

Achieving & Sustaining Accessibility – Forming the Habits

Heidi Scher, M.S., C.R.C.

Associate Director – Assistive & Instructional Technology
Center for Educational Access ~ University of Arkansas

Virtual Leadership Academy 2.0

October 27, 2020



These are NOT the Same

Digital \neq Accessible



The Human Factor

People Impacted by Inaccessibility

Who are

- ⊙ deaf or hard of hearing
- ⊙ blind or with low vision
- ⊙ deaf-blind
- ⊙ color-blind

With

- ⊙ motor-related conditions
- ⊙ dyslexia
- ⊙ auditory or visual processing disorders

Who

- ⊙ (se) first language is not English
- ⊙ are working online in a noisy environment
- ⊙ have slow internet speeds

Common Barriers to Online & Digital Environments

- Inaccessible documents
 - ⊙ Headings are not structured properly
 - ⊙ Unknown images
 - Missing alt text
- Inaccessible videos
 - ⊙ No captions
 - ⊙ Videos that are only visual
- Poor links
 - ⊙ Non-descript
- Navigation that requires a mouse



Email Communication

Email: Meaningful Subject Lines

- Not: “Zoom Link”
 - ◎ Use: “Zoom Link – Leadership Academy 2.0”
- Not: “Help”
 - ◎ Use: “Assistance needed with presentation”
- Not: “Registration”
 - ◎ Use: “Ark-AHEAD conference registration received”

Email: Provide a Message – Not Just a Graphic

- Fliers as content do not convey the message to all users
 - ◎ Add alternative text to images
 - MS Outlook and some other email apps provide this option
 - ◎ Some apps allow HTML to be edited
 - ◎ OR - Include text content in email



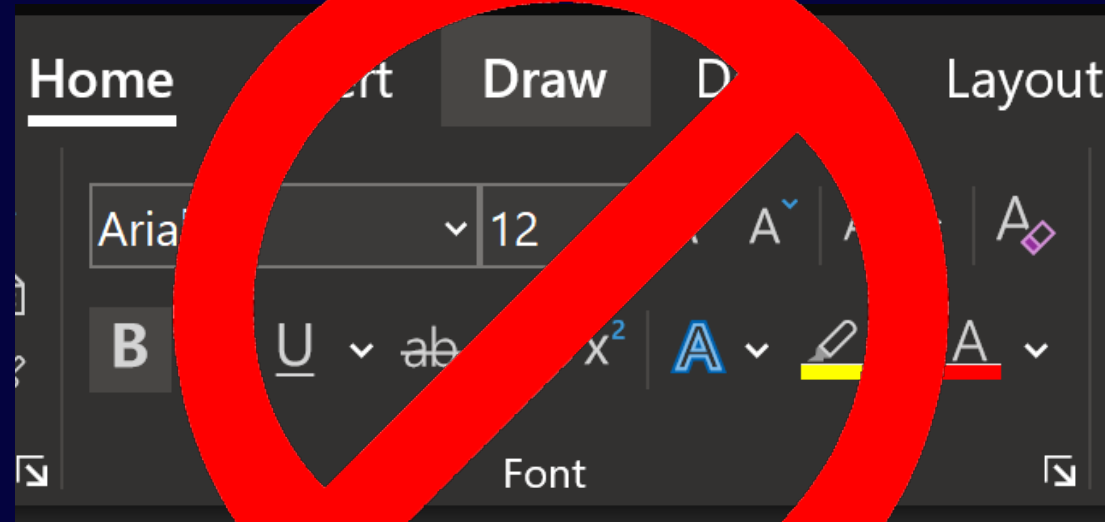
MS Word

MS Word: Headings

- Headings provide visual structure to a document.
- Heading *styles* provide accessible structure to a document.

