



BSPH CENTER FOR
TEACHING AND LEARNING

Teaching Toolkit



JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

An Introduction to Authoring Accessible Documents

October 2023



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Before We Get Started

- Files for Download:
<https://tinyurl.com/CTLAccessibleMaterials>
(requires login with JHED ID @jh.edu)

Please **download**:

_PracticeDoc.docx

_PracticePowerPoint.pptx

Also, bookmark the site!



OBJECTIVES

By the end of this workshop, you should be able to:

- ▶ Meet the minimum digital accessibility expectations of Johns Hopkins faculty.
- ▶ Know what tools are available in Microsoft products to help you get there.
- ▶ Understand why we can't rely on automated checkers alone.
- ▶ Know the value in employing these skills all the time, with every document, and not just “when you have time” or “when it really matters”.



Our End Goal: Employ Best Practices for Accessible Materials

- ▶ Use accessible templates
- ▶ Use built-in tools, including Styles, to maintain structure & formatting
- ▶ Consider color contrast ratios & never rely on color alone
- ▶ Provide alternative text for images (*& any complex non-text object*)
- ▶ Use accessibility checkers
- ▶ Provide captions & alternative accessible formats for video & audio
- ▶ Become familiar with University resources
 - ▶ *Digital Accessibility at JHU*
<https://accessibility.jhu.edu/>



Why Worry?



JHU & the Bloomberg School's Commitment

[We are committed] “to helping students succeed in our rigorous academic offerings. This includes making our learning environment one that is accessible, providing equitable opportunity and usability for all individuals, regardless of limitations. In our dedication to student success, we are taking action to follow University-wide guidelines that require all new course materials created after January 1, 2021, to be accessible¹.”



A Moral and Ethical Responsibility

“Every member of the Johns Hopkins University community deserves equal access to the abundant educational and employment opportunities we offer.”¹

- ▶ Accessibility is part of Inclusivity
- ▶ Accessible environments are enhanced environments
- ▶ We all have an ethical and moral responsibility



¹ JHU Office of Institutional Equity <<http://oie.jhu.edu/>>

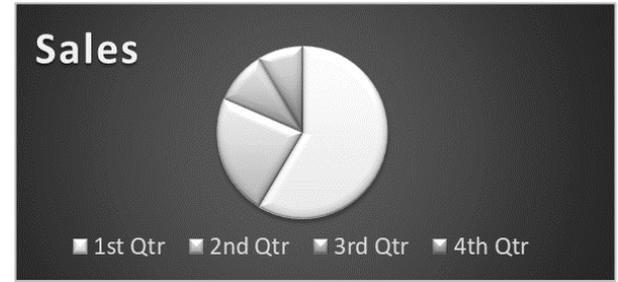
A Legal Responsibility

- ▶ ADA (1990)
- ▶ Rehabilitation Act of 1973
 - ▶ Section 504 (1973)
 - ▶ Section 508 (1998)
 - “508 Refresh” (2018)



