

Accessibility in OER Design

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Why Accessibility?

- Sure, your open textbook is open to download. It's even open to remix and revise. But **what if I told you that this alone is not open enough?**
- **Accessibility fights discrimination** in access to information for people with different abilities.
- This includes physical abilities (seeing, hearing), but it **also includes mental abilities** (learning disabilities, dyslexia, dyscalculia). In GA, our accessibility organization's requests are largely from learners with learning disabilities.

How Much Is Enough?

- This isn't a strict checklist every time. Accessibility isn't about legal compliance, **it's about equity.**
- **Accessibility is a spectrum**, not a binary switch.
- **Build OER to be accessible from the start** in some basic ways, then move toward more ambitious options if possible.
- **Use this workshop for the basics!**
- Ambitious stuff we won't cover today: Braille print-on-demand, audio description of visual video elements, accessible computer hardware, print magnifiers, etc.

Workshop Setup

- Turn Full Screen off. We need to split this up between your application and our presentation.
- Download this Word file and open it in Word (or LibreOffice):
(sharepoint link)
- Download this file and open it in PowerPoint (or LibreOffice):
(sharepoint link)
- Minimize the PowerPoint for now. Have Word open on half of your screen and Zoom on the other. (If you have two monitors, even better!)

Word Accessibility Tip 1: Structure Your Document

- Screen readers use **structured documents** to allow readers to jump between different sections. **Imagine using a screen reader and trying to get to Chapter 12 of a textbook without a structure!**
- To create a structured document, use the Styles in Word's ribbon. If you don't like the style that's there, change the look, then right-click the style, and apply your style to it.
- **Kick this habit:** Creating a document structure on sight alone using colors, sizes, bold, etc. Do this with your structured document – and if you want to change something, you only have to change it once!

Word Accessibility Exercise 1: Structure Your Document

Using Styles, change these:

- “Lorem Ipsum: The Ipsuming” to a Title.
 - “Chapter 1: Birth of Lorem Ipsum” to a Heading 1.
 - “Chapter 2: Lorem Ipsum Abides” to a Heading 1.
 - “Chapter 2.1: Lorem Ipsum Meets Maude” to a Heading 2.
 - “Chapter 3: Bride of Lorem Ipsum” to a Heading 1.
 - “Chapter 3.1: Son of Lorem Ipsum” to a Heading 2.
- Change the Heading Styles to your favorite fonts and sizes.
- Click View, then Navigation Pane to see a Table of Contents.

Note: in LibreOffice, Styles are in a drop-down on the upper left.

Word Accessibility Tip 2: Tell Word About Your Lists

- Screen readers recognize ordered and unordered lists only when they're created using the list tools in your word processor.
- Use the bullet point icon on the Home section of the ribbon.
- Don't like the design? Change it using the drop-down arrow.
- **Kick This Habit:** Creating lists using hyphens, numerals, and spaces (Word may try to make these into an actual list automatically, though!)

Word Accessibility Tip 3: Tell Word About Your Table Headers

- Tables are only accessible when used for actual tabular data, and if you do use them, designate your headers. Screen Readers will read tables differently if they have headers to work with.
- Use Table Styles and designate a Header Row in the top-left corner.
- Right click on your header row, click Table Properties, then on the row tab, set the header row to repeat on every page.
- **Kick These Habits:**
 - Using tables for content arrangement on the page.
 - Creating headers using bold or larger text alone.

Note: in LibreOffice, there's a whole Table menu, and it's wonderful.

Word Accessibility Tip 4: Tell Screen Readers About Your Links

- Think about how a screen reader would read a direct URL, especially a long one. Not good, right?
- Instead, always highlight text and embed the hyperlink there. That text needs to be descriptive of where the link is going.
- A screen reader can list all the hyperlinks at once using the descriptive text.
 - [This link](#) *is not* good.
 - [Click here](#) *is not* good.
 - [Creative Commons Homepage](#) *is* good.

Word
Accessibility
Exercise 2:
Make
Accessible
Lists, Tables,
and Links

- Turn the inaccessible list in Chapter 1 into an accessible, unordered (bullet-point) list.
- Turn the inaccessible table in Chapter 2 into a table with headers that repeat onto the next page.
- Right after the table, turn the inaccessible hyperlink into an accessible link.

Everything Accessibility Tip: Every Image Needs Alt Text (Mostly)

- Images cannot be interpreted by screen readers. If an image has information, it needs a text description. You can do this by **adding alternative text (alt text) to an image**.
- If it's a **decorative** image with no information, this doesn't apply. Some applications let you mark something as decorative to make an exception. *It's important to only do this when the image adds no value except decoration to the page.*
- If you already have captions and they're in the right reading order, adding alt text might lead to the screen reader reading the description *twice*. **You only need one.**
- **Kick This Habit:** Throwing Google Images in an OER without regard to alt text.

Word Accessibility Exercise 3: Add Alt Text to an Image

- Describe the image in Chapter 3 using alt text. Use a max of two sentences—keep it descriptive, about the length of a tweet.
- Try to steer clear of criticism, opinions, etc. unless it's part of describing the image itself. (“**Badly-lit** photo of a city street,” for instance.)
- Right-click the image and select “Edit Alt Text” in Word.
- *In LibreOffice: Right-click, Properties, Options, fill in “Alternative (Text Only)”*

What about PDFs?

