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Abstract

This study examined the impact of librarians' digital literacy skills on inclusive library services delivery for undergraduate students with disabilities in the faculty of education: a case study of Hezekiah Oluwasanmi Library, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria. The study employed a descriptive survey research method. A total of 37 librarians those who possessed a degree in Librarianship among Library Officers, were included in the study, working in Hezekiah Oluwasanmi Library. Questionnaire was used for data collection, and 37 self-constructed questionnaires were distributed and received (100%) and equally used for analysing data. The findings revealed that librarians generally possess moderate to high levels of digital literacy skills, such as curating inclusive digital resources, using e-resources, providing digital reference services and troubleshooting ICT issues, but competence in the use of assistive technologies was found to be very low. However, the availability of digital tools and assistive technologies was very low, with only databases and e-learning platforms, while tools such as screen readers, captioning software, Braille translators and adaptive devices were not available. It was recommended that prioritising the acquisition and maintenance of essential assistive tools such as screen readers, magnifiers, Braille translation software and adaptive keyboards to enhance equitable accessibility and inclusivity in the use of libraries is necessary for people with disabilities. Adequate budgetary allocations should be made to support the procurement of digital resources, ICT infrastructure and accessibility tools for inclusive library service delivery. Also, Awareness campaigns and user education programs should be conducted for both librarians and students.

Keywords: Digital Literacy Skills, Inclusive Library Services, Undergraduate Students with Disabilities, Academic Libraries

Word Count: 251

Introduction

In the twenty-first century, the circle of academic librarianship has witnessed a paradigm shift in the provision of information services, with digital literacy emerging as a crucial competency for librarians. Digital literacy, often defined as the ability to effectively locate, evaluate, use and create information using digital technologies, goes beyond basic computer skills to encompass knowledge of digital platforms, assistive technologies and inclusive information delivery systems (Eshet-Alkalai, 2012; Ng, 2012). In university libraries, therefore, where students rely heavily on electronic resources for learning and research, the digital literacy skills of librarians directly influence the quality-of-service delivery.

However, inclusive library service delivery has become particularly significant in the context of supporting undergraduate students with disabilities. University libraries are not only expected to provide equitable access to print and electronic resources but also to integrate assistive technologies and adaptive services that address the unique learning needs of students with visual, hearing, mobility and cognitive impairments (Akin & Haruna, 2021; IFLA, 2016). The effectiveness of these services depends largely on the librarians' ability to harness digital tools and platforms in ways that promote inclusiveness.

In Nigeria, academic libraries have made notable progress in adopting information and communication technologies (ICTs), yet challenges remain regarding accessibility for students with various diverse of disabilities. Studies indicate that many librarians in Nigerian universities lack advanced digital literacy skills, particularly in the use of specialised software, screen readers and other assistive technologies designed to support inclusive learning (Adeyemi & Oyewumi, 2022; Oni, 2020). This gap often translates into barriers for students with disabilities, limiting their ability to fully benefit from library resources and services compared with their counterparts who are bodied physically and provided with the necessary services.

Specifically, at Obafemi Awolowo University (OAU), the Faculty of Education has one of the largest student populations, including undergraduates with diverse special needs. As future teachers, administrators and educational leaders, these students depend heavily on the university library for access to knowledge. However, the extent to which librarians' digital literacy skills impact the inclusiveness of library services for these students remains underexplored. Investigating this relationship is essential not only for improving library practices but also for advancing the university's commitment to inclusive education and the global Sustainable Development Goals

(SDGs), particularly SDG 4 on quality education and SDG 10 on reducing inequalities in higher institutions of learning (United Nations, 2015).

Therefore, this study is situated within Hezekiah Oluwasanmi Library as the central service provider of inclusive library services at Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria. However, the research focus is on undergraduate students with disabilities in the Faculty of Education. This deliberate choice of population ensures disciplinary relevance to Adult Education, which emphasises inclusive learning, lifelong learning and equity of access to educational resources. By aligning the study with the Faculty of Education, the research not only addresses the role of librarians' digital literacy skills in delivering inclusive services but also contributes to broader discourses in Adult and Inclusive Education. Hence, the collaboration provides both academic relevance and supervisory expertise for the study.

