Digital Accessibility Basics for Conventions

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"What we have are a few people who know a lot about accessibility. What we need are a lot of people to know a little about it."

— Matt May

Digital accessibility?

Most conventions are used to considering on-site physical accessibility.

Digital accessibility is often an afterthought (if considered at all).

Members with disabilities who use assistive technology may be at a disadvantage.

Common accessibility issues

Color choices adversely affecting color blind and low-vision readers.

Videos that are unintelligible for Deaf or hard-of-hearing viewers.

Documents that are difficult or impossible to read for Blind or low-vision readers.

Websites that are difficult or impossible to interact with.

Color

Color blindness

Positive is green, negative is red...   ...unless you're color blind!

Category	Amount
Memberships	$151,425.53
Dealers' Room	$10,455.00
Art Show	-$9,711.65
Misc. Income	$5,531.59
Pass Through	$70.00
Total	$157,770.47

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Color contrast and legibility

Low contrast hampers legibility

This is a sample of text using a light grey color against the lighter grey background of this slide. Many modern designs use color schemes like this. Though it may still be legible for readers with normal vision, readers with visual disabilities may not be able to read the content.

Use higher contrast colors instead

This is a sample of text using a darker grey color against the lighter grey background of this slide. While pure black text (like the headers on this slide) has higher contrast, this color combination passes legibility checks while still presenting a "softer" look that designers may prefer.

Video Captions

Captions help many people

We often think of captions as being primarily for Deaf and hard-of-hearing viewers.

Captions also help:

- English language learners.

- Neurodiverse viewers.

- Viewers in noisy environments.

- Anyone who just likes captions.

Use YouTube's automated captioning

Videos uploaded to YouTube are automatically captioned.

Be aware: The captioning process is not perfect!

Use YouTube's captioning tools to review and correct the captions.

This can be done in-browser, or you can download the caption file, make corrections, and upload the replacement.

Document Accessibility
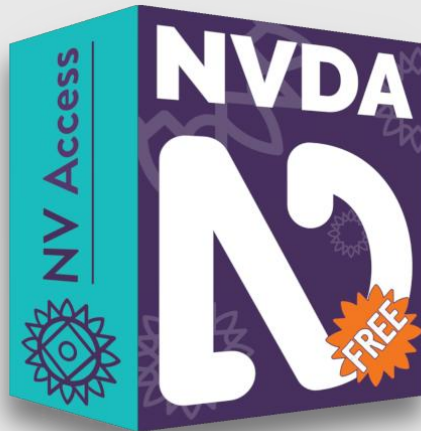
Documents should be set up properly

All documents you distribute should be created with accessibility in mind. It's far easier to include accessibility from the start than to add it at the end.

Email, Word/Google Docs files, PDFs of newsletters, progress reports, program books, etc.

Documents created without accessibility features can range from difficult to impossible to read for users of assistive technology.

Good news: The basics of accessibility are simple!

Screen reader demonstration

Define headings with styles

Sighted readers use visual cues (font face, color, size, etc.) to find section headings.

Simply formatting text (selecting a line and changing the font face, color, size, etc.) does not give assistive technology users the same cues.

Using heading styles to define headings adds accessibility information that assistive technology can access.

Styles also benefit sighted readers and document editors!

Include alt text for all images

Alt(ernative) text is a brief description of the contents of an image for Blind and low-vision readers.

Descriptions should be as concise as possible while conveying all important information.

The same image may have different alt text depending on the context in which it is being used.

Complex images may be summarized or may have more information provided in the document body.

Use descriptive text for links

Don't use "click here", "more info", or similar wording to note links.

Only include "bare" URLs if they are short and easily understandable. Long URLs, especially with long strings of random characters, are incomprehensible noise.

Link text should be written as to give the user some idea of where the link will take them when read out of context.

Headers and footers are ignored

Don't put critical information in document headers or footers unless it is also mentioned at least once in the body of the document.

Headers and footers are usually ignored by screen readers. This prevents reading the same text repeatedly or injecting header and footer text into paragraphs that split across pages.

Tables should have header rows set

Table rows allow screen readers to give context for the data in a cell.

