

Accessibility Evaluation Report: Manifold Learning Platform (University of Minnesota)

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Conducted by: Accessiblü, LLC

For: Library Accessibility Alliance (LAA)

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Summary of Accessibility Findings

Accessiblü conducted a **high-level accessibility evaluation** of the *Manifold* learning platform from the University of Minnesota to assess its usability for individuals with disabilities. The review was conducted using the JAWS and NVDA screen readers, keyboard-only navigation, and manual inspection for conformance to select WCAG 2.2 AA success criteria.

Key Findings

While several accessibility issues were identified that may create confusion or inefficiencies for users relying on assistive technologies, no critical barriers prevented our users from navigating the site, searching for a book, locating it, or accessing the text.

However, these issues could still negatively impact usability, requiring unnecessary effort to complete specific tasks. Addressing these concerns will improve efficiency, usability, and overall accessibility.

Top 3 Issues Identified

1. Inconsistent and Nested Banners

- a. Multiple banner elements are nested, creating redundancy in screen reader output.
- b. Impact: Screen reader users may experience difficulty navigating landmarks, causing confusion.
- c. WCAG Success Criteria: 1.3.1 Info and Relationships (A)
- 2. Search Functionality Issues
 - a. The search button remains expanded, filters apply upon focus instead of selection, and focus returns to the top of the page instead of to results.
 - b. Impact: Users may lose track of where they are, unintentionally change filters, or struggle to access search results efficiently.
 - c. WCAG Success Criteria: 2.4.3 Focus Order (A), 2.1.1 Keyboard (A), 3.2.1 On Focus (A)

3. Improperly Labeled or Non-Interactive Elements

- a. Some buttons, such as "Execute Search" and "Sign In," are labeled but do not function properly, and filter/sorting options appear as static text.
- b. Impact: Users relying on assistive technologies may believe elements are interactive when they are not, leading to wasted effort and confusion.

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c. WCAG Success Criteria: 4.1.2 Name, Role, Value (A), 3.3.2 Labels or Instructions (A)

Disabilities Impacted

Blind and Low-Vision Users

- **Issues:** Unclear page structure, missing alternative text, and improper focus management.
- **Impact:** Navigation inefficiencies and difficulty interpreting visual content via screen readers.

Users with Motor Disabilities

- **Issues:** Keyboard traps and inconsistent keyboard operability in search functions and filters.
- **Impact:** Increased difficulty performing searches and interacting with form elements.

Users with Cognitive Disabilities

- **Issues:** The page layout can be confusing, search filters behave unexpectedly, and there is no guidance for closing expandable menus.
- **Impact:** Difficulty understanding how to interact with the site may lead to frustration for some users.

Page-Specific Findings and Impact Analysis

The following section lists the accessibility findings by URL and WCAG violations and descriptions and their impact on users.

Homepage (https://manifold.umn.edu/)

Issue	WCAG Success Criteria	Description	Example
Nested Banner Elements	1.3.1 Info and Relationships (A)	Screen reader users hear multiple nested banners , causing redundancy.	JAWS reads "Banner" multiple times before reaching content.
		Some images lack meaningful alt text , particularly for maps and graphics.	An image of a city overlay map is announced as "Graphic," with no explanation.
	2.4.6 Headings and Labels (AA)	Search results and section titles use inconsistent heading levels, making navigation difficult.	Some H2s are followed by H4s instead of H3s.
Keyboard Trap in Menu	2.1.1 Keyboard (A)	The navigation menu cannot be closed without using Escape , and no instructions are provided.	Users become "stuck" in the menu when trying to tab out.

Impact Summary:

Multiple banners and inconsistent heading levels may make navigation redundant and confusing for users who rely on screen readers. The menu's keyboard trap could also frustrate keyboard-only users, as blind users may struggle to interpret images due to missing alt text.