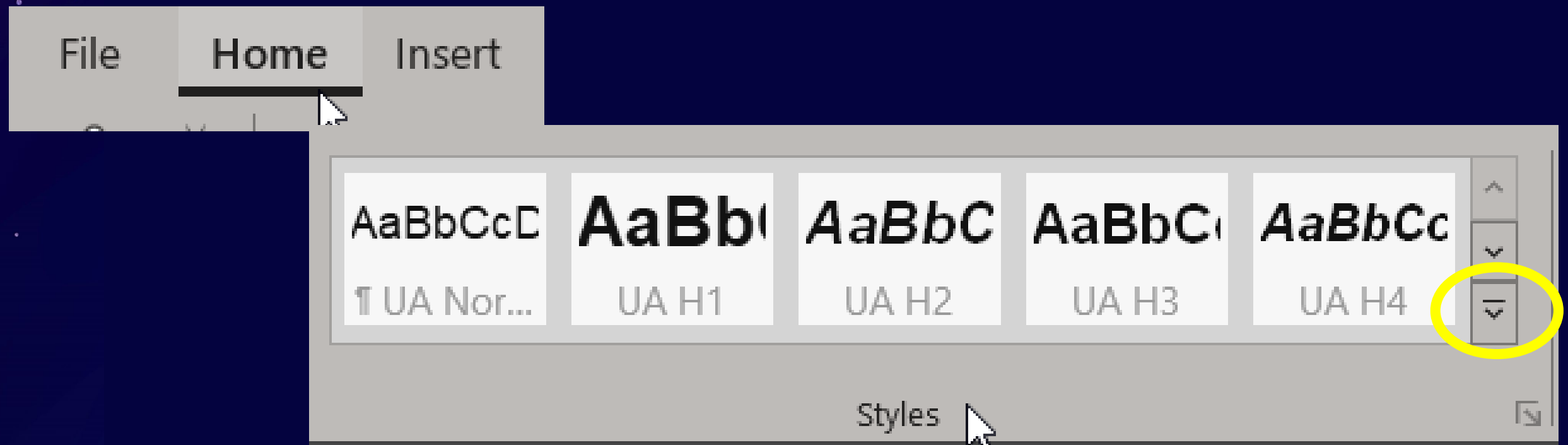
MS Word: Do Not Use Heading Attributes

- Do not simply change font attributes
 - On Home ribbon, Font section with font type, font size, font color, bold/italic/underline
 - ⦿ While this looks like a heading, it does not really create a true heading.



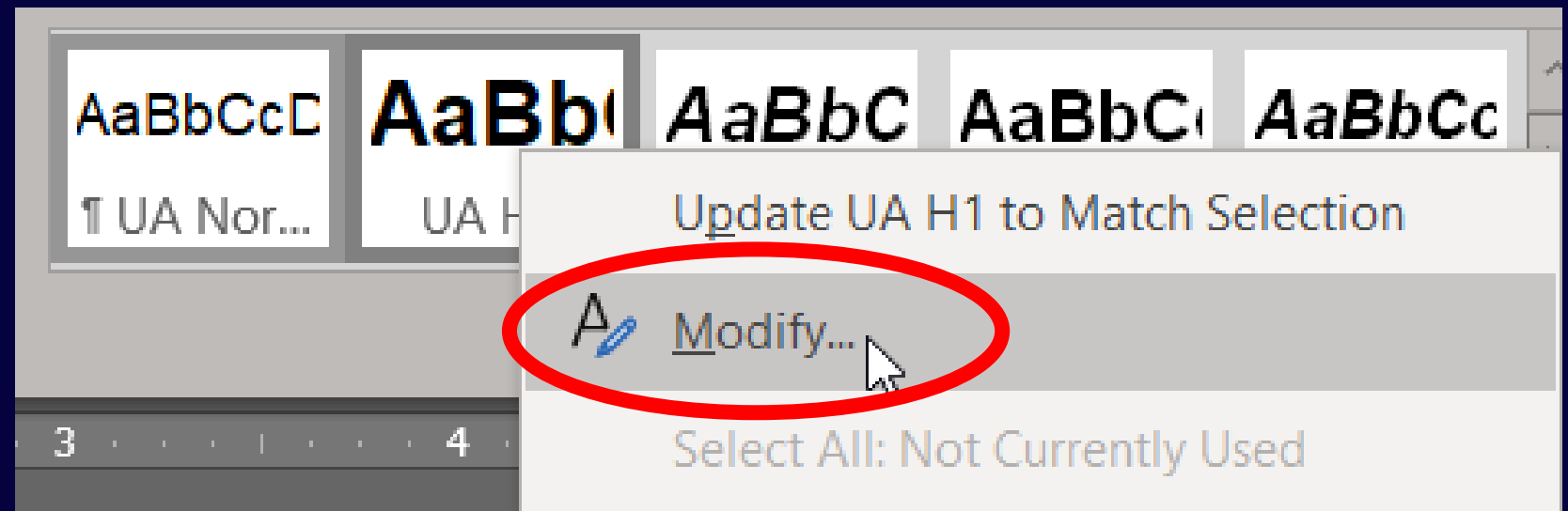
Home Ribbon: Use Heading Styles

- ◎ Use heading styles
 - On Home ribbon, Styles section



Headings: Show Your Own Style

- Each heading style can be modified.
 - ⦿ Right click on the heading style to be changed
 - ⦿ Select Modify



Benefits to Using Heading Styles

- Screen-reader users can navigate document by accessing a list of headings.
- Easily set up a Table of Contents in long documents.
- Modify a style setting and change all of the same headings within the document.