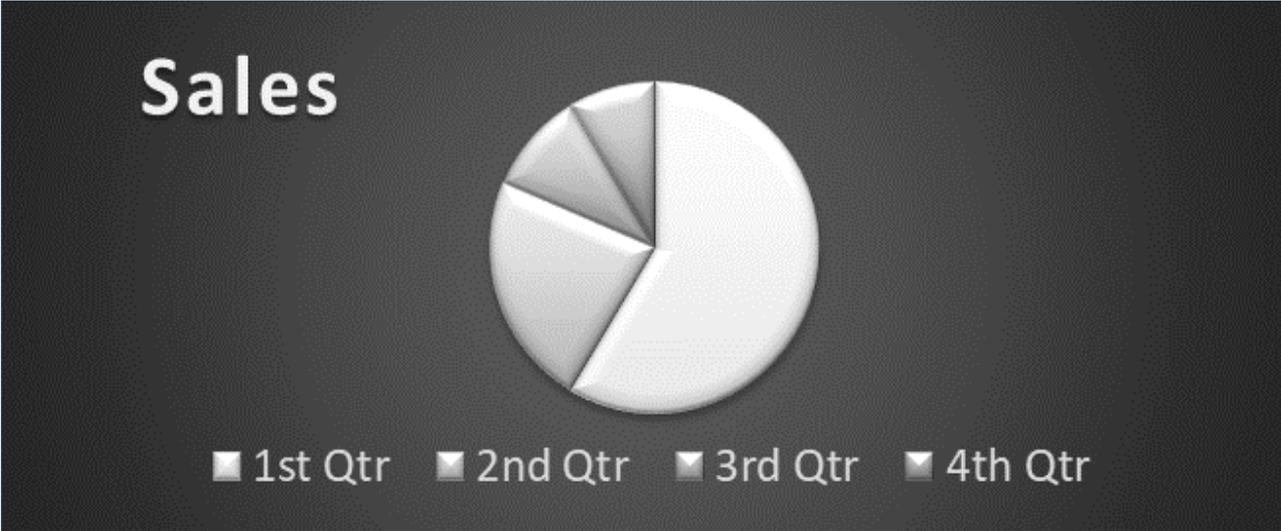
We All Benefit from Accessible Documents

- ▶ Routinely employing practices that consider universal accessibility puts your best foot forward
 - ▶ Professional
 - ▶ Conscientious
 - ▶ Considers sustainability
 - Hides “the complexity of technology”
 - ▶ Reaches a **larger audience**



| Enrollment Category | Maryland | Nation |
|---------------------|----------|--------|
| % Undergraduate | 80.9 | 85.2 |
| % African American | 26.6 | 12.6 |
| % Hispanic | 8 | 15.7 |
| % Asian | 6.8 | 5.9 |
| % White | | 51.7 |
| % All Minorities | 41.7 | 38.3 |
| % Foreign | 5.4 | 4.9 |

We All Benefit - 1



We All Benefit - 2

AP Almo Pro A/V (via rAVe [Publications]) <proavnews@almo.com> Celine Greene 8:02 AM

See New Products, Earn RUs & Get Certified October 25-26 with Almo & AVIXA

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Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

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Almo is Bringing the E4 AV Tour to Nashville
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The Award Winning E4 AV Tour is Presented By

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 Right-click or tap and hold here to download pictures. To help protect your privacy, Outlook prevented automatic download of this picture from the Internet.
E4 AV Tour Nashville 2018



We All Benefit - 3

Comparative Higher Education Statistics: Maryland and the Nation

| Enrollment Category | Maryland | Nation |
|---------------------|----------|--------|
| % Undergraduate | 80.9 | 85.2 |
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Poorly formatted table compares higher ed enrollment in Maryland vs. the Nation across demographic categories. See source for details.
Source: Maryland Higher Education Commission. *2018 Data Book*. "Comparative Higher Education Statistics: Maryland and the Nation".



Best Practices toward Authoring Accessible Documents



Best Practices

- ▶ Consider levels of effort (human and technical)
- ▶ Employ tools toward efficiency and precision
- ▶ Are sustainable to avoid retrofitting or rework



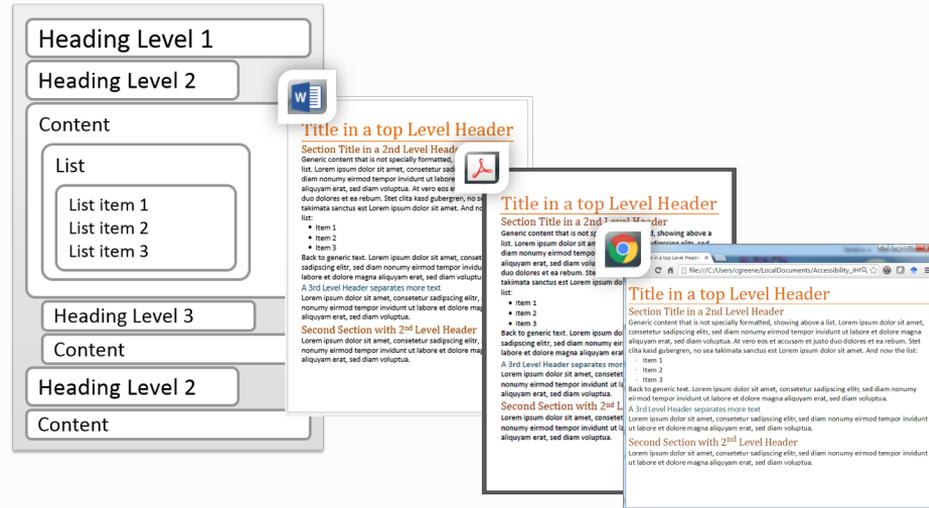
Selected Best Practices in Microsoft Office