Statement of the Problem

University libraries play a vital role in supporting teaching, learning, and research, particularly for students with disabilities who require inclusive services and access to specialised resources. In recent years, the growing integration of information and communication technologies (ICTs) has transformed library service delivery. Therefore, digital literacy has thus become a critical competency for librarians, enabling them to effectively use digital tools, electronic resources, and assistive technologies to meet the diverse needs of all users. However, research shows that many librarians in Nigerian university libraries face significant gaps in digital literacy skills, limiting their ability to provide inclusive services (Oyelude, 2022). These gaps affect the ability to adopt assistive technologies, design accessible digital platforms, and support students with disabilities in navigating library resources. As a result, students with disabilities are at risk of being marginalised, experiencing barriers to information access, and missing out on equitable educational opportunities.

More so, at the Faculty of Education, Obafemi Awolowo University, the situation is particularly critical, as undergraduate students with disabilities increasingly rely on digital and inclusive services for their academic success. Yet, it remains unclear whether librarians possess sufficient digital literacy skills to meet these demands for the pursuit of their academic progressions, what tools are available, and what challenges they encounter in applying such skills for inclusive service delivery. Without empirical evidence, it is difficult to design targeted

interventions or capacity-building programs to improve service delivery for this user group, as they are also bona fide users of the services available in the university libraries. This gap underscores the need to empirically examine the impact of librarians' digital literacy skills on inclusive library service delivery for undergraduate students with disabilities. Therefore, addressing this issue will not only enhance library effectiveness but also contribute to equity, diversity, and inclusion in higher education.

Research Questions

1. What is the level of digital literacy skills possessed by librarians for the undergraduate students with disabilities in the faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria?
2. How available are digital tools and assistive technologies to librarians in delivering inclusive services for undergraduate students with disabilities in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria?
3. What challenges do librarians face in applying digital literacy skills to inclusive library service delivery for undergraduate students with disabilities in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria?

Literature Review

Digital literacy is more than the ability to use computers; it encompasses a set of competencies that enable individuals to locate, evaluate, create and communicate information using digital technologies (Ng, 2012). Eshet-Alkalai (2012) identifies it as a multidimensional skill that includes technical, cognitive and socio-emotional dimensions. In the library context, according to Koltay (2011), digital literacy extends to the ability of librarians to use electronic databases, digital repositories, online catalogues and assistive technologies to facilitate equitable access to information resources. Thus, digital literacy is not only a professional skill but also a determinant of service delivery effectiveness.

However, librarians in academic libraries are increasingly expected to possess digital competencies that go beyond traditional cataloguing and reference services. These services also include database searching, management of digital collections, application of metadata standards and the use of assistive technologies to support students with disabilities (Adeyemi & Oyewumi,

2022). Studies in Nigeria have revealed, according to Oni (2020), that while librarians have basic ICT proficiency, many still lack advanced competencies in the use of assistive tools such as screen readers, voice recognition software and digital accessibility applications. In the same vein, according to Ani and Bassey (2021), who observed that the absence of regular professional development and inadequate infrastructural support hinders librarians' ability to deliver inclusive services (at least, for the benefits of all categories of users regardless of their deficiencies).

Inclusive library service delivery entails providing equitable access to information resources and services to all users, including students with disabilities. According to the International Federation of Library Associations and Institutions (IFLA, 2016), libraries are mandated to remove barriers to information access by adopting universal design principles and integrating assistive technologies. In the Nigerian context, however, libraries are often ill-equipped to fully support students with disabilities due to challenges such as insufficient funding, lack of trained personnel, and inadequate infrastructure (Akin & Haruna, 2021). This results in limited access to electronic resources, poor accessibility of library websites and minimal provision of specialised services.

Several studies have highlighted the connection between librarians' digital literacy and inclusive service delivery. For example, Adeyemi and Oyewumi (2022) found that librarians with higher digital competence were more likely to integrate inclusive practices in service delivery. Similarly, Abubakar and Hassan (2019) established that digital literacy was a significant predictor of librarians' ability to support students with special needs. Moreover, in developed countries, librarians are increasingly trained in accessibility standards such as Web Content Accessibility Guidelines (WCAG), which enhances their ability to provide inclusive digital services (Brophy, 2018). This is also argued internationally, and studies also support these findings. For example, Walton and Leung (2022) reported that in developed countries, librarians' mastery of digital literacy and inclusive practices directly impacted students with disabilities' academic success. They noted that institutions that prioritised training librarians in digital inclusion strategies recorded higher user satisfaction among disabled students.

