

Feature

Accessibility for Individuals with Disabilities in Academic Libraries

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Abstract

The current study explores the accessibility efforts of academic libraries in supporting patrons with disabilities, with a focus on the implementation of assistive technologies, accessible furniture, and other accommodations. A survey was distributed to academic librarians across various listservs (ARL, ACRL, and ALA) to gather data on current accessibility practices, challenges faced, and areas for improvement. The survey included questions on the availability of assistive technologies such as screen readers, Braille displays, and text-to-speech software, as well as physical accommodations like adjustable furniture, ramps, and accessible workstations. The study seeks to highlight the importance of ongoing investment in accessibility, staff training, and institutional support to ensure equitable access for all patrons. Additionally, the researcher hopes to provide insights for library administrators and policymakers in addressing accessibility challenges in academic environments.

Introduction

Academic libraries play a crucial role in supporting the intellectual growth of students, faculty, and staff. For individuals with disabilities, however, accessing library resources can be challenging without dedicated accessibility services. Libraries that prioritize accessibility provide inclusive environments, enabling everyone to benefit fully from their resources. Accessible library services are essential in creating equitable opportunities for individuals with disabilities to participate in academic activities. Libraries serve as hubs for research, learning, and collaboration, and barriers to access can significantly hinder the academic success of students and faculty with disabilities. These barriers might include physical inaccessibility, limited access to digital resources for those with visual impairments, or difficulty in accessing information due to cognitive disabilities. By providing accessibility services, libraries demonstrate a commitment to inclusivity, allowing all users to fully engage with their resources.

Academic libraries offer a variety of services to accommodate the unique needs of individuals with disabilities. Many libraries offer assistive technology such as screen readers, magnification tools, text-to-speech software, and Braille displays. These tools allow users with visual impairments to read digital and physical resources, making information more accessible. Additionally, speech recognition software can assist users with mobility impairments, allowing them to interact with computers without traditional typing. Digital resources, including ebooks, databases, and websites, should be designed to accommodate assistive technologies. This includes offering text-based descriptions for images, closed captioning for videos, and accessible formats for downloadable resources.

Physical accessibility is crucial in libraries, and many institutions provide ramps, elevators, and accessible desks. These accommodations are particularly important for individuals with mobility impairments, enabling them to navigate the library comfortably and independently. Libraries may also provide ergonomic furniture and adjustable computer stations, benefiting individuals with various physical disabilities. In addition to the physical building, accessibility is also important in relation to the physical resources the library holds. Academic libraries often provide alternative formats for print materials. This might include converting books and articles into Braille, large print, or audio formats. In some libraries, staff can assist users by transcribing materials, making it possible for visually impaired or dyslexic students to access essential readings.

Accessibility in libraries extends beyond technology and physical adaptations. Staff training on disability awareness, accessible technologies, and inclusive communication is vital. Library staff who are well trained in these areas can offer more effective support and ensure that users with disabilities feel welcome and understood.

The current study explores the accessibility efforts of academic libraries in supporting patrons with disabilities, with a focus on the implementation of assistive technologies, accessible furniture, and other accommodations. The study seeks to highlight the importance of ongoing investment in accessibility, staff training, and institutional support to ensure equitable access for all patrons. Additionally, the study seeks to provide insights for library administrators and policymakers in addressing accessibility challenges in academic environments.

Drawing from a previous study by Longmeier and Foster, who conducted a survey of Association of Research Libraries (ARL) institutions in October 2020,¹ the current study focused on the following research questions:

- RQ1: What factors are influencing academic institutions to provide resources and tools for accessibility?
- RQ2: What services and software/hardware are available for patrons' accessibility?
- RQ3: What support outside the library do academic libraries use to provide assistance for patrons' accessibility?
- RQ4: Are the library accessibility resources being used, and does the library plan on continuing the accessibility activities either long-term or short-term?