*Follow Along with the Practice Files (_PracticeDoc.docx and _PracticePowerPoint.pptx)
found inside: <https://tinyurl.com/CTLAccessibleMaterials>*

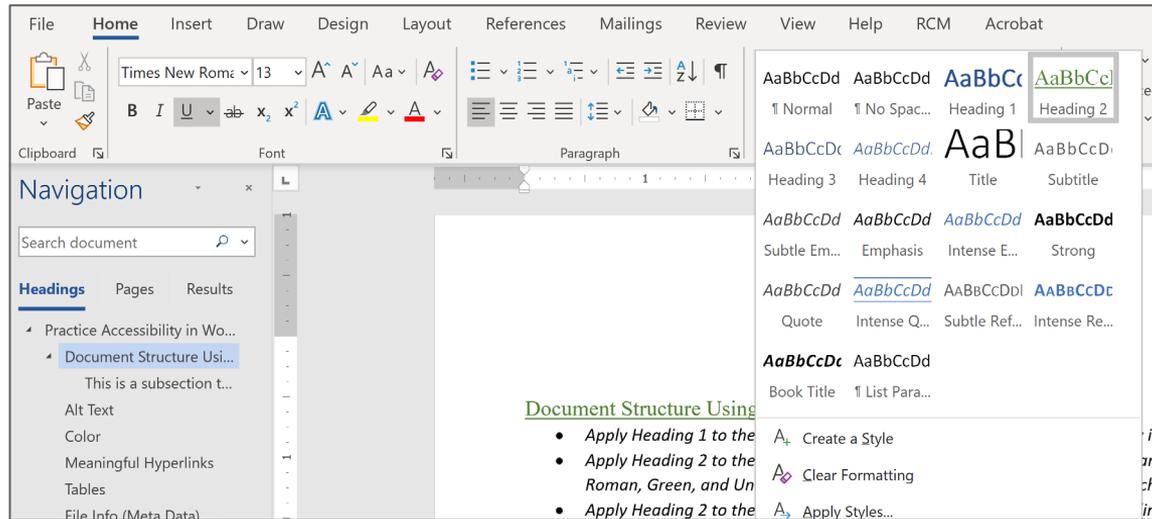
Best Practices - All Documents: Document Structure

- ▶ Document structure: the way the parts of a document are programmatically organized in relation to each other
 - ▶ Serves as a navigation aid
 - ▶ Ensures “robustness” across formats and platforms
- ▶ Use TEMPLATES
- ▶ Use STYLES (Headings, Lists, Tables, Paragraphs, Column breaks, etc.)
 - ▶ Control appearance/layout and reading order



