



Updated Vendor Response: ProQuest Ebook Central to MSU UARC's 2021 Evaluation of Ebook Central

October 25th, 2023

Accessibility Evaluation Response

The Ebook Central team would like to thank the Library Accessibility Alliance and the Big Ten Academic Alliance (BTAA) again for their 2021 evaluation of accessibility on the Ebook Central platform. The key issues identified in the original evaluation, including the inclusion of an Accessibility Mode, keyboard navigation issues, appropriate headings structure, and others are addressed in the table that follows.

In 2019, we partnered with Deque to conduct a similar evaluation of high-use pages of the Ebook Central platform and found many of the same issues. At the time of writing, many of the issues found in both evaluations have been resolved. The remaining issues are moderate or minor in severity and are scheduled to be resolved as soon as possible in 2024.

Additionally, we are in the process of updating all pages of our core platform to provide a better overall user experience with improved levels of accessibility. This effort began with the complete update of the Search Results page in September 2023 and will continue with updates across the remainder of the platform.

Since the time of the audit, Ebook Central has also added a responsive EPUB Reader that provides a high quality, accessible reading experience for users, with a range of tools available to them within the reader. Where provided by publishers, EPUBs are available to end users.

We continue to partner with publishers to obtain accessible versions of all content and have a remediation process in place when accessibility issues are found.

As an organization, we are committed to providing all users with a fully accessible experience for research, teaching, and learning. We make every effort to ensure that Ebook Central can be used by everyone.

High-level findings and status of resolution

Below is the list of findings identified in the evaluation, along with information on each issue's resolution and priority.

Conformance

Original Issue	Response
<p>The "Accessibility Mode" does not provide an alternate conforming version. [WCAG 2.1 CR 1]</p> <ol style="list-style-type: none"> 1. Functionality is removed (e.g., images, highlighting) 2. New content that is not accessible is introduced (e.g., broken text). 3. The accessibility of some existing content is broken when the mode is enabled (e.g., cannot close sidebar via keyboard) 4. The mode cannot be reached by all users (requires user to create an account and be signed in) 5. Link to enable the mode is not visible on screen 6. Users should not be forced to access a separate version of a page to use assistive technologies when there is no reason that the primary page could not be made accessible 	<p>Status: Planned</p> <p>Comments: The Ebook Central PDF Reader no longer offers "Accessibility Mode". We provide a "Text Only Mode" that allows screen readers to access PDF content provided by publishers.</p> <p>Ebook Central now offers an EPUB reader that provides an updated and more accessible user experience. As of the time this report was generated, approx.. 32% of the books available on Ebook Central are available in both PDF and EPUB format when downloading, and 8% are EPUB only. DRM and library restrictions may apply if full download is available.</p> <p>As part of our current roadmap Ebook Central is actively working to update the functionality and accessibility of the PDF Reader that will fix or eliminate the issues described.</p>

Document Structure

Original Issue	Response
<i>Headings are not appropriately structured. [WCAG 2.1 SC 1.3.1]</i>	
On the Home page, "Authoritative ebooks at your fingertips." Is not an appropriate H1 for the page	<p>Status: Closed</p> <p>Comments: Using accessibility testing tools, this H1 tag is correct. The other H1 reference in the code is hidden unless needed as an emergency response. For example, if the system is down.</p>
On the Search Results page, "Book Results" should be tagged as H2 when active or book titles should be tagged as H2s, not H3s	<p>Status: Closed</p> <p>Comments: There is no designated H1 tag on this page. The H2 is used for the secondary navigation items that need to be present like the Cookie Preferences, etc. H3 is a common heading use for individual title results.</p>
On the Book page, "Availability", "Description", "Table of Contents", and "Book Details" should be tagged as h2s, not h1s	<p>Status: Planned</p> <p>Comments: These issues will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
On the Book page, "About The Author" and "Tags" should be tagged as h2s, not h3s	<p>Status: Planned</p> <p>Comments: These issues will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
On the Book page, "TITLE", "SUBTITLE", etc. should not be tagged as h6s	<p>Status: Planned</p> <p>Comments: These issues will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>