Literature Review

Over the past couple of decades, the number of students with documented disabilities attending higher education has increased, bringing accessibility issues to the forefront of library services.² This has led to a need for more research on how library services can be made more accessible for those students. The current study uses a survey similar to that used by Longmeier and Foster, who conducted a survey of ARL institutions related to what services the library provides, whether they have changed due to campus or state requirements, which positions within libraries provide support, and what the impetus was for offering services.³

Accessibility Surveying

Surveying has been a common methodology used in the literature on accessibility. Bonnici and Maatta conducted a longitudinal survey by polling librarians in 2008 and then again in 2014 at the National Library Service for the Blind and Physically Handicapped, part of the Library of Congress.^{4,5} According to Longmeier and Foster, Bonnici and Maatta's survey:

...examined available services, the demographics of the librarians providing the assistance, and the characteristics of the patrons served. Notable changes from 2008 to 2014 were perceptions of reduced support from the library administration, expressed needs for better technology assistance, and disappointment at the delayed release of the planned Digital Talking Books Program. Librarians in both years reported fiscal concerns and a lack of qualified professionals.⁶

In another accessibility study using surveys, Ashmore, Grogg, and Rosen⁷ report on a survey conducted in 2019 by LYRASIS, a membership network of more than 1,000 galleries, libraries, archives, and museums to discover how these membership institutions approach accessibility. Their report summarizes the survey with examples of accessibility efforts from North Carolina State University Libraries. LYRASIS's survey collected information on the challenges, determined best practices, and outlined the next steps for libraries that struggle in accessibility.⁷

In 2021, Schultz and Azadbakht⁸ used surveying among librarians worldwide who work with Open Educational Resources (OERs). From the participation in the survey, the researchers found that fewer than half of the respondents said that they always consider accessibility when working with faculty to create or adapt OERs. Fewer than one-third said they considered accessibility a factor when adding OERs to their collections. Limitations that came up in the study included time, lack of resources, and lack of support for creating OERs. These limitations are then increased for disabled students who cannot access outdated OERs.⁸

Accessibility Case Studies

In addition to surveys, case studies have also been used as a common methodology in the accessibility literature. Using the College of Staten Island (CSI) Library–City University of New York (CUNY) as a case study, Falloon reviewed the best practices for evaluating, purchasing, and marketing electronic resources in compliance with the Americans with Disabilities Act (ADA). Falloon used LibGuides as an outreach tool for this study to disseminate information and documentation among CUNY librarians. Falloon concluded that purchasing and marketing workflows need to be redesigned to be universally applicable to all library users. This includes the additional step of evaluating the accessibility, not just the usability, of the product or service.⁹

Using the University of Mississippi Libraries as a case study, Hopper determined how academic libraries can best serve functionally diverse patrons in a digital landscape through usable and accessible LibGuides.¹⁰ Hopper builds on the literature concerning LibGuide's accessibility and usability, exploring what best practices can be implemented when developing LibGuides. For this case study, Hopper created a best practices LibGuide as a resource for librarians to use when developing their own guides. The librarians' guides were then evaluated for accessibility with WebAIM's WAVE Accessibility Evaluation Tool, along with a manual rubric created by Stitz and Blundell.¹¹ Hopper indicated that further research is recommended in the subject, with a wider range of LibGuides and creators and a deeper look into overall accessibility issues.¹⁰

Accessibility and Online Courses

A common focus in the literature on accessibility relates to the accessibility of online courses through universities. At the University of North Texas, Briggs et al. conducted a quantitative analysis of 374 accessibility reports conducted by digital accessibility specialists across three academic semesters.¹² These reports evaluated course accessibility following Universal Design for Learning (UDL) principles and Web Content Accessibility Guidelines (WCAG). From the findings, the authors developed recommendations that accessibility professionals, faculty, and instructional designers can use to support their faculty and online students with disabilities.¹²

In a study by Kumar and Owston,¹³ the researchers evaluated online courses for accessibility by automated tools and by student participants, and the data from the evaluations were compared on different methods of e-learning accessibility. The results from the evaluations found that nearly all of the students who were observed encountered one or more barriers to accessibility while completing the online courses, although the automated tools did not predict the same barriers. The automated tools predicted potential barriers that were not relevant to the study participants. The researchers indicate the importance of carrying out student-centered accessibility evaluations in addition to relying on automated tools and accessibility guideline conformance as measures of accessibility. The researchers also found that students preferred to participate in unmoderated sessions, and that the data from the unmoderated sessions were comparable to that from moderated sessions.¹⁰

Library Websites and Accessibility

Another common focus of accessibility studies is library websites. As Longmeier and Foster put it, a library website serves as the library's "virtual front door."¹⁴ Cassner, Maxey-Harris, and Anaya¹⁵ examined the availability of services for users with disabilities on the websites of 99 ARL member libraries. The authors determined that 88% of the libraries had pages supporting people with disabilities, and many libraries provided services, such as retrieving materials, and circulation assistance, such as extended checkout times.¹⁵

