

Accessibility in Open Educational Resource Design

Jeff Gallant, Program Director,
Affordable Learning Georgia

Tiffani Reardon, Program Manager,
Affordable Learning Georgia



OER and ALG: What Are They?

Open Educational Resources (OER): freely-available teaching and learning resources which can be shared and customized by anyone through an open license. OER include **open textbooks** and **open ancillary materials**.

Affordable Learning Georgia (ALG): a USG initiative to reduce the cost of course materials to students, contributing further to educational equity and student success. OER is a part of the initiative.

Learn more about OER and ALG through the [Affordable Learning Georgia website](#).



Why Accessibility?

- Sure, your open textbook is open to download. It's even open to remix and revise. But **this alone is not open enough.**
- **Accessibility fights discrimination** in access to information for people with different abilities.
- Accessibility works toward including people of all **physical abilities** (seeing, hearing), and it **also includes mental abilities** (learning disabilities, dyslexia, dyscalculia).

Retroactive Accessibility at ALG

- New accessible and interactive repository, [OpenALG/Manifold](#)
- Complete needs assessment of all materials
- Partnership with UNG Press for accessible Word versions of their OER
- Slow conversion of all materials to accessible Word or HTML versions

Proactive Accessibility at ALG

- New [accessibility support materials](#)
- New requirements for grant-funded materials
- Improved training for grantees
- New training for ALG Champions
- Other ideas in progress:
 - Evaluation rubric
 - Expanded professional development

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 session and our resources for the basics!**
- [Check with CIDI](#) and your Disability Services Offices about advanced/physical accessibility services: Braille print-on-demand, audio description of visual video elements, accessible computer hardware, print magnifiers, etc.



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 within your structure—if you want to change something, you only have to change it once across the document!

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.

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.

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.

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 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 session).

- 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 Home tab in the Ribbon, click Arrange, then Selection Pane. Does everything read in order (from the bottom → up)? 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 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.

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).

For website accessibility, consider using:

- [WAVE Evaluation Tool](#) (Firefox/Chrome Extension), a comprehensive website accessibility checker.
- [Colorblindly](#) (also an extension) simulates what it looks like to be multiple variations of colorblind while viewing a webpage.
 - Colorblindly is also included in WAVE.

Just in case... EPUB!

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

[EPUB Validator](#)

How 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](#)



Apply It!

We have prepared demo documents and exercises for you to apply your new skills.

[Exercises](#)

[Word Demo](#)

[PowerPoint Demo](#)





Thank You!

For questions, please contact:

Jeff Gallant, jeff.gallant@usg.edu

Tiffani Reardon, tiffani.reardon@usg.edu