Home Page Screenshot

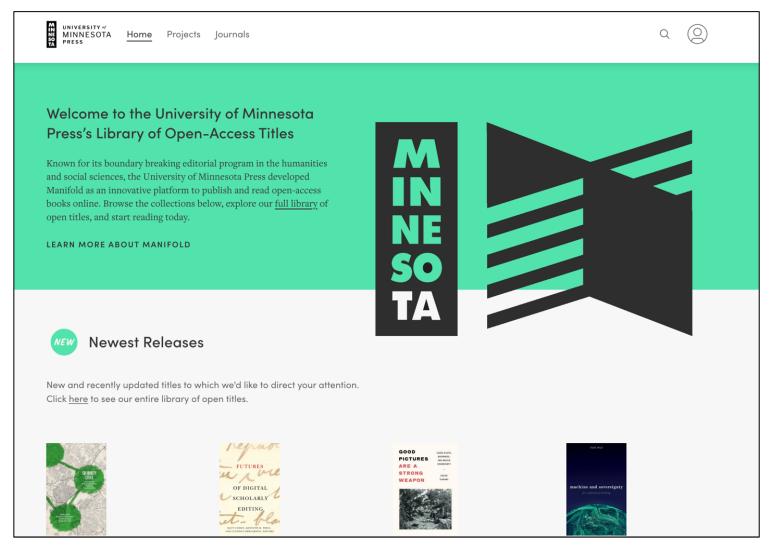


Figure 1. Home page of the University of Minnesota Press's Library of Open-Access (Manifold).

Issue	WCAG Success Criteria	Description	Example
Search Button Cannot Be Collapsed		The search button remains expanded even when users try to collapse it.	Pressing "Enter" or "Space" does not collapse the expanded search function.
Search Results	(A)	results section.	Users must manually navigate back to results.
Misleading Filter Selection Behavior	3.2.1 On Focus (A)	Filters change when focused, instead of requiring user selection.	The "Anthropology" filter activates simply by tabbing over it.

Search Page (https://manifold.umn.edu/search)

Impact Summary:

Users who are blind or have motor or cognitive impairments may struggle with the search function, experiencing unexpected focus changes and difficulty adjusting filters.

Search Page Screenshot

MINNESOTA Press	Home Projects Journals	a (Q)
	Q silence Show results for: V Everything V projects V journals V resources V texts V annotations V full texts	
	<text><text><text><text><text><text></text></text></text></text></text></text>	
	Sound, Image, Silence PROJECT by Michael Gaudio by Michael Gaudio Sound, Image, Silence provides a groundbreaking examination of the colonial Americas by exploring the special role that aural imagination played in visible representations of the New World. It masterfully fuses a diversity of work across vast social, cultural, and spatial distances, giving us both a new way of understanding sound in art and a powerful new vision of the New World. Published December, 2019	

Figure 2. Screenshot of the Manifold search page with results for the word "silence."

Book Navigation (https://manifold.umn.edu/book)

Issue	WCAG Success Criteria	Description	Example
Described Alternative		•	The book cover images do not convey meaningful content.
	4.1.2 Name, Role Value (A)	linke making it linglaar that it carvas as a	JAWS does not announce "Table of Contents" when opening the menu.

Impact Summary:

Users relying on screen readers may struggle to find and navigate book sections efficiently because of inadequate labeling and a lack of descriptive alternative text.

Book Page Screenshot

X N N N N

UNIVERSITY // MINNESOTA Home Projects Journals PRESS

Knowing Silence

How Children Talk about Immigration Status in School



There is a persistent assumption in the field of education that children are largely unaware of their immigration status and its implications. In *Knowing Silence*, Ariana Mangual Figueroa challenges this "myth of ignorance." By listening carefully to both the speech and significant silences of six Latina students from mixedimmigration-status families, from elementary school into middle school and beyond, she reveals the complex ways young people understand and negotiate immigration status and its impact on their lives.

Providing these children with iPod Touches to record their own conversations, Mangual Figueroa observes when and how they choose to talk about citizenship at home, at school, and in public spaces. Analyzing family conversations about school forms, in-class writing assignments, encounters with the police, and applications for college, she demonstrates that children grapple with the realities of citizenship from an early age. Educators who underestimate children's knowledge, Mangual Figueroa shows, can marginalize or misunderstand these students and their families.