A different study by Vaughan and Warlick¹⁶ examined library websites of Virginia's four-year academic institutions in the Virtual Library of Virginia consortium. The authors found that only 27.5% of the forty websites included information on their home pages about policies or programs for people with disabilities. They went on to recommend that libraries have a designated point of contact for users needing accessibility help. Furthermore, Vaughan and Warlick recommended inclusive language to use on web pages and in policies, as well as topics to cover on accessibility web pages.¹⁶

McCann and Peacock¹⁷ investigated how accessible academic library websites are by analyzing the homepages of 124 ARL member institutions in the United States using the WAVE web accessibility evaluation tool. The study highlights that library websites—critical access points for all users—frequently fail to meet accessibility standards despite libraries' legal and ethical obligations to provide inclusive digital access. Furthermore, the study underscores that accessibility must be embedded in web design, not treated as an optional feature, and that continuous evaluation and correction are needed to serve diverse user needs effectively.¹⁷

In addition to academic and research libraries, the accessibility of public library websites has also been studied. Maatta Smith¹⁸ used a website accessibility assessment of the 127 US public library members of the Urban Library Council, using the World Wide Web Consortium's WCAG to "establish the level of Web readiness of urban public libraries to meet the needs of individuals with disabilities."¹⁸ Findings from the study suggested these libraries require additional and ongoing maintenance to be digitally inclusive.¹⁹

Yoon, Hulscher, and Dols studied blind participants' navigation of library and nonlibrary websites using screen readers and advocated that library websites employ "an inclusive information architecture" for screen readers.²⁰ The authors offered recommendations for the layout of the content, issued a reminder that screen readers convey information aurally, and cautioned that extraneous material, such as decorative elements, hinders usability. While their suggestions are

specifically related to users of screen readers, the authors' overarching recommendations are based on universal design (UD) concepts.²¹

Accessibility and Open Access

Another area of research has been the impact of open access (OA) on accessibility. Hadad and Aharony²² examined how academic librarians perceive their roles, and the roles of their libraries, in promoting OA publishing, focusing on what changes are needed to strengthen these efforts. Using semi-structured interviews with representatives from all ten Israeli universities, the authors analyzed librarians' perspectives on current practices, challenges, and future needs related to OA. The study found that librarians largely view themselves as advisors who guide researchers through OA publishing options and policies, while seeing libraries as responsible for implementing OA initiatives once institutional policies are in place.²²

Accessibility and Legal Challenges

Wentz, Gorham, and Jaeger²³ explored the unique legal, ethical, and practical challenges that academic libraries in the United States face in ensuring accessible content and digital services for people with disabilities. The authors explain that academic libraries occupy a complex institutional space: They are both providers of digital access (e.g., computers, databases, online systems) and creators/distributors of content (e.g., digital repositories, open journals), which exposes them to multiple accessibility obligations under US civil rights laws such as the ADA and the Rehabilitation Act.²³

This challenge becomes all the more important as new federal digital accessibility regulations that affect higher education institutions in the United States are issued. In April 2024, the US Department of Justice finalized updated rules under Title II of the ADA that require public colleges, universities, and other state and local education entities to ensure their digital content and platforms are accessible to users with disabilities. These standards align with the WCAG 2.1 Level AA, which set widely recognized criteria for accessible websites, mobile apps, documents, media, and learning systems. Garrett²⁴ emphasizes that higher education institutions must act before the compliance deadline which was recently extended to April 26, 2027 for state and local government entities serving populations of 50,000 or more, and April 26, 2028 for state and local government entities serving populations of less than 50,000, as well as special district governments. Garrett also notes that achieving accessibility involves addressing legacy course materials, decentralized content creation, gaps in staff expertise, and the need for institutional policies and resources to support ongoing accessibility work.²⁴

Theoretical Framework

For the current study, results were analyzed using the principles of UD as a theoretical framework. According to the Centre for Excellence in Universal Design, UD is "the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability."²⁵ UD and UDL emerge from a shared foundation aimed at fostering equity, accessibility, and inclusivity across various domains.