Original Issue	Response
On the Read Online page, "Logo" is not an appropriate h1 for the page	<p>Status: Deferred</p> <p>Comments: This issue will be investigated for additional information in Q4 2023 and assessed for level of effort.</p>
On the Read Online page, the invisible "Table of Content Section" heading should be tagged as an h2, not an h3	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
On the Read Online page, "TABLE OF CONTENTS" should be tagged as an h3, not an h2	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
On the Read Online page, content under "TABLE OF CONTENTS" should not be tagged as programmatic headings	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
On the Read Online page (Accessibility Mode), headings are not tagged in the document	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
Headings in the PDF are not tagged. [WCAG 2.1 SC 1.3.1]	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
<i>Lists are not appropriately structured. [WCAG 2.1 SC 1.3.1]</i>	
On the Search Results page, lists in the "Refine your search" section should be coded into programmatic lists	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
On the Book page, contents in the "Table of Contents" section should be coded into a programmatic list	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
On the Book page, contents in the "Book Details" section should be coded into a programmatic list	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
On the Read Online page, content under "TABLE OF CONTENTS" should be coded into a programmatic list	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>

Original Issue	Response
<p>On the Read Online page (Accessibility Mode), random and incoherent text fragments are provided to users (e.g., numbers from table of contents on page vii, text from figure on page 2, “forms of energy individOverview individOverview of Energy Usage 3”). [WCAG 2.1 SC 1.3.1, WCAG 2.1 SC 1.3.2]</p>	<p>Status: Planned</p> <p>Comments: The Ebook Central PDF Reader no longer offers “Accessibility Mode”. We provide a “Text Only Mode” that allows screen readers to access PDF content provided by publishers.</p> <p>Ebook Central now offers an EPUB reader that provides an updated and more accessible user experience. As of the time this report was generated, approx.. 32% of the books available on Ebook Central are available in both PDF and EPUB format when downloading, and 8% are EPUB only. DRM and library restrictions may apply if full download is available.</p> <p>As part of our current roadmap Ebook Central is actively working to update the functionality and accessibility of the PDF Reader that will fix or eliminate the issues described.</p>
<p>On the Read Online page (Accessibility Mode), document text is incorrectly broken into fragments of paragraphs, sentences, and words, and is therefore not read out correctly by assistive technologies (e.g., “O U R E N E R G Y F U T U R E”, “U N I V E R S I T Y O F C A L I F O R N I A P R E S S”). [WCAG 2.1 SC 1.3.1, WCAG 2.1 SC 1.3.2]</p>	<p>Status: Planned</p> <p>Comments: The Ebook Central PDF Reader no longer offers “Accessibility Mode”. We provide a “Text Only Mode” that allows screen readers to access PDF content provided by publishers.</p> <p>Ebook Central now offers an EPUB reader that provides an updated and more accessible user experience. As of the time this report was generated, approx.. 32% of the books available on Ebook Central are available in both PDF and EPUB format when downloading, and 8% are EPUB only. DRM and library restrictions may apply if full download is available.</p> <p>As part of our current roadmap Ebook Central is actively working to update the functionality and accessibility of the PDF Reader that will fix or eliminate the issues described.</p>
<p>On the Book page, text in the “Description” and “Book Details” sections that is not visible on screen is incorrectly read out. [WCAG 2.1 SC 1.3.2]</p>	<p>Status: Deferred</p> <p>Comments: This issue will be investigated for additional information in Q4 2023 and assessed for level of effort.</p>
<p>On the Book page, an invisible “Reader Reviews” heading is incorrectly read out. [WCAG 2.1 SC 1.3.2]</p>	<p>Status: Deferred</p> <p>Comments: This issue will be investigated for additional information in Q4 2023 and assessed for level of effort.</p>
<p>On the Book page, the book title h1 should be read before all content it organizes (i.e., “Read Online” button, etc.). [WCAG 2.1 SC 1.3.2]</p>	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
<p>The language of the PDF is not defined. [WCAG 2.1 SC 3.1.1]</p>	<p>Status: Deferred</p> <p>Comments: This issue will be investigated for additional information in Q4 2023 and assessed for level of effort.</p>