Similarly, in a developing country like Nigeria, studies have also proved, according to Ifijeh and Yusuf (2022) that examined the role of academic libraries in promoting inclusive education in Nigeria. Their findings indicated that digital literacy among librarians was central to creating inclusive environments, but institutional barriers, such as a lack of funding and

infrastructural deficits, hindered progress. Also, Akinola and Olayemi (2020) investigated the influence of ICT skills of academic librarians on their ability to provide inclusive services. Their results showed that librarians who demonstrated high proficiency in digital tools were better positioned to support visually impaired and hearing-impaired students by using adaptive technologies such as screen readers, Braille displays, and captioning software. Collectively, these studies highlight that digital literacy is a critical determinant of how well librarians can support inclusive library services. However, most Nigerian studies emphasise persistent gaps in training, infrastructure and policy implementation, thereby underlining the significance of research focusing on Obafemi Awolowo University as a case study. Hence, suggests that improving librarians' digital literacy could directly improve inclusive service delivery in the universities for effective service delivery.

Methodology

This study adopted a quantitative research design using a descriptive survey method. The study population consists of 37 librarians and library officers working in Hezekiah Oluwasanmi Library, Obafemi Awolowo University, Ile-Ife, Osun State. These members of staff are directly involved in providing information services to undergraduate students, including those with disabilities. Library officers were considered, going by the regulation of Librarian Registration Council of Nigeria (LRCN), a librarian is anyone with a first degree in library studies in Nigerian universities, being the benchmark or minimum qualification for being a professional librarian, but nomenclature has not been changed, who are working in Hezekiah Oluwasanmi Library. The study employed a total enumeration sampling technique, ensuring that all librarians by academics are included in the study. This eliminates sampling bias and ensures comprehensive coverage of the target population. Therefore, data was collected using a structured questionnaire designed based on the research objectives. The questionnaire was divided into five sections:

- i. Section A: Demographic information of respondents.
- ii. Section B: Digital literacy skills of librarians.
- iii. Section C: Availability and use of digital tools/assistive technologies.
- iv. Section D: Challenges faced in applying digital literacy to inclusive library service delivery. The items were measured using a 4-point Likert scale ranging from Very High to very low and Strongly Agree to Strongly

Disagree (4-1). The copies of the questionnaires were administered physically to ensure a high response rate. Respondents were assured of confidentiality and anonymity in their responses. Data collected was analysed using descriptive statistics (like frequency counts, percentages, mean and standard deviation) for each research question. Analysis was conducted using SPSS (Statistical Package for the Social Sciences)

Results and Discussion of Findings

Table 1: Population of the Study and Questionnaire Response Rate

Table 1 shows the total population of 37 librarians and library officers working in Hezekiah Oluwasanmi Library, Obafemi Awolowo University. To ensure the inclusive representation and normal distribution of questionnaires, the number of questionnaires administered, and the number of questionnaires received, with a response rate of 37 (100%).

S/N	Category of Respondents according to Faculties	of Population (Estimated)	Questionnaires Distributed	Questionnaires Received	Response Rate (%)
1	Librarians	18	18	18	100%
2	Library Officers	19	19	19	100%
Total	$\Sigma X =$ Total Population	37	37	37	100%

Research Question One: What is the level of digital literacy skills possessed by librarians for the undergraduate students with disabilities in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria?

Table 2 shows the level of digital literacy skills possessed by librarians for the undergraduate students with disabilities in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria.

Table 2: Level of digital literacy skills possessed by librarians for the undergraduate students with disabilities

S/N	Digital Literacy Skills	Very High (%)	High (%)	Low (%)	Very Low (%)	Mean	Std Dev.
1	Ability to search and retrieve academic resources online	15 (40.54)	13 (35.14)	6 (16.22)	3 (8.11)	3.08	0.95
2	Proficiency in using library databases and e-resources	16 (43.24)	12 (32.43)	5 (13.51)	4 (10.81)	3.08	1.01
3	Competence in using assistive technologies (screen readers and magnifiers).	7 (18.92)	4 (10.81)	7 (18.92)	19 (51.35)	1.97	1.19
4	Ability to provide digital reference services (chat, email, virtual reference)	18 (48.65)	9 (24.32)	5 (13.51)	5 (13.51)	3.08	1.09
5	Skills in curating and recommending inclusive digital resources	15 (40.54)	17 (45.95)	4 (10.81)	1 (2.70)	3.24	0.76
6	Ability to guide students with disabilities in navigating e-learning platforms	