Example:

Heading 2 was originally set as Arial, 16 point, Left aligned, Bold.
Modify it to Arial, 14 point, Center aligned, Italic.

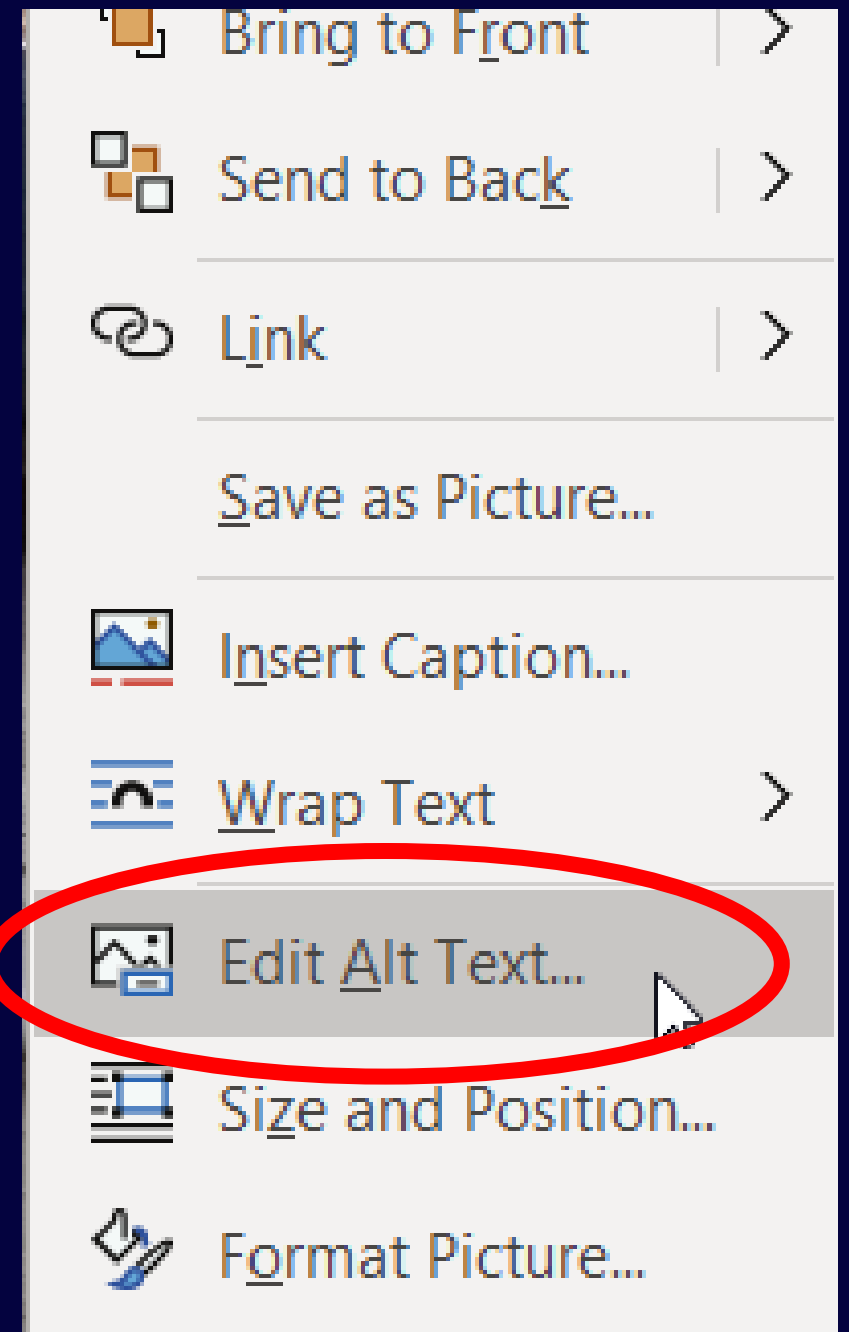
ALL Heading 2s within the document will change to the new modified settings.

