

BEST PRACTICES: ACCESSIBILITY AND EQUITY FOR E-LEARNING CONTENT

LEARNING GOALS

- Discuss a broad definition of accessibility and the purpose of creating accessible educational materials in the practice of equitable instructional design;
- Differentiate between tools available for some common software and explain the roles each play in adding accessibility to digital learning objects (e.g., hierarchical organization in documents, alt-text for images, or closed captioning for video)

OUTLINE

ACCESSIBILITY & ITS PURPOSE FOR PEDAGOGY (MARY)

- Accessibility vs. accommodation
 - Accessibility is not one thing—it's really a descriptor of the extent to which something (a digital object, as we're thinking about it) is usable by a variety of people with a variety of needs.
 - Accommodation is after-the-fact add-ons that make an object usable, generally with a specific ability issue in mind.
- Why think about accessibility in teaching?
 - Some students need accessibility features & it's the law!
 - Legally, the College needs to provide *accommodation* at the least, but getting there requires both diagnosis and disclosure
 - Many of the kinds of accessibility features we often discuss are useful beyond specific accommodations
- Universal design for learning
 - Goes way beyond just accessibility (as we're talking about it today)—for a great overview, presentation from Divonna & Clint for the JPI—but there is some overlap.
 - Accessible objects can help facilitate UDL methods in teaching
 - Similarly, the UDL “plus-one” mindset can be helpful as you start thinking about adding accessibility to digital learning objects

SOME BEST PRACTICES AND TOOLS FOR CREATING ACCESSIBLE LEARNING OBJECTS

- Documents & PDFs (MARY)
 - Accessible doesn't only mean that a screen reader can do a talk-out-loud read-through of the text. You have to have the document semantically organized. This means using headings to break up the text, as well as bullets and numbered lists.
 - Elements like bold, italics, indents are not semantic – they are visual cues, not meaningful ones.

- A heading structure allows your document to be parsed in a way that breaks it down into a hierarchical structure. Headings are not decorative. Do not skip headings just because you don't like how it looks.
- Good practice for creating links dictates that the link text is descriptive in some way of what the link does. "Click here" or copy-pasted URLs aren't great for screenreaders, but also aren't as helpful for just human eyes.
- Creating a Word document and then saving it as a PDF is the best way to create an accessible PDF, hands down.
- A note on accessibility checkers
- Slideshows (MARY)
 - Using automated slide layouts can help to insure screen reader compatibility
 - Using the notes field to add your "script" or more detailed notes for a presentation can make a slideshow one option for students who may not be able to access a live presentation or video recording (or just great for reviewing later)
- Images (R.C.)
 - Include alt-text for images that is descriptive of what is going on in the image. If there is text that is part of the image, make sure that is transcribed somewhere, either as part of a caption or as part of the alt text.
 - If the image is semantically situated in the text, then alt text may not be necessary. It would create redundancy in screen readers.
 - Alt text should convey content AND function.
 - Images used ONLY for decoration do not need alt text. However, reconsider WHY you are using an image for decoration, if that is its only purpose.
- Video (R.C.)
 - Captioning – machine generated captioning may or may not be good enough for what you are doing. Different systems have different auto-generated captions, such as YouTube and Screencast-o-Matic. You can use the systems to clean up captions after you are finished.
 - Transcripts – Ensemble Video allows you to have an interactive transcript that allows your users to click on certain bits of text and take them directly to that point in the video. This requires a captions file to be added to
 - If captions aren't an option, consider posting your notes and scripts alongside the videos.
 - Record videos in such a way that students can easily view them on smaller screens. Don't assume everyone has a laptop. If you are doing something that requires a lot of fidelity, they may not be able to read the text or see the images. If your video requires a lot of fidelity, students with slower connections may miss the finer details since it may stream at a lower resolution.
 - If doing a buttonology video, be conscious of your mouse movements.

PLANNING FOR ACCESSIBILITY (IN ADVANCE & IN THE FUTURE) (R.C.)

- Designing for accessibility can be super time consuming...if you're trying to fit in every possible thing

- Again, consider a “plus-one” mindset
 - Keep in mind that some things (like making a more accessible document) will take *much* less time if accessibility is considered up-front
- Communicate with faculty/students & consider prioritizing high-need features
 - Or similarly, features that are especially useful to many students (e.g., captions), remembering that not all students may have the means to disclose
- Consider looking into project management techniques, especially when designing e-learning objects with a team. This will help you think about the lifecycle of the objects, including assigning different elements and planning for when you need to revisit different aspects. [Basecamp](#) is one option, and it has a free version.
- Sharing & licensing
 - When building e-learning content, consider applying a CC or other license to the material so it can be shared and remixed for others.
 - If you want to apply a CC license to your materials, then plan your e-learning objects accordingly, so any outside material you are using is licensed in a sympathetic way.

ADDITIONAL RESOURCES

- [Materials from “It’s Open Access, But Is It Accessible.”](#) Virtual Presentation by Becky Graham, April 19, 2020. Licensed under [Creative Commons Attribution 4.0](#) license.
 - [Video recording](#)
- “Universal Design for Learning Wherever You Are Learning.” Presentation by Divonna Stebick & Clint Baugess. [Recording on the JPI website.](#)
- [Add alternative text to a shape, picture, chart, SmartArt graphic, or other object](#)
- [Image Alt Text.](#) - Best practices from Penn State
- [How do I check for accessibility issues in Acrobat Reader \(PDF\)?](#)
- [WebAIM PowerPoint Accessibility](#) - detailed instructions for creating accessible slides in PowerPoint with instructions for reordering objects
- [WebAIM Contrast Checker](#)
- [Office Accessibility Checker](#)

CROWDSOURCED IDEAS AND NOTES

Many of the tips for creating accessible documents and images are also applicable to creating accessible webpages. For more details, the [Librarian Resources: Web Accessibility Guide](#) is a great resource.

QUESTIONS

- How do you make accessible links useful for a printed version?
 - The New York State Dept. of Education gives a good example for [one way to do this](#) (along with a list of general best practices for links). Their suggestion is to include the URL in parentheses after the accessible hypertext link but to **not hyperlink the URL**, so a screenreader does not read it as a link.
- What functionality does an accessibly created document provide for those who don’t use screenreaders?

- As an example: a semantically organized Word document (especially a long one) is more easily navigable using Word's [navigation pane](#).
- Will Word automatically format numbered or bulleted lists as a "list paragraph?"
 - Generally, yes, so long as you play along with the automatic formatting that Word suggests.
- What are best practices for writing alt-text for complex images?
 - Alt-text is best used for shorter descriptions that explain the most important details. Best practice generally states that alt-text descriptions are kept under 125 characters. For images that require longer descriptions, including an image caption or longer explanation in-text might be a better option. This [guide from Portland Community College](#) shows a few examples for ways to write longer descriptions in a variety of formats.
- What is the best approach if a tool won't allow you to mark an image as decorative?
 - In order to make sure that assistive technologies recognize an image as decorative, it needs to be marked as such. Microsoft Office often allows you to mark with a checkbox that an image is decorative. If it does not, and for images on the web, the image must be marked as "null" with quotation-space-quotation. **Leaving a blank alt-text field or not including alt-text is not the same as marking the alt-text as "null."** Below, I've included an example image with a null marker in the alt-text field. An example for [how to do this on the web](#) is available from W3C.

