

High-Level Accessibility Evaluation (WCAG 2.1)

Open Textbook Library

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Prepared for: BTAA-Library Accessibility Alliance

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SUMMARY

This report reflects the findings of a high-level assessment of the Open Textbook Library platform for its conformance with the W3C Web Content Accessibility Guidelines version 2.1 (WCAG 2.1).

There are very few WCAG 2.1 compliance issues with Open Textbook Library, and they are very minor overall with the most pressing issue being around content bypasses and keyboard navigation. Below are the most critical issues to address to improve system compliance.

Top Findings

- 1. **Skip Links and Bypasses:** The main problem with the accessibility is the lack of skip links and other content block bypasses. These are important for non-sighted users to be able to navigate the site quickly without having to repeat content or get lost in an infinite scroll.
- 2. **Keyboard Navigation:** Another major issue is in the full text of the ebook. There are several scrollable regions on the page that do not have keyboard access. These areas must be accessible using the keyboard so that all users are be able to scroll the content. Additionally, the filters panel in the search results is not accessible using the keyboard.
- 3. **Color Contrast:** There is a minor color contrast issue with the filter panel. The filter label has an insufficient color contrast ratio of 4.4 (foreground color: #666f77, background color: #eeeeee, font size: 13.8pt (18.4px), font weight: normal), and should be at least 4.5:1.

Best Practices

- Heading levels should only increase by one.
- All page content should be contained by landmarks.





ACCESSIBILITY FINDINGS

This report was conducted against the Open Textbook Library Platform and covers a selection of pages and features that were to be tested as a representative sample of the database's conformance to the WCAG 2.1 AA standards.

The resource was reviewed using a combination of manual and automatic review tools and assistive technologies, including the WAVE Accessibility Assessment tool, Axe Accessibility Assessment tool, WCAG Color Contrast Checker, and NVDA screen reader. PDF content was tested against Section 508 requirements using Adobe Acrobat's accessibility tools and manual analysis. All problems identified by automatic tools were verified manually. This evaluation was performed using Firefox on Windows 11.

Below are the errors revealed during the accessibility evaluation of the Open Textbook Library platform. Each result shows a summary of accessibility issues and the reason it was flagged. Screenshots are included.





1. Initial Interface

Test Case: Test initial interface/landing page to ensure menus, sub-menus, search box, images, icons, etc. are accessible. https://open.umn.edu/opentextbooks/

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Browse Subjects	About Open Textbooks	Submit	Discovery	Open Education Network	
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SC 2.4.1: A mechanism should be available to bypass repeated blocks of content.

Sites should have a way to skip past repeated blocks of content, such as branding, account, login, etc. This most commonly takes the form of "Skip to main content" and "Skip to navigation" links.

Reason flagged:

• There are no skip links at the top of the page.





2. Search Results

Test Case: From the initial landing page, conduct a search for: computer science. Test search results page, including filters/refine search. Filter to CC BY. Sort by Faculty Rating.

	Open Textbook Library	Search the Library	GO		
rowse Subjects	About Open Textbooks Submit	Discovery Open Education Network			
All Textbook	S				
Filters	•				
	College Success	Concise			
	Contributor: Baldwin				
	Publisher: OpenStax				
College	License: CC BY				
Cess Conci	curriculum. With the input carefully prioritized the mo material such as college cu financial literacy, health, an the original College Succes see additions such as a nei	Transition courses, and can also be used as a supplementary resource in courses across the curriculum. With the input of hundreds of instructors and academic success experts, the author carefully prioritized the most critical topics to align to briefer courses. The offering covers material such as college culture, time management, mindest, study skills, test preparation, financial literacy, health, and planning for the future. While much of the material is very similar the original College Success book, this version was holistically edited and updated. Users will see additions such as a new section on group work and greatly expanded coverage of stress management and wellbeing.			

