Why and How to Create a Universally Designed Microsoft PowerPoint

**Accessibility:**

Accessibility is a measure of how simply a person can participate in an activity. Accessibility continues to become more and more relevant to all of us. We use assistive devices without even thinking about it. For example, using handrails when going up and down stairs, holding on to a bar when taking transit, or using an automatic door opener when trying to carry multiple items through a door. While most forms of accessibility typically provide ways for most individuals to function in an environment, they often create separation between people who need accessibility features and those who do not. Universal design removes this separation and provides an environment that all people can use freely and without barriers. Universal design for learning (UDL) is a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn.

**Purpose:**

Taking a Universal Design for Learning approach to PowerPoint will help avoid technological barriers that may hinder student’ ability to obtain important information. The following techniques can help you reach the maximum number of students with a presentation designed for all class participants.

**Use one of the PowerPoint templates. These templates were designed to be accessible by using slide design, colors, contrast, fonts and font sizes for all audiences. They are also designed so that screen readers can easily read the slide content.**

Templates can be used by completing the steps below:

* Open up PowerPoint
* Click on Theme
* Click on the template you would like to use
* Do not add text boxes. The text in added text boxes will not be read by a screen reader.

**Use Outline View**

* Each major heading of outline represents title of new slide.
* Indented lines below each heading become bullet points.
* Ensures elements of each slide are visible and organized appropriately.
* Screen readers read from outline view. If content does not show in outline view, it will not be read.

**\*NOTE –text added in a new text box is not read through a text reader and is often omitted when the document is exported to a Microsoft Word, Adobe PDF, or HTML format.\***

**Using Graphics and Images**

* Add Alternate Text to images to assist students who cannot see the images.
  + Adding alternative text to photos is a principle of web accessibility.   
    Visually impaired users using screen readers will be able to understand an on-page image. Follow the steps below to add alternative text to your power point:
    - For a shape, picture, chart, SmartArt graphic, or other object, right-click the object, click **Format Object**, **Format Picture**, **Format Chart Area**, or other, and then click **Alt Text**.
    - For an Excel PivotTable, right-click it, point to **PivotTable Options**, and then click**Alt Text**
    - In the **Description** box, enter an explanation of the shape, picture, chart, PivotTable, SmartArt graphic, or other object.
    - If you want, in the **Title** box, enter a brief summary. This box should only be filled in if you are entering a detailed or long explanation in the **Description** box
* Explain graphics directly on the slides where they appear.
* Describe your images in the Note Pane.

**Narrated PowerPoint Presentations**

* Script narration first and focus on adding detail to what is already on slides.
* Include script in the Notes Pane

**\*Notes – for best results when recording audio, use a head set to provide consistency in volume\***

# **More Tips for Universal Design, Usability, and Accessibility**

* Do not rely on color or font changes alone to convey important information.
* Keep the background simple to ensure a high contrast between background color and foreground text.
* Make sure charts and graphs can be understood, even if copied or printed in black and white.
* Hyperlinks should clearly convey where they will take the user and what will be achieved by following the link.
* Use fonts that are clear and not overly ornate.
  + San serif fonts like Arial and Verdana are best for headings and text viewing on screen.
  + Fonts with serifs, such as Times New Roman and Garamond, are better for body text and printed documents.
* Font size should be large and readable by people who have vision impairments.
  + Use a minimum font size of 13 points.
  + For audiences of 40-99 people, use at least 28 points.
  + For audiences of more than 100 people, use a font size of 36 points or larger.
* Explain any background context that might be crucial to understanding.
* Define acronyms upon first usage, and avoid using slang, jargon, or ambiguous terms that limit universal understanding.
* Each image should have alternative text or be described in the text of the slide (refer to alternative text above).
* Videos should be captioned, described, and transcribed.

**Before sharing your PowerPoint with your students, use the built in Accessibility Checker to check the document for any accessibility issues. Follow the steps below:**

* Click on File in the top left hand corner.
* Click the “Check for Issues” box
* Click check accessibility
* If issues are noted in the dialog box, edit as stated, run accessibility checker again. If there are no issues, great!

**For more information on accessible templates please refer to the links below:**

* <https://webaim.org/techniques/powerpoint/>
* <https://it.wisc.edu/guides/accessible-content-tech/create-accessible-documents/>

**References:**

<http://accessproject.colostate.edu/udl/modules/powerpoint/mod_ppt.php?display=pg_1>

<http://www.cast.org/our-work/about-udl.html#.XIFY-iJKiUk>

<http://www.accessibleuniversity.com/accessibility-basics/defining-accessibility>

<https://support.office.com/en-us/article/add-alternative-text-to-a-shape-picture-chart-smartart-graphic-or-other-object-44989b2a-903c-4d9a-b742-6a75b451c669#bkmk_o2016_2013>

<https://support.office.com/en-us/article/make-your-powerpoint-presentations-accessible-to-people-with-disabilities-6f7772b2-2f33-4bd2-8ca7-dae3b2b3ef25>