In the following sample table, without headers, data is read without context. With headers, the name and year of the convention can be included.

	2020	2021	2022	2023
Norwescon	0	1,469	1,302	1,643
Worldcon	1,847	2,359	3,574	18,895

Check your documents for accessibility

Microsoft Word: Has a built-in accessibility checker that will flag the most common errors and guide you through correcting them.

Google Docs: Has no accessibility checker. Download as Word .docx and use Word to check.

Adobe InDesign: Has no accessibility checker. Export the PDF and use Acrobat Pro to check.

Automated accessibility checker tools will not catch everything!

PDF Files

Acrobat PDF files are often problematic

Most PDFs are partially or entirely inaccessible to users of assistive technology.

PDFs can be accessible, but it requires some skill and knowledge to produce accessible documents.

If a document can be distributed in another format (Word .docx, Excel .xlsx, eBook .epub, etc.) it is often a better choice.

Creating accessible PDF documents

Start with an accessible source document.

When creating documents to be converted to PDF:

- Microsoft Word is easier and is best for simpler documents.
- Adobe InDesign is best for complex documents and layouts but requires more skill and training.

Exporting accessible PDF documents

DO NOT use "Print to PDF". This removes accessibility information.

Microsoft Word: Use *File: Save As…*, set the format to .pdf, and check Options to be sure "Document structure tags for accessibility" is checked.

Google Docs: Recently added partial accessibility support to exported PDFs, but still has issues. Still recommend downloading a Word version and exporting the PDF from Word.

Adobe InDesign: Use *File: Export…* and save as Adobe PDF (Interactive).

Checking PDF Accessibility

Requires Acrobat Pro.

Use Acrobat Pro's built-in accessibility checker under the *All Tools* tab, *Prepare for Accessibility, Check for Accessibility*.

You can also manually review the document's accessibility tags by opening the Accessibility Tags right-hand pane. These are what modern screen readers access.

A quick note on Canva

Canva is a popular web-based page layout and design tool. Your convention may be tempted to use it.

Be aware: Canva does not produce accessible PDFs.

If you are designing newsletters or other documents in Canva, they will be difficult or impossible to read for users of assistive technology.

Canva works fine for creating social media and similar graphics that are not distributed as PDFs.

Websites

All the above rules apply

Webpages should be structured using the same guidelines as reviewed above for documents.

Most content management system (CMS) backends like WordPress or Drupal make this very simple.

Extra considerations for websites

Because websites are more interactive, there are other basic accessibility checks that should be run.

As with documents, automated accessibility checker tools are helpful, but will not catch everything.

Users might zoom in or out, use their keyboard or other assistive technology devices instead of a mouse, or otherwise interact with your website in ways you might not expect.

Keyboard test:
Take the "no mouse" challenge

Can you navigate your website without your mouse?

Use your keyboard to move around the website.

- Can you access everything?

- Can you operate all buttons, sliders, and other controls?

- Can you always tell where you are on the page?

Zoom in. More. More. Seriously, more.

Low-vision users often zoom in or use magnification software tools. How well does your website adapt to different zoom levels?

Zoom in to 150% and explore your website. Is all text visible? Are forms operable?

Now zoom in to 200%.

Now zoom in to 400%.

(That's far enough.)

Don't forget your portals!

If you have registration systems or members-only portals that use a different backend system than your primary website, those should be checked as well.

You may need to contact the vendor/programmer to let them know of accessibility issues you encounter.

If the issues cannot be corrected, a notice should be posted to let assistive technology users know they may need assistance with those portions of the website.

Consider how your website can help other accessibility efforts

If you accept user-uploaded images, include a way for the submitter to include their own alt text.

Panelists submitting headshots may know how they would prefer to be described.

Artists and dealers submitting artwork or photos of samples will probably be able to describe their work better than you can.

Don't forget to make sure the submitted text is sent to your publications team!

Deep Space Fine
@thisismewhatevs

I high key love that Star Trek chose to respond to the idea that "in the future disability will be erased" with "in the future disability will be accommodated for without stigma"

Thank you!
Questions?

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Find me online:

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