

Document & Email Basics for Accessibility

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Introduction

This article focuses on actions you can take to ensure your written communication – documents and emails – are as accessible as possible. However, it is only a high-level overview. For step-by-step instructions and more information, links to relevant articles are provided throughout. The tips in this article apply to any word processor, not just Microsoft Word.

The POUR Principle

Web Accessibility follows a set of guidelines put forth by the World Wide Web Consortium (W3C). These guidelines are based on the “POUR” principle, which stands for Perceivable, Operable, Understandable, Robust. The POUR Principle states that content must be:

- **Perceivable:** Information must be presentable to a user in a way that they can discern regardless of which senses a person has use of.
- **Operable:** The user interface and navigation components need to be able to be used by everyone, including people who don't navigate using a standard mouse.
- **Understandable:** Information must be presented in a way that is clear to all users.
- **Robust:** The content supports and can be accessed by a variety of devices, including assistive devices.

Best Practices

Below are some best practices to ensure that you are creating an accessible document. Behind each title you'll see which part of the POUR principle each practice speaks to.

Use Accessible Language (Understandable)

Using plain language and avoiding jargon is one of the number one strategies you can use to ensure your message is accessible to as broad an audience as possible. This is beneficial for folks who live with learning disabilities or cognitive challenges, who experience anxiety or even for

folks who speak English as a second language or who are new to the subject matter.

Use Consistent Formatting and Layout

The formatting and the layout of the text become a language that conveys information in and of itself, for example indicating important sections, hyperlinks, step-by-step instructions, etc. If the formatting and layout are not consistent, you lose that information, and it becomes meaningless.

Use Headings and Styles (Perceivable, Understandable)

Titles, subtitles, and headings allow a document to be scanned, either visually, or with a assistive technology, such as a screen reader. For this to work, it's important to only use the build-in styles for their intended purpose, for example:

- Only use the title and subtitle styles for the title and the subtitle of the document,
- Use headers for in-text headers instead of re-using the subtitle style,
- Do not use headers out of order (i.e. header 2, header 1, header 3) and do not skip any levels (i.e. header 1, header 3)

Headings are intended to explain what a section is about. Organize the information in your document into small chunks. Ideally, each heading includes only a few paragraphs.

To see if the structure of your document is logical, scan the table of contents for anything that feels disjointed or out of order. This will be the same structure a screen reader follows.

▶ [Click here for more information on using heading styles.](#)

NOTE: Different styles can look the same but using the right style in the right place ensures a screen reader user can make sense of the document.

Consider Text Alignment (Understandable)

Center-aligned text, or otherwise unconventionally aligned text, can add to the reading load for people with dyslexia. Text, especially in emails or on

web-pages, should be left-aligned because otherwise the spacing within the line becomes difficult to read.

It may be tempting to justify the text because it creates a more professional look with neat and clean edges. But consider that justifying text means spreading out the words on the line to span the whole line, it means there might be big gaps between the words. This becomes more noticeable the shorter the line of text is side to side, for example if you have several columns. Sometimes these gaps line up and form what's called "rivers" within the text. The design element of clean lines should be sacrificed in favour of accessible text.

Lastly, the "jagged" right edge actually makes the text easier to read because as the reader's eye is scanning each line, it's easier to find the next line if the lines are of uneven length, especially for dyslexic readers.

▶ [A designer's notes on justifying text](#)

Adjust Spacing (Understandable)

People with dyslexia sometimes experience text "swimming together" on a page. They often see text merge or distort. To reduce the reading load, you can increase white space between sentences and paragraphs.

▶ [Adjust spacing and indents in Word](#)

Create Accessible Lists (Perceivable, Understandable)

To make it easier for screen readers to read your document, organize the information into small chunks such as bulleted or numbered lists.

Design lists so that you do not need to add a plain paragraph without a bullet or number to the middle of it. If your list is broken up by a plain paragraph, some screen readers might announce the number of list items wrong. Also, the user might hear in the middle of the list that they are leaving the list.

