



Otero Junior College Web Accessibility

December 2014

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Current State of the OJC Web Site with Regards to Accessibility Issues

Accessibility Overview

The emphasis on accessible web sites for higher learning has taken priority over the last year as Federal Guidelines have become more standardized and future accessibility audits of college web sites by the government are likely. It is our goal to design the OJC web site to meet the WCAG 2.0 Level AA (Intermediate) accessibility guidelines.

The CCCS Accessibility Plan SP 3-125G (Rev Nov 2014) outlines online guidelines:

“Begin remediating all accessibility issues in websites and web content to conform to Web Content Accessibility Guidelines 2.0. Websites include but are not limited to: CCCS.edu, go.cccs.edu, Conference Center, Colorado State Plan, CTSOS, Teacher Cadet, Colorado Manufacturing Careers, TAA1 (cccscoetc.weebly.com), CCNS, Portal Login, Active Program Approval, Perkins, CTA, Universal Contacts, VE135, Standards, CCCS Web Applications. Remediation efforts will be prioritized by a variety of factors including but not limited to sections that are most viewed based on usage statistics and sections with most severe accessibility and/or usability issues.

Where possible, web pages and/or web sites shall have a link to report accessibility problems. Ensure that feedback mechanism is accessible and create a procedure/process to address feedback in a timely manner.”

An added bonus to having an accessible web site is that it goes a long way towards having a web site that is accessible to search engines and helps with the Search Engine Optimization (SEO) for the site. There are a lot of parallels between search engines and people with disabilities. In fact I consider search engines to be “disabled” in that respect – needing a logical structure to a page, titles, descriptions, headers and alternative text for images to properly index the page. If the site is accessible it is also optimized for search engines; the two are not mutually exclusive.

Areas of Emphasis for the OJC Web Site:

1. Structured Content (Level A)

- a. Complying with the need for good web page structure and formatting is a wide-ranging target. Many forms of assistive technology rely on correct formatting to work correctly (headings, bullet points and italics).
- b. To comply with web page structure, good design practices should be observed. Break up content with subheadings for new sections and mark those headings with HTML header tags. Use the correct HTML for all structural elements and valid HTML everywhere else. Additionally web forms should have clear labels describing the input field.
- c. A well-written and clear page is always broken up with headings. They make it easier for people to find the section they are interested in and help to structure the content so it doesn't seem overwhelming to read.
- d. Structure the web page to be SEO friendly (page titles, page descriptions) thereby making the web page more accessible to assistive-technology also.

2. Alternative Text for Non-Text Content (Level A)

- a. Text alternatives for non-text content (for example, images, multimedia and form controls) must be used. Alternative (or 'Alt') text is a replacement for the image – not an addition to it. This means the text should describe the image and give the same information as the image would if seen.
 - b. There are a few types of images that don't need alt text: spacers, icons, purely decorative, tests and CAPTCHA images. In all these cases, the 'null' alt text is used by simply leaving the alt text out – but putting quotes in (alt=""). Screen readers will then skip the image rather than reading the filename or trying to substitute an alt text.
3. **Can be Navigated by Keyboard Only in Logical Order** (Level A)
 - a. Keyboard accessibility is crucial for customers with motor impairment to be able to navigate the web site. Many of these customers cannot use a mouse and will use their keyboard to move around the website.
 - b. Tab order is important to be able to navigate from link to link in a logical order.
 - c. All navigation is controllable by either the tab or arrow keys, which is a standard many people are familiar with. The site should contain no Keyboard Traps; making sure that keyboard-only customers don't get stuck anywhere on the site. All parts of the website should be reachable by keyboard alone and visitors must also be able to navigate away from all parts of the website too.
 - d. Having focus visible makes it easier for your customers to understand where they are on a page. Focus visible is all about the little outline that appears around an element when you use the tab or arrow keys to get to it.
4. **Form Labels** (Level A)
 - a. Forms have a feature that requires people to fill in some information. You need to make sure your customers know what's required of them when they reach one of these form elements on your website. This boils down to describing what you expect your customers to enter in to text fields. Without clear labels and instructions your customers won't know what to do.
 - b. Label all input fields in a form clearly and helpfully. Keep labels simple - too much explanation can be counter-productive. Things like 'First name', 'Email' and 'Your message' are fine. Same goes for instructions, "Required fields are in red and have a * symbol" works great. So does "Fill in this form and click submit to get in touch".
 - c. Where a field needs a specific format, use placeholder text to explain it (For example, for a 'date' field in a form you might use "Enter the date as dd/mm/yyyy")
5. **Text Contrast with Background** (Level AA)
 - a. Some of our customers with visual impairments need a stronger contrast than others, so getting the colors right is essential. A clear contrast between the text on the website and the background color is called contrast ratio, the greater the ratio the better it is for people with visual disabilities. The contrast ratio between the web site text and background is at least 4.5:1. This is accomplished by using a light background and dark text or a dark background and light text.
 - b. There is a handy web tool that can provide a color contrast ratio for accessibility:
<http://webaim.org/resources/contrastchecker/>
6. **Table Structure/Headers** (Level AA)

- a. A well-designed table always uses a table heading tag for the first row to identify the data that follows. They make it easier for people to understand the information that is presented in a logical way and to structure the content of the table so it doesn't seem confusing.
7. **Scalable Font, Responsive Design (Level AA)**
 - a. Font should be scalable to increase size if needed. Some of people with visual-impairments will need to resize text in order to understand it fully. Text should allow for up to a 200% resize without dropping of any content or functions.

