# Accessibility Guide

When creating content, there are a few basic steps that should be followed to assure your content is accessible. The core steps needed for accessibility are the same regardless of whether your document is in HTML, Microsoft Word, Adobe PDF, or another document format. The principles are the same for all document types, but the individual steps vary depending on which tool you’re using and what the final format of the document will be. There are some platforms that offer “accessibility help” including Microsoft Office and Adobe’s “Accessibility Checker” and Google’s add-in extension “Grackle” (at an additional cost as of this writing) that can help you identify areas that need correcting.

## Use Proper Headings

Headings provide screen readers and other assistive technologies the ability to navigate quickly between different sections or portion of a document. In word processing these are called *styles* and within presentation programs, the *placeholders* for slide titles and content serve the same purpose. Headings should form an outline of the page content (Heading 1 for the main heading, Heading 2 for the first level of sub-headings, Heading 3 for the next level of sub-headings, etc.). This enables screen reader users to understand how the page is organized, and to quickly navigate to content of interest. Most screen readers have features that enable users to jump quickly between headings with a single key-stroke.

## Use Lists

Any content that is organized as a list should be created using the authoring software’s list controls. Programs usually offer some form of bulleted or numbered lists. Use this feature rather than numbering or indenting manually. This helps screen readers understand how the content is organized. The screen reader informs the user that they are on a list and may inform them how many items are on the list, which can be helpful for the user when deciding whether to continue reading.

## Use Meaningful Hyperlinks

Links should convey clear and accurate information about the destination. Most tools allow the user to assign text to a link. Avoid typing out a full web address. Screen readers will read this letter-for-letter which is cumbersome for anyone using assistive technology. Instead, assign descriptive text and apply the web address to the text. For documents that will be circulated as print material, consider using a URL shortening service to create a customized and meaningful link. An example of using a meaningful hyperlink would be “find our resources on the [OTAN website](https://www.otan.us).” Instead of typing “find our resources on <https://www.otan.us>.”

## Add Alternate Text to Images

Using images in educational materials should always lend themselves to the topic being taught. Images used should always have a clear description (and be related to the learning). If images are only meant to be decorative, they should be marked as decorative.

Secondly, be sure to leave images “in-line” with text. Screen readers do not do well with images that allow text to wrap around the edges. For many users, the text is read accurately, but when the image is encountered, the alt-text would be spoken. However, if there are several lines of text surrounding the image, that image alt-text would be read multiple times by the screen reader, representing each line of text that is adjacent to the image.

## Identify Document Language

Screen reader software is multilingual, and can read content in English, Spanish, and many other languages. To make sure that screen readers will read a document using the appropriate language, the language of the document should be identified.

You should also identify the language of any content written in a language other than the document’s default language. This will allow supporting screen readers to switch between language profiles as needed on the fly.

## Use Tables Wisely

Tables are often used to format materials. Avoid this to help preserve accessibility in a document. Learn to use tabs, columns, and other resources within the software to place text and images. Use tables only to relay data information.

* Not used to control layout
* Keep it simple.
* Consider smaller multiple tables for complex information
* Clearly identify column and row headings

## Color Contrast

Color is used to emphasize text and other graphics with color and text together. It is important to be mindful that the difference between colors need to have enough contrast for those with visual impairments to be able to read and consume the information provided. Be proactive in your use of color to make sure there is enough contrast between the foreground and background colors. For example, putting black text on a light blue background is easy to read. But putting grey text on a light blue background could be much more difficult for someone with color blindness or other visual impairment to be able to read the information. When in doubt, consider using a tool like [Color Contrast Analyzer](https://www.tpgi.com/color-contrast-checker/) to verify that the colors used meet the requirements of contrast for accessibility.

## Preserve Accessibility When Converting to Portable Document Format (PDF)

Best practices for converting files to PDF is to use the “Save as PDF…” option available within the application. Be cautious though, if you do not have Adobe Acrobat Pro, it can be difficult to correct accessibility errors. There are a few tricks that can help maintain your accessibility efforts. One primary issue is what Adobe calls the “Title.” Typically, when the Adobe accessibility checker reviews the document, this is one error that must be manually corrected. The steps for this one correction are as follows:

* In Adobe Acrobat Pro choose File>Properties> the Document Properties dialog box opens. Choose the Description tab.
* In the Title box, enter the title of the document (not the file name, what you want the screen reader to read)
* In that same dialog box click the “Initial View” tab and then choose “Document Title” from the Show drop-down list.
* Click OK to close the dialog box.
* After these steps are followed, Adobe Acrobat Pro accessibility checker should not generate any errors.