Structure in Microsoft Office: Word

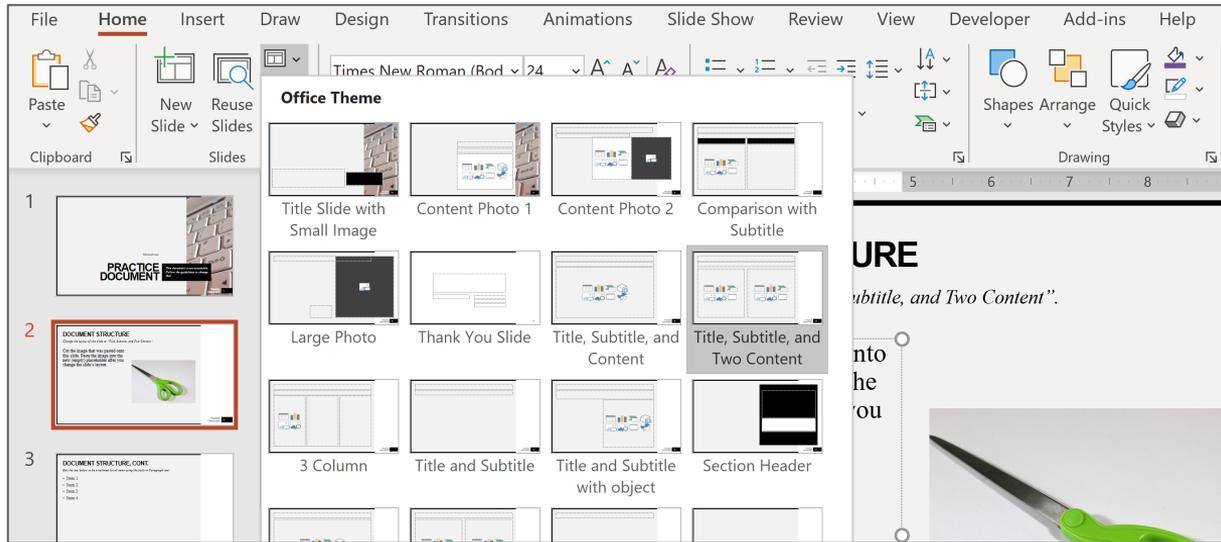
- ▶ Use Styles and document parts (e.g. Headings, Tables, Bullets, Footer)
- ▶ Use Page Setup and Formatting for controlling layout



ACTIVITY: Provide structure using Headings & bullets in `_PracticeDoc.docx`

Structure in Microsoft Office: PowerPoint

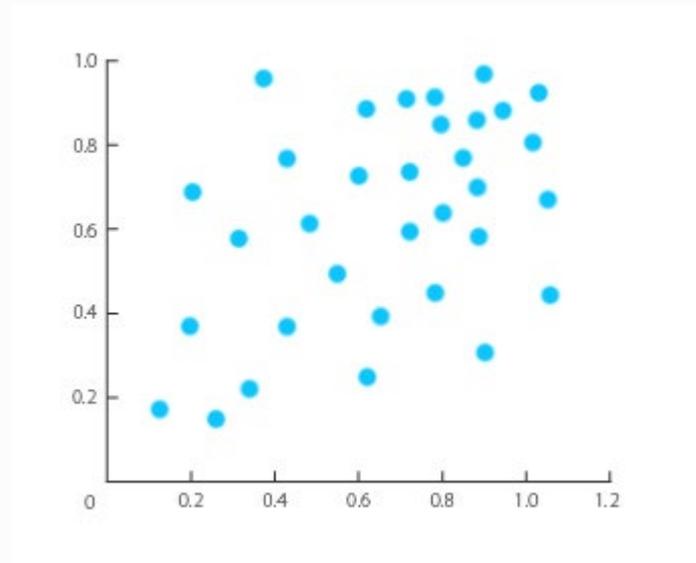
- ▶ Use templates and only rely on a slide master layout's placeholders
- ▶ Each slide must have a unique title