MS Word: Including Images with Alt Text

- Without alt text, screen-reader user won't know what the image is
 - ⦿ Screen-reader will read it as “graphic”
- Concisely describe the graphic
 - ⦿ “Image of” and “Graphic of” are not needed

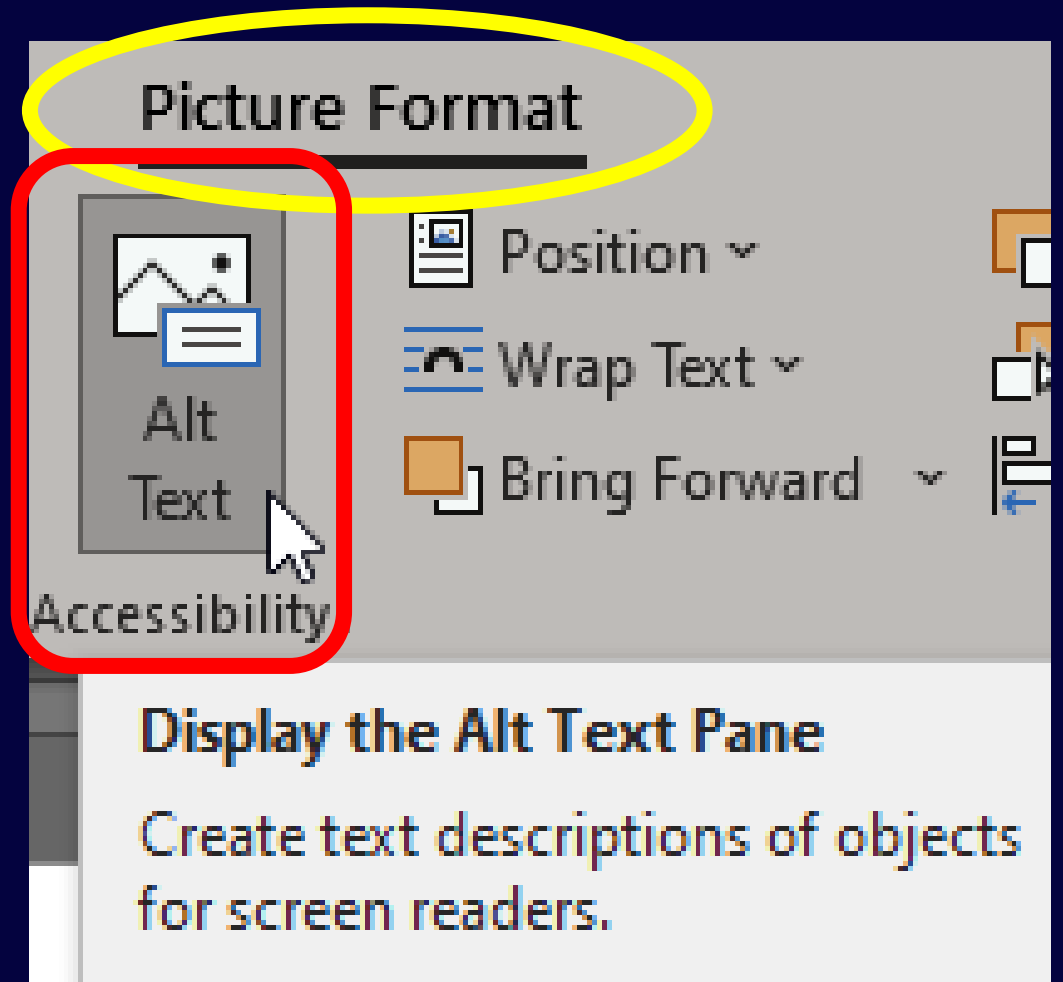
MS Word: Adding Alt Text – From the Graphic

- Select the graphic (click on it)
- Right click on graphic
 - Select Edit Alt Text