- Create them in Word first. No, no, not InDesign, create them in Word. Yes, really.
- Save your file as a PDF.
- When saving as a PDF, click Options in the Save dialog box and ensure that these are checked:
 - Convert document information
 - Enable Accessibility and Reflow with tagged Adobe PDF
 - Create Bookmarks
 - Convert Word Headings to Bookmarks

*Tiffani's two-cents:
Seriously consider keeping it in Word for easier accessibility.*

PowerPoint: Workshop Setup

- Be sure to turn Full Screen off. We need to split this up between your application and our presentation.
- If you have not already done so, download this file and open it in PowerPoint (or LibreOffice):
 - (sharepoint link)
- Have the PowerPoint open on half of your screen and Zoom on the other half. (If you have two monitors, even better!)

Tip: On PC, you can snap windows to half the screen by hitting your Windows key and the right or left arrows.

PowerPoint Accessibility

Tip 1: Reading Order Is King, Use the Layouts

- PowerPoint Layouts are the Styles of PowerPoint. Using them will allow screen readers to read the content in the correct order.

Note: there is a way to set reading order without using Layouts, but it's tedious and unnecessary (and not covered in this workshop).

- Easy way to do this: Start with a blank presentation and use only the layouts. Then, at the end, use the Design Ideas feature to make things look good! It gets more varied over time as updates occur.
- Then, test it out. On the View window in the Ribbon, click Outline View. Does everything read in order? Good! If not, check out that slide.
- **Kick This Habit:** Throwing new text boxes and images on the slides. Use the layouts to put more text and images in.

PowerPoint Exercise 1: Fix the Reading Order

- In the PowerPoint file, look at the first slide normally. (Don't worry about the font and the colors for now.) Then, look at it in Outline View. Does the slide read the way it looks?
- Go back to Normal View, and then fix the reading order for this slide by right-clicking the slide, selecting a layout, and getting the elements in there correctly.
- Check the reading order in Outline View.
- (Be sure to make the image accessible!)

PowerPoint Accessibility Tip 2: Use Slide Master to Fix Color/Font Issues

- Inaccessible fonts and contrast are tough to fix sometimes. Fix it all in one place! Click View, then Slide Master.
- You can fix all the fonts in the presentation by clicking Fonts, and then Customize Fonts. Avoid graphic fonts ('artistic' ones like scripts or Papyrus), as limited-sight learners will have trouble with those.
- To fix colors click Colors, then click Customize Colors. Fix the colors that aren't contrasting well with the background (Followed Hyperlink is a very frequent culprit).
- **Kick This Habit:** Making design changes slide-by-slide. Your wrists will thank you.

PowerPoint Exercise 2: Fix Colors and Fonts

- In the PowerPoint file, look at the first slide again. We need to use a regular serif or sans serif font instead of this weird graphic font. We also need to change the hyperlink color to dark blue.
- Go to View, then Slide Master, and change the font to Calibri (or another easy-to-read font) for the whole first slide.
- In Slide Master, go to Colors, then customize the hyperlink colors to dark blue and dark green.

Video Tip: Use a Script! Yes, Really!

- We all love to think we're excellent improvisatory performers, but by scripting your recorded video and sticking to that script, you have a transcript ready to go. Otherwise, you're stuck trying to transcribe it yourself or using an AI to try to transcribe it for you.
- In YouTube, you can paste that script into the English Subtitles caption box, and it will detect where each line starts and ends. This fixes the YouTube issue of auto-captioning: you provide the words, and it applies the timing of the words.

Video Tip: What if I Don't Have a Script?

Here are some alternatives:

- Put the video in YouTube and wait for the auto-captioning to process. Copy those captions to a Word file. Fix the captions. Use this fixed caption document just like a script and paste it back in.
- Put the video in otter.ai or other speech-to-text programs and wait for this auto-transcription to complete. Fix the captions and do the same pasting process.

MS Office Tip: Accessibility Checkers

- These can help in checking on whether your documents are accessible! However, they're very literal, and they're not always right.
- For example, if you have photo captions instead of alt text, the checker may say you're missing alt text. That's technically correct, but you have an alternative that it's not considering.
- Don't sweat the small stuff. Let the Accessibility Checkers point things out, and you absolutely can disagree with them. A 100% good file in the Accessibility Checker doesn't mean it's 100% accessible.

Web Accessibility

Plenty of things we did today apply to websites: structure and headings, alternative text, accessible hyperlinks, accessible lists, tables with headers, and fixing your fonts and colors universally (instead of a slide master, it's CSS).

Check out the [WAVE Evaluation Tool](#) (Firefox/Chrome Extension), created by web accessibility company WebAIM. It's a checker for websites, and it includes:

[Colorblindly](#) (also an extension) simulates what it looks like to be multiple variations of colorblind while viewing a webpage.

Just in case... EPUB!

The DAISY Consortium has an EPUB Validator that ensures an EPUB has a correct, accessible structure:

[EPUB Validator](#)

How the Heck
Will I
Remember
All of This?

Fear not! Affordable Learning
Georgia has a set of faculty-
centered accessibility guides.
Use this link to get there:

[Affordable Learning Georgia
Accessibility Guides](#)



Thank You!

For questions, please contact:

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