	(7 reviews)				
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	Medical Termino	logy for Healthcare Professions			
& oG	Copyright Year: 2021				
MEDICA	L Contributors: Nelson and G	reene			
TERMINOL		st Florida Pressbooks			
FOR	License: CC BY				
PROFESSIO	ONS focuses on breaking down, context of anatomy and ph	Medical Terminology for Healthcare Professions is an Open Educational Resource (OER) that focuses on breaking down, pronouncing, and learning the meaning of medical terms within the context of anatomy and physiology. This resource is targeted for Healthcare Administration, Health Sciences, and Pre-Professional students.			
Sin the second					

SC 1.4.3: Elements must meet minimum color contrast ratio thresholds. **Location(s):**

<h4>Filters</h4>

Reason flagged:

• Element has insufficient color contrast of 4.4 (foreground color: #666f77, background color: #eeeeee, font size: 13.8pt (18.4px), font weight: normal). Expected contrast ratio of 4.5:1

SC 2.1.1: All functionality should be keyboard accessible.

All functionality of a web page should be accessible using the keyboard. During testing the Filter panel was inaccessible using keyboard controls.

Reason flagged:

• Filters are inaccessible using the keyboard.





SC 2.4.1: A mechanism should be available to bypass repeated blocks of content.

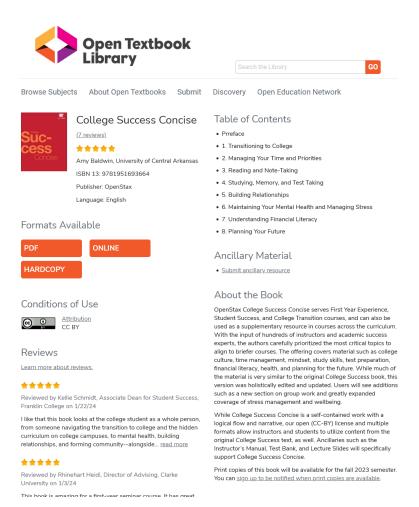
Sites should have a way to skip past repeated blocks of content, such as branding, account, login, etc. This most commonly takes the form of "Skip to main content" and "Skip to navigation" links. Additionally, users should be able to skip past feed content to the footer of a page.

Reason flagged:

- There are no skip links at the top of the page.
- Search results region lacks pagination and doesn't have the "feed" role.
- User cannot use the "End" key to skip to the footer of the page.

3. Individual Results

Test Case: Select the first book in the search results to test the individual search result landing page.





SC 2.4.1: A mechanism should be available to bypass repeated blocks of content.

Sites should have a way to skip past repeated blocks of content, such as branding, account, login, etc. This most commonly takes the form of "Skip to main content" and "Skip to navigation" links.

Reason flagged:

• There are no skip links at the top of the page.

SC 1.3.1: elements must be contained in a or . **Location(s):**

• Submit ancillary resource

Reason flagged:

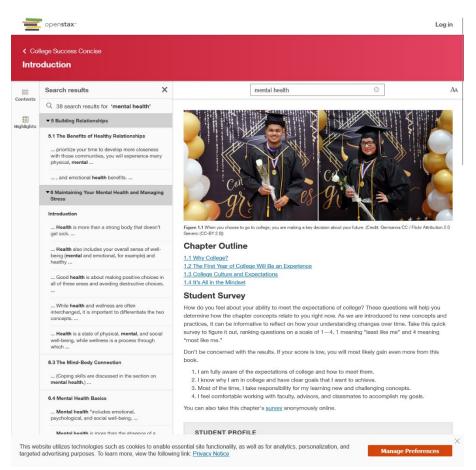
• List item does not have a , parent element





4. Full eBook

Test Case: Test the full-text of the ebook by clicking into the Online link. Test the table of contents. Search the text of the ebook by typing "mental health" and click on one of the results. https://openstax.org/books/college-success-concise/pages/1-introduction



SC 2.1.1: Scrollable regions must have keyboard access. **Location(s):**

• There are multiple instances of this issue on this page.

Reason flagged:

- Element should have focusable content
- Element should be focusable

Disclaimer: This high-level evaluation was conducted for the Library Accessibility Alliance and represents a good faith effort conducted within a limited time frame. It should not be assumed to be complete or free from error. No warranties or guarantees are implied. UT is not responsible for direct, indirect, or incidental damages based on this work; its use or interpretation by any individual, group, or organization; or on conditions beyond our control.