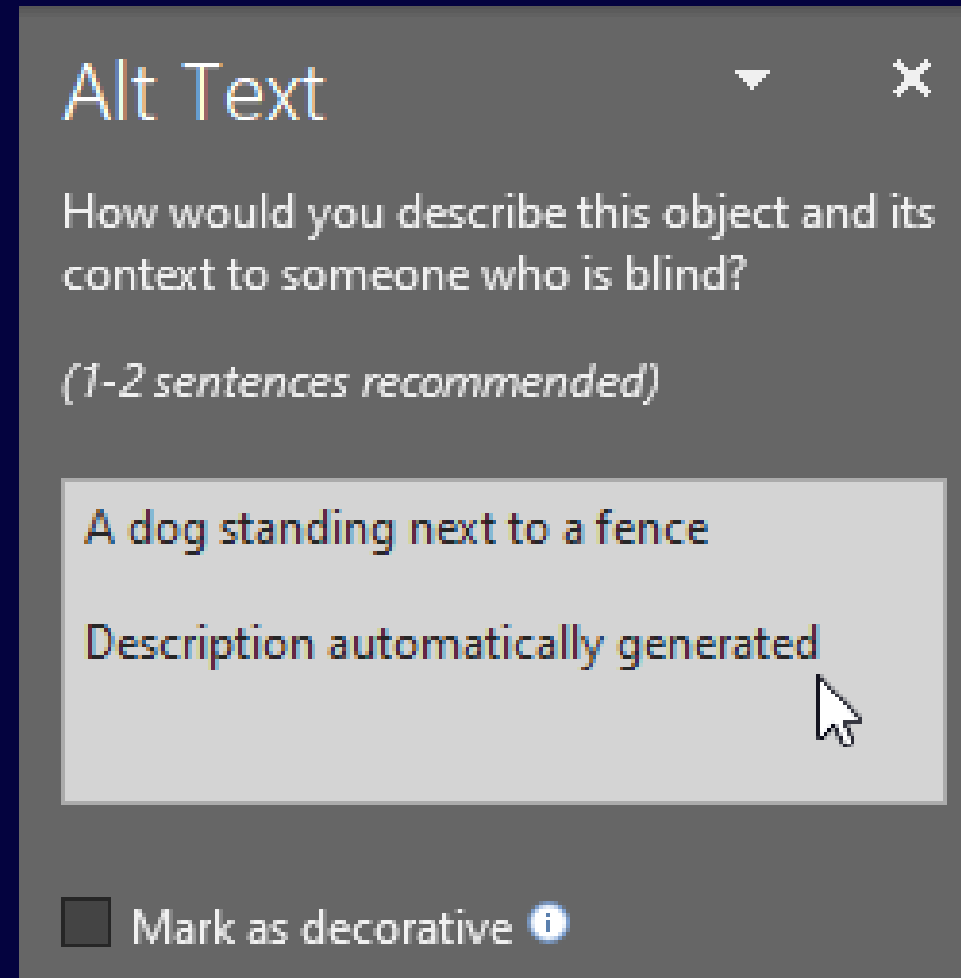
MS Word: Adding Alt Text – From the Ribbon

- Select the graphic (click on it)
- Right click on graphic
 - Select Edit Alt Text
- Or, on ribbon at top of window, click on Picture Format
 - Select Alt Text



MS Word: Adding Alt Text - From the Ribbon

- Alt text window will open.
 - ⦿ Don't rely on the auto-generated description
 - ⦿ Enter concise, brief description
 - "Image of" or "Graphic of" not needed
 - ⦿ If graphic is only for decorative use
 - No need to enter description
 - Click box for "Mark as decorative"



Retain Accessibility By Saving as PDF

- When saving Word document as PDF, accessible formatting is saved in PDF.
 - ◎ Use “Save as PDF”, NOT Print to PDF.

