, and symbols (2.3) • Promote understanding across languages (2.4) • Illustrate through multiple media (2.5)	Provide options for **Expression & Communication** (5) • Use multiple media for communication (5.1) • Use multiple tools for construction and composition (5.2) • Build fluencies with graduated levels of support for practice and performance (5.3)
Internalize Provide options for **Self Regulation** (9) • Promote expectations and beliefs that optimize motivation (9.1) • Facilitate personal coping skills and strategies (9.2) • Develop self-assessment and reflection (9.3)	Provide options for **Comprehension** (3) • Activate or supply background knowledge (3.1) • Highlight patterns, critical features, big ideas, and relationships (3.2) • Guide information processing and visualization (3.3) • Maximize transfer and generalization (3.4)	Provide options for **Executive Functions** (6) • Guide appropriate goal-setting (6.1) • Support planning and strategy development (6.2) • Facilitate managing information and resources (6.3) • Enhance capacity for monitoring progress (6.4)
Goal **Expert learners** who are… **Purposeful & Motivated**	**Resourceful & Knowledgeable**	**Strategic & Goal-Directed**

References

CAST (n.d.) 'UDL Guidelines – FAQ'. Accessible at: **https://udlguidelines.cast.org/more/frequently-asked-questions**

CAST (2018). Universal design for learning guidelines version 2.2 [graphic organizer]. Wakefield, MA. Accessible at: **https://udlguidelines.cast.org/binaries/content/assets/udlguidelines/udlg-v2-2/udlg_graphicorganizer_v2-2_numbers-yes.pdf**

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