

Accessibility in Drupal

Users with disabilities can make sense out of webpages if they are created with accessibility in mind, including:

Create structure in the document

Headings

Sighted people can skim documents by picking out big, bold headings on the page. Some screen reader users skip from heading to heading in a page, so they can also skim a document.

To make headings accessible to screen reader users, headings need to be marked up as such. When you are starting a new topic or section, use a heading to let the user know that's what it is. Headings need to be used in a hierarchy: Heading 1 should be the most important. Drupal automatically turns the title you type into a Heading 1. Since there should be only one heading 1 on a page, you cannot choose it again from the formatting drop-down. The rest of the headings can be used as often as you want if you keep them in the correct hierarchy. Think of the heading structure as an outline. Use logical heading levels to delineate main points and nest sub-points of your material. Heading 2 should be a sub-point of heading 1; a Heading 3 should be a sub-point of Heading 2, etc. Don't skip headings in the hierarchy, for instance don't jump from a Heading 2 to a Heading 4. Don't use a heading just because you want your text bold or big; only use headings to signal the end of a topic and the start of another.

Lists

Use true lists (bulleted or numbered) by using the bullet or number tool in your documents. A screen reader will announce that it's a list and also announce how many items are in the list.

Provide headers for data tables

Tables that are used to organize tabular data should have appropriate table headers (the <th> element). Data cells should be associated with their appropriate headers, making it easier for screen reader users to navigate and understand the data table.

Closed Captioning at UNI

Videos that the public can access or videos that are an accommodation for a student must be close captioned. YouTube uses automatic speech recognition (ASR) to generate automatic captions. These captions are estimated to be only 60-70% accurate, and regulations state that captions need to be 99% accurate. In YouTube, you can let the automatic caption generator do the initial captioning, then go in and fix errors. However, if you want your page to be indexed by

search engines like Google, you need to upload captions. We can create a caption file for you to upload if you share an mp4 video file with us. We can caption video for Google Drive as well.

Create Accessible Links

Many screen reader users have a list of all links on the page read to them. If a link is read out as a full URL, as in <http://www...> they will have no context as to where the link goes. Link words that could be understood out of context, instead of linking words like “Click here” or “Read more”. For instance, if you are linking to the UNI homepage, link the words "UNI homepage".

Linking to a Document

For new content, try to create a new Drupal page instead of linking to a document. If you must link to a document, be sure to make sure it is accessible. Also, let the user know what kind of document they are possibly downloading (put PDF, etc. in parentheses after the relevant text).

Ensure accessibility of non-html content, including Microsoft Word documents, PDF files, and Powerpoint

There are [resources](#) on the IT website that explain how to make these types of documents accessible. If you cannot make the document or file accessible, consider creating a Drupal page instead or, at the very least, provide an accessible alternative.

Add alternative text to images

Since a screen reader cannot see an image, you need to add some alt (alternative) text to images. Some screen readers cut off alt text after 125 characters, so be succinct. The main question you should ask yourself is, “Why is this image used? What message it supposed to convey?” It is important to realize that the alternative text is a replacement for the image, not a description of the image. For instance, if your page is about campaniles in the Midwest, you might give an image of the campanile alt text of "Campanile at University of Northern Iowa".

You do not need to start with “image of_” or “graphic of_” as the assistive technology will do that when reading out the page. You should not use images of text, but if there is text in your image (like a logo), use that text as the alt text.

Accessibility issues relating to color

Color alone

Don't use color alone to convey information, i.e. “click the red text”. Some color-blind people can't tell the difference between red and green. In fact, as many as 8 percent of men and 0.5

percent of women with Northern European ancestry have the common form of red-green color blindness.

Color contrast

Also, the color contrast between foreground and background needs to be sufficient.

- The [WAVE checker](#) has a tab to tell you if your contrast on your Web page is bad.
- The [Colour Contrast Analyser](#) can be used on other documents besides Web pages. You can use the little eyedropper to sample background and foreground colors in documents or images, then find out if they pass WCAG rules (AA) for accessibility.

Check Accessibility of Web Pages

To check your Web pages' accessibility, use SiteImprove or [WAVE](#)

Legal Standards to be Met-Section 504

Section 504 of the Rehabilitation Act of 1973 prohibits discrimination against people with disabilities in programs that receive federal financial assistance. It set the stage for enactment of the Americans with Disabilities Act (ADA) in 1993

Legal Standards to be Met-Title II of the ADA

Title II of the Americans With Disabilities Act applies to State and local government entities, and protects qualified individuals with disabilities from discrimination on the basis of disability in services, programs, and activities provided by State and local government entities. Title II extends the prohibition on discrimination established by section 504 of the Rehabilitation Act of 1973 to all activities of State and local governments regardless of whether these entities receive Federal financial assistance.

Legal Standards to be Met-Section 508

Section 508, an amendment to the United States Workforce Rehabilitation Act of 1973, is a federal law mandating that all electronic and information technology developed, procured, maintained, or used by the federal government be accessible to people with disabilities. This appears to cover only the federal government; however, Iowa has adopted Section 508 as the standard to make our electronic and information technology accessible.

I've created a web page with links to the instructions I've made for the [accessibility of Web pages, Microsoft Word and Powerpoint, PDFs made from Word, and closed captioning](#).