Keyboard Support

Original Issue	Response
<p>On the Search Results page, expanded lists in the "Refine your search" section can be thousands of items long (e.g., the "SUBJECT" list has 2,400 items for a search of "global warming"), forcing keyboard users to make thousands of button presses to navigate through or collapse the list. [WCAG 2.1 SC 2.1.1]</p>	<p>Status: Closed</p> <p>Comments: The organization of information and navigation of elements on the Search Results page was updated in 2023 for a more useful and accessible experience. As part of the current roadmap effort additional hidden navigation links or incremental reveal of subject elements are being considered. Finally, though the issue can cause additional time to navigate, it is the equivalent of a user not employing keyboard navigation to visually scan through the subject items, and, as such, does not really fall into a AA level accessibility issue.</p>
<p>On the Book page, the "Show more" link in the Book Details section cannot be activated via keyboard. [WCAG 2.1 SC 2.1.1]</p>	<p>Status: Closed</p>
<p>On the Read Online page, arrow buttons to expand or collapse sections within the sidebar cannot be activated via keyboard. [WCAG 2.1 SC 2.1.1]</p>	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
<p>On the Read Online page (Accessibility Mode), the sidebar cannot be collapsed via keyboard. [WCAG 2.1 SC 2.1.1]</p>	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
<p>On the Search Results page, the "Show more" and "Show less" links reset focus to the top of the page. [WCAG 2.1 SC 2.4.3]</p>	<p>Status: Closed</p>
<p>On the Search Results page, "MICHIGAN STATE UNIVERSITY" receives focus, but is not interactive. [WCAG 2.1 SC 2.4.3]</p>	<p>Status: Closed</p>
<p>On the Book page, "About The Author" and "Tags" receive focus, but are not interactive. [WCAG 2.1 SC 2.4.3]</p>	<p>Status: Closed</p> <p>Comments: This is acceptable as this is a headline of a specific area on the page that a user may want to get more information about the author.</p>
<p>On the Book page, focus incorrectly goes to content in the "Book Details" section that is not on screen when the user advances focus. [WCAG 2.1 SC 2.4.3]</p>	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
<p><i>Focus is not sufficiently visible for a variety of interactive content. [WCAG 2.1 SC 2.4.7]</i></p>	
<p>"ProQuest Ebook Central" link at start of pages</p>	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
<p>On the Home page, the "Search" button, carousel image links, previous and next arrows in the carousel, and navigation dots in the carousel</p>	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>
<p>On the Search Results page, checkboxes</p>	<p>Status: Closed</p>
<p>On the Book page, the "Read Online" and "Download Book" buttons</p>	<p>Status: Planned</p> <p>Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.</p>

Original Issue	Response
On the Read Online page, the "Zoom..." button and tabs (Book Details, Table of Contents, Annotations, Search within book)	Status: Planned Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.
On the Read Online page, the "Full Download" button in the Book Details sidebar	Status: Planned Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.
On the Advanced Search page, dropdowns, checkboxes, and the "Search" button	Status: Planned Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.
On the Book page, advancing focus unexpectedly causes the visual content of the "Book Details" section to change. [WCAG 2.1 SC 3.2.1]	Status: Planned Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.

Navigation

Original Issue	Response
On the Search Results and Advanced Search pages, page title does not identify the unique page. [WCAG 2.1 SC 2.4.2]	Status: Closed / Planned Heading elements page to page contain different names to identify the page the user is currently on. Additional information on pages with specific information may be added to page heading element. Example: 'Search Results for [Topic]'. Will be doing discovery in Q4 2023 to identify if additional contextual information should be added. Workaround: Adding additional information to the heading may provide a clearer experience but the current headings differentiate and inform users about the page they are currently viewing in Ebook Central.
On the Book and Read Online pages, page title does not include the book name. [WCAG 2.1 SC 2.4.2]	Status: Planned Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.
In the PDF, "someTitle" is not an appropriate document title and the title is not available to screen readers (Document Properties not set to show Document Title in Initial View). [WCAG 2.1 SC 2.4.2]	Status: Planned Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.

Forms and Date Submission

Original Issue	Response
On the Search Results page, legend and heading tags (in the "Refine your search" section) should not be provided separately - heading tags should be placed inside legend tags when both are needed so that screen readers do not receive redundant content. [WCAG 2.1 SC 2.4.6]	Status: Deferred Comments: This issue will be investigated for additional information in Q4 2023 and assessed for level of effort.