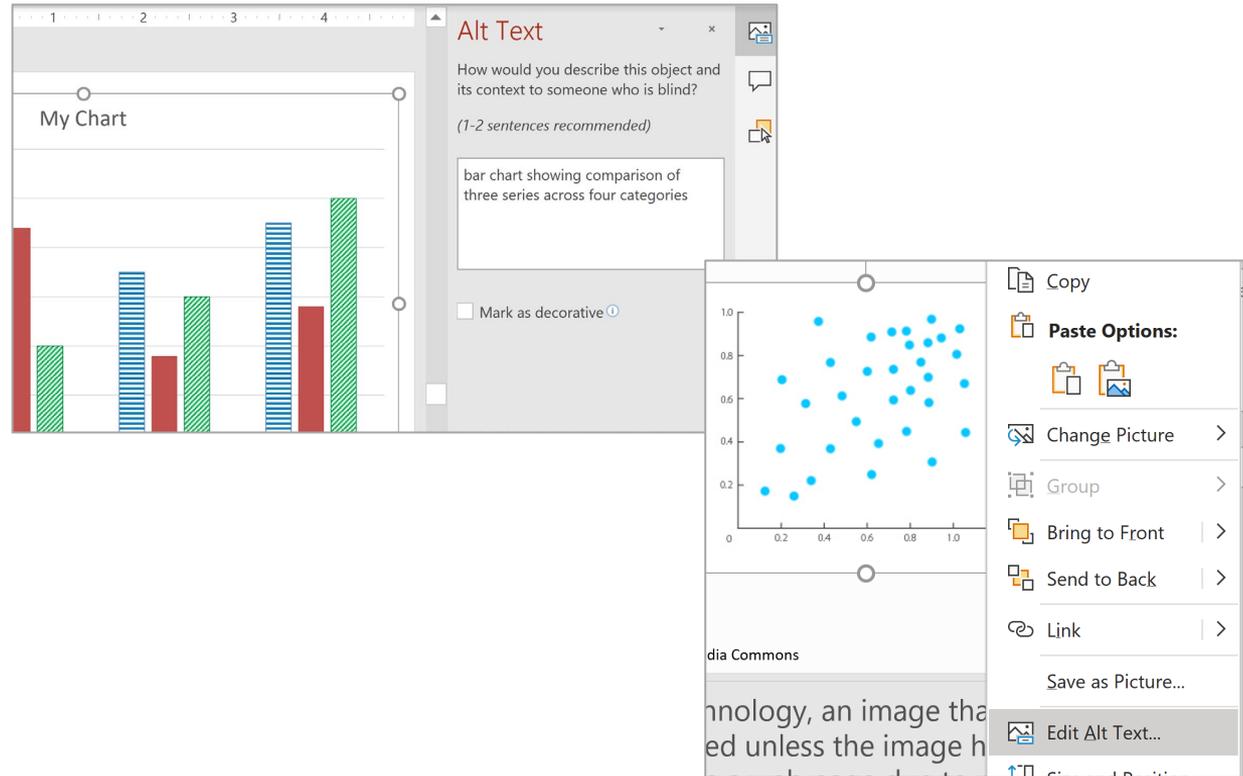
ACTIVITY: Provide structure using layouts with a placeholder in slides 2 & 3 of _PracticePowerPoint.pptx

Best Practices - All Documents: Alternative (Alt) Text

- ▶ Simple, succinct text to
 - ▶ describe any *non-decorative* image
 - ▶ summarize any complex element (table, chart, embedded multimedia, etc.)
- ▶ Alt text should convey the meaning of the object
 - ▶ Images should avoid including text if possible; if not, mention it in alt text
 - ▶ Do not state the obvious
 - ▶ Use appropriate language (context)



