Universal Design for Learning

Universal Design for Learning (UDL) is an applied framework established by the Center for Applied Special Technology (CAST) for expanding learning opportunities and reducing barriers in education.

Burgstahler describes UDL as a "paradigm for higher education that would simultaneously address issues of equality, accessibility, social integrity, and communication" (Burgstahler, 2008). Universal Design for Learning (UDL) is now a widely recognized framework that provides guidelines for reaching students with a broad spectrum of ability. The spectrum of ability can range from physical to cognitive and permanent to situational, all of which can impact the learner's ability to effectively learn and participate in an online classroom.

Spectrum of ability:

- **Visual:** blind, low-vision, color-blind, forgotten reading glasses, no screen

- **Hearing:** deafness, hard-of-hearing, limited range hearing, no earbuds, no speakers

- **Motor:** response time, limited fine motor control, on a bumpy bus, hands are full

- **Cognitive:** learning disabilities, distractibility, tired, high functioning, low functioning

  ([UCSF Digital Accessibility](#))

The principles of UDL help reduce and eliminate barriers from the onset and provide options for all learners. In addition to encouraging digital accessibility, UDL principles also ensure that courses are designed for learners with various cognitive abilities and various motivational orientations. By accounting for learner variability and reducing barriers at the onset, course designers and instructors can minimize the need for accommodations and make learning truly universal.

Principles And Tips

1. **Multiple Means of Representation:** Learners differ in the ways that they perceive and comprehend information that is presented to them. Learning, and transfer of learning, occurs when multiple representations are used, because they allow students to make connections within, as well as between, concepts (CAST).

   - Provide examples that are culturally relevant to a broad audience.

- ○ Ensure all resources and digital texts are inclusive and digitally accessible to all learners by providing choice to read, watch, or listen.

- ○ Provide captions for all audio and descriptive captions for video.

- ○ Provide educationally relevant descriptions for images and graphics.

2. **Multiple Means of Expression:** Learners differ in the ways that they can navigate a learning environment and express what they know. It should also be recognized that action and expression require a great deal of strategy, practice, and organization, and this is another area in which learners can differ (CAST).

   - ○ Use multiple, accessible assessments such as oral presentations, demonstrations, written work, exams that allow students choice of expression.

   - ○ Ensure adequate time to complete assignments.

   - ○ Provide multiple opportunities for students to practice and improve their work and demonstrate their knowledge.

   - ○ Keep expectations high and communicate clear learning objectives and criteria.

3. **Multiple Means of Engagement:** 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 (CAST).

   - ○ Ensure communication avenues are inclusive and digitally accessible to all learners including language learners and learners with sensory impairments by providing multiple ways to participate.

   - ○ Provide clear guidance and background information needed for participation.

   - ○ Facilitate the exchange of ideas and sharing of perspectives between learners.

   - ○ Include a statement inviting learners to meet and discuss with the instructional team.

UDL Principles guide the instructional design of courses for variability and inclusivity, in which all learners can have the opportunity to participate, engage, and learn effectively. By providing multiple avenues and options for learners to reach the same goal, instructors can help reduce barriers to learning and develop learners who are motivated, resourceful, and goal-directed.

References

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