

# Tips for Creating Accessible Documents

## Accessibility

Accessibility is making information technology resources and services available in a usable format for all students, employees, guests and the general public regardless of disability.

LSU now requires all documents that are published on the internet, used in online courses, emailed to students, employees, guests or the general public to be accessible.

## Assistive Technology

Assistive technology is software or a device that assists a person in accessing information. One example of assistive technology is a screen reader. Screen readers allow blind or visually impaired person access to information by having the screen reader read to them.

## Microsoft Office Documents

### Font, Color and Meaning

- Use basic fonts such as: Calibri, Arial, Franklin Gothic, Helvetica and Proxima Nova.
- Sufficient contrast between the text and the background.
- Color alone should never be used to imply meaning. Color can be used to express meaning, but it should also say "important." Or some other designation that can be read by the screen reader.
- If designating something with color such as red and blue, you may also want to add a shape to designate the difference. Red and blue may not be seen by people with color blindness.

## Images and Alternative Text

- Alternative text (Alt text) is used to provide a non-visual means of representing the content or function of an image. **All images must have it.**
- In the Alt text box title is not needed; but you should always use the description field to include what the person should learn from the picture.
- Best Practices in Alternative Text
  - Accurate and equivalent – Present the same content or function as the image.
  - Succinct – Only a few words are necessary (max 125 Characters).
  - Redundancy – Do not provide information that is in the surrounding text.
  - Descriptive Phrases – Screen readers identify images by type. Do not use descriptive phrases such as “image of...” or “graphic of...”

## Running the Accessibility Checker

The accessibility checker assists with finding accessibility errors in Word, PowerPoint and Excel. The checker can find a number of errors, but it cannot find every error.

- Errors are the most serious problems and should be addressed before the document is considered accessible
- Warnings point out content that is difficult to read.
- Tips identifies content that people might find difficult to read.

## Start in Microsoft Office and Save as PDF

- Use the save as PDF option to inherit metadata and tags defined in the source document. Once saved, PDF will be accessible. Print as PDF does not create an accessible PDF.

## PowerPoint Presentations

### Building Structure

- Outline View – Use the outline view to see presentation structure. The outline is the initial steps in establishing the reading order of the presentation.
- Templates and Themes – Keep in mind the contrast color between the background and font and avoid textured backgrounds. Busy backgrounds may make text harder to read for some individuals.
- Slide Layouts – Use the built-in slide layouts rather than blank slides with added text boxes. Slide layouts contain places for titles and content placeholders.
- Titles – Each slide should have a title which are presented as headings and will be the first thing read on each slide.
- Reading Order – Screen readers will read the slides by the set reading order. The reading order can be found under: **Home > Arrange > Selection Pane**. The pane will appear to the right of the presentation window. Reading order can be rearranged by dragging and dropping the items in the reading order.

### Presentation Features

#### Motion, Blinking and Transitions

- Motion – Any content that blinks flashes or moves across the screen. Content that blinks or flashed more than three times a second can trigger a seizure in individuals with epilepsy disorder.
- Animations can be distracting to those with cognitive disabilities. It is ok to use animation to control the items in a list. Allow one item to appear discuss it, then allow the next item to appear discuss it and so on.
- Animation and motion should be used sparingly and only to enhance the presentation. LESS IS MORE!

#### Slide Layout/Content

- Columns - Use either the two content or the comparison layout for side by side content place holders. A screen reader will read the entire first column before going to the next column.
- Pictures and Images - Alt text must be added to images so that screen readers can identify the image. Right click on the image, go to photo properties and then alt text.
- Charts - Chart should be simplified or split it into two or more charts to make the chart smaller and easier to understand. A full description can also be added to the speaker notes on the slide. It should be noted in the alt text to “see full description in the notes of the slide”.
- Graphs can present issues for people with low vision or to those sitting in the back of a large lecture hall. Darkening the lines and make them thicker is helpful. Labels and numbers should be at least 18pt.
- Tables – Tables can easily be added to a presentation but require some specific formatting.
  - Column headers, row headers or both
  - Do not leave any cells blank
  - Do not merge or split cells
- Smart Art - Illustrate a process or relationship. Add alt text for the full graphic, then add alt text to each section of the graphic.
- Multimedia Content - All videos must be captioned. Videos may also require description

## Word Documents

### Image and Alternative Text

- Alt text can be provided in multiple ways in Word documents:
  - Use the **Description** field in the **Alt Text** field
  - Provide information about the content or function of the image in the surrounding text.
  - When the equivalent text cannot be provided succinctly in text near the image, you may link to another section of the document (e.g. an appendix) or to an accessible web page.

