

A photograph of a desk setup. In the center is a silver laptop displaying the Windows 8.1 Start menu with various app tiles like Mail, Photos, and Netflix. To the left is a white pencil holder filled with colorful pencils. Behind the laptop are two spray cans, one white with a green top and one light blue. To the right are several notebooks, one with a colorful abstract drawing, and a few pens and pencils. The background is a white desk surface with a wire mesh organizer.

The Bridge to Understanding

Building Accessibility into Health Literate Materials

Presented by Kelli Ham

July 21, 2021

- *About me*
- *Introductions in chat*
- *About this presentation*



Objectives

Attendees will be able to:

- describe digital accessibility issues encountered by people with various disabilities
- identify common practices that create inaccessible practices
- perform simple techniques for adding accessibility into health literate digital content

The Reality for Some Users

Low vision or blindness
Hearing loss or deafness
Physical/mobility issues
Cognitive or other issues





Assistive Technologies for Digital Content - Examples

For users with visual impairments:

- Screenreaders and other text-to-voice tools
- Voice recognition software
- Tools to enlarge text or displays
- Audio descriptions of movies or other video

For users with hearing impairments:

- Closed captioning for video, television or other digital media

Good Design + Assistive Technologies = Accessible Content!

The Top Five Concepts and Techniques

How to:

- Use built-in layouts in PowerPoint and Google Slides
- Write and apply good alt text to images
- Create meaningful hyperlinks
- Use color effectively and correctly
- Avoid common mistakes such as inserting text boxes and forgetting or repeating slide titles

PowerPoint

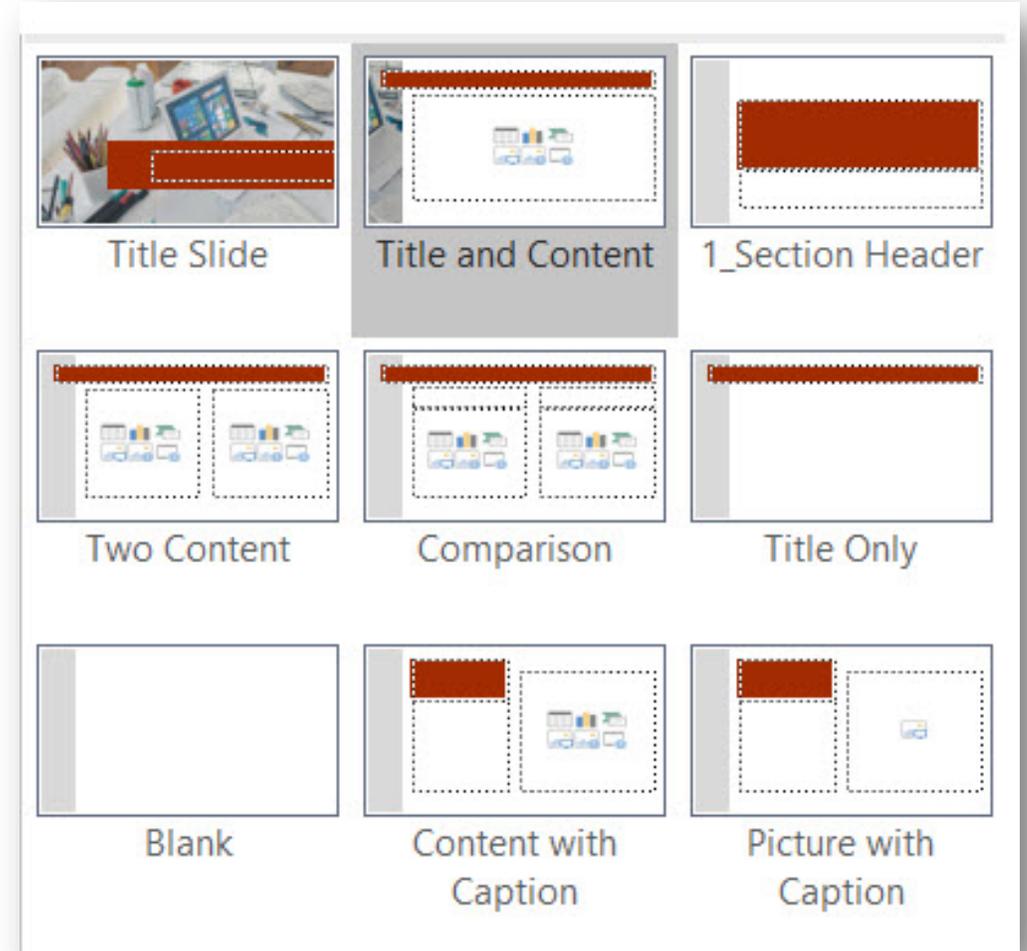
- Ability to create visually rich presentations
- Colorful templates, great effects, excellent for training or conveying information
- But... these great slides can be completely inaccessible to people with visual impairments!



