High-level accessibility review – LAA
(Gale Power Search Platform)

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Gale Power Search Platform

Summary

Top 3 problems for the Gale Power Search Platform

This high-level assessment covers limited portions and functionality of the Gale Power Search Platform. The assessment revealed issues with assistive technology compatibility, resulting in some users missing information required to perceive and understand content, and to operate functions. It is important to keep in mind that the findings represent a high-level assessment, and do not reflect the results of a Deque Comprehensive Web Assessment.

1. **Name Role Value** – Throughout the site, there is often a visual indication of a current or selected item, but a programmatic equivalent is not provided in order to benefit users who are unable to visually perceive this.

2. **Lists** – In some instances, unordered lists and description lists are malformed due to the existence of code nested within the same lists that is not allowed to be nested.

3. **Context Changes** – When applying filters to search results, the page often reloads after each filter is applied. This occurs without any warning and without a user specifically triggering a ‘apply filter’ type of control. As a result, a user of Assistive Technology may become disoriented or may abandon any filtering due to the disruptive nature of the context change.

Accessibility findings

**Project wide issues**

The issues presented in this section were identified in multiple pages and are recorded here to avoid repetition. These are applicable to each screen. Due to particularities, similar issues are still reported on a page per page basis, where applicable.

**Automated findings using Axe**

Issues found through automated testing come from the Axe plugin, an open source accessibility testing tool that is available for Chrome, Firefox and Edge. Details here: [https://www.deque.com/products/axe/](https://www.deque.com/products/axe/).

No project-wide issues were found using automated methods

**Additional manual findings using NVDA screen reader**

1. **SC 1.1.1 A** – The ‘Gale’ logo in the footer area is missing vital information in its alt attribute value. Specifically, the text “A Cengage Company”.


1. **Landing Page**

**Source:** https://go-gale-com.proxy.lib.umich.edu/ps/start.do?p=GPS&u=umuser  
**Test case:** Test initial interface/landing page to ensure menus, sub-menus, search box, images, icons, etc. are accessible.

**Automated findings using Axe**

No issues were found using automated methods

**Additional manual findings using NVDA screen reader**

1. **SC 4.1.2 AA** – The ‘Subject Guide Search’ item is visually distinguished as the ‘current’ item among a grouping of items, but this is not programmatically indicated.

2. **SC 4.1.3 AA** – When the publication date has been improperly filled out, and a user attempts to submit the form, the ‘Please enter a valid date’ error message is not automatically announced by Assistive Technology.
2. Search Results

Source: https://go-gale.com.proxy.lib.umich.edu/ps/subjectguide.do?method=doLinkDirectedSearch&searchType=SubjectGuideForm&listPosition=1&prodId=GPS&subjectParam=Q1&subjectId=13124&searchId=&searchMethod=subject+click&userGroupName=umuser&typedCharacters=Animal+husbandry&inPS=true&displaySubject=Animal+husbandry&subjectAction=VIEW_SUBDIVISIONS&searchQueryId=Q1

Test case: From the initial landing page, conduct a search for: “Animal husbandry,” then select the first subject term, “Animal husbandry.” Test search results page, including filters/refine search (full text documents, peer-reviewed journals, lexile measure 850L-1050L) and sort by options (relevance, newest, oldest).

Automated findings using Axe
1. **SC 4.1.2 A** – Some search results contain a `<span>` element with no defined role that also makes use of an ARIA attribute (aria-label) that is not supported on a generic element with no defined role.
2. **SC 1.3.1 A** – The .top-tools__container unordered list contains `<div>` elements that are not allowed to be nested within the unordered list.
3. **SC 1.3.1 A** – The .filters_list description list contains `<dt>` elements whose roles have been modified by ARIA to be a semantic button. As a result, the description list is malformed.

Additional manual findings using NVDA screen reader
1. **SC 4.1.2 A** – The ‘Academic Journals (2,006)’ item is visually distinguished as the ‘current’ item among a grouping of items, but this is not programmatically indicated.
2. **SC 3.2.2 A** – When applying any filter to the results, a change in context is triggered as there is no warning ahead of time and there is no ‘apply filters’ control to allow the user to determine when filters should be applied.
3. **SC 4.1.2 A** – The “1” in the pagination is visually distinguished as the ‘current’ item among a grouping of items, but this is not programmatically indicated.
4. **SC 1.3.1 A** – When the Lexile Measure filter group is expanded, the checkbox options are not programmatically associated with their group label.
3. Individual Search Result 1

Source: https://go-gale-com.proxy.lib.umich.edu/ps/i.do?p=GPS&u=umuser&id=GALE|A788881273&v=2.1&it=r&sid=bookmark-GPS&asid=8fd4cca2

Test case: Test individual search result landing page (“Enhanced antibacterial activity of bovine milk exosome-based drug formulation against bacterial pathogens.”)

Automated findings using Axe
No issues were found using automated methods

Additional manual findings using NVDA screen reader
1. SC 1.3.1 A – Several section headings exist in the main article but they are not semantically marked up as headings.
2. SC 4.1.2 A – The “MLA 9th Edition” in the ‘Source Citation’ section is visually distinguished as the ‘selected’ item among a grouping of items, but this is not programmatically indicated.
4. **Individual Search Result 2**

**Source:** https://go-gale-com.proxy.lib.umich.edu/ps/i.do?p=GPS&u=umuser&id=GALE|A788838555&v=2.1&it=r&sid=bookmark-GPS&asid=96e14256  
**Test case:** test actual document (HTML full-text article with PDF download option: “A practical guide for the husbandry of cave and surface invertebrates as the first step in establishing new model organisms.”)

**Automated findings using Axe**  
No issues were found using automated methods

**Additional manual findings using NVDA screen reader**  
Not completed due to insufficient time.
5. **Advanced Search**

Source: https://go-gale-com.proxy.lib.umich.edu/ps/dispAdvSearch.do?userGroupName=umuser&prodId=GPS

**Test case:** Test advanced search page

Automated findings using Axe

1. **SC 1.3.1 A** – The .top-tools__container unordered list contains `<div>` elements that are not allowed to be nested within the unordered list.
2. **SC 4.1.2 A** – The page contains duplicated IDs. Affected IDs include: LX_dynamicLimiterField

Additional manual findings using NVDA screen reader

Not completed due to insufficient time.