Info

Save

Save As

Save as Adobe
PDF

Print

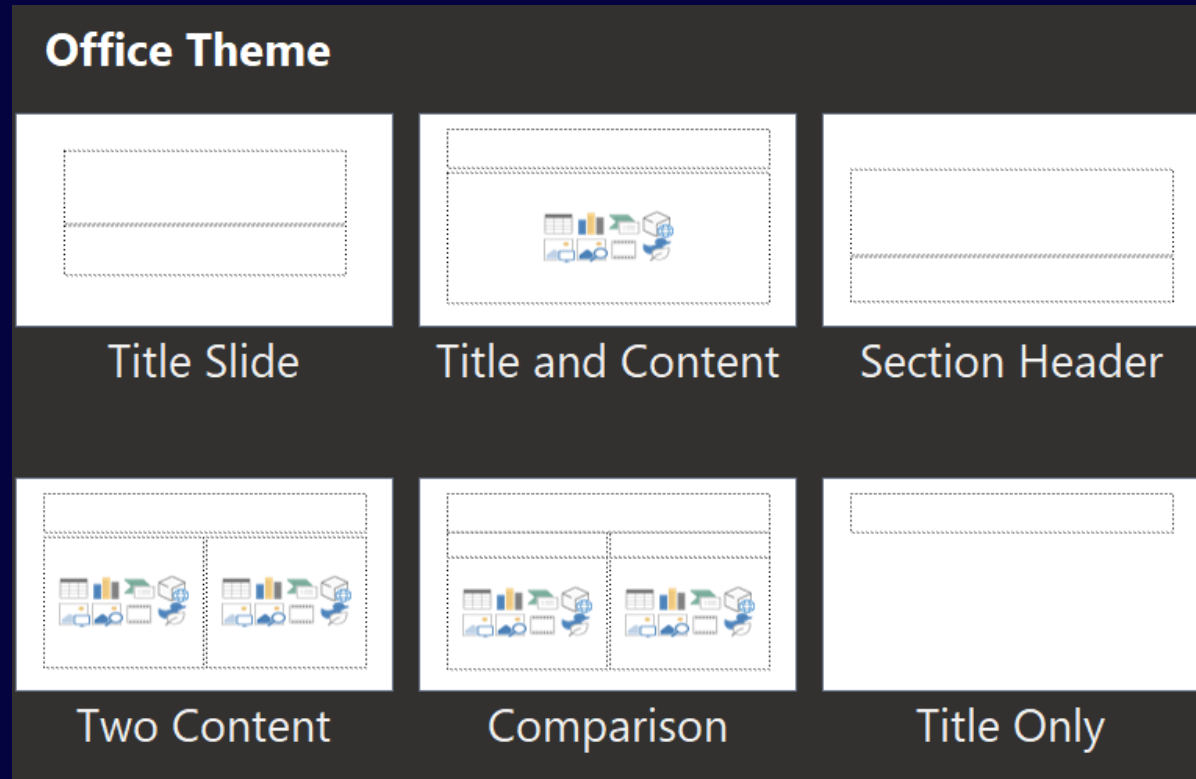
Share



MS PowerPoint

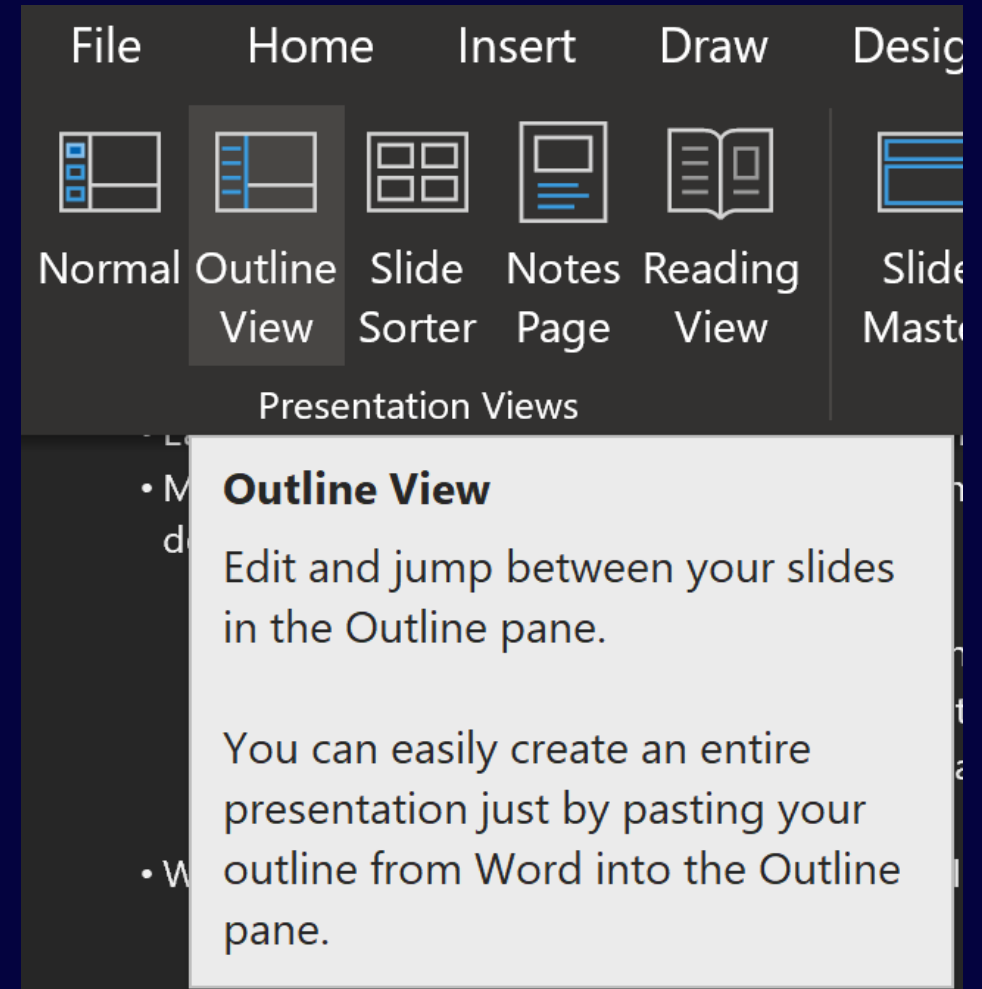
PowerPoint: Use Pre-Made Slide Layouts

- Use pre-made slide layouts
 - ⦿ Avoid free templates that do not have pre-made layouts
 - ⦿ Do not choose a blank slide and add text boxes.
 - ⦿ Choose the layout that best fits content.