The initial conceptualization of UD emerged in architecture, with an emphasis on creating physical spaces accessible to all. Mace, Hardie, and Plaice are credited with foundational work in this area, advocating for seamless integration of accessibility features into mainstream architectural

practices.²⁶ Other studies, such as Steinfeld and Maisel's, have further explored the application of UD in housing design, demonstrating how adaptable living spaces can address the needs of aging populations and individuals with varying mobility needs.²⁷

A common thread across the current research is the emphasis on UD/UDL as a multifaceted framework adaptable to diverse educational and research settings. Almeqdad et al. and Espada-Chavarria et al. underscore the importance of flexible instructional strategies, such as multimodal materials and diverse assessment techniques, in making education accessible to a broader spectrum of learners.²⁸ Meanwhile, Williams and Moore extend UD principles to biomedical research, advocating for the systemic inclusion of persons with disabilities to enhance research validity and equity.²⁹ The literature heavily emphasizes the role of UD/UDL in addressing systemic inequities, particularly for learners with disabilities. Lid situates UD within an interdisciplinary discourse, linking it to broader social justice efforts.³⁰ Similarly, Schreffler et al. advocate for its application in STEM education, emphasizing barrier removal through accessible instructional designs and laboratory setups.³¹ Wells highlights positive student perceptions of UDL strategies in virtual higher education, particularly regarding their flexibility and accessibility.³² These insights resonate with broader calls in the literature for stakeholder engagement to refine and expand UD/UDL practices.

In the context of technology, UD principles guide the development of digital tools and applications that accommodate a diverse user base. The intersection of technology and UD/UDL is highlighted as transformative, particularly in Bray et al. and Ismailov and Chiu.³³ These studies reveal how digital tools enable personalized learning experiences, streamline access to materials, and support autonomy in online and secondary education contexts. The critical need for educator training to maximize these technological affordances is a recurring insight.

Despite its widespread benefits, researchers note challenges in implementing UD across disciplines. Variability in implementation fidelity, insufficient longitudinal research, and the need for more interdisciplinary approaches are significant barriers. For example, Bray et al. and Schreffler et al. stress the necessity of standardized practices and sustained training programs for educators and researchers.³⁴ Cost, lack of awareness, and resistance to change also remain significant barriers.³⁵ However, advancing technologies and evolving societal attitudes provide opportunities to overcome these hurdles.

Methods

The method used in this study involved a survey given online to academic librarians from institutions across the United States to gather data on current accessibility practices, challenges faced, and areas for improvement. Similar to Longmeier and Foster, who conducted a survey of ARL institutions in October 2020, the survey included questions on the availability of assistive technologies such as screen readers, Braille displays, and text-to-speech software, as well as physical accommodations like adjustable furniture, ramps, and accessible workstations. Having received approval from the Institutional Review Board, an invitation with a link to the survey was distributed via email distribution lists for the ARL, as well as posted to discussion forums for the ALA and Association of College and Research Libraries via ALA Connect. The survey was distributed to potential participants in October 2024 and stayed open until January 2025. The quantitative study comprised multiple choice and open-ended questions. The survey took approximately 15 minutes to complete.

Results

This study aimed to examine academic librarians' efforts to create accessibility tools, resources, and spaces in colleges and universities. This research study provides a descriptive picture of accessibility practices in academic libraries through the eyes of the librarians currently working in those spaces. This study consists of a survey of academic librarians. While there are similarities among the academic libraries in this sample, it is erroneous to think they can be lumped together. Data analysis provides a picture of the current accessibility practices in academic libraries, the timeline for when these practices started, and the reason behind making academic libraries accessible. The survey data were collected from academic librarians during the fall semester of 2024. The data were analyzed using SPSS, NVIVO, and HyperResearch. Each survey took approximately 15 minutes to complete and consisted of 22 questions plus the consent form.

During the data collection period, a total of 163 participants opened the survey. Of the 163 participants that opened the survey, 153 of them answered the first question. The first question asked participants to identify the type of institution where they work; the answers are as follows: 95 (62%) public academic libraries, 51 (33%) private academic libraries, 2 (1%) special/government libraries, and 5 (3%) other. Of the five respondents who reported "other" as the library type, two reported being at a nonprofit or library consortium.

Table 1. Type of Institution

Q1 Type of institution	Responses	Percentage
Public	95	62.1%
Private	51	33.3%
Special/Government	2	1.3%
Other	5	3.3%
Total	153	100.0%

The second question asked participants, "Has your library engaged in any accessibility activities as defined above during the past three years?" The answers were either "yes" or "no." The respondents' answers are 124 (86%) yes and 20 (14%) no.

Table 2. Has Your Library Engaged in Any Accessibility Activities in the Past Three Years?

