

Universal Design & Accessibility

Universal design principles for online learning environments are based on the knowledge that a broad range of human ability exists. Therefore the creation of content needs to be made as usable as possible for as many people as possible regardless of age, ability, or situation.

Usable content accommodates people with disabilities, older people, children, novice technology users, and others in ways that benefit all users. Online courses and communities add the dimension of any time, anywhere access. This creates many different scenarios for students and instructors engaged in the process of teaching and learning not defined just by ability, but by time and place as well.

Designing for a wide range of users from the beginning of the building process can increase usability without significantly increasing the time it takes to build. The results benefit everyone and reduce modifications later when students, instructors, or content change.

Universal design for online learning seeks to provide:

- **Multiple means of representation**—to give learners various ways of acquiring information and knowledge.
- **Multiple means of expression**—to provide learners alternatives for demonstrating what they know.
- **Multiple means of engagement**—to tap into learners' interests, offer appropriate challenges, and increase motivation.

In today's educational settings, the mix of students is more diverse than ever. Educators are challenged to teach all kinds of learners, and they are evaluated against changing standards. Studies have shown that 60%-80% of students do not report their disability.

Teachers want their students to succeed, but a one-size-fits-all approach to education simply does not work.

There are some simple things you can do to make your course accessible for the learner. Making your course accessible will help the learner to access the content with little issue.

Descriptive Headings

Use descriptive headings to organize the content in a course. Headings are critical when creating accessible content and they provide the ability to directly jump to content and can save assistive tool users hours of time. Keep it simple and use the heading styles provided by the tool you are writing in. Below is a link to Microsoft Office on how to make your word documents accessible:

- [Headings in Word Documents](#)

Readable PDF Files

Ensure that PDF files are readable by screen readers. Simple methods for “print” or “save” to PDF may create a single image of the file and scanning documents to PDF will often result in an

image of the file. The screen reader will not be able to interact with or read the image. For details about making accessible PDF documents, see:

- [Meet PDF Accessibility Standards](#) (Acrobat Pro DC)
- [Use automatic OCR software in Acrobat](#)

Descriptive Links

Within your course, make your links descriptive. Every link should describe what the user can expect to find when they click on it. Just providing the link with the web address or URL is not considered informative and should not be used.

Videos and Images

Only use images that have a purpose and meaning otherwise it will create clutter and will be overwhelming to those with disabilities. Add alt text that is simple and describes exactly what the image is. For example, alt = “photograph of a human eye”. If the image is a diagram that conveys complicated information, a long description, or textual format of the material is required.

- [Alt tags in Microsoft Office 2016](#)
- [Creating Accessible Word Documents](#)
- [Microsoft Accessibility Checker](#)

Include descriptive caption or a transcript to your content to ensure users with hearing impairments are able to understand it. Please see below for details on adding closed captioning:

- [Adding Captions to YouTube](#)

Font Styles

Screen readers do not identify font styles such as bold and color. If you want to give a strong visual cue, make sure to use an accessible alternative like an exclamation mark at the end of your sentence if it's important. Screen readers intonate exclamation and question marks which means it won't read “question mark” but will give a questioning tone to a question.

Additional Resources

[Why is Universal Design Important – Ted Talk](#)