NWHEAT – Accessibility Webinar Series
January 13, 2022, Part 3:
Testing for Common Accessibility Barriers on Websites

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The webinar was not recorded at the request of the Office for Civil Rights staff.

Presenters
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Summary
The information provided in this webinar should not be consider legal advice and is informational only. For technical assistance contact either of the two presenters directly or email the U.S. Department of Education’s Office of Civil Rights’ general email address: OCRWebAccessTA@ed.gov

What is OCR?
OCR’s Mission: To ensure equal access to education and to promote ed excellence throughout the nation through vigorous enforcement of civil rights. Their activities include:

- Complaint investigations,
- Compliance reviews,
- Policy guidance,
- Technical assistance.

What are your legal obligations under Federal disability rights law?
The Office of Civil Rights enforces two civil rights laws that address the rights of individuals with disabilities and access to an institution’s programs and activities:

- Title II of the Americans with Disabilities Act of 1990.

OCR averages fielding about 10,000 complaints per year over the last few years. According to statistics presented up to 2018, the number of overall disability complaints has been trending upward. Of issues received in FY 2017-2018 most were resolved. Of the many types of disability complaints received by OCR, those regarding accessibility problems with technology were the fourth most common.

The Institution Needs to Assure “Equal Access”

- Must receive all the educational benefits provided by the technology in an equally effective and equally integrated manner, as compare to people without disabilities.
- Must be able to:
Access to the same information.
Engage in the same interactions, and
Enjoy the same benefits and services
With substantially equivalent ease of use.

Accessibility standards for online content

- The simplest way to demonstrate compliance with federal civil rights law, with respect to online content, is for a covered entity to comply with an appropriate accessibility standard.
- No specific accessibility standard is endorsed by the Department of Education or required by Section 504 or Title II.
- However, many recipients use the Web Content Accessibility Guidelines (WCAG) version 2.0, level AA as an accessibility benchmark, to identify barriers and solutions.

More information can be found on the OCR website.  www.ed.gov/ocr

Decision letters and agreements to address complaints can be found in OCR's Freedom of information OIA Room. On that page, “The Office of Civil Rights (OCV) is providing access to resolution documents reached on or after October 1, 2013. The resolution documents documents cover aspects of laws OCR enforces.” https://ocrcas.ed.gov/ocr-search?title=&keywords_state=&keywords=

OCR annual reports can be found at: https://www2.ed.gov/about/offices/list/ocr/congress.html

How do people with disabilities use online technology?

Online technologies should be accessible to everyone, including those with blindness, low vision, mobility disabilities, deafness / hard of hearing, and other disabilities, such as seizure disorders or cognitive disabilities.

People who are blind use screen readers or text to speech, keyboard controls that enable navigation, refreshable Braille displays, and other tools.

People with low vision use screen magnifications, color contrast, and screen readers with keyboard controls.

People with mobility disabilities might find it impossible to use a mouse or (in some cases) a standard keyboard. They might use keyboard controls, mouth stick, operating system features (such as sticky keys), foot pedals, eye tracking, or speech recognition.

For all of the above having keyboard-only navigation is important.

People who are hard of hearing use video captions or transcripts of audio or video content.

People with other disabilities may experience seizures if they are exposed to flashing lights at specific frequencies and those with cognitive disabilities may benefit from many of the techniques described in this presentation.

Demonstration of manual testing of some common accessibility barriers?
Rhonda Collins showed us a sample website for fictitious Sample University. The website included many accessibility issues that users would experience. She demonstrated those issues and ways to test for them. Since this was a practical demonstration, we will do our best to describe the session.

**Example 1 – Keyboard Navigation**

Conduct manual testing to determine if your site is accessible for keyboard-only navigation, which is navigation to the links on a page using only buttons on the keyboard and not a mouse. This testing needs to be done manually. There are automated checkers, but they will not identify all the barriers to access for keyboard-only users.

In the Sample University example, when using the keyboard-only method, we could not see any change as to where we were located on a page except when the page sometimes scrolled down. On the page, if a mouse was used you see the links light up and drop down menus emerge.

Rhonda made a change to the page that highlighted which link is the current one when scrolling the page using just the keys on the keyboard. This feature is called “force focus.” A participant provided the following resource on it: [https://www.webaxe.org/force-focus-tools/](https://www.webaxe.org/force-focus-tools/)

**Example 2 – Main Content Button**

Without a “main content button” at the top of the page, someone using keyboard navigation has to scroll through links in the header every time they go to a new page. A “skip to main content button” allows the user to drop past the top menu to the first link in the content for the page skipping the menus at the top of the page.