Q2 Has your library engaged in any accessibility activities in the past three years?	Responses	Percentage
Yes	124	86.1%
No	20	13.9%
Total	144	100.0%

In the third question, when asked to describe what accessibility activities their libraries undertook in the past three years, many of the responses related to auditing or redesigning the library website. Several participants specifically mentioned LibGuides and ensuring the LibGuides used by their institution aligned to accessibility best practices. One participant gave a specific example of reconfiguring LibGuides to work with screen readers. Ensuring videos were closed captioned and that other electronic resources aligned with accessibility best practices were other common

themes across the responses. Making sure the library's social media content was accessible was also mentioned. Other answers related to providing accessible information literacy instruction, both in the physical classroom and virtually. Still, other answers included providing staff training through workshops and other efforts, with sign language classes for library staff being one specific example given. Collaboration was found to be important, such as using a staff working group to review the library's accessibility efforts and working with the institution's IT Accessibility Coordinator. Some libraries even get the students involved, with one participant mentioning a student survey related to accessibility efforts.

The fourth question asked participants, "How long has your library been actively providing accessibility services to users?" The choices for this question were as follows: less than 1 year, 1–5 years, and 6 or more years. Less than 1 year was chosen by 17 (15.7%) respondents. The choice 1–5 years was selected by 53 (49.1%) respondents, and the choice 6 or more years was chosen by 38 (35.2%) respondents.

Table 3. How Long Has Your Library Been Actively Providing Accessibility Services?

Q4 How long has your library been actively providing accessibility services to users?	Responses	Percent
Less than 1 year	17	15.7%
1–5 years	53	49.1%
6 or more years	38	35.2%
Total	108	100.0%

Table 4 compares the types of libraries and the length of time each has been offering accessibility services to users. The answers most chosen by type of library are as follows: 73.7% of public libraries have been offering accessibility services for 6 years or longer, 52.9% of private libraries have been offering accessibility services to users for less than 1 year, 5.9% of special/government libraries have been offering accessibility services to users for less than 1 year, and 2.6% other libraries have been offering accessibility services to users 6 or more years.

Table 4. Type of Library and Providing Services to Users

	How long has your library been actively providing accessibility services to users?		
Type of library where you work	Less than 1 year	1–5 years	6 or more years
Public	41.2%	58.5%	73.7%
Private	52.9%	39.6%	23.7%
Special/ Government	5.9%	0.0%	0.0%
Other	0.0%	1.9%	2.6%

For Question 5, in response to the open-ended question, "What services does your library provide for accessibility requirements?" similar to Longmeier and Foster, the most prevalent answers were scanning or OCR of resources and retrieval of materials, mentioned by most respondents.³⁶

Services for users with visual impairments were also prevalent answers, including providing magnifiers, screen readers, large format printing and scanning, large format or Braille keyboards, alternative format textbooks, as well as modified lighting. Services for users with hearing impairments were also mentioned, such as sign language interpreters, external microphones in the library's classroom, and closed captioning services. Physical space was also a common theme, with participants mentioning ADA-compliant bathrooms, doorways, and aiseways, accessible meeting rooms and study spaces, as well as adjustable height furniture. Other services mentioned included the availability of voice recorders for note taking as well as a book delivery service. Several participants mentioned library staff were available to individually assist users with special needs. Collaboration was also found to be important, with participants mentioning collaborating with their university's disability services unit on campus, their university's IT department, as well as with faculty, with one participant mentioning hosting workshops for faculty on creating accessible documents.

Question 6 asked participants, "What triggered the development of accessibility services in the library?" Participants were asked to mark all that apply. The answer choices were as follows:

1. Equity, diversity, and inclusion priorities as professional value
2. Library priority
3. Campus mandate
4. Lawsuit, reactive
5. Hired staff with needs
6. Changing publisher interfaces
7. Lawsuit, proactive
8. Our library does not provide services

The sample size for this question was 92 participants. Responses can be found in Table 5.

Table 5. What Triggered the Development of Accessibility Services in the Library?

Q6 What triggered the development of accessibility services in the library?	Responses	Percentage
Equity, diversity, and inclusion priorities as a professional value	74	80.4%
Library priority	71	77.2%
Campus mandate	30	32.6%
Lawsuit, reactive	9	9.8%
Hired staff with needs	7	7.6%
Changing publisher interfaces	6	6.5%
Lawsuit, proactive	3	3.3%
Our library does not provide services	3	3.3%

Table 6 compares the different types of libraries with the different triggers for developing accessibility services in the library. The two categories chosen frequently among all libraries were equity, diversity, and inclusion priorities as professional value or library priorities.

