

Multiple Ways to Experience The Content Within This Article –

- A. Listen to this content (<http://www.cyberears.com/cybrss/12035.mp3>)
- B. Watch a short video about this content (<http://bit.ly/udlexplained>)
- C. See a comic about this content (<http://bit.ly/udlonlinecomic>)

On February 1st, 2011 The Center for Applied Special Technology (CAST) released an updated version to the guidelines for the Universal Design for Learning (UDL) framework. Like version 1.0, the guidelines continue to focus on educators structuring curricula and lessons in such a way to provide options to meet the variety of needs of all learners. Educators using these guidelines consider multiple ways to represent information, multiple means for individuals to express what they know, and multiple methods of engaging the participants. A wide array of technologies are utilized by educators to provide these options to those participating in the learning environment.

One of the major changes embedded within version 2.0 of the UDL guidelines is an adjustment in terminology. Rather than calling the participants “students” the new guidelines address those participating in the educational environment as “learners.” The change in terminology was applied to help widen the scope of UDL to include any individual, regardless of age.

With this change in mind, the underlying principles of UDL should not only be applied to school-aged students, but to adult learners as well. When conducting online professional development workshops educators providing the training can use the UDL principles to differentiate the experience for every learner. In order to do this, the professional developer can use the three pillars of UDL to provide a rich, multi-modal learning experience. Online professional development courses provide an opportunity and environment for educators to plan out a variety of modalities by which the participants can experience content, demonstrate knowledge, and make meaningful interactions.

When creating an online course, the educator develops a plan of learner outcomes. Similar to the curricula for school aged learners, these become the goals of the course and provide a tent pole upon which the entire course is designed. From there, the educator begins to think about all the different methodologies for presenting the content. Traditionally, text can be used as a starting point, but in order to engage all learners, multiple means need to be incorporated from the beginning. Therefore, along with text, professional developers might consider providing audio clips, images, video clips, and an interactive simulations for the learner to experience.

Audio clips can be auto-generated by using a text to speech converter, such as www.vozme.com. Alternatively (perhaps preferably) audio can be created by the educator through the use of a voice recording system, such as www.vocaroo.com or the open-sourced software program Audacity (<http://audacity.sourceforge.net>). Yet another way to provide content using audio is to refer the learner to a podcast episode on the topic. A wide range of free and openly shared content is available in audio format via podcasts. iTunes is one example of a free podcast aggregator that can be used to find relevant audio content.

The old adage, “a picture is worth a thousand words” continues to ring true for 21st century learners. Creating or sharing found images provides a visual representation of a concept. Still images, such as an individual digital photo, are only one type of visual representation. Multimedia slideshows, such as those found or created on sites like <http://photopeach.com> or <http://vuvox.com> can also be used. Furthermore, comic generators, like <http://bitstrips.com> and <http://pixton.com> allow users to create visual representations using cartoons.

Video provides another form of media to engage learners. Like audio and images, the professional developer can choose to generate their own video clips or utilize the multitude of free and openly shared content available on the Internet from sites such as <http://youtube.com>, <http://schooltube.com>, and <http://teachertube.com>. Even the most basic of digital cameras can be used to create short video clips but tools such as web cameras or digital video cameras can also be used to create digital videos. Sites like <http://xtranormal.com>, <http://voki.com>, <http://blabberize.com>, and <http://kerpoof.com> provide users with the ability to create short digital videos and animations without the use of a digital camera. Using the tools built into the websites, professional developers can quickly incorporate an engaging and entertaining video into their course as a way to demonstrate a topic.

Interactive websites provide users with the ability to engage in active learning. Reading text, listening to audio, and viewing video are all passive ways to acquire information. Interacting with an environment (or others within an environment) provides the learner with an experience that is dynamic. Sites like <http://secondlife.com> allow users to create a three-dimensional representation of themselves which navigates and interacts within a virtual environment. Two dimensional games, simulations, and social interactions can also be used for learners to experience content.

By using multiple modalities the learner is given the opportunity to experience the content by listening to it, watching it, reading about it, and interacting with it. These same modalities can then be used by the learners to express what they have learned. Learners can be expected to utilize text, audio, images, video, or simulations to create rich projects that are meaningful on a personal level. In this way, learners aren't just completing a project to demonstrate what they've learned, but creating something authentic that can be used in their own practice.

It is important to remember that the professional developer is not requiring each participant to experience every modality. The professional developer is providing options from which the learners can choose. Some learners may choose to read blog posts about the topic, while others might choose to listen to the audio, while still other might choose to play the interactive game or watch the video. Of course, some learners, may choose to experience the content in more than one way as well. The role of the professional developer in an online course is to provide as many options as possible for each learner to experience the content and express what they have learned. When an online course is developed and executed using the principles of Universal Design for Learning, the result becomes something that transcends the traditional learning experience. Participants walk away from the course with a sense that the experience was customized to their unique styles of learning which ultimately results in a more internalized synthesis of the content.

Chris Bugaj is an author for The International Society for Technology in Education (ISTE®) and also facilitates an online course in Assistive Technology. ISTE is the premier membership association for educators and education leaders engaged in improving learning and teaching by advancing the effective use of technology in PK-12 and teacher education. ISTE represents more than 100,000 education leaders and emerging leaders throughout the world and informs its members regarding educational issues of national and global scope. ISTE is home to the NETS, the leading digital age education standards in the U.S. and many countries.