

## 5.4.7 Creating an accessible document

### Simple Language

Keep content simple and direct, and avoid jargon to make communications more effective.

People with disability are more likely to have reading difficulties. For example, a person who is profoundly Deaf may have Auslan as their first language and English as their second language.



### Text format

For people who have dyslexia or have low vision, reduce the reading load to make your communications easier to understand:

- Avoid excessive use of formatting. Excessive use of bold, italic and underline can render text more difficult to read.
- Avoid excessive use of CAPITALS. It is difficult to read and infers that you are shouting at the reader.
- Avoid the use of justified text. Justified text creates large uneven spaces between letters and words. When these spaces line up above one another, a distracting river of white space prominently appears. This can cause dyslexic readers to lose their place repeatedly.
- Avoid the use of serif fonts. Serif fonts have feet or hooks at the ends of the letter strokes. They may look decorative, but they can cause reading problems for people with dyslexia. Serif fonts tend to obscure the shape of letters, making them run together. Sans serif fonts help users see the shapes of letters more clearly. This also increases the spacing between letters, making words more distinguishable.
- Ensure font size is sufficient. The minimum font size should be about 12 points. At smaller sizes, the text becomes illegible on a screen.

### Check documents for excessive formatting

Inspect the document for more than one sentence of italic, underlined or capitalised text. Update the content so that only the emphasised part of the paragraphs are bolded.

- Check documents for justified text.
- Inspect the document for text that is aligned to both the left and right margins.
- Check documents for serif fonts.
- Inspect the file for text that has hooks at the ends of the letters.

### Colour contrast

Ensuring good contrast between foreground and background colours is important for users who have low vision or colour blindness. Ensure the document has text/background colour combinations with a contrast ratio of at least 4.5:1, unless it is large text (18 point unbolded or at least 14 point bolded) where a reduced contrast ratio of 3:1 is required.

Vision Australia has a Colour Contrast Analyser tool to assist with the selection and testing of ratios.

## Use the Colour Contrast Analyser

1. Select the foreground eyedropper icon.
2. Hover the magnifier over the foreground text and select.
3. Select the background eyedropper icon.
4. Hover the magnifier over the background and select.

## Use of colour

Colour used to highlight or call attention to content can assist sighted users. People who use a screen reader, however, are likely to miss out on this information as screen readers do not communicate colour changes. In addition, some sighted users who have trouble seeing colours may also miss out on information conveyed through colour.

Whilst the use of colour is encouraged, it must not be the sole method of communication. Use an additional method of conveying the same information such as including text, a shape or symbol.

## Check a document for use of colour

- Inspect the document for elements that use colour alone to highlight or call attention to content.
- Update the element to include another sensory characteristic such as text, shape or symbol. If you choose to use a shape or symbol, ensure to add alternate text to the image.

## Headings

When headings are implemented correctly, tags are attached to each heading level. This allows the screen reader to announce the heading level of the text. This hierarchy helps people map the structure of the content in their mind; it communicates the most and least important information and how sections of information relate to each other. It also helps those with cognitive impairment, learning difficulties or literacy issues understand the structure of a document.

Use the true heading styles to indicate the hierarchical level of headings in the document. True heading styles are available within the Home ribbon in Microsoft Word.

## Use true heading styles

1. Click in the heading text.
2. Select a heading style from the Home tab Styles group.

## Numbered and bulleted lists

Lists are simple but useful because they provide meaning to information in a document. For example, lists can help a person who is blind to build a mental map of the information. Screen readers include shortcuts for navigating through list content.

Remember not to create a custom list using symbols and increase indent. Screen readers will not be able to detect the text as a list.

## **Implement numbered and bulleted lists**

- Use the true numbered/bulleted list function in Word to make lists accessible instead of indenting and putting a dash or dot character. Choose a list style under Home in Microsoft Word.

## **Blank lines**

Spaces, tabs and empty paragraphs may be perceived as blanks by people using screen readers. Navigating through multiple consecutive blanks adds unnecessary screen reader noise to the page. In addition, a user may think they have reached the end of a document after encountering a long list of blanks.

Use formatting, indenting, and styles to create white space instead of repeating blank characters.

## **Create paragraph spaces and insert a page break**

- Instead of creating space between paragraphs by inserting blank lines, use the Line Spacing Options under Home.
- Instead of moving content to a new page by including multiple blank lines, insert a Page Break (under Insert).

## **Data tables**

Sighted users can gain a holistic view of information when associating a table header with its data cell. However, if a table is not optimised for accessibility, screen readers will not announce cell data with its associated headers. This makes it difficult for blind users to perceive tabular content.

There are three types of simple data tables:

1. Column tables: the first row, going from left to right, contains table headers.
2. Row tables: the first column contains the table headers.
3. Combination tables: combination tables contain both column and row headers.

Once you have defined whether your data table has column headers, row headers or both, you can apply the correct techniques to enhance the accessibility of your data table.

### **Identify the column headers of tables:**

1. Select the first row of the table.
2. Right-click on the selected row.
3. Select Table Properties then Row.
4. Tick the “Repeat as header row at the top of each page” option.

