# **Accessible PowerPoints**

## Texts

* When selecting the text color
  + White text on dark green
  + Yellow text on violet
  + Yellow text on dark blue
  + Black text on yellow
  + Black text on pink
  + Dark red text on white
  + Violet text on white
  + Black text on white
  + Dark blue text on white
* When selecting the background
  + **Simple**, not graphical
  + One color, preferably light pastel or white if black print is used
    - Two color gradients acceptable where one is white and the other **pastel**
    - Two color gradients acceptable where one is not white, if the **pastel** colors are adjacent on the color wheel
  + Avoid **gray** for text and background
  + Avoid text with **shadows**
* Make sure text is not too small, especially if the presentation will be viewed on a projector.
  + San Serif fonts
    - **Verdana**
    - **Arial**
    - **Tahoma**
    - **Antique Olive**
    - **Helvetica**
  + Minimum font size should be **28** points; shoot for 44-point for titles and 36-point for content. A good rule of thumb:
    - Headings **32** pts or larger
    - Subheadings **30** pts or larger
    - Text **28** points or larger
* Do not use **color** as the only way to convey information. Avoid using **red, green and orange**. Consider using **textures** instead of colors in graphs or charts.
* Use underscoring, quotation marks or bolding to emphasize text. Avoid **italics** and **highlighting.**
* Use bullets when listing items
  + No more than **six** bullets in a list
  + Where bulleted lists occur side-by-side, text of one list should be **on a different colored background** to avoid confusion
* Transition and animations should be simple if they are required. Complex or automatic transitions and animations can be distracting.
  + These may cause screen readers to **re-read slides** or **read them out of order**
  + May not give users enough time to read the slide content.
  + Flashing or quick movements may cause **seizures** or **vertigo**.
  + If you must use animation:
    - **Fly in from left**
    - **Wipe right**
    - **Appear**
* Use clear and simple language. If you have embedded video, ensure the video is **captioned**.
* If you have embedded audio, include a **transcript**.

## Templates

* The **Design** tab contains many built-in Themes and color Variants. Some of the templates have low contrast between slide text and the slide background and a few have busy backgrounds. Choose a theme with **good contrast** and with simple backgrounds.
* When searching for templates add the word “accessible” to the search for templates that the creator tagged as accessible.
* [Microsoft Accessible PowerPoint template sampler](https://templates.office.com/en-us/accessible-powerpoint-template-sampler-tm16401472?ui=en-US&rs=en-US&ad=US)
* Use the **Slide Master** to make changes to all slides within a presentation to preserve accessibility.

## Layouts

* Always best to pick **your slide type before adding content** but you can change the layout of an existing slide on the **Home** tab by selecting **Layout**. This usually works well if you started with a layout choice in the first place. Avoid using the **blank** slide.
* A descriptive title on the slides makes it much easier for screen reader users to read and navigate the presentation. In the event you want the title not visible, you can write one to help those with screen readers and then hide it.
  + Chose **Arrange** on the Home ribbon and select **Selection Pane**.
  + Select the toggle hide/show button to the right of the title.
  + Notice that the title disappears from the slide but is still in the outline view.

## Reading Order

* Screen readers read the elements of a slide in **the order they were added to the slide**.
* The **Outline** view is a quick way to check the reading order of your slides. Notice that tables, graphics and pictures will not show in **Outline** view.
* The **Selection Pane** helps you check the reading order. From here you can drag and drop to adjust the reading order of the slide.
* The reading order in the Selection Pane is from the **BOTTOM** up. The title should be at the very **bottom**.
* Avoid using the same title for slides. Spill over information (two slides to continue information) should be titled slide 1 of 2 and slide 2 of 2 or add the word “**continued**.”
* Avoid creating **Text Boxes** as they do not show up in Outline View – this means that when converting PPT to HTML there will be missing information. Also, if there is more than one **text box** on the slide the reading might be out of order for a screen reader. If you add your own **Text Boxes** be sure to check the reading order when you have the slide completed.

## Alternative Text (Alt text)

* Provide alternative text to help to communicate what is important in images and other visuals. Alt text provides a textual alternative to non-text content.
* The alternative text for an image might change immensely based on upon context.
* Images may have **content** and a **function**. In most cases the image will only have a **function** such as a button which activates a link. When an image has no **function** but providing **content** it is because it is not a link and is not clickable.
* To add alternative text right-click on the image and choose **Format Picture**.
  + Select **Size & Properties** icon
  + Chose **Alt Text**.
  + Enter appropriate text in the **Description** field only (not the **Title** field).
  + Do not select “**generate a description for me**” as the quality is usually very poor.
  + If the image is decorative, leave the field blank and check “**mark as decorative**.”
* Typically:
  + Be **accurate and equivalent** in presenting the same content and function of the image.
  + Be **succinct.** Typically no more than a few words are necessary, though rarely a short sentence or two may be appropriate. Limit yourself to 120 characters for simple images.
  + Don’t be **redundant** or provide the same information as text within the context of the image. Use a null alt text (alt=””)
  + Don’t use phrases such as “**image of**” or “**graphic of**” to describe the image.

## Links

* When PowerPoint automatically creates a hyperlink the URL may not make sense to a screen reader user, so you need to **make the link text descriptive**.
* Right-click the link and select **Edit Hyperlink**. Click in the Text to Display field at the top and enter descriptive text.
* If you are creating a presentation that is both printed out and visually displayed, you might want to include the full URL and a description in the link in the text.

## Tables

* Use the Table Tools to make tables accessible. Click inside the table to access the tools and then look at the **Design** tab.
* If the top row contains headers for each column, make sure the **Header Row** checkbox is checked.
* If the first column of the table contains headers for each row, make sure the **First Column** checkbox is checked.
* In the Table Styles section, select a style where the table headers are clearly identified visually and have **good contrast**.
* Avoid **overly complex tables** in PowerPoint. Do not use **blank cells** in a table. When needing a more complex table consider saving the presentation to **PDF** and adding the additional accessibility information in **Adobe**.

## Accessibility Checks

* Microsoft products have a built-in accessibility checker which can help the document author test the overall accessibility of the document.
* Select **File** and then **Info**.
* Select the **Check for Issues** button and choose **Check Accessibility**.
* When the issue is addressed, it will **disappear automatically**.
* Note that the “check reading order” never disappears as you must check this individually.

## Export to PDF

* Exporting to PDF will now ensure **heading structure** and other **accessibility** will remain intact. Users of PowerPoint for Mac should be cautioned that exporting to PDF will not yield an **accessible, tagged PDF document** and that must be remediated using Acrobat Pro.
* Using a PDF file to share with users is preferred because **the file size is smaller and distracting slide transitions are usually removed**.
* When you save as a PDF, open the **Options** and ensure both the “document properties” and “document structure tags for accessibility” are checked under **Include non-print information**. Select OK and then Save.
* Consider creating a **Word file** with all of the information you expect to convey. From that, create the PowerPoint to highlight points. Share the **Word file** so the audience gains all the knowledge you had hoped to convey.

## Website References

* <https://aphaccessibility.com/checklist-for-power-point-presentations/>
* <https://www.washington.edu/accessibility/documents/creating-accessible-presentations-in-microsoft-powerpoint/>
* <https://webaim.org/techniques/powerpoint/>
* <https://www.framingham.edu/Assets/uploads/about-fsu/accessibility/_documents/7-steps-accessible-ppt.pdf>