Alt Text in Microsoft Office

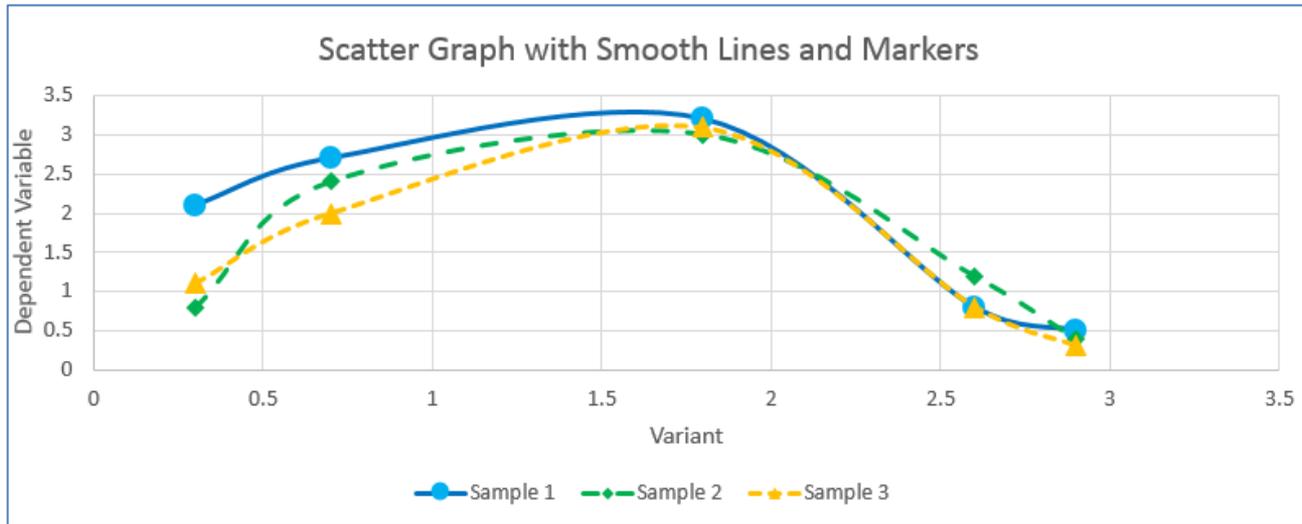


<https://tinyurl.com/MSSupportAltText>

ACTIVITY: Add alt text on image and line graph in `_PracticeDoc.docx` and `_PracticePowerPoint.pptx` (slides 4 & 5)

Best Practices – All Documents: Color

- ▶ Do not use color alone to convey meaning
 - ▶ Alternatives: shapes, line types, emphasis (underline, bold, italics), etc.



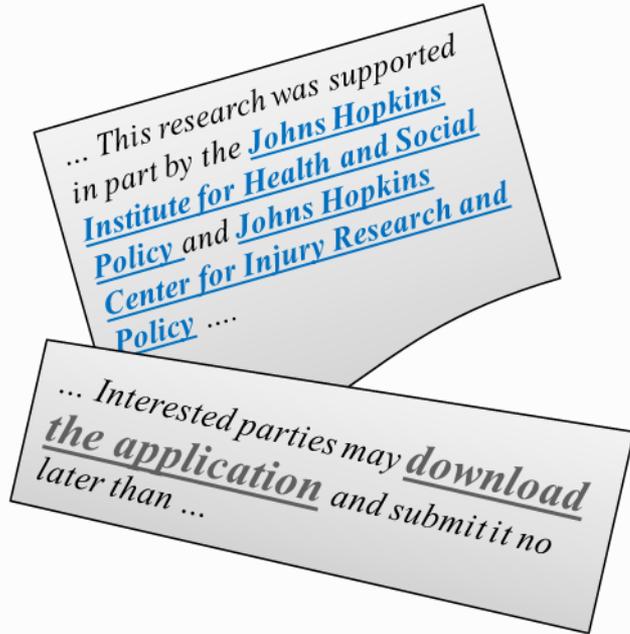
Best Practices – All Documents: Contrast Ratio

- ▶ The contrast (light to dark) of objects next to or overlaying each other must be sufficient (at least 4.5 to 1, in most cases)
 - ▶ Text over background images
 - ▶ Text inside a table with cell shading
 - ▶ Color-coded maps
 - ▶ <https://contrastchecker.com/>

| Heading 1 | Heading 2 |
|-----------|-----------|
| Item 1 | Item 2 |
| Item 3 | Item 4 |