Original Issue	Response
On the Search Results page, numbers to the right of the visual "Refine your search" labels are not included in programmatic labels (e.g., "35572" next to "English"). [WCAG 2.1 SC 2.4.6]	Status: Closed
On the Search Results page, "Refine your search" is inappropriately read out after every label in the "Refine your search" section. [WCAG 2.1 SC 2.4.6]	Status: Closed
On the Advanced Search page, the PDF checkbox is not programmatically labeled. [WCAG 2.1 SC 3.3.2]	Status: Closed

Images

Original Issue	Response
<i>A variety of images do not have appropriate alternative text. [WCAG 2.1 SC 1.1.1]:</i>	
"ProQuest image in footer"	Status: Closed
"On the Home page, the graphic under "Trusted Content" is decorative and should have a null alt attribute"	Status: Planned Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.
"On the Search Results and Read Online pages, the Chapter Download button (alternative text makes no mention of "PDF", despite "PDF" being visually present in the image)"	Status: Planned Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.
On the Search Results page, book cover thumbnails in the Chapter Results tab are decorative and should have null alt attributes"	Status: Closed Comments: It is acceptable that the book cover image contain a description.
"On the Read Online page, close ("x") button in the sidebar"	Status: Planned Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.
Images in the PDF lack alternative text. [WCAG 2.1 SC 1.1.1]	Status: Planned Comments: We are committed to working with publishers to ensure the content we host is accessible. Some eBooks are only available as scanned PDFs which we know are unreadable with screen readers. As part of our effort to update the functionality and accessibility of the PDF Reader maximizing the usability of content provided by publishers will be tactically integrated. This effort is currently underway and will continue through 2024. Identified content can be remediated.
On the Book page, "Enrichment by Syndetics Unbound" is an image of text, instead of styled text. [WCAG 2.1 SC 1.4.5]	Status: Closed Comments: This is acceptable as some titles are logos with descriptive text and cannot be created with HTML code.

Color and Visual Characteristics

Original Issue	Response
On the Search Results page, color is the only means to differentiate search term highlighting. [WCAG 2.1 SC 1.4.1]	Status: Closed Comments: Search terms no longer appear as highlighted on the Search Results page.

Original Issue	Response
Blue text on multicolored background (e.g., "Advanced Search" and "Browse Subjects" links on the Home page) and dark grey text on grey (e.g., selected filter categories ["PUB YEAR", "LANGUAGE"], page number links when focused on the Search Results page) have insufficient contrast. [WCAG 2.1 SC 1.4.3]	Status: Closed
On the Home page, grey carousel navigation dots on white background have insufficient contrast. [WCAG 2.1 SC 1.4.11]	Status: Planned Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.

Custom Elements and Dynamic Content

Original Issue	Response
Content and functionality (e.g., "Featured Titles" section on the Home page, "Refine your search" section on Search Results page) disappears at some page widths and text sizes. [WCAG 2.1 SC 1.4.4]	Status: Closed / Planned Comments: This issue has been resolved on the Search Results page. This issue on the Home page will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.
The value of the Settings menu button is incorrectly identified as "collapsed" when it is expanded, and screen reader users are not notified when closing it. [WCAG 2.1 SC 4.1.2]	Status: Deferred Comments: This issue will be investigated for additional information in Q4 2023 and assessed for level of effort.
On the Search Results page, "MICHIGAN STATE UNIVERSITY" is incorrectly identified as a menu. [WCAG 2.1 SC 1.4.4]	Status: Deferred Comments: This issue will be investigated for additional information in Q4 2023 and assessed for level of effort.
On the Book page, the heading and contents of the "Description" section are inappropriately read out on the "Show more" link. [WCAG 2.1 SC 1.4.4]	Status: Deferred Comments: This issue will be investigated for additional information in Q4 2023 and assessed for level of effort.
On the Book page, screen reader users are not notified when the "Show Subsections", "Hide Subsections", "(Read more)", and "(less)" links are activated to expand or collapse content. [WCAG 2.1 SC 1.4.4]	Status: Deferred Comments: This issue will be investigated for additional information in Q4 2023 and assessed for level of effort.
On the Book page, programmatic names (e.g., "biology") are not provided for tags. [WCAG 2.1 SC 1.4.4]	Status: Deferred Comments: This issue will be investigated for additional information in Q4 2023 and assessed for level of effort.
On the Read Online page, name information is not complete for page navigation links (i.e., visible text says "Page Intro of 195" but it is read out by screen readers only as "Go to page"). [WCAG 2.1 SC 1.4.4]	Status: Planned Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.
On the Read Online page, screen reader users are not notified when opening contents via the sidebar or when bookmarks are added. [WCAG 2.1 SC 1.4.4]	Status: Planned Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.
On the Advanced Search page, "Advanced Search" is visually styled as a tab, but is not provided with appropriate role or value information for a tab (e.g., "tab" and "selected"). [WCAG 2.1 SC 1.4.4]	Status: Planned Comments: This issue will be assessed for level of effort in Q4 2023 and incorporated into the roadmap for remediation in 2024.