#1 Use Built-In Layouts and Outline View

PowerPoint templates come with several built-in layouts:

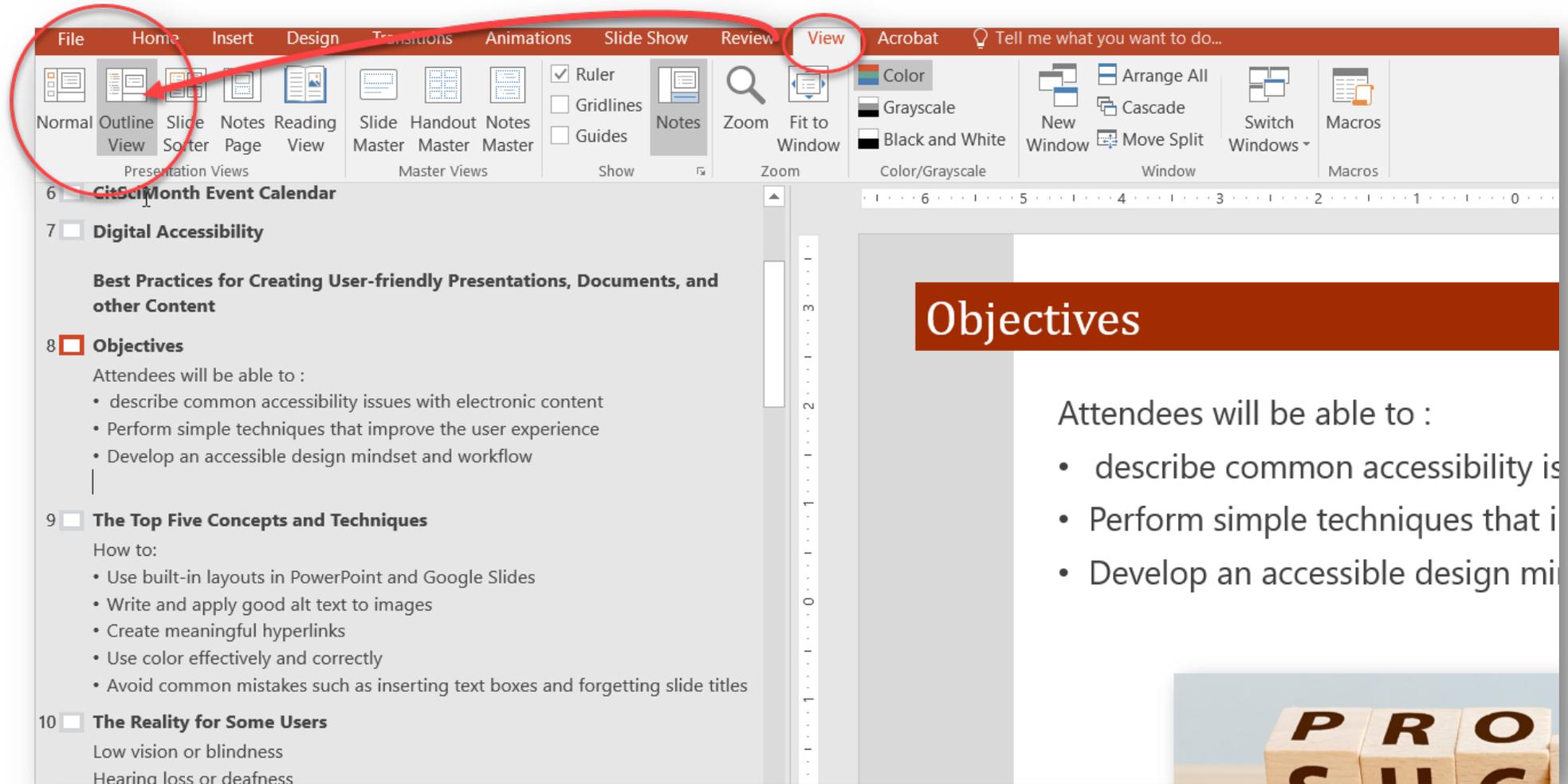
- Screenreaders rely on structure and order – titles, content ‘containers’ for text, pictures, tables, and graphs
- Elements can be resized and moved
- Users can create custom layouts too



Layouts provide the necessary structure.