Avoid Tables (Understandable)

In general, avoid tables and present the data another way, like paragraphs with headings. If a table cannot be avoided, follow these guidelines:

1. **Do not nest tables within tables and don't merge or split individual cells.** Screen readers navigate a table by counting the cells. If a table is nested within another table or if a cell is merged or split, the screen reader loses count and can't provide helpful information about the table after that point. If you can tab through the table from the top left cell to the bottom right cell smoothly, column by column and row by row, then a screen reader can navigate it as well.
2. **Avoid blank cells.** Blank cells could also mislead someone using a screen reader into thinking that there is nothing more in the table.
3. **Do not force tables to a fixed width.** Tables with fixed width might prove difficult to read for people who use Magnifier, because such tables force the content to a specific size. This makes the font very small, which forces Magnifier users to scroll horizontally, especially on mobile devices. Make sure the tables render properly on all devices, including phones and tablets.
4. **Use column headers.** Screen readers use header row information to identify rows and columns.
5. **Add Alt-Text to tables.** Alt-text explains what a table is about to someone who has a visual disability much like it describes an image.

► [How To Create Accessible Tables](#)

Add Meaningful Hyperlink Text (Perceivable, Understandable)

1. **Ensure hyperlinks are noticeable.** By default, they are underlined and blue. You can manually change how they look by using the standard Word formatting, but it is recommended that you keep hyperlinks underlined so that a person who is colour blind can tell the text is a link. If you change the colour of the hyperlink, use colour that is different enough from the colour of the regular text to stand out and always use the same colour for all hyperlinks.
2. **Rename hyperlinks.** Do not just copy and paste the link the way it is. Not only is it ugly –some links are long and include unnecessary tags like where you clicked on the link – but also, it's tough for users of screen readers because the screen reader might read out a URL letter by letter: "H, T, T, P, colon, slash, slash, w, w, w, etc."

- a. Use the title of the page you are going. If the page doesn't have a good title, write something descriptive of where the link goes.
- b. Avoid naming hyperlinks something generic like "click here", or "learn more". When a screen reader goes through the links, it will read: "Click here. Link. Click here. Link. Click here. Link."

▶ [How to Create or Edit a Hyperlink](#)

▶ [How to Make Hyperlinks Accessible for Screen Readers](#)

Avoid Information Only in the Header or Footer (Perceivable)

Headers and Footers are visible only in the Print Layout view and the Print Preview. People who use screen readers miss out on important information as screen readers do not scan Headers or Footers.

Use Accessible Font (Perceivable, Understandable)

1. **Use Accessible Fonts.** Some fonts are easier for some people to perceive but be more difficult for others. For example, the simplicity of a sans serif font may improve the readability of text for a user with a visual impairment while a user with dyslexia may find the characters difficult to tell apart. There are some fonts that have been designed specifically for accessibility, such as [Tiresias](#) and [OpenDyslexic](#), but fonts such as Arial, Helvetica, Open Sans, and Verdana are also good choices.

▶ [What are accessible Fonts?](#)

2. **Avoid using too many different fonts, font sizes or too much formatting.** Besides being poor design, using too many different fonts, using excessive formatting such as underlines or italics, or typing in all caps increases the cognitive load for the reader. In addition, for users struggling with anxiety, or ADHD, it may cause feelings of overwhelm to be reading a cluttered or busy looking document. A good rule of thumb is to think of these elements as a language that conveys information, i.e. underlined text is a hyperlink, bold text is something important.

Ensure Colour Contrast (Perceivable)

Poor color contrast affects people who are visually impaired or colour blind as well as those trying to view content in sunlight or in glare conditions, and

those who have dyslexia or other learning or cognitive challenges. When choosing colours to present text information the foreground to background contrast ratio should be a minimum of:

- **4.5:1** for regular text
- **3:1** for 18-point font and larger, or 14-point bold font

To test contrast ratio use the [WebAIM Contrast Checker](#) or [WCAG Contrast Checker](#).