## Make tables accessible for Job Access With Speech (JAWS) users

For tables containing column and row headers:

1. Select the cell where column headers meet row headers.
2. Select Insert then Bookmark.
3. Enter "Title" in the Bookmark Name field.

For tables containing column or row headers only:

1. Select the column or row containing the headers.
2. Select Insert then Bookmark.
3. Enter "RowTitle" (for row headers) or "ColumnTitle" (for column headers) in the Bookmark Name field.

Remember, 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. For example:

- Title\_1
- RowTitle\_Revenue
- ColumnTitle\_Expenses

## Complex tables

In Word screen readers are only capable of associating a data cell with up to two table headings (i.e. simple data tables).

A complex table has more than two sets of table headings making navigating and understanding the table difficult.

We recommend creating a set of simple data tables instead of one complex table.

## Alternative text

People who are blind are not able to access information conveyed visually through images. A screen reader will identify an image on a page and announce the alternative text (alt-text). The alt-text should be meaningful and convey the purpose of the image.

## Decorative images

Decorative images do not convey information; they are included in a document purely for aesthetic purposes. You should be able to remove a decorative image without affecting the meaning, information or content of that page.

## Provide alternative text for images

1. Right-click on the image.
2. Select Format Picture then Layout & Properties then Alt Text.
3. Enter a text description in the Description field.
4. Include a summary in the Title field (optional).

## Charts and graphs

Complex images contain substantial information, more than can be conveyed in a short phrase or sentence. It may not be appropriate to describe a complex image in alt-text as the description will be too long. Instead, implement the following techniques:

1. State the image type at the start of the alt-text, e.g. a chart.
2. Include the title of the complex image (e.g. chart) in the alt-text, e.g. Number of coffees consumed yearly by DCJ staff 2013 to 2018.
3. Include in the chart's alt-text the location of where a text description can be located, e.g. read below for more information.
4. Provide a text description in the content below the image.
5. Provide an associated accessible data table.
6. If using a legend choose a colour scheme with a high contrast ratio and use additional visual cues.
7. Choose colours with a high contrast ratio and use additional visual cues.

Some users find it difficult to perceive differences in colours and cannot access information that is conveyed solely through colours. Therefore, it is necessary to ensure adjacent colours on a graph or chart present a contrast ratio of 4.5:1 and communicate the same information via additional visual means. Additional visual cues (e.g. different patterns) must be used to distinguish between data sets.

## Diagrams and illustrations

Depending on the complexity of the image it is not always possible to place the text alternative in the content directly below the image (nor would it make sense to sighted users).

In these situations we recommend placing the text alternative in the Appendix. Place a link from the flowchart to the text alternative and place another link from the text alternative back to the flowchart.

## Table of contents

A table of contents makes it easy for users to quickly navigate to a section of your document. Each item in your table of contents links to sections of your document that use the heading styles.

Sighted keyboard-only users and screen reader users will rely on a linked table of contents to efficiently navigate long documents.

Inserting a table of content:

1. Select References then Table of Contents.
2. Choose a style.

## Accessibility checker

The Microsoft Accessibility Checker helps to quickly identify and resolve many common accessibility issues. This tool helps content authors test content before they publish it. The Accessibility Checker detects common accessibility problems such as missing alt text and the inclusion of styles.

The inspection results are categorised as:

- Errors: Indicate content that people with disability are unable to read.
- Warnings and Tips: Indicate content that people with disability might find difficult to read.

Launch the Accessibility Checker

1. Select File then Check for Issues then Check Accessibility.
2. Select the first Error, Warning or Tip.
3. Refer to Additional Information for instruction on how to fix the accessibility issue.

### 5.4.8 Creating Accessible PDFs from Word Files

Adding accessibility tags to PDF files makes it easier for assistive technologies to read and navigate a document, with a table of contents, hyperlinks, bookmarks, alt text, and so on.

There are two methods you can use to convert accessible Word documents to PDF.

1. Using the Acrobat PDFMaker add-in; to access the add-in the Acrobat Pro or DC software must be installed.
2. Save an accessible PDF using the Office feature.

By using the techniques outlined in this factsheet most of the structure added to your Word document will be maintained in the PDF output in the form of tags.

Note that the PDF output will still need to be updated to comply with the Web Content Accessibility Guidelines (WCAG) 2.0 which can be done using the Acrobat Pro or DC software.

### How to: Export to PDF using Acrobat PDFMaker add-in

Set accessible options in PDFMaker Settings:

1. Select Acrobat then Preferences.
2. In Acrobat PDFMaker select Settings.
3. Tick the Create Bookmarks, Add Links and Enable Accessibility and Reflow with tagged Adobe PDF options.

Select accessible options in PDFMaker Security

1. Select Acrobat then Preferences.
2. In Acrobat PDFMaker select Security.
3. Tick the Enable text access for screenreader devices for the vision impaired option.

## Converting Documents using PDFMaker

1. Select Acrobat then Create PDF.

If you do not have the Adobe add-in (PDFMaker) installed, use the following method.

### **How to: Export to PDF using Office Save As**

1. Go to File then Save As.
2. Select Save as type then PDF (\*.pdf).
3. Select Options.
4. Select Document structure tags for accessibility.