Outline View

Any text on the slide should show in Outline view:



The screenshot shows the Microsoft PowerPoint interface with the 'View' tab selected in the ribbon. The 'Outline View' icon is circled in red. The slide content is visible in the Outline view pane on the left, showing a list of topics and bullet points. The main slide area on the right shows the slide content, including a title 'Objectives' and a list of bullet points.

Outline View Content:

- 6 **CitSciMonth Event Calendar**
- 7 **Digital Accessibility**
 - Best Practices for Creating User-friendly Presentations, Documents, and other Content**
- 8 **Objectives**
 - Attendees will be able to :
 - describe common accessibility issues with electronic content
 - Perform simple techniques that improve the user experience
 - Develop an accessible design mindset and workflow
- 9 **The Top Five Concepts and Techniques**
 - How to:
 - Use built-in layouts in PowerPoint and Google Slides
 - Write and apply good alt text to images
 - Create meaningful hyperlinks
 - Use color effectively and correctly
 - Avoid common mistakes such as inserting text boxes and forgetting slide titles
- 10 **The Reality for Some Users**
 - Low vision or blindness
 - Hearing loss or deafness

Slide Content:

Objectives

Attendees will be able to :

- describe common accessibility is
- Perform simple techniques that i
- Develop an accessible design mi

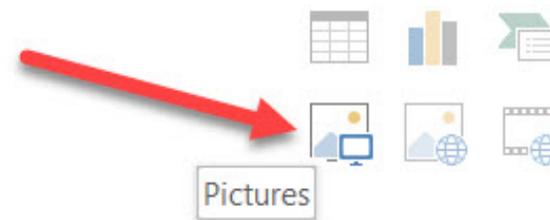
PRO
SUC

Insert Elements Properly

Insert using the content type icon, not copy and paste

Why? It causes a tremendous amount of work later when checking for accessibility

Click to add text



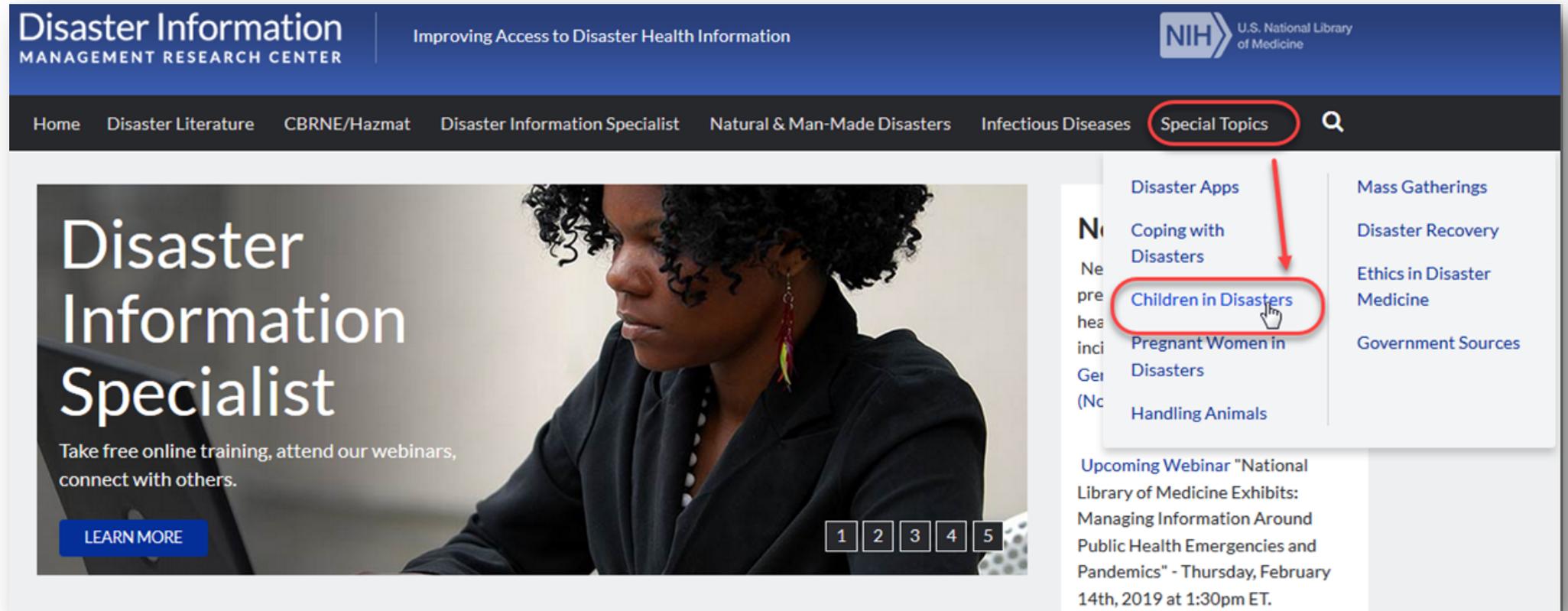
Best Practice for Inserting Pictures

1. Create folder for your project
2. Save images in the folder
3. Insert images using the Pictures icon in the content box



#2 Describe Images with Alt Text

Images help tell your story. It's important to convey the same experience and meaning to a user who cannot see the image.



