

## **Universal Design Principles for Presentations and Meetings**

Purpose: Design materials, discussions, and educational activities that are accessible to all participants.

### The Seven Principles of Universal Design

- 1) Equitable Use
- 2) Flexibility in Use
- 3) Simple and Intuitive Use
- 4) Perceptible Information
- 5) Tolerance for Error
- 6) Low Physical Effort
- 7) Size and Space for Approach and Use

### The Principles of Universal Design for Learning:

- 1) Provide Multiple Means of Representation
- 2) Provide Multiple Means of Action and Expression
- 3) Provide Multiple Means of Engagement

How to Use this Document: This document provides several considerations that make learning environments more accessible for participants. Most items on this list are possible to incorporate with minimal foresight and intentionality. There may be some items that are not possible to implement due to circumstances out of your control. At these times, we suggest you acknowledge this limitation to the participants prior to delivery and if needed, be creative to find alternate ways to be sure that the session continues to be as accessible as possible.

It is recommended that you use PowerPoint when creating your presentation. PowerPoint 2010 and newer versions contain a built in Accessibility Checker when running the software on a Windows based PC. This is a great feature to utilize while creating your presentation to make sure you are incorporating accessibility concerns into the design of your presentation. See the end of this document for information on how to run the MS Office Accessibility Checker.

The use of Prezi is not recommended for any presentation or session at Convention. Prezi is not accessible to a variety of individuals and is not compatible with any of screen reader technology. Prezi should not be used when presenting at the ACPA 2017 Convention as it can exclude some members from the valuable information you are presenting on in your session

Other presentation mediums may be acceptable, however, they must be able to provide fully accessible experiences for all attendees.

## Use the following information when creating your PowerPoint presentations:

### Animations/Transitions

- Do not use animations for text.
- If a transition is required, use a sound rather than visual transitions between slides.

### AutoShapes

- AutoShapes are treated like text boxes and will have their contents read by screen readers
  - If you are not adding text to the AutoShape, include Alt Text describing the shape.

### Charts & Graphs

- Include Alt Text for all charts and graphs.
- Do not use color as the only method of conveying information.

### Color contrast

- Use colors that provide a high contrast (black/white or dark blue/white).

### Font

- Use a Sans-Serif Font (Arial, Calibri, Verdana, et al.).
- Keep the same font throughout the presentation.
- On screen, font size should be 24 pt. or greater.
- Use no more than three different font sizes per slide.
- Text should not overlap any pictures or background images.

### Graphics & Images

- Include Alt Text for all images and graphics.
- Images laid on top of each other should be grouped together.
- Avoid moving or flashing images.
- Read aloud all the text and describe any images or graphics on slides.

### Handouts Created from Slides

- Regular Print Handouts
  - Use a minimum of 12 pt. font.
  - Print 3 slides maximum per page.
  - Have several extra copies available.

- Large Print Format Handouts
  - Use a minimum of 18 pt. font
  - Print 1 slide maximum per page.
  - Have at least 2 copies of any handouts using large print (18 pt. bold) available.
- Make handouts available online before the session, ensuring they are screen-reader compatible.
  - Note: Convert and save documents using Adobe Professional software instead of simply converting the document in Microsoft Word (using Word's "created PDF" tool does not deliver a file that is screen-reader compatible).

### Hyperlinks

- For presentations viewed on the web or in person, use the text to display feature.
- For printed viewing, include a textual representation and the URL.
  - Example: ACPA 2017 Convention Homepage (<http://convention.myacpa.org/columbus2017/>)

### Media

- Video (with no audio)
  - Include Alt Text that fully describes all portions of the video. Alt text provides a textual alternative to non-text content in documents, presentations, or web pages and is usually added by right clicking on the image and selecting "format picture".
    - The key principle is that computers and screen readers cannot analyze an image and determine what the image presents. As content creators, text must be provided to the user which presents the content and function of the images within your document, presentation or web content.
- Audio (with no video)
  - Include a complete text transcript of the audio recording.
- Multimedia (Video with audio)
  - Multimedia **requires** the use of captions. **There are no exceptions to this rule. If it's not captioned, don't use it!**

### Reading Order

- Reading order refers to the order in which a screen reader will read the different parts of your slide or document.
  - Utilize the Selection Pane to check the reading order of objects on your slides.

## Slide Numbers

- Include page numbers on each slide.
- Include page numbers on each note page.

## Slide Titles

- Each slide of the presentation should have a unique title.

## Tables

- Tables are a shortcut for sighted individuals and are difficult for screen readers to work with. If possible, consider alternative methods for displaying the information you need within a table.
- Include Alt Text that fully describes every cell in the table.
- Do not merge cells.
- Column and Row headers are required.

## Considerations for Delivery of the Presentation:

### Room Arrangement

- Request seating to reflect your intended purpose.
  - Ensure your presentation visuals can be accessed from any seat.
  - For example, request theater style seating for lecture type presentations, or consider round tables for session centered on discussion and interaction.
- Ask participants for feedback on their needs around lighting.