Best Practices – All Documents: Hyperlinks

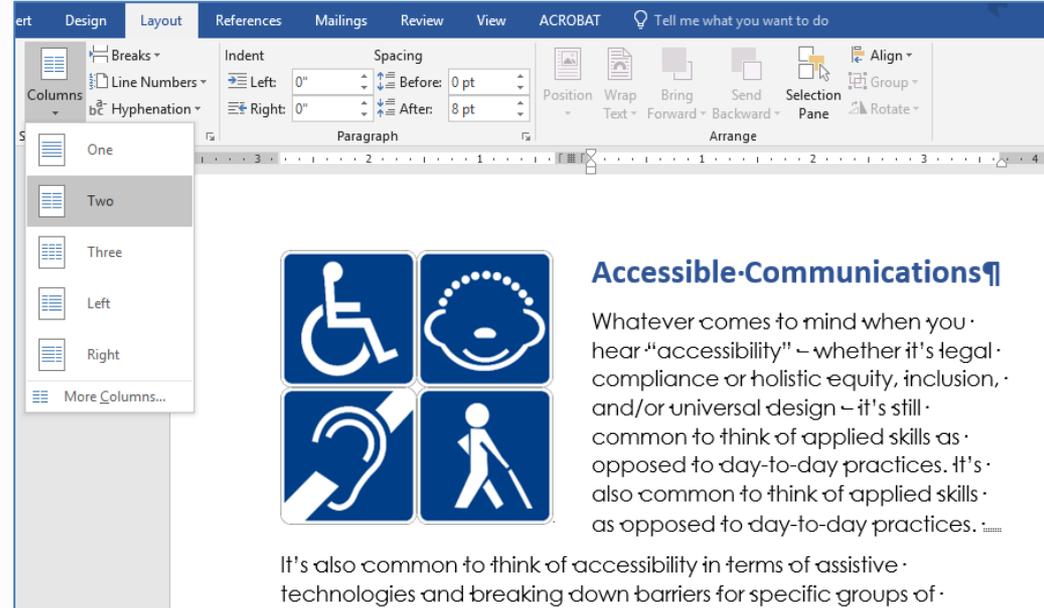


- ▶ Use “Meaningful” text
 - ▶ Inform users where link navigates them
 - Exception: when the URL is the meaningful text
 - Consider a URL shortener
 - ▶ Indicate purpose of linked resource
 - ▶ Consider [PIC], [VIDEO], or [AUDIO] alongside the link if format isn’t obvious
- ▶ Distinguish hyperlink from the surrounding text by something other than color



Best Practices - All Documents: Do not use Tables for Layout

- ▶ Tables present sorted, or organized, categories of data.
- ▶ Do not use tables for controlling layout!
 - ▶ Instead use paragraph formatting, columns, section breaks, line spacing, etc.



The screenshot shows the Microsoft Word interface with the 'Layout' ribbon selected. The 'Columns' dropdown menu is open, showing options for 'One', 'Two', 'Three', 'Left', 'Right', and 'More Columns...'. The 'Paragraph' section of the ribbon is visible, showing 'Indent' (Left: 0", Right: 0") and 'Spacing' (Before: 0 pt, After: 8 pt) settings. The document content includes a section titled 'Accessible Communications' with four icons: a person in a wheelchair, a person with a hearing aid, a person with a white cane, and a person with a white cane and a hearing aid. The text below the icons discusses accessibility in terms of legal compliance, holistic equity, inclusion, and universal design.

Accessible Communications

Whatever comes to mind when you hear "accessibility" – whether it's legal compliance or holistic equity, inclusion, and/or universal design – it's still common to think of applied skills as opposed to day-to-day practices. It's also common to think of applied skills as opposed to day-to-day practices. It's also common to think of accessibility in terms of assistive technologies and breaking down barriers for specific groups of

Best Practices – All Documents: Tables

- ▶ Always insert a table or use a table placeholder
- ▶ Make certain tables are formatted to:
 - ▶ include Table Header Row
 - ▶ avoid empty, merged, and split cells unless necessary
 - ▶ include visible cell borders (gridlines)
 - ▶ have sufficient contrast between text and any background fill colors
 - ▶ include a caption for complex tables

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Tables in Microsoft Office

- ▶ Design → Header Row
- ▶ Word: Layout → Repeat Header Rows

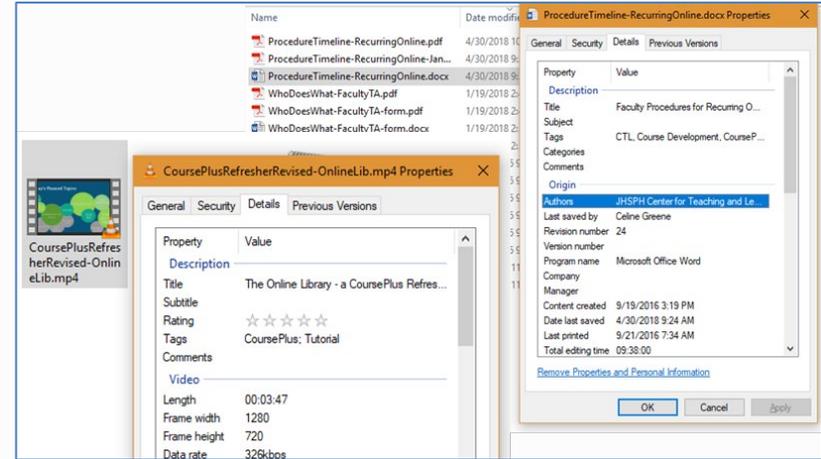
The top screenshot shows the Microsoft Word ribbon with the 'Design' tab selected. The 'Table Style Options' group contains the 'Header Row' checkbox, which is checked and circled in orange. A tooltip for 'Header Row' is visible, explaining its function. Below the ribbon, a table titled 'Count of Procedures' W (in Minutes) by A' is shown with columns 'Wait Time' and 'Area 1'.

The bottom screenshot shows the 'Table Tools' ribbon with the 'Layout' tab selected. The 'Repeat Header Rows' button is circled in orange. A tooltip for 'Repeat Header Rows' is visible, explaining its function. The same table from the top screenshot is visible below the ribbon.

ACTIVITY: Edit tables in *_PracticeDoc.docx* and *_PracticePowerPoint.pptx* (slide 7)

Best Practices – All Documents: Navigation, Properties/Attributes

- ▶ **Navigation** is always made better when there are
 - ▶ **Page numbers** in Word and Excel documents
 - ▶ **Slide numbers** and **Unique slide titles** in PowerPoint
- ▶ **Document Properties** assist users and technologies to:
 - ▶ Search
 - ▶ Navigate
 - ▶ Know something about a file (without opening it!)
- ▶ Aim to complete **title**, **key words** (“tags”), & **author**
- ▶ Save files with **no restrictions**



The Microsoft Office Accessibility Checker



Running the Accessibility Checker

AccessibleMaterials-Oct2023
OneDrive - Johns Hopkins » WorkshopMaterials » Taina » A

Share Copy path Copy local path

Protect Presentation
Control what types of changes people can make to this presentation.

Inspect Presentation
Before publishing this file, be aware of the following issues:

- Comments
- Document properties, author's information

Inspect Document
Check the presentation for hidden properties or personal information.

Check Accessibility
Check the presentation for content that people with disabilities might find difficult to read.

Check Compatibility

Design Layout References Mailings **Review**

Read Aloud

Check Accessibility

Language

New Comment Delete Previous

Next Show

Comments

1

Check Accessibility
Alt Text
Navigation Pane
Focus
Options: Accessibility

<https://tinyurl.com/MSSupportAccessibilityChecker>

MS Accessibility Checker

▶ Classifies:

- ▶ Errors
- ▶ Warnings
- ▶ Tips

Errors:

- ▶ *Images – alt text*
- ▶ *Slides – unique titles*
- ▶ *Tables – headers*
- ▶ *Structure – Styles, Table of Contents*

Warnings:

- ▶ *Meaningful hyperlinks*
- ▶ *Tables – no split, merged, or empty cells*
- ▶ *Blank characters*
- ▶ *Color contrast*



Get Started Now!

- ▶ Practice what you've learned
- ▶ Avoid rework
- ▶ Remind yourself of legal, ethical and moral reasons
- ▶ Focus on the end goal: benefit everyone

... all the time





JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH



Accessibility is a Public Health Issue

THANK YOU

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(requires login with JHED ID @jh.edu)
- ▶ Please download:
- ▶ PracticeDoc-Solution.docx
- ▶ PracticePowerPoint-Solution.pptx