Combining significant empirical findings with reflections on the ethical questions surrounding research and responsibility, Mangual Figueroa models new ways scholars might collaborate with educators, children, and families. With rigorous and innovative ethnographic methodologies, *Knowing Silence* makes audible the experiences of immigrant-origin students in their own terms, ultimately offering teachers and researchers a crucial framework for understanding citizenship in the contemporary classroom.

Figure 3. The Knowing Silence main page.



Book Table of Contents Screenshot

Cover	
Half Title Page	
Title Page	
Copyright Page	
Dedication	
Contents	
Preface and Acknowledgments: How I Enter	
Transcription Conventions	
Introduction: Children as Knowing	
1. "Recording Everything I Say"	
2. A Spiraling Curriculum of Citizenship	
3. Speech or Silence at School	
Interlude I. "Cállate"	
4. An Interview with the Dream Team	
Interlude II. "There's Always Police"	
Conclusion: A Lifetime of Knowing	
Afterword: We Are Still Here	
Notes	
Bibliography	

Figure 4. Table of Contents page for Knowing Silence.

Projects Page (<u>https://manifold.umn.edu/projects</u>)

Issue	WCAG Success Criteria	Description	Example
Filter and Sorting Options Read as Static Text	4.1.2 Name, Role, Value (A)	Users are not informed that sorting and filtering options are interactive.	Sort "A-Z" and "Z-A" functions appear as plain text instead of selectable buttons.
	3.3.2 Labels of	isaaren tiala anas natara intaraetina	The screen reader does not provide a clear label for search entry.

Impact Summary:

Users who depend on filters for project searches may find it challenging to make selections, resulting in inefficient navigation.

All Projects Page Screenshot

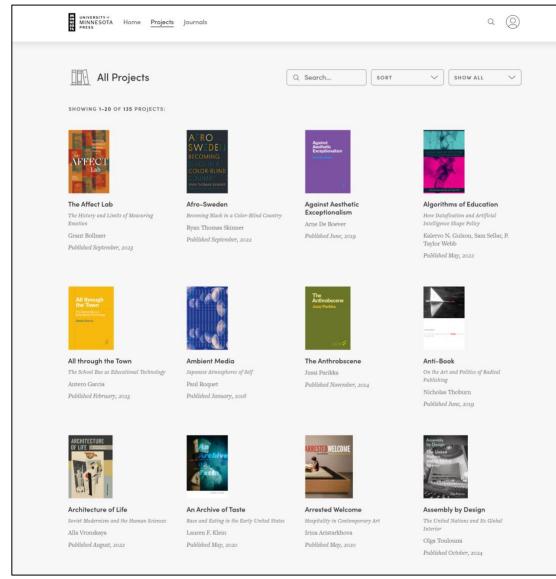


Figure 5. The "All Projects" page displays the search results.

Final Thoughts and Recommendations

Despite these challenges, users successfully completed searches, found books, and accessed text. However, the efficiency and ease of use for assistive technology users are somewhat negatively impacted.

Recommended Fixes

- Improve navigation structure by using clear heading levels and removing redundant banners.
- Fix search function usability by ensuring filters only activate on selection and focus remains on search results.
- Correct labeling issues in menus, tables of contents, and buttons to prevent confusion.

Disclaimer

Accessiblü prepared this report as a high-level accessibility evaluation of the University of Minnesota's Manifold learning platform. The evaluation utilized industry-standard testing methodologies, including screen reader testing (JAWS 2025), keyboard-only navigation, and manual inspection for select WCAG 2.2 AA success criteria.

This report does not represent a comprehensive WCAG compliance audit and should not be seen as a certification of accessibility compliance. While we have identified significant accessibility concerns and usability barriers, this evaluation was limited in scope and may not encompass all accessibility issues on the platform.

No Legal Liability:

Accessiblü offers this report for informational purposes only. It assumes no legal responsibility for accessibility violations or compliance failures resulting from its use. Organizations seeking formal certification should conduct a comprehensive audit and user testing disabilities.

Limitations of Testing:

This evaluation was conducted at a specific time, and platform updates may have occurred after testing was completed. Additionally, while automated tools and expert reviews were utilized, real-world users with disabilities determine the true measure of accessibility.