The screenshot shows the website for the Disaster Information Management Research Center, part of the U.S. National Library of Medicine. The header includes the organization's name and tagline, "Improving Access to Disaster Health Information". The navigation menu features several categories, with "Special Topics" circled in red. A dropdown menu is open under "Special Topics", listing various sub-topics. "Children in Disasters" is circled in red, and a red arrow points to it from the "Special Topics" menu item. Other sub-topics include "Disaster Apps", "Coping with Disasters", "Pregnant Women in Disasters", "Handling Animals", "Mass Gatherings", "Disaster Recovery", "Ethics in Disaster Medicine", and "Government Sources". The main content area features a large image of a woman with curly hair, looking down, with the text "Disaster Information Specialist" overlaid. Below the image is a "LEARN MORE" button and a set of five numbered navigation buttons (1-5). A sidebar on the right contains information about an upcoming webinar: "Upcoming Webinar 'National Library of Medicine Exhibits: Managing Information Around Public Health Emergencies and Pandemics' - Thursday, February 14th, 2019 at 1:30pm ET."

The Art of Writing Alt Text

Not too much, not too little.

- Right click on image; choose Size and Position
- Include all meaningful text in Description field
- Explain meaning, not just literal description
- Limit repetition (~~photo of x~~, ~~photo of y~~, ~~photo of z~~)
- Aim to provide the equivalent experience as a person with sight
- Meaningless objects can be ignored – enter "" (Screen readers skip double quotes in description field)
- Caution - watch for auto-populated alt text; the checker misses it
 - Example: 2019-04-06_9-29-35.png

#3 Meaningful Hyperlinks



Do You Suffer from WIMS (Web-Induced Medical Stress)?

<https://www.youtube.com/watch?v=bgGm7vhzqWc> → This is an unclear hyperlink!