Amy suggested this source for accessibility tools, including “force focus:” [https://pauljadam.com/bookmarklets.html](https://pauljadam.com/bookmarklets.html)

**Example 3 – Contrast Testing**

The Sample University webpage displayed light blue text on a dark blue background. The lack of contrast makes the text hard to read for most people.

The color contrast can be tested by using a Color Contrast Analyser (CCA). Several options for contrast checkers can be found through a web search. Another option is to look for an “Eyedrop tool,” which will give WCAG 2.1 results for contrast. The contrast ratio between different colors of text should be at least 4.5:1 for regular text or 3:1 for large scale (18 pt) text.

The Chrome browser also has a tool for contrast checking. Right click with mouse and click inspect. Tiny box in top left corner of drop up box. Can get a contrast ratio number.

One example of a color contrast analyzer suggested by a paricipant: [https://www.tpgi.com/color-contrast-checker/](https://www.tpgi.com/color-contrast-checker/)

**Example 4 – Ambiguous Links**

Rhonda highlighted paragraphs from Sample University pages in which the text “click here” appeared several times. For those who have screen readers, the words “click here” will be read out and that will
be meaningless to the user. Sample University used headers above the text to help indicate what the links are. This works for sighted people, but not for screen readers as the connection is not made as to the content of the link. The link text should be clear about where that link leads.

**Example 5 Using Only Color to Convey Information**

On the Sample University page there were links where only a different color was used and no underlining to indicate that a link existed. Using colors to differentiate links does not work for those who are colorblind.

Another example was a table that used red to indicate programs that were undergraduate and blue for those that are graduate. Again, those with colorblindness cannot tell the difference.

In addition to doing more than just having contrasting colors, tables need to be designed in such a way that they have the proper table markup.

**Popular Programs**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Undergraduate</th>
<th>Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Psychology</td>
<td>Physical Therapy</td>
</tr>
<tr>
<td>2</td>
<td>Accounting</td>
<td>Business Administration</td>
</tr>
<tr>
<td>3</td>
<td>Engineering</td>
<td>Computer Science</td>
</tr>
</tbody>
</table>

**Example 6 – Keyboard Trap**

Sample University had a social media feed, as is common on many sites. Rhonda demonstrated that a user relying on keyboard-only navigation will wander into the box and be trapped there endlessly clicking on the many social media links. The website should address keeping users out of his trap.

**Example 7 – Pause Flipping Images**

It is popular on many home pages (and other pages within a site) to have a feature at the top of the page or within the page with images that automatic flip from one to the next. For those flipping features, there needs to be the ability to pause content so that those with disabilities can access and assess the content and links for each image.

**Example 8 – Videos without audio**
Some videos have no audio or have music with no words describing what is happening. The intention is that the video images are sufficient or there is text on the screen that describe the message to be conveyed. This technique is a problem for those with visual impairments. A transcript of the video needs to be added to convey the message of the video.

**Example 9 – Alternative text (alt-tags)**

All images should have the proper alternative text to describe what is happening in the image. Descriptions should be complete about what is in an image. In the demonstration, a table was shown and it was suggested that a detailed description may be needed and/or a data table that is accessible with proper table markups so that screen readers can guide those using them.

**Example 10 – Review webpages using “reflow view” or at 200% magnification**

Those who have low vision will magnify the screen so that they can see the text or links. When greatly magnified, the design of the page sometimes makes the page hard to use or unusable.

**Audience Question**

Question: Is there a recommended guide for manual testing?

Answer: OCR is developing a set of videos to help with website accessibility issues. They will probably be released in the next quarter. Watch the OCR website for an announcement. Additionally, OCR cannot endorse any organization, but there are several non-profit entities that provide useful information.

**Presenter Biographies**

Rhonda Collins is an attorney with the U.S. Department of Education, Office for Civil Rights. She currently serves as a member of the National Digital Access Team. Before joining OCR, she was an Assistant City Attorney for the City of Atlanta where she handled matters related to technology, cybersecurity, procurement, telecommunications, and intellectual property. Ms. Collins is a graduate of the Georgia Institute of Technology and Mercer University School of Law.

Amy Kim has worked for the Office for Civil Rights (OCR), U.S. Dept. of Education since 2003, and has worked extensively in schools, colleges, and universities as a civil rights attorney helping students and families resolve discriminations complaints, including disability-related concerns. Previously, she worked for the Office of the General Counsel, U.S. Dept. of Health and Human Services. Amy obtained her B.S. in Biochemistry from the University of Washington, and J.D. from the University of Washington, School of Law. Amy enjoys volunteering in her local community and has assisted a variety of community and civic organizations, including serving as an officer of the International Community Health Services (a community health center), the Civil Rights Law Section of the Washington State Bar Association, and the Joint Asian Judicial Evaluation Committee. Amy is the child of political refugees from Korea, and grew up in Covington, WA. She currently resides in Seattle.