Creating Word Documents which are Accessible for Screen Readers

Create Properly Formatted Titles and Paragraph Headings

It is important to create uniform headings in your document so that a screen reader can navigate the document and the reader can understand how the document is structured. When you create a heading in a document, such as a title or a paragraph heading, it is not enough simply to bold the text or increase the font size. A screen reader cannot “see” the bold letters. Always use the “Style” tool in Microsoft Word. The Style tool enables you to create consistent headings so that an individual can follow how your document is organized.

Instructions for Word 2007 and above on PCs

• Select your heading text.
• Using the Style tool at the top of the menu bar, click on the appropriate style (e.g., Heading 1, Heading 2, etc.). The document title should be marked as Heading 1. Major topic headings should be Heading 2. Subtopic headings should be Heading 3. Sub-subtopics should be Heading 4, and so on. Do not skip heading levels.

Instructions for Macs

• The Style menu can be found in the Formatting palette.
Create Properly Formatted Lists

- If you need to create a list in a document, use the appropriate button (e.g., bullets and numbering) on Word’s formatting toolbar. Avoid making lists with just dashes or asterisks; otherwise a screen reader may not be able to read the list in the proper order.

A properly formatted list would look like the ones below:

- Apples
- Bananas
- Oranges

Or

1. Apples
2. Bananas
3. Oranges

Create Properly Formatted Tables

In order for a person who is using a screen reader to understand your table content, you must specify the column headings in Word.

If you are using Word 2007 and 2010 on a PC

- Click anywhere in the table.
- Go to the Table Tools Design tab at the top of the page. Check the Header Row check box.
- Type (or retype) your column headings.
- Press the Enter key.
For Tables that span more than one page

- Mark the row with the column headings in the table properties as “Repeat as header row at the top of each page.”

In Word for Windows:

- Right-click on the first row of the table.
- From the context menu, select Table Properties.
- Click on the Row tab.
- Click on the “Repeat as Header Row...” checkbox.

In Word for Macs:

- Open the Table menu.
- Choose “Heading Rows Repeat.”
- For Tables with Both Row and Column Headers
  - Place the insertion point in a cell where the row and column containing the headers meet.
- Open the Insert menu and choose Bookmark.
- Type “Title” (without the quotes) and press ENTER.

For Tables with Only Row Headers

- Place the insertion point in any cell within the column containing the headers.
- Open the Insert menu and choose Bookmark.
- Type “RowTitle” (without the quotes) and press ENTER.
- For Tables with Only Column Headers
  - Place the insertion point in any cell within the row containing the headers.
  - Open the Insert menu and choose Bookmark.
  - Type “ColumnTitle” without the quotes and press ENTER.
  - Tip: Do not place a bookmark in each cell that contains a header. A screen reader will recognize all cells in the marked row and/or column as a header.

For Documents with Multiple Tables

- Microsoft Word does not allow two bookmarks to use the same name.
- If there is more than one table in your document, add a number or descriptive word to the end of the bookmark text used to indicate headers. (Example: RowTitle Animal.)

<table>
<thead>
<tr>
<th>Animal</th>
<th>Vegetable</th>
<th>Fruit</th>
</tr>
</thead>
<tbody>
<tr>
<td>monkey</td>
<td>carrot</td>
<td>apple</td>
</tr>
<tr>
<td>cat</td>
<td>spinach</td>
<td>orange</td>
</tr>
<tr>
<td>dog</td>
<td>broccoli</td>
<td>banana</td>
</tr>
</tbody>
</table>
Create a Description of Your Table

- For Word 2010 on PCs, right click on the table and choose “Table Properties.”
- Under the Alt text tab, insert your description in the “Description” area.
- If you do not have Word 2010, create a concise description of your table in your text. It’s best to place this description above the table, so the reader can read it prior to encountering the table.

Describe Graphs and Charts

- If you place a graph or chart (e.g., bar chart, pie chart) in a document, include text that describes the content of the chart in detail. While the data that is used to create the chart will be accessible in the original file (it is basically a simple spreadsheet), it will not be included in a PDF or HTML version. You need to provide the narrative that describes the chart. You can also create “alt” text using in some of the most recent versions of Word.
Using Word 2007 and 2010 on PCs

• To add a caption, right click near the edge of the chart, graph or table and choose “Insert Caption.”

• In the Caption dialog box, type in a short description.
To Add Alternative Text

- The option for adding alternative text to a chart or graph is not turned on by default. First, you need to make the feature available and then add the alternative text description. To enable alternative text, navigate to the fly-out menu (known as the Quick Access Toolbar) at the top of the ribbon and choose “More Commands.”

- Select “Customize on the left (Word 2010 users will see the “Quick Access Toolbar”). Use the drop-down menu “Choose commands from” and select “Commands Not in the Ribbon.”
• Select “Alt Text” and the “Add” button to add the option to your Quick Access Toolbar.

• You will now have easy access to alternative text for charts and graphs from the Quick Access Toolbar.
• Highlight the chart or graph and click the alternative text button that you just set up in the Quick Access Toolbar. Select the "Alt Text" tab and insert an alternative text description. Word 2010 users will type the description in the "Description" box.

**For Mac Users (Word 2004 and 2008)**

• To add a caption, right click near the edge of the chart, graph or table and choose “Insert Caption.”

• In the Caption dialog box, type in a short description.
To add alt text:

- There is currently not a way to add alt text to a chart or graph using Word 2004 or 2008 for Mac.

**Label Images and WordArt with “Alt” Text**

- If you insert pictures, WordArt, or other images in a Word document, you must label them using the “alt” text feature in Word. A screen reader will stop on the image and read the alt text that you have written.

**In Word 2007 and above:**

- Select the picture and right click on it.
- Select “Format Picture.”
- Click on the Alt Text Tab.
- Type text that describes the picture, e.g., “Koala bear facing the viewer.” Be brief, but thorough. It is not necessary to begin your “alt” text with “Picture of…” A screen reader will preface the “alt” text with “Image.”
**Rename Hyperlinks**

- The name of the hyperlink needs to accurately describe the source. Avoid pasting a link that is convoluted and nonsensical to a screen reader, like this:
- Instead, rename the link, so that it accurately describes the content of the website:
  - Swarthmore College Student Disability Service

**To rename a link:**

- Right click on the link.
- Choose edit hyperlink.
- In the next display box, type a more appropriate description in the box at the top marked “Text to Display.”

![Edit Hyperlink dialog box](image)

**Run an Accessibility Check of your Document**

- Word 2010 comes with a new accessibility check so that enables you to identify any accessibility problems your document may have. To test your document:
  
  Select File > Info > Check for Issues > Check Accessibility

- **Note:** this option is not available on Mac’s using Word 2011
• A dialog box appears on the right after the checker runs through the document presenting the accessibility errors. Feedback on each item, as well as tips on how to make the proper repairs, are included. Selecting an item in this report will take you to that item in your document.
Sources

- Georgia Tech Center for Assistive Technology and Environmental Access
- Freedom Scientific Webinar Archives
- Michigan State University Web Accessibility
- Accessibility and Usability at Penn State
- Web Accessibility in Mind Website - WebAim