PowerPoint & Outline View

- Use the Outline View to ensure all text is viewable.
 - Click View tab, then on Ribbon select “Outline View”



PowerPoint & Added Text Box

- This textbox is part of the template layout.

This textbox was added.

*And the contents does not appear in the Outline View
so it won't be read by a screen reader
nor will it be included if content is exported to a Word doc
(or other format).*

• Click View tab, then on Ribbon select "Outline View"

16  **PowerPoint & Added Text Box**

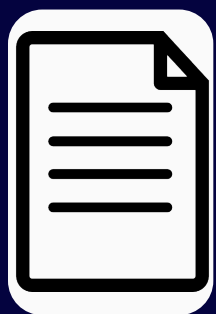
• This textbox is part of the template layout.

17  **Digital Media – Videos**

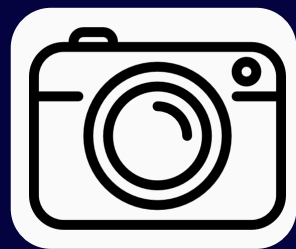


PDF (Portable Document Format)

PDF Documents – Not All Created Equal



- Text-based
 - ⦿ Text can be selected
 - ⦿ Sometimes called “searchable” PDF
 - ⦿ Use text-select tool to tell if there is text



- Graphical
 - ⦿ Picture of the page (i.e., a graphic)
 - ⦿ Usually a scanned document
 - ⦿ Text cannot be selected

PDF (text-based)

- Created when an accessible Word document or PowerPoint is “saved as PDF”
- Usability features:
 - ⦿ Searchable
 - ⦿ Navigable
 - ⦿ User can copy/past content
- Can be accessed using assistive technology
 - ⦿ Screen-readers
 - ⦿ Text-to-speech applications

PDF and Accessibility

- “Text-based” does not mean completely accessible
- Simple documents may convert well from Word or PowerPoint to PDF
- Complex documents
 - ◎ Need to be checked for accessibility
 - such as: logical reading order, tags, identify form fields, table structures, lists...
 - ◎ May need remediation to ensure accessible
- Adobe Acrobat Professional has an accessibility check feature
 - ◎ Sometimes better to just provide original document if very complex



All Digital Print Communications

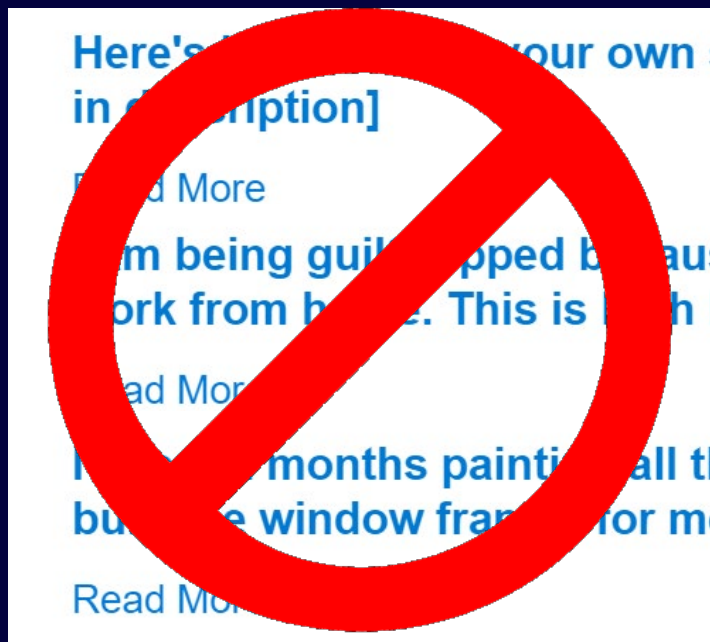
In All Digital Print Communication - 1

- Add Alt Text to images
- Use unique headings
 - ⦿ Avoid using same heading multiple times
 - ⦿ OR: Identify it by adding “continued” or a number (as above)
- Font face:
 - ⦿ Use san serif font with ‘heavy’ lines (Arial, Tahoma, Verdana)
 - ⦿ Avoid ‘light’ weight lines (Calibri Light)
- Don’t use color only to convey emphasis
 - ⦿ If someone is color-blind, they might miss it
 - ⦿ Use other *attributes* as well

In All Digital Print Communication - 2

- Use underlines only for *hyperlinks* – not to draw attention to text.
 - ◎ In digital realm, underline indicates a hyperlink.
- Use meaningful links
 - ◎ Not: “Read more”, “Click here”
 - ◎ Use: “More about Tools for Accessibility”, “Styles in MS Word”

Link Examples



Read more: [Amazon Prime: 21 benefits ever member gets](#)

All Digital Print Communication - 3

- Ensure good contrast between background and text
 - ◎ Good choices:
 - Black or dark blue text on light grey or white background
 - Light text – white or light grey – on black or dark blue background
 - ◎ If unsure, use a color checker/contrast analyzer to check.