## List and Columns

- Use the lists item in the styles pane.
- Can define a new list bullet if needed.
- Columns should be created using the columns tab in the styles menu. Screen readers will read the columns just like a newspaper. From top to bottom and left to right.
- The tab key should not be used to create columns as the screen reader, will read over the tab and not read all of the information.

## Descriptive Hyperlinks

- Use descriptive link text that does not rely on context from the surrounding text.
- Keep the amount of text in the link to a minimum.
- Use underlined text with a color that stands out from the surrounding text.

## Charts and Tables

- When adding a more complex image such as a chart or table. The alt text should say the title of the image with some details
- Some charts such as pie charts or bar graphs can be made more accessible by creating a simple table that provides the same information.
- When creating a table always use the built-in table tool under insert.
- Identify the header row. When a table goes on to another page the header row will be repeated on the next page. This also helps the screen reader navigate the table.
- Make sure that none of the rows break across pages.

## Excel Spreadsheets

- Follow Contrast Guidelines. Best practice use black on white
- Provide Descriptive Titles for Worksheets and Tables. Worksheet names can only be 31 characters long and cannot include / and [ ]. Table name have no character limits but should tell the reader exactly what the table is about. The table name should be in the first column of the first row of the table and can be merged into one cell.
- Provide Row and Column headers. Always provide a header even if you feel the title is obvious.
- Do not leave cells blank. If the cell has no data, put in “this cell intentionally has not data” or “no data”. This text can be colored to match the background so that only the screen reader can see it.
- Check Hyperlinks. The link should only include the web address. Be sure all links work and include a screen tip.
  - Screen Tip Check: Right click on the cell, select hyperlink, select screen tip at the top right. In the dialog box type a meaningful explanation of where the link will take the reader.
- Insure the print area is set correctly. Select the entire table including headings. Select the page layout tab, then select print area and set print area.
  - To hide extra rows and columns that are outside of the print area: Highlight rows or columns, press Shift + End (press and release), then press End. Then right click on the area and select hide.
- Delete unused worksheets. Right click on the unused worksheet and select delete and confirm in the dialog box.
- Run Spell check. Only one worksheet can be checked at a time.
- Fill out document properties. From the file tab, select prepare for sharing and a properties tab appears. Editing can be done in this tab.
- Provide Help Text for navigation in cell A1. This text can include instructions such as press tab to navigate through the cells. This text can be set to match the background, so it can only be seen by the screen reader.
- Resize the row and merge cells where you wish to insert the chart. In the cell where the chart is type in the description. Hide the text to match the color of the background so that the text will only be read by the screen reader.

- Avoid blank rows and columns. If there are two or more tables on a worksheet, leave one blank row and resize the blank row if desired.
- It's ok to have merged cells in titles, but not ok in the data.
- Designate the end of a table. Type "end of worksheet" immediately after the last row of your table. If you wish you can hide the text by changing the color to match the background.
- Define the title region. In basic mode a screen reader will read from left to right, one row at a time, just like reading a book. When reading a table, we may want the screen reader to identify the row header, then column header and then the value. We can set this to happen within Excel. There are three things we must know:
  - Is this the first or only table in the worksheet?
  - What are the addresses of the top left and the bottom right cells of the worksheet?
  - Is this the first or only worksheet in this workbook?
- Select the top left cell in the table, but not the title. Go to the formulas tab in the ribbon and select name manager in then define names group. Select new in the top corner. In the name field type – TitleRegion, then put a 1 if this is the first table on the worksheet. Then a period, then the range of cells from the top left to the bottom right with a period in between, then another period, then the worksheet number.

Example: **TitleRegion2.C12.F18.3** defines the C12-F18 range on the 3<sup>rd</sup> worksheet tab as the 2<sup>nd</sup> table on that worksheet tab.

- If the table only has one column region, define the name as columnTitleRegion instead of Title Region.
- If the table only has one row header define the name as RowTitleRegion and the rest is the same.
- If you move the table around or changes to the header, you will have to recode the title parameters.
- Wait until you are finished with the spreadsheet before entering the coding for your title region.
- Don't forget to save the document!

## Resources

For more information about accessibility guidelines please go to [Webaim.org](http://Webaim.org).