Table 6. Comparing Library Type with Trigger for Accessibility

Q6 What triggered the development of accessibility services in the library?	Type of Library				
	Public	Private	Special/ Government	Other	Total
Equity, diversity, and inclusion priorities as a professional value	47 (79.7%)	25 (80.6%)	1 (100.0%)	1 (100.0%)	74 (80.4%)
Library priority	47 (79.7%)	22 (71%)	1 (100.0%)	1 (100.0%)	71 (77.2%)
Campus mandate	23 (39.0%)	6 (19.4%)	0 (0.0%)	1 (100.0%)	30 (32.6%)
Lawsuit, reactive	6 (10.2%)	3 (9.7%)	0 (0.0%)	0 (0.0%)	9 (9.8%)
Hired staff with needs	3 (5.1%)	3 (9.7%)	0 (0.0%)	1 (100.0%)	7 (7.6%)
Changing publisher interfaces	5 (8.5%)	0 (0.0%)	0 (0.0%)	1 (100.0%)	6 (6.5%)
Lawsuit, proactive	2 (3.4%)	1 (3.2%)	0 (0.0%)	0 (0.0%)	3 (3.3%)
Our library does not provide services	1 (1.7%)	2 (6.5%)	0 (0.0%)	0 (0.0%)	3 (3.3%)
Total	59	31	1	1	92 (100%)

Question 7 asked, "What software/hardware are you providing for accessibility purposes for PATRONS?" The answer choices were as follows: screen readers; digital magnifiers; free Web browser plug-ins; special keyboards, etc.; microphones/voice amplifiers; and other, please specify.

Table 7. Software/Hardware for PATRONS

Q7 What software/hardware are you providing for accessibility purposes for PATRONS?	Responses	Percentage
Screen readers	44	59.5%
Digital magnifiers	38	51.4%
Free Web browser plug-ins	34	45.9%
Special keyboards, etc.	33	44.6%
Microphones/voice amplifiers	26	35.1%
Others, please specify	25	33.8%
Total	74	100%

Question 8 asked participants, "Are you involved in a consortium that is addressing accessibility issues/concerns?" The answers were either "yes" or "no." The respondents' answers were 21 (22.8%) yes and 71 (77.2%) no.

Table 8. Are You Involved in a Consortium That Is Addressing Accessibility Issues/Concerns?

Q8 Are you involved in a consortium that is addressing accessibility issues/concerns?	Responses	Percentage
Yes	21	22.8%
No	71	77.2%
Total	92	100.0%

Question 9 asked participants, "Does your library have plans to engage in accessibility activities in the coming year?" The answers were either "yes" or "no." The respondents' answers were 78 (83.0%) yes and 16 (17.0%) no.

Table 9. Does Your Library Have Plans to Engage in Accessibility Activities?

Q9 Does your library have plans to engage in accessibility activities in the coming year?	Responses	Percentage
Yes	78	83.0%
No	16	17.0%
Total	94	100.0%

Question 10 asked participants, "If yes, will these activities be one-time/project-based, ongoing, or both?" The respondents' answers were one-time/project-based, 4 (5.2%); ongoing 29 (37.7%); and both, 44 (57.1%).

Table 10. Will These Activities Be One-time/Project-based, Ongoing, or Both?

Q10 If yes, will these activities be one-time/project-based, ongoing, or both?	Responses	Percentage
One-time/project-based	4	5.2%
Ongoing	29	37.7%
Both	44	57.1%
Total	77	100.0%

Question 11 asked participants, "How many remediation requests do you have per year?" The respondents' answers were less than 10 (55.6%), 11–20 (7.4%), more than 21 (4.9%), and we transfer remediation requests to another department outside the libraries (32.1%).

Table 11. Remediation Request

Q11 How many remediation requests do you have per year	Responses	Percentage
Less than 10	45	55.6%
11–20	6	7.4%
More than 21	4	4.9%
We transfer remediation requests to another department outside the libraries	26	32.1%
Total	81	100.0%

Question 12, asks participants, "Is there a state law in place that dictates what services are offered at your library?" The answers were either "yes" or "no." The respondents answered 25 (31.3%) yes and 55 (68.8%) no.

Table 12. State Law in Place

Q12 Is there a state law in place that dictates what services are offered at your library?	Responses	Percentage
Yes	25	31.3%
No	55	68.8%
Total	80	100.0%

Table 13 shows the types of libraries that answered yes for having state laws that dictate what services are offered at the library. Of the 25 libraries that marked yes, 20 were public academic libraries. Four private libraries noted these laws dictating what services they offer. No special/government library marked yes. Only one other library marked yes.

