

Accessibility: Opening Windows to Digital Collections

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Introduction

Accessibility is a growing concern for universities and academic libraries as they create and provide more digital resources for their communities. The development of best practices for accessible web pages and documents is well underway. To date, no in-depth study of digital content management systems has been done.

Purpose

To evaluate the level of accessibility provided to visually-impaired users by two of the most used digital collections platforms: CONTENTdm and Digital Commons.

Using established evaluation criteria from Section 508 and WCAG 2.0 in combination with usability studies, we wanted to know:

1. Are our CMSs technically accessible?
2. Beyond technical compliance, are they functionally usable?
3. Are there changes we can make in our specific implementations of the software to improve accessibility for visually-impaired users?

This section includes a screenshot of the Montana Memory Project web site homepage and a screenshot of University of Montana's Digital Commons web site homepage.

Methods and Tools

1. Reviewed WCAG 2.0 Level AA and Section 508 standards.
2. Established list of links to different pages within each CMS to test different elements and display structures.
3. Used web accessibility evaluation tools to test the list of links.
4. Interviewed visually-impaired student who tested the list of links and provided verbal feedback about his experience

This section includes four screenshots:

1. The researchers sitting with the visually-impaired student while he tested CONTENTdm and Digital Commons
2. Screenshot of the results of a web accessibility evaluation tool report for a University of Montana Digital Commons web page
3. Screenshot of the results of a web accessibility evaluation tool report for a University of Montana CONTENTdm web page
4. Screenshot of the visually-impaired student's laptop running JAWS and viewing a CONTENTdm item page next to the researcher's Chromebook viewing the same CONTENTdm item page

Results

- According to each products' Voluntary Product Accessibility Template (VPAT), both CONTENTdm and Digital Commons meet basic Section 508 accessibility standards.
- Web accessibility evaluation tools identified some errors and several common potential areas for improvement.
- There are disparities between technical and functional accessibility.
- The student helped us identify configuration changes that we could make to help improve accessibility.

Conclusions/Next Steps

- It is difficult to provide sufficient labeling and context for functional accessibility.
- Changes to locally configurable settings can improve accessibility in CONTENTdm:
 - ✓ Metadata fields
 - ✓ Controlled vocabulary settings
 - ✓ Compound objects
- Investigate future accessibility upgrades with OCLC and bepress.
- Determine how research results impact our decisions about CMSs for future digital collections.
- Conduct additional usability/accessibility testing with more visually-impaired users.
- Expand usability/accessibility testing to include users with other kinds of disabilities.

This section includes one image that provides the content from the Title, Creator, Description, and Subject metadata fields from a single item in CONTENTdm.