



Tech Tip #2015-04

Accessibility for Learning: An Introduction (Sight Impairment)

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Transcript

For the full screencast, see <http://ctle.utah.edu/resources/tech-tips.php>

Greetings Everyone! My name is Dr. Linda Ralston. I am the instructor of the CTLE Cyber Pedagogy course and an Associate Professor at the University of Utah. I have been teaching at the U since 1991 and teaching online since 1999. Thank you for taking the time to check out this introductory tech tip on Accessibility for Learning. The purpose of this short tech tip is to help educators ensure that their course materials are equally accessible to all their students. (Note: Slide featured a graphic with learners holding up letters spelling out LEARN.)

We have made tremendous strides to ensure everyone has access to our academic buildings at the University of Utah, but have we taken steps to make our course materials are equally accessible. Just as we will not tolerate stair cases, curbs, or other barriers to our campus facilities, we should be equally adamant about ensuring access to the materials we utilize in our courses. (Note: Image featured a person in a wheelchair facing a staircase and two escalators)

It should be important no matter who you are or how you deliver your course material because it is the law. The **Americans with Disabilities Act** ensures equal opportunity to users with disabilities, and Section 508 requires electronic and information technology be accessible to people with physical, sensory, or cognitive disabilities. So any electronic files distributed via the web or distributed as PDF files on email, or any other files for that matter, need to be made equally accessible for learners with disabilities. (Note: Image illustrating accessibility for learning) **Learn more** at <http://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards>

What does your classroom look like today? Today, regardless of whether we are teaching in a classroom, online, or in a blended setting, students today are often seen with their laptop, tablet, or smart phone at the ready. Even when I teach in the classroom, I post my syllabus, e readings, lecture notes, study questions, assignment instructions, and calendar on our Canvas Learning Management System. I send out weekly announcements, conduct quizzes, accept assignments, and post grades via Canvas. Have you ever wondered how this might challenge a learner with a disability? How does a learner with a sight impairment read the assigned ebooks and/or PDF documents? How does a student with a hearing impairment listen to your recorded lectures? How does a student with a physical disability navigate your Canvas course pages? But I am getting ahead of myself here. In this introduction to the “Accessibility for Learning” series of tech tips, I would like to clarify a few key terms and concepts. (Note: Image illustrates a large lecture hall with almost every student with a laptop on their desk.)

So what exactly is accessibility? According to the Office of Civil Rights Compliance Review, “Accessible” means a person with a disability is afforded the opportunity to acquire the **same** information, engage in

the **same** interactions, and enjoy the **same** services as a person without a disability in an equally effective and equally integrated manner, with substantially **equivalent ease of use.**” Let me simplify that a bit . . .

Well, by definition, accessibility simply refers to something that is obtainable or attainable. Simply, how easy can something be used or obtained by all our students. Primarily, I am referencing a screen reading device, but there are a wide variety of assistive devices. For the instructor, the challenge is to remove the obstacles that prevent accessibility tools from functioning effectively. In many cases, these challenges are relatively simple to overcome, but sometimes the solutions require some additional thought and effort. (Note: Image depicts a variety of assistive devices and a word cloud of words related to accessibility.)

Assistive devices exist to help learners of all abilities to access learning materials, such as Screen Readers (i.e., Jaws from Freedom Scientific) and speech recognition software, Screen Magnifiers, Touchscreens, and head pointers. For example, **students who are blind** or learners with severe visual limitations will be accessing your electronic course materials, such as, PDFs, Canvas pages, and ebooks using special software normally called screen readers. The screen reader “talks” to the user with synthetic speech. It provides feedback to users to interact with an electronic document. **Learners with hearing impairments** will not be able to benefit equally from audio announcements or the audio portion of video; students who are hearing impaired will experience problems with audio lectures or a video if text transcripts are not provided for audio clips or video are not captioned. (Image: A learner using a head pointer to operate a tablet.)

You may wonder where you should begin. I suggest that you become aware of the Web Content Accessibility Guidelines (WCAG) 2.0 from the World Wide Web Consortium (W3C) which provides the next generation of guidelines for accessible design. This standard consists of 12 guidelines, which can be summarized into 4 areas: Perceivable, Operable, Understandable, and Robust. I will be reviewing the standards in upcoming Tech Tips with demonstrations, but at this time let me share with you one or two suggestions that require very little technology skill. (Image: WCAG 2.0 Book)

Perceivable requires that information and user interface components must be presentable to users in ways they can perceive:

Provide text alternatives for non-text content, such as images, charts, tables, and graphs. Screen reader programs cannot read images. It can only read text or the alternative text tags that the Web designer associated with that image. For a student who is totally or nearly blind, items like color and dense text are not differentiated by the screen reader. However, a well organized page with clear and meaningful text is important. This will be essential for students with learning or with cognitive disabilities also.

Additionally, we should provide captions and alternatives for audio & video content, such as, closed captioning and text transcripts. (Note: Slide features an image illustrating the use of a caption.)

Make content adaptable; available to assistive technologies. For example, utilize the Canvas modules page to enable your learners to use the Next button on the bottom right of the Canvas page to allow

them to move through the lesson module without having to return to the home page or a study guide. (See the yellow highlighted area on this slide.)

Use sufficient contrast to make things easy to see and hear – I have used a contrasting color on this illustration to make it easier to identify and draw your attention to the item I am pointing out to you on the slide.

For example, never use flashing text. Do not use animated or moving graphics unless the animation is necessary to illustrate important information, such as an animation demonstrating how a machine works. Even so, it is best to place the animation on a different page, or to set it up to start only when clicked. Avoid using background images behind text. Make sure that there is a good contrast between the color of the background and the color of text. (Note: Slide features an image illustrating providing several alternatives for recorded lectures.)

Watch for upcoming Tech Tips for Teachers, such as How to make your PDF files universally Accessible. (Image: CTLE Tech Tips for Teachers icon.)

If you have any trouble putting this Tech Tip to work for you, please don't hesitate to contact CTLE or TLT.

Here's the contact info:

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Canvas help drop-in hours: M/T 9:00 am – 4:00 pm | Faculty Center (MLIB 1705)