Table 13. The Type of Libraries that Answered Yes for State Laws

Type of Library	Yes	No
Public	20 (25.0%)	32 (40.0%)
Private	4 (16.0%)	23 (28.7%)
Special/Government	0 (0.0%)	0 (0.0%)
Other	1 (1.3%)	0 (0.0%)
Total	25 (31.3%)	55 (68.8%)

An analysis of variance (ANOVA) was conducted to examine whether responses to Question 12 (presence of a state law related to accessibility) differed across types of academic libraries (public, private, special/government, and other). ANOVA is appropriate for comparing mean differences across more than two independent groups.

The hypotheses were defined as follows:

Null hypothesis (H_0): There is no statistically significant difference in responses to Question 12 across academic library types.

Alternative hypothesis (H_1): At least one academic library type differs significantly in responses to Question 12.

Both of these hypotheses relate to research Question 1 (RQ1) as a driving influence on accessibility in academic libraries.

The ANOVA revealed a statistically significant difference among academic library types with respect to Question 12, $p = 0.0179$. This result indicates that responses regarding the presence of a state law related to accessibility were not uniform across library types.

The effect size for the overall ANOVA was assessed using **Cohen's f** , which quantifies the proportion of variance in the dependent variable attributable to group membership. The observed effect size was $f = 0.306$, indicating a **moderate effect** and suggesting a meaningful difference among library types.

Table 14. ANOVA Pairwise Tests

P-Value	0.0179
Effect Size (Cohen's f)	0.306

To further examine the relationship between categorical variables for library type and the presence of state accessibility laws, a **Chi-squared test of independence** was conducted. This test assesses whether two categorical variables are statistically associated. The Chi-squared test yielded a statistically significant result ($p = 0.0325$), indicating that library type and the presence of a state accessibility law were not independent. The strength of the association was evaluated using **Cramér's V** , which is appropriate for categorical data. The resulting effect size was $V = 0.293$,

representing a **moderate association** between the variables. This suggests that while the relationship is not strong, it is practically meaningful and may inform future research.

Table 15. Chi-Squared Test

P-Value	0.0325
Effect Size (Cramér's V)	0.293
Sample Size	80

All analyses were conducted using a total sample of $N = 80$. While this sample size was sufficient to detect moderate effects, findings should be interpreted cautiously given the number of library categories and the potential for small sample sizes within them. Taken together, the results indicate that academic library type is associated with differences in responses regarding the presence of state accessibility laws. These findings reflect statistically significant group differences and associations but do not support causal inferences. Further research using larger samples and longitudinal or policy-focused designs is warranted to clarify the mechanisms underlying these relationships.

Discussion

While many academic libraries provide accessibility services, there is always room for improvement. Libraries can enhance accessibility by conducting regular assessments of their services and seeking feedback from users with disabilities. Libraries should also stay updated on the latest accessibility technologies and best practices, investing in new tools and resources as they become available. Additionally, fostering partnerships with campus disability services can help libraries better meet the needs of students and faculty with disabilities. By collaborating with experts in disability support, libraries can develop more robust policies and resources tailored to their communities' needs. Furthermore, libraries can host events and workshops on accessibility to raise awareness and educate the campus community about the importance of inclusivity.

Accessibility services in academic libraries are essential for fostering an inclusive academic environment. By providing assistive technologies, accessible spaces, digital accommodations, and staff training, libraries can support individuals with disabilities in achieving academic success. As the field of accessibility continues to evolve, academic libraries must remain proactive, responsive, and committed to creating welcoming spaces for all members of their academic communities.

RQ1: What factors are influencing academic institutions to provide resources and tools for accessibility?

Most of the libraries that responded to this survey (86.1%) had been providing accessibility services in some capacity for at least three years. Only 15.7% of the libraries in this survey had just started to provide accessibility services during the last year. About 35% of the libraries that responded had been providing accessibility services for six years or longer. The answer "less than 1 year" was chosen more often by private and special/government libraries. Public libraries chose "6 or more years" more often than any other category. Based on the data, these choices to provide accessibility resources were partly driven by the equity, inclusion, and diversity priorities as professional value (80.4%). The answer "library priority" was chosen by 77.2% of the respondents. This demonstrates that the trigger for providing accessibility services was driven externally and internally. The external factors may have had financial elements tied to the trigger. The internal factor demonstrates the library's values and the parent institution's mission and values.

RQ2: What services and software/hardware are available for patrons' accessibility?