### Audiovisual Needs

- Request the technology you actually need.
- Request sound amplification that reflects your presentations needs.
  - For example, request multiple mics for panel discussion, or sound amplification equipment for videos.

### In-session Activities

- Consider how a wide variety of individuals might engage with your intended activity and plan accordingly.
- What skills and abilities are required to participate? Consider the following when designing activities for sessions:
  - What types of movements or motions are required to participate?
  - What types of communication are required to participate?
  - What technology or technological capabilities are required to participate?
  - What types of interactions are required to participate?
  - What types of handouts are provided?

## Learning Methods

- Use multiple methods to meet the needs of various learning styles including: visual-linguistic (reading and writing), visual-spatial (graphs, videos and pictures), auditory (listening), and kinesthetic (touching and moving).
- Use stories and examples to illustrate concepts.
- Use learner-centered, participatory learning methods.
- Connect new information and concepts to previous points.
- Provide a clear and concise outline of presentation for attendee note taking.

## Working with People Who Use Interpreters

- Communicate with the sign language interpreter(s) and the participant(s) they are working with to identify the optimal space for the interpreter(s) prior to the start of your session.
- Always direct your attention and responses to the participants instead of interpreters when present.
- Review planned activities with the participant(s) to explore if any shifts or adjustments are needed for optimal accessibility.

## How to Run the MS Office Accessibility Checker:

Beginning with the 2010 version, MS Office software features a built in Accessibility Checker (Windows based versions only). This tool will help to ensure that any documents or presentations you create are taking into account the different types of users who will interact with your creation. As part of ACPA's continuing efforts to make our programs and services accessible to all members, we ask you take some time to familiarize yourself with the Accessibility Checker.

### How to Use the Accessibility Checker

- 1) Click File > Info. If the Accessibility Checker sees any potential issues, you will see a message next to the Check for Issues button, located in the middle of your screen.
- 2) To view and repair the issues in your file, click Check for Issues > Check Accessibility. Your file reappears, and the Accessibility Checker task pane shows the inspection results. Click a specific issue to see Additional Information and steps you can take to change the content.

### What Does the Accessibility Checker Do?

The Accessibility Checker checks your file against a set of possible issues for people who have disabilities might experience in your file. Each issue is classified as an Error, Warning, or Tip:

- **Errors:** An error is for content that makes a file very difficult or impossible for people with disabilities to understand.
- **Warning:** A warning is for content that in most, but not all, cases makes a file difficult for people with disabilities to understand.
- **Tips:** A tip is for content that people with disabilities can understand, but that might be better organized or presented in a way that would improve their experience.

Fixing some issues might require you to change, reformat, or update your content. The Accessibility Checker also lets you know about Office features you can use to make your content more accessible.

**THE ACCESSIBILITY CHECKER DOES NOT CATCH EVERYTHING!!** Use it to double check your work but remember that it will not catch everything.

## References

Colorado State University – Access to Postsecondary Education through Universal Design for Learning (<http://accessproject.colostate.edu/udl/>)

National Center on Universal Design for Learning (<http://www.udlcenter.org/>)

North Carolina State University's The Center for Universal Design (<https://www.ncsu.edu/ncsu/design/cud/>).

University of Washington's Do-It (Disabilities, Opportunities, Internetworking, and Technology) Center (<http://www.washington.edu/doi/>)

WebAIM (<http://webaim.org/>)

## Additional Resources for Creating Accessible Materials & Websites Web Accessibility Evaluation Tool:

WAVE (<http://wave.webaim.org/>).

IDI Web Accessibility Checker: Reviews single html files (<http://achecker.ca/checker/index.php>).

How to create accessible electronic materials using Adobe (<http://www.adobe.com/accessibility/>).

How to create accessible electronic materials using Microsoft (<http://www.microsoft.com/enable/training/default.aspx>).

## Materials and Guidelines from Universities/Organizations

CAST provides information about UDL (<http://www.cast.org/udl/index.html>).

McMaster University's Office of Human Rights and Equity provides resources on accessibility (<http://hres.mcmaster.ca/resources-1>).

North Carolina State University's The Center for Universal Design (<https://www.ncsu.edu/ncsu/design/cud/>).

San Diego State University provides tutorials and guides on accessibility (<http://access.sdsu.edu/instructmater.htm#tutorials>).

University of Washington's Access DL provides resources for making distance learning accessible (<http://www.washington.edu/doi/Resources/accessdl.html>).

University of Washington's Do-It provides resources and references on Universal Design (<http://www.washington.edu/doi/Brochures/Academics/instruction.html>).

University of Washington's Do-It provides additional resources and references on Universal Design of Instruction ([http://www.washington.edu/doi/Brochures/Academics/equal\\_access\\_udi.html](http://www.washington.edu/doi/Brochures/Academics/equal_access_udi.html)).

University of Wisconsin-Madison's Trace Center provides resources on Universal Design and related concepts, principles and guidelines ([http://trace.wisc.edu/world/gen\\_ud.html](http://trace.wisc.edu/world/gen_ud.html)).