**** 2016 Completed and Ongoing: Web HTML and structure is scalable, responsive, structured, and navigable by keyboard.**

OJC Web Site Accessibility Status as of December 2014

Major Web Site Redesign Completed (Projected January 2015 – completed March 2015)

The Otero Junior College has undergone a complete redesign in 2014. Requirements for the redesign and new Content Management system included conformance to WCAG 2.0 adherence.

“HTML, CSS, and JavaScript for all pages completed in a responsive style of development so that mobile and desktop use same code. Meet web standard compliance including W3C, WAI, and Section 508. Must be optimized for Search Engines (SEO).”

Otero Junior College worked closely with the design developer; Donahue Designs, and the CMS developer; OmniUpdate (OUCampus) to insure web accessibility issues were built into the new design during development. This includes all the areas of emphasis discussed above. During the migration of the current content to the new CMS and design the new pages are being checked for accessibility in three ways: using the built in CMS accessibility checker, manually by the web developer, and using our third party web check software; Site Improve with their built-in accessibility checker.

Web Site Accessibility Check

Results of the accessibility checks during this migration process shows the new content HTML code and structure provided by the OmniUpdate CMS to validate with the AA WCAG 2.0 standards. The proprietary code provided with the OmniUpdate CMS does not validate with the W3C validator, as this code pertains to the design structure pulled from the OU design templates - it really has no bearing on the actual content provided to the user.

**** 2015 Complete: Website completely migrated March 2015.**

Accessible Documents and PDFs

The Otero Junior College web site has approximately 330 PDFs that are open to public access and as such fall under the WCAG 2.0 requirements. The OJC web site also includes a Law Enforcement Training library with another several hundred documents and PDFs that are not accessible to the general public. They are accessed through a logon page and are intended for enrolled law enforcement students only and as such do not fall under the WCAG 2.0 requirements.

The existing PDFs have been checked and formatted for accessibility requirements using the Adobe Acrobat accessibility tools - primarily proper headings and table structure, logical tags, and alt tags for figures and images. Of these about 80% pass the full accessibility test. The remaining 20% pass the quick check test. In these instances the failure of the full check is primarily due to not having alt tags for some figures. These figures are design images that have nothing to do with content, such as filled header boxes, lines, and bullets. As these files are updated special attention will be paid to these elements and alt tags will be included as these figures are inserted. All future PDFs will be formatted using the native document's (MS Word, Excel, Publisher, and InDesign) accessibility tools before being converted to a PDF. Then the document will be double checked in Adobe Acrobat.

**** 2016 Completed and Ongoing: Existing and new online pdfs checked for accessibility issues. All pdfs on web site pass checker.**

D2L and Portal Accessibility

Accessibility standards for D2L and the Portal will be the same as those applied to our web site, with special emphasis on contrasting colors, alt tags for images, keyboard control of links and tab order, structure and proper headings. At this time CCCS is working on the standards for the Portal and D2L.

**** 2015 Complete: Portal HTML checked and passed accessibility standards..**

Videos and Multimedia

At Otero Junior College we are beginning to use short videos to enhance our content on certain pages. We have a YouTube account for OJC and our videos are uploaded there. We pull certain videos into our web site using an embed code with iframes. There are certain accessibility problems associated with the use of multimedia on web sites. One site that clearly offers solutions for YouTube accessibility is: <http://designedgecanada.com/blogs/yes-you-can-make-youtube-video-accessible-here-is-how/>. The following information is shamelessly copied from the web site and lays out our plan for creating accessible videos:

Step 1: Solving the keyboard navigation challenge

YouTube offers several versions of its embeddable player, including an HTML5 version and a Flash version. The Flash version is not accessible for people who must use a keyboard to navigate (it fails both the Keyboard rule and the Keyboard Trap rule on all major browsers). However, the HTML5 version is accessible.

Conveniently, the HTML5 player is automatically used on Android and iOS devices. For other devices however, we need to force its use by following these three steps:

1. Upload your video as an mp4 file, no other format (if it's already online, download it as mp4, then reupload)
2. Change the HTML code that embeds the player from `src="//www.youtube.com/embed/VIRx3RJzbZg"` to `src="//www.youtube.com/embed/VIRx3RJzbZg?html5=1"` (swapping in the unique code that YouTube supplies for your video)

Step 2: Making excellent captions, the easy way

YouTube has the magical ability to automatically generate fairly accurate captions for uploaded videos, saving you much effort and drudgery. However, these automatic captions are never good enough, and sometimes quite bad if there are multiple speakers or background noise.

