

# Accessibility 101

## 1 What is it?

Web accessibility is an inclusive practice that ensures individuals with a disability "...can perceive, understand, navigate, and interact with the web [platform]" (Thatcher et al., 2006). Poor web design can create barriers when accessibility tools are needed. For example, an individual with a visual impairment may use software, such as a screen reader, that allows web-based content to be read audibly to the user. When the web page is poorly designed the screen reader will not be able to read the information as it was intended to be presented. As educators, in a tech-savvy world, it is imperative we ensure all students have equal access to information, content, and materials that we provide in an online platform.

## 2 Why is it important?

**It is the law:** Title III of Americans with Disabilities Act (ADA) prohibits discrimination on the grounds of disability. This includes the use of an online platform, as equal access must be provided. Failure to meet the minimum accessibility requirements may result in formal complaints and/or discrimination lawsuits.

**It is the right thing to do:** Making web-based information equally accessible demonstrates your ethical commitment to ALL learners within your courses/training.

**It is a good strategy:** Individuals with or without a disability can benefit from an accessible web-based platform. For instance, it is convenient for the people who use older computers or browser versions, have slow connections, subscribe to limited data plan, and operate on a wireless or mobile connection. In this way, it reaches more users.

## 3 How to do it?

There are many ways to ensure accessibility regardless of the platform(s) used. This requires a little bit of extra effort and care from you, but benefits all learners and helps to "future-proof" your materials. The following are some recommended strategies that can be used to ensure accessibility:

- **Fonts:**
  - Make sure there is a contrast between both the background/foreground colors and text colors.
  - Select easy to read fonts, avoid small font sizes.
  - Limit use of font variations.
  - Avoid underlining text as this could be misunderstood as a hyperlink
- **Colors:**
  - It is important to note that screen readers do not recognize colors. It is recommended that the developer not use colors to communicate information (e.g., keywords, to indicate a link).
  - To avoid confusion, limit use of multiple colors
  - When using color, as noted above, make sure colors have sufficient contrast.
- **Images:**
  - When designing or developing online materials use minimal-to-no flickering or animated graphic elements.
  - When posting to a Learning Management System (LMS) fill in the image description box as you upload it and provide a text caption to help people understand the message if they are unable to see it.
  - Similarly, when using images/tables/graphs in Microsoft WORD, provide alternative

text (technically known as “Alt text” or “Alt tags”).

- When using audio/videos/images in Microsoft PowerPoint, utilize the notes section to help people understand the meaning/context.
- **Audio and Video (Media):** When possible provide captioning and/or transcripts for your media
- **Documents (Attachments):** All documents uploaded within the LMS/web platform should be American Disabilities Act (ADA) Compliant; these include Adobe PDF files, Microsoft Word Documents, and Microsoft PowerPoint Presentations. If you are attaching a PDF file, make sure the PDF file has not been converted from scanned images of books or other sources which are not accessible. Most LMSs have a built-in ‘accessibility checker’ option which will confirm whether the contents are accessible or not.
- **Tables:** It is recommended that you prioritize lists over tables to ensure greater accessibility. However, if it is necessary to use tables, make sure that you use both headers and cell properties. Screen readers sometimes require advanced keystroke commands to navigate them correctly. The easiest way to ensure accessibility in tables is to give each table an ID and summary which provides the user with an overview of the content.
- **Links:** Instead of using the actual link (e.g. <https://www.education.purdue.edu/academics/graduate-students/degrees-and-programs/graduate-programs/learning-design-technology/>), it is recommended that you provide a description of the link (e.g. [Learning Design and Technology Graduate Program](#)) to inform readers about the type of content contained in the link.

(H. Fiock, personal communication, October 4, 2018)

## 4 Additional Resources

- See Purdue University’s “[Enhancing Accessibility](#)” overview for additional information or to set-up a *consultation* for those on Purdue campuses.
- [Challenges to making online courses accessible, and recommended solutions](#)
- [List of accessibility barriers in online courses and recommended solutions](#)
- [Five tips for ADA-compliant inclusive design](#)
- [Accessibility resources from COLORS, Center for Online Learning, Research and Service](#)
- [20 tips for teaching an accessible online course](#)
- [Universal Design Online Inspection Tool \(UDOIT\)](#) from the University of Central Florida: (Can be used with canvas platforms)

## 5 References

- Burgstahler, S. (n.d.). 20 tips for teaching an accessible online course. Retrieved from <https://www.washington.edu/doit/20-tips-teaching-accessible-online-course>
- Course accessibility guidelines. (n.d.). Retrieved from <https://www.purdue.edu/innovativelearning/tools-resources/accessibility/course-accessibility-guidelines/>
- Moore, E.A. (2014, June 30). Improve accessibility in tomorrow’s online courses by leveraging yesterday’s techniques. Retrieved from <https://www.facultyfocus.com/articles/online-education/improve-accessibility-tomorrows-online-courses-leveraging-yesterdays-techniques/>
- Rabidoux, S., & Rottman, Amy. (2017, May 3). 5 tips for ADA-compliant inclusive design. Retrieved from <https://www.insidehighered.com/digital-learning/views/2017/05/03/tips-designing-ada-compliant-online-courses>
- Thatcher, J., Burks, M.R., Heilmann, C., Henry, S.L., Kirkpatrick, A., Lauke, P.H., Lawson, B., Regan, B., Rutter, R., Urban, M., Waddell, C.D. (2006). Web accessibility: web standards and regulatory compliance. Berkeley: Apress
- Why make a site accessible?. (n.d.). Retrieved from <http://www.d.umn.edu/itss/training/online/access/why/>