Question 3 provided an in-depth look at the priorities that libraries are addressing. Comments mentioned accessibility regarding all front-facing virtual environments and outreach programs. This included integrating accessibility technology like screen readers and closed captioning in LibGuides and videos. Other ways libraries mentioned focusing on accessibility included sign language classes for staff, workshops/training on accessibility, and collaborations with other departments such as IT. The data in Question 7 revealed similar applications and congruity in the software/hardware utilization by all the libraries in this study. The data reveals institutions have screen readers, magnifiers, and other accessibility tools available.

RQ3: What support outside the library do academic libraries use to provide assistance for patrons' accessibility?

Question 11 (How many remediation requests do you have per year?) demonstrates that the libraries in this survey are not being inundated with accessibility requests. The choice "less than 10" was chosen by 55.6% (45) of respondents. For any academic library, this would be considered a minor part of the workload, even if there is only one or two librarians on staff. The choice "We transfer remediation requests to another department outside the libraries" was chosen by 32.1% (26) of the respondents. Given that 81 participants responded to this question, the results might point to academic institutions creating other departments outside the library being solely responsible for accessibility and disability support.

RQ4: Are the library accessibility resources being used, and does the library plan on continuing the accessibility activities either long-term or short-term?

Accessibility usage was demonstrated in the data, but the choice of "less than 10 remediations" was the most popular answer (55.6%). However, the choice to "transfer remediation requests to another department outside the libraries" was chosen (32.1%) as the second most common answer. This could demonstrate the library does not have the necessary knowledge or resources to meet the accessibility needs requested. This could also indicate that academic libraries are instructed by institutions to send accessibility requests outside the library instead of training library staff and funding libraries to meet the needs.

Recommendations for Practitioners

Based on data in this study, academic libraries and academic librarians have seen a shift in professional values and library priorities within the last six years. The data could be due to an alignment with current institutional missions, visions, and beliefs. The transfer of remediations may indicate a need for training and the type of resources available to meet accessibility requests. Also, as state regulations require academic libraries to meet accessibility needs and have resources on hand, more training and in-house data will need to be collected to follow trends.

Recommendations for Future Research

The results for Question 6 of the survey indicate that most academic libraries are being driven by some of the same external forces when it comes to implementing accessibility in the library. The results for the "lawsuit proactive" answer demonstrate the lack of initiative institutions of higher education have when it comes to their accountability for patron access and services. The answer "lawsuit reactive" points to 10% of public and private institutions in this survey that are making

changes to accessibility due to legal issues. While this is not generalizable, more research is needed on the legal issues facing academic libraries in providing accessibility.

Over the past three years, 86.1% of the libraries surveyed had engaged in providing accessibility to persons with disabilities. There were two public academic libraries and two private academic libraries that had not engaged in accessibility activities during the last three years. This is a great percentage (86.1%), but why were there libraries that did not provide accessibility? These results also show that equity, inclusion, and diversity priorities as professional values are shifting in the way staff view how the library services different groups within the library space. While these were not library mandates, it does show that the profession shifted toward accessibility during the past three to six years. For future research, an examination is needed into how this value may change in five or seven years as a measure of how well we are maintaining these professional values in academic libraries.

While this study gives an idea of the type of accessibility tools available in the library, it does not provide details on checking out these tools or if there is marketing associated with accessibility resources and services the libraries offer. A follow-up study on how the library lends out tools like screen readers would help inform the field, and it would also help create a framework for best practices in accessibility lending. Marketing information would provide context for the question, "How many remediation requests do you have per year?" The numbers for this question seem lower than expected, but this might be the result of a lack of marketing on what accessibility tools the library has to offer.

The statistical tests in the study provide evidence that certain types of academic libraries correlate with accessibility being mandated by state laws. This is expected, given the funding received by public academic libraries compared to other types of academic libraries. More research on the different states that have mandated accessibility within the context of what public academic libraries have implemented would be a useful next step to creating a model for UD. Also, research is needed on how accessibility lawsuits are changing in regard to what is federally required and what is recommended best practice.

Conclusion

Accessibility in academic libraries has undergone a paradigm shift in professional values and library priorities. This study provides evidence for current resources and forces influencing accessibility in academic libraries. More research is needed on how lawsuits and state mandates influence these factors and what kind of training staff receive on addressing accessibility needs in libraries. As libraries track implementations and how internal and external forces impact accessibility, the closer the field will be to creating a comprehensive accessibility model for best practices, and the field must also be willing to examine the possibility that no comprehensive model for accessibility is possible due to the individual nature of serving diverse populations with unique needs.

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