We'll start with what YouTube provides, then improve upon it manually.

1. Upload your finished video (never start captioning until the video is final!) to your YouTube channel. Set it to Private (as we don't want to share it with the world yet), then wait several hours for YouTube to generate its captions. The longer the video, the longer it takes.
2. Now, use YouTube's caption editor to clean the following:
 - Words: fix spelling, and remove "umms" that get in the way of understanding
 - Pacing: shift words to the next or preceding caption to ensure complete phrases never bridge two captions (i.e. nouns and verbs are connected to their modifiers, and prepositional phrases are not separated)
 - Consider deleting any time segments which are left blank, then select the timer on your full-sentence caption and increase the time to run for the duration of the full sentence. The idea is to steal time from pauses to fit in the full text, in situations where it's difficult to get all the words in... but not to go as far as to replace pauses that are part of "the story"

Captioning is an art, however here are some guidelines to help you get started:

- No caption should appear for less than two seconds
- Add descriptions of sound in square brackets (such as [music] or [laughter]) to help people understand what is happening
- If there's more than one speaker, add tags like ">>BERMAN:", at the beginning of a new line, to identify speakers or change of speaker
- If someone is spelling a word, caption it with hyphens, as in S-P-E-L-L-I-N-G

**** 2016 Complete: All videos closed captioned.**

Step 3: Adding a descriptive transcript

To achieve Level A compliance, you need to include either a descriptive text transcript or an audio description (WCAG 2.0 1.2.3). Most people will choose the former because audio descriptions take more effort.

YouTube wonderfully provides a transcript button, enabling the viewer to read all the captions in one place. But a transcript of just the captions is not sufficient: we need descriptive text transcripts.

So what you're going to do is take the complete transcript of your captions and add descriptive text that relates what else is going in the video ("location shot", actions, body language, scene changes, etc.). Then add a "Transcript" button directly below the video on your web page, and have it link to a separate HTML page containing the transcript.

How to create the descriptive text transcript:

1. Go to the YouTube video's Transcript (select the Transcript icon) and copy and paste it to a text file.
2. Use a text editor to remove the timecode by hand... or save time by downloading the .srt file from YouTube's caption editor, and using the free software Aegisub for Windows, Mac, or Unix (download at Aegisub.org) to remove the timecode.
3. To avoid broken sentences, search and replace any extra hard-returns. Also replace all line endings with single spaces.
5. Insert any descriptive text (you can conveniently take text from an audio description script if you happen to have one). For example: "The speaker is sitting in an armchair in front of a fireplace. Throughout the entire video, he addresses the camera directly."
6. Insert the resulting text into the page on your website that is linked to the "transcript" link below the video.

**** 2016 Complete: Descriptive transcripts added to YouTube videos.**

Projected Additional Work to Be Done 2015 - 2016

Continue checking all new documents and PDF files for accessibility issues. To this end we will be training faculty and personnel who generate MS Office documents or pdfs to insure that they are accessible using the built in tools from MS Office and Adobe Acrobat. These documents will be double checked before going up on the web site.

**** 2016 Progressing: Continue training faculty and employees on accessible word, excel, and power point documents. And converting to accessible pdfs.**

**** 2016 Completed and Ongoing: Existing and new online pdfs checked for accessibility issues. All pdfs on web site pass checker.**

All HTML and content tags will be checked for issues using a SiteImprove weekly inspection. We realize this is an ongoing process and our pages and content must be continually checked. We have the advantage of our complete web redesign and migration of our site to the new Content Management System so we are starting out with a fairly accessible web site.

**** 2016 Ongoing: Continue to use SiteImprove on a regular basis to identify and fix accessibility issues with the web site.**

With our new Videos from YouTube we will pay more attention to the text descriptions and captions. At this time the few videos we do have need some accessibility work.

**** 2016 Complete: All new videos on YouTube are close captioned.**

[Provide Feedback from Web Visitors About Accessibility Problems.](#)

In our continuing effort to improve our web site and online accessibility a contact link will be provided on our new redesigned web site that allows a visitor to report an accessibility problem or potential problem. This is also in accordance with the SP 3-125G directive from CCCS.

**** 2016 Complete: Online contact link added to bottom footer saying – Send questions, comments and/or report accessibility problems to webmaster@ojc.edu.**

References:

An overview of WCAG 2.0 AA:

<http://www.wuhcag.com/wcag-checklist/>

Acrobat and Word Accessibility Checkers:

<http://www.adobe.com/content/dam/Adobe/en/accessibility/products/acrobat/pdfs/acrobat-x-accessibility-checker.pdf>

<http://www.adobe.com/content/dam/Adobe/en/accessibility/products/acrobat/pdfs/acrobat-x-accessible-pdf-from-word.pdf>

Accessible YouTube Videos

<http://designedgecanada.com/blogs/yes-you-can-make-youtube-video-accessible-here-is-how/>