The term "universal design" describes the concept of making products that are usable to the greatest extent possible by everyone, regardless of their age, ability, or status in life. Universal Design for Learning (UDL) expands this concept into the educational setting. UDL research shows that each student has their own learning style – visual, auditory, kinesthetic. A one-size-fits-all approach is less effective.

**In the Classroom**

Education is traditionally based on the notion of an “average student” and teaching methods and materials are designed with this approach in mind. Students who are not “average” - those who are gifted or deaf and hard of hearing - are frequently excluded. UDL focuses on variability instead of uniformity. Educators are encouraged to be flexible with goals, methods, materials, and assessments. UDL principles eliminate the need for costly and time-consuming after-the-fact changes by planning for variability in the initial design.

**UDL Principles**

**Principle I:** Providing Multiple Means of Representation (the “what” of learning)

- Perception
- Language, expressions, and symbols
- Comprehension

Examples:

- Using images and text to illustrate ideas
- Providing digital formats that allow the learner to enlarge text or change fonts or colors
- Captioning videos

**Principle II:** Providing multiple means of action and expression (the “how” of learning)

- Physical action
- Expression and communication
- Executive function

Examples include:

- Use multiple formats such as paper, electronic, and multi-media
- Allow various modes of expression—writing, verbal, or project-based
- Facilitate scaffolding of ideas to promote higher level learning

**Principle III:** Providing multiple means of engagement

- Recruiting interest
- Sustaining efforts and persistence
- Self-regulation

Examples include:

- Incorporate relevant examples for a variety of learners
- Increase skills in self-regulation and self-determination
- Provide self-assessment exercises
How to Incorporate UDL: UDL incorporates many research-based approaches to learning: cooperative learning groups, performance-based assessment, project-based learning, multisensory teaching, and the theory of multiple intelligences.

Presenting information in a variety of formats - online resources, videos, PowerPoint presentations, and e-books - can replace a standard lecture format. It can be enhanced through the use of speakers, case studies, field trips, music, role play, educational software and hands-on activities. Assessment methods can be similarly flexible. Learning can be demonstrated through oral and visual presentations, instead of a standard written test.

Captioned Media: Captioning videos is another example of universal design. Captions are often seen as being only for individuals who are deaf and hard of hearing, however, they benefit everyone: those whose first language is not English, those in noisy settings, those who are unfamiliar with the vocabulary, and many others. If instructors decide to post captioning transcripts, all students benefit by having comprehensive notes of the video content.

Some media comes with captions; others may need to be captioned to use in class:
- Commercial media, produced by large production companies, is often already captioned.
- Smaller or independent production companies may not have thought to include captions. However, they may add captions upon request.
- YouTube videos are most often not captioned, so captions will need to be added. The automatic captions produced on YouTube videos are notoriously inaccurate and cannot be relied upon for access.
- Instructor-produced media will most likely not have captions.