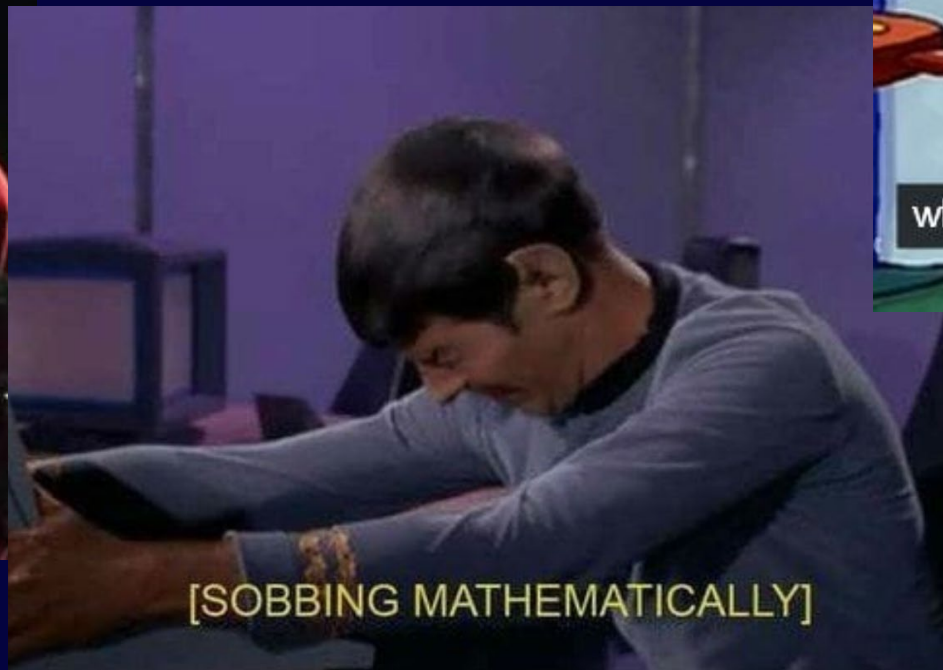


Digital Media

Accessible Videos

- Video player
 - ⦿ controls must be accessible
- Spoken words
 - ⦿ captions
 - ⦿ transcript
- Description of visual content
 - ⦿ audio descriptions
 - ⦿ video description

Bad Captioning Examples





The World Wide Web

...Your Corner Anyway

Web

- Information posted
 - ⊙ Page content
 - Text – proper HTML/XML coding
 - Graphics – with alt text (alt tags)
 - ⊙ Additional documents – accessible documents
 - ⊙ Digital media – accessible with captions & audio (video) descriptions
- Forms to collect information
 - ⊙ proper HTML/XML coding
 - ⊙ correct navigation order
- WCAG – Web Content Accessibility Guidelines
 - ⊙ Four main principles of web accessibility
 - POUR: Perceivable, Operable, Understandable, and Robust



Communication/Video Platforms

Current Industry Leaders

Zoom and Microsoft Teams

- ◎ Both have good accessibility (not perfect)
- ◎ Both are working to improve all the time.
 - Auto-captioning available
 - ◎ Typically 80-85% correct.
 - ◎ On saved videos: auto-caption text and punctuation need to be corrected
 - Compatible for third-party captioning services
 - Screen-reader compatibility
 - Keyboard navigation
 - “Pin” a participant video
 - Accessibility settings



Resources

Resources: General & Web

- Explore Access
 - ◎ Creating Accessible Documents
 - ◎ Social Media Accessibility Toolkit
- DO-IT: Disabilities, Opportunities, Internetworking, and Technology
- NCAM: National Center for Accessible Media
- WebAIM: Web Accessibility In Mind
- W3C: World Wide Web Consortium
 - ◎ WAI: Web Accessibility Initiative
 - ◎ WCAG: Web Content Accessibility Guidelines Overview

Resources: Color Contrast Analyzers

- [Contrast Checker by ACart Communications](#)
- [Color Contrast Tester by Joe Dolson](#)
- [Color Contrast Analyzer Apps by Paciello Group](#)
- [Contrast App by Nothing Magical \(for iOS and macOS\)](#)
- [Contrast Checker by WebAIM](#)

Thank you!

Heidi Scher, M.S., C.R.C.

hascher@uark.edu

479.575.3104

Associate Director – Assistive & Instructional Technology

Center for Educational Access

University of Arkansas