

Universal Design for Learning

<https://vimeo.com/625778477/0ab6978db7>

Getting Started with Universal Design for Learning: Design Learning for Everyone

To maximize the potential for learning students need variety within their courses. Some students prefer to work alone while others crave social interactions. Some might benefit more from reading text, while others prefer to listen to an audio recording. Some might prefer to write a paper, while others demonstrate their learning more effectively by creating a presentation.

So how do instructors select effective instructional strategies to meet the needs of all students? The universal design for learning or UDL framework can help. UDL is a system based on cognitive neuroscience research, that provides a blueprint for designing strategies, materials, and assessments that aim to help students overcome barriers to learning. The framework helps to ensure that every student has an equal opportunity to succeed.

The UDL framework is based on three guiding principles:

- Engagement: This principle addresses why students are motivated to learn.
- Representation: This principle addresses what kinds of content students receive.
- Action and Expression: This principle addresses how students demonstrate learning and apply that knowledge to new contexts.

Let's take a closer look at each of these three principles.

Multiple Means of Engagement

This principal refers to students taking part in learning, using a variety of active learning strategies. Active learning involves students as dynamic participants during class, helping them to develop an in-depth understanding of essential concepts.

Active learning activities can be short or long, and can be completed independently or collaboratively. Examples include journal writing, problem solving, small group discussions, and structured team-based projects. When instructors break up lectures with engaging activities or brief questions, the breaks help students process information, practice skills, synthesize, and apply ideas. These strategies make lectures more engaging and effective.

Active learning addresses learner variability by providing students with a variety of strategies and opportunities to engage in different kinds of interactions: Learner-to learner, learner-to-content and learner-to-instructor. Together, these different interactions motivate students to learn, engage them in a variety of contexts, and provide authentic learning experiences that promote cognitive thinking.

Multiple Means of Representation

This principle recognizes the diverse ways that students perceive and understand information. Some lessons may present better with sound or visuals. Other lessons are more effective with text. At the same time, students may have barriers to learning such as reading difficulties, cultural differences, or

language gaps. Videos, and imagery can help students overcome these barriers. These formats can be combined with readings to make a lesson more understandable to more students. Multimedia with captions or transcripts help students with hearing impairments or language differences. Multimedia can also help students with visual impairments. Well-narrated multimedia allows students to learn completely through audio. Accessible electronic media can be viewed on multiple screen sizes, different speeds, and allow for screen readers to dictate digital readings out loud.

In summary, one size does not fit all. Varied content in multiple formats addresses barriers to learning, and helps all students achieve learning goals.

Multiple Means of Action and Expression

Students bring diverse backgrounds, experiences, and prior knowledge to each class. The *multiple means of action and expression* principle recommends using diverse strategies to allow students to demonstrate what they know. Varied assessments allow students to demonstrate their mastery of skills in multiple ways. For example, in lieu of writing a paper, some students might do better giving an oral presentation or developing a digital project. If a course includes a traditional final exam, students benefit when there is a choice of how to demonstrate their learning. Exam alternatives include writing a paper, developing a website, or creating a multimedia project.

In addition to offering choice, students benefit from a balance of formative and summative assessment strategies. Formative assessments consist of ongoing, low stakes feedback that affirms students' strengths and uncovers areas that need work. Examples include asking students to write a few sentences about the lecture's main points, or create a proposal before doing a research project.

Summative assessments are higher stakes. They include exams, papers, and final projects. Authentic assessments, such as performance of specific skills or simulations provide relevance by helping students to connect the learning material to real world contexts. This increases student engagement and supports comprehension.

In conclusion, the UDL framework emphasizes the importance of building expert learners in any context. Students are dynamic in learning and ability. Implementing UDL is a continual process that involves practice reflection and refinement. UDL offers faculty strategies to make courses more engaging, and content more accessible, which in turn sets students up for success.