Colour should not be used as the sole means of providing information. Individuals who are blind, visually impaired, or have certain types of color-blindness may not be able to discern information is being communicated by color alone.

▶ [Some examples for the use of colour](#)

Add Alt Text to Visuals (Perceivable)

Alt text is one of the biggest elements in ensuring accessibility of digital content. If a picture is worth a thousand words, what is it worth to people who cannot see? A lot of information is presented in form of an image, a chart or graphic. Sometimes entire studies are presented as infographics. People living with vision impairments miss out on key information if the visual elements do not have any descriptions. Such descriptions are called alt text (short for alternative text).

Using alt text, briefly describe the image, its intent, and what is important about the image. Screen readers read the description to users who can't see the content. The alt text shouldn't be longer than a short sentence or two—most of the time a few thoughtfully selected words will do. Do not repeat the surrounding textual content as alt text or use phrases referring to images, such as, "a graphic of" or "an image of."

PowerPoint automatically generates alt texts for photos, stock images, and the PowerPoint icons by using intelligent services in the cloud. Always check the autogenerated alt texts to make sure they convey the right message. If necessary, edit the text. For charts, SmartArt, screenshots, or shapes, you need to add the alt texts manually.

▶ [How to add alt text to objects on a slide](#)

► [Guide on writing effective alt text](#)

NOTE: Avoid using text in images as the sole method of conveying important information. If you use images with text in them, repeat the text in the slide. In alt text of such images, mention the existence of the text and its intent.

Email Specific Considerations

Below are some considerations for your written communication in emails. If you know the person you are emailing and you know their capabilities for perceiving and understanding, then you can disregard some of these pointers. However, if you don't know the audience, or it is a group of people you're writing to, these pointers will help create accessible emails.

Avoid Flashy GIFs

GIFs can be a fun addition to your email, but they can cause problems for people with photosensitive epilepsy, especially when they come across unexpectedly. If the GIF is on loop, which most of them are by default, it can be distracting for people with ADHD or who suffer from anxiety, and they'll find it hard to focus on the rest of the content.

Don't Replace Words with Emojis / Emoticons

You can use emojis in your emails and subject lines, but it's best to use them in addition and not instead of written content. If you just want to add an emoji to show the tone of the email or highlight a smile, that's fine. If you replace words or phrases of the email the reader might miss your point because not every email program will show emojis the same way and some older versions of email clients won't load newly added emojis. When that happens, the reader's email program will display a square as a placeholder for an emoji it doesn't know how to display so your message does not come across.

Consider Sending a Plain-Text Email

Plain-text emails are just text: no images, fancy fonts, or hyperlinks. They do not look as pretty as HTML emails but are important for accessibility. Some of the email service providers will autogenerate a plain-text version

of your email, but you can create one yourself by switching your email to plain-text manually.

This doesn't mean that there is no structure to plain-text emails; you want your email to look neat and not a messy chunk of text.

▶ [Change the email format to HTML, Rich Text Format, or plain text](#)

Using the built-in Accessibility Checker

The Accessibility Checker is a tool that reviews your content and flags accessibility issues. It explains why each issue might be a potential problem for someone with a disability. The Accessibility Checker also suggests how you can resolve the issues that appear.

In PowerPoint, the Accessibility Checker runs automatically in the background when you're creating a document. If the Accessibility Checker detects accessibility issues, you will get a reminder in the status bar.

To manually launch the **Accessibility Checker**, select **Review > Check Accessibility**. The Accessibility pane opens, and you can now review and fix accessibility issues.

▶ [Accessibility Checker Guide](#)

▶ [Accessibility Checker Video Walk-Through](#)

▶ [Accessibility Checker rules](#)

Closing

These are just a few basic considerations when creating documents or written communication. Accessibility is a big subject and there is more to explore. There are always new features coming out, so one of the most important things to do in order to create accessible presentations is to keep learning.