

PURDUE REPOSITORY FOR ONLINE TEACHING AND LEARNING

Universal Design for Learning (UDL)

1 What is it?

Universal Design for Learning (UDL) is a framework that draws on a large body of research on cognition and learning that can guide us to improve and optimize teaching and learning for ALL individuals, with and without disability. Its premise flows from the idea that we are all omnivorous learners and we do best when provided with options for engagement, representation, and actions and expression.

2 Why is it important?

UDL derives from efforts to make teaching more accessible to ALL learners. Every day as instructors we are tasked with guiding learners in specific curriculum goals/objectives, yet each classroom (online or face to face) is full of diverse learners (See Cultural Competence). These learners bring a wide variety of knowledge, experience, cultures, strengths, and needs, which may or may not allow for the specific curriculum goals/objectives to be successfully mastered within the classroom. Understanding the diverse nature of our students as well as the Principles and Guidelines of UDL will support educators in the consideration of barriers that may hinder the learning process (CAST, 2018).

3 How to do it?

CAST has created detailed guidelines with suggestions and checkpoints for thinking about how to implement UDL. This framework is based on three scientific insights that teach us how humans learn: Affective Networks, the WHY of Learning; Recognition Networks, the WHAT of Learning; and Strategic Networks, the HOW of Learning (CAST, 2018).

• The WHY of Learning (Affective Networks) represents a crucial element to learning because individuals differ in the ways they are engaged or

motivated to learn. There is not one method of engagement that is optimal for all learners across all contexts, therefore providing *Multiple Means of Engagement* is essential.

- Consider: how do we optimize autonomy, relevance, and value to diverse sets of learners while minimizing threats and distractions? How do we develop goals and objectives and provide growth-oriented feedback to sustain effort and persistence? How do we set appropriate expectations and develop self-assessment and reflective skills so students can become self-regulated learners?
- The WHAT of Learning (Recognition Networks) represent the multiple ways in which learners perceive and comprehend information that is presented to them. There is not one method of representation that is optimal for all learners, therefore providing *Multiple Means of Representation* is critical for learning.
 - Consider: How do we offer ways to customize information and offer alternatives to auditory and visual information? How can we help students to navigate the language and symbols that we use, and what cultural codes are embedded in these languages and symbols? How do we make appropriate use of students pre-existing funds of knowledge to create patterns and connections?
- The HOW of Learning (Strategic Networks) represent how learners differ in the ways they navigate a learning environment and express what they know or understand. Providing *Multiple Means of Expression* is key to student learning (CAST, 2018).
 - Consider: How do we vary the physical methods of response and navigation while



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optimizing access to tools and assistive technologies? How do we offer multiple modes of communication and graduated levels of support? How do we facilitate appropriate goal-setting, planning, and monitoring?

4 Additional Resources

- See Purdue University's <u>Enhancing</u>
 <u>Accessibility</u> overview for additional information on UDL or to set-up a *consultation* for those on Purdue campuses.
- Examples of UDL implementation and resources specifically geared toward college teaching.
- <u>CAST's UDL Guidelines</u>: These guidelines
 offer a detailed framework for thinking through
 the possibilities and implications of UDL.
 Additionally, each individual line in the
 guidelines links to detailed descriptions and
 questions with detailed supporting research.
- <u>UDL Free Learning Tools</u>

5 References

CAST (2018). Universal Design for Learning Guidelines version 2.2. Retrieved on Dec 12, 2018 from http://udlguidelines.cast.org

Gordon, D., Meyer, A., & Rose, D. H. (2016). *Universal design for learning: Theory and practice*. CAST Professional Publishing.

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