#3 Meaningful Hyperlinks - Example

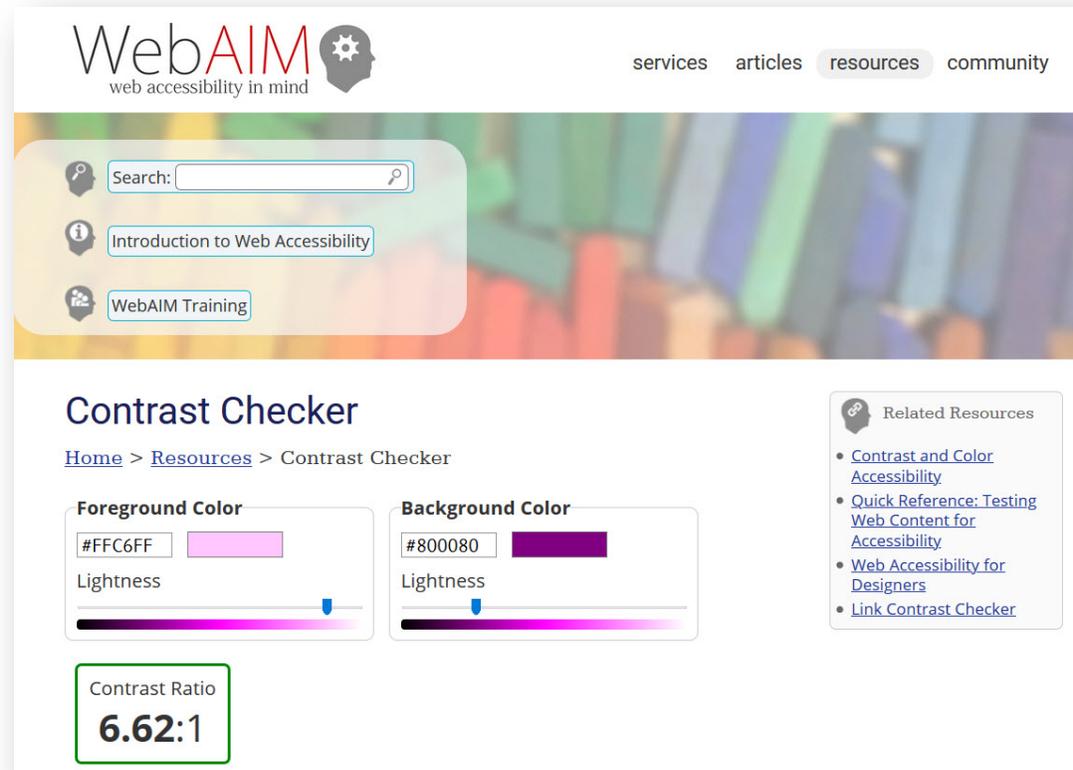


Do You Suffer from WIMS (Web-Induced Medical Stress)?

[Healthfinder.gov Video: "Do You Suffer from WIMS?"](#) → This is clear and understandable.

#4 Utilize Color Properly

Good contrast is essential for readability. Black on white has excellent contrast, but gray or yellow on white has poor contrast.



The screenshot shows the WebAIM website header with the logo "WebAIM web accessibility in mind" and navigation links for "services", "articles", "resources", and "community". Below the header is a search bar and a list of resources: "Introduction to Web Accessibility" and "WebAIM Training". The main content area is titled "Contrast Checker" and includes a breadcrumb trail: "Home > Resources > Contrast Checker". The tool interface features two color selection sections: "Foreground Color" with a hex code of #FFC6FF and a lightness slider, and "Background Color" with a hex code of #800080 and a lightness slider. A green-bordered box displays the "Contrast Ratio" as 6.62:1. To the right, a "Related Resources" section lists links to "Contrast and Color Accessibility", "Quick Reference: Testing Web Content for Accessibility", "Web Accessibility for Designers", and "Link Contrast Checker".

[WebAim Contrast Checker Tool](#)

Use Caution with Font Colors

A person with color blindness may have difficulty here:

Please answer the following survey.

Required Questions are marked in red.

Name: _____

Email: _____

Phone: _____

Job Title: _____

Company: _____

A vertical image on the left side of the slide showing a laptop, a notebook, and a pen. The laptop screen displays a Windows-style interface with various icons. The notebook has some handwritten notes, and a pen is visible. The image is partially obscured by the dark red header bar.

5 Break Bad Habits

DON'T...

Create Text Boxes

- Text boxes are ‘invisible’ to screen readers; use the slide content box instead

Copy and paste images

- This adds an element outside the structured layout and generates a “check reading order” warning that requires extra work later; use the ‘insert picture’ function instead

Use animations with flashing or flickering

- These visuals can trigger epileptic seizures; see guidelines when animations are necessary

Checking for Errors and Issues

Accessibility Checker finds

- Missing alt text
- Missing or duplicate titles

Warnings and tips for:

- Unclear hyperlinks
- Reading order
- And more

Manual Check is needed for:

- Text that is missing from outline view (in a text box)
- Proper reading order of title, content, and images
- Color issues
- Correct alt text
- And more

Accessibility Checker in PowerPoint

The image shows a screenshot of the Microsoft PowerPoint interface. On the left, the 'File' tab is selected in the ribbon, and the 'File' menu is open. A red circle highlights the 'File' menu item, and a red arrow points from it to the 'Check for Issues' button in the 'Inspect Presentation' section of the right-hand pane. The right-hand pane is titled 'Info' and shows the presentation name 'Accessability-CitSciMonth2'. Under the 'Inspect Presentation' section, there are three options: 'Inspect Document', 'Check Accessibility', and 'Check Compatibility'. The 'Check Accessibility' option is highlighted with a red background. A red arrow also points from the 'Check for Issues' button to the 'Check Accessibility' option. The 'Check Accessibility' option has a description: 'Check the presentation for content that people with disabilities might find difficult to read.'

File Home Insert Des

Cut Copy Paste Format Painter Clipboard

New Slide

Info

Accessability-CitSciMonth2

Documents » All Current Working Docs » 508

Protect Presentation

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

Inspect Presentation

Before publishing this file, be aware that it contains:

- Document properties, author's name and cropped out image data
- Invisible objects

Inspect Document

Check the presentation for hidden properties or personal information.

Check Accessibility

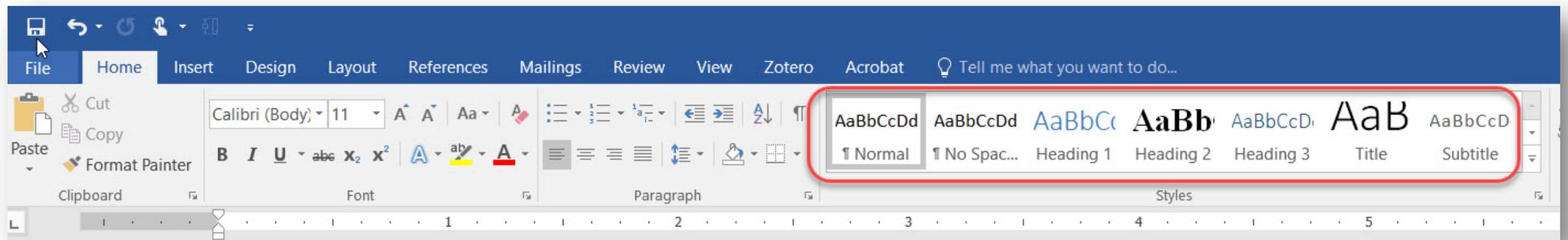
Check the presentation for content that people with disabilities might find difficult to read.

Check Compatibility

Check for features not supported by earlier versions of PowerPoint.

Microsoft Word

- Not as complicated as PowerPoint
- Structure also matters
- Use Styles to indicate Headers, Paragraphs
- Same techniques for images and hyperlinks
- For long documents, use Table of Contents feature





What about PDF Documents?

PDFs can be created from Word, PPT, InDesign or other tools such as Canva. PDF accessibility is complicated and beyond the scope of this session.

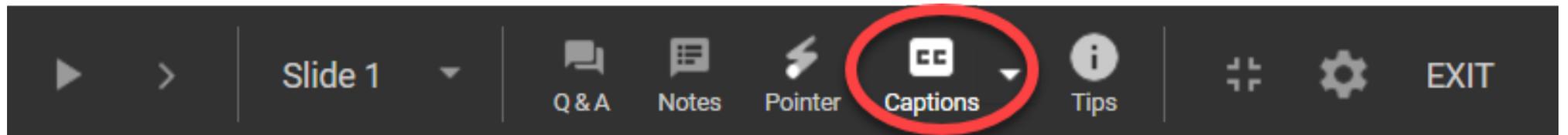
Tips:

- Use accessible design techniques in Word and PPT and save as PDF. Most will carry over to the PDF; other steps need to be taken for full accessibility.
- Some PDFs are images and completely inaccessible (e.g. Canva creates image PDFs; avoid using image PDFs for online content)

Google Docs and Slides

Similar features to create good structure or inaccessible slides – it's up to the user!

- layouts, headers, ability to add alt text
- simple to use, great for collaboration
- not as robust as PowerPoint
- has unique features such as closed captions
 - Use Chrome browser with plugged in headset
 - Use presenter mode to enable CC tool



Accessible Templates and Guides

This presentation was made with the Making Templates Accessible Guide from Microsoft.

Helpful tips and information are found on each slide on the template.

[Accessible Templates for Office](#)

Get accessible templates for Office

Office 2016, Office for business, Office 365 for home, Office 2016 for Mac

Templates that help you make your content accessible to everyone are now available on [Templates.Office.com](#). You can find them by searching for "accessible templates" or you can use our query: [Accessible Office templates](#).

Alternatively, you can get to them straight from your Office application. Go to **File** > **New** and type "accessible templates" in the **Search for online templates** box.

Get a quick view of several accessible templates in these template samplers.

Word



Get the [Word sampler](#)

Excel



Get the [Excel sampler](#)

PowerPoint



Get the [PowerPoint sampler](#)

Additional Resources

National Center on Disability and Access to Education (NCDAE)

Cheatsheets: <http://ncdae.org/resources/cheatsheets/>

PDF Accessibility (Acrobat Pro)

<https://helpx.adobe.com/acrobat/using/create-verify-pdf-accessibility.html>

WebAim – an essential resource. Many accessibility tools, including:

Contrast checker: <https://webaim.org/resources/contrastchecker/>

MS Office evaluation checklists: <https://webaim.org/resources/evaloffice/>

WAVE Accessibility Evaluation tool: <https://wave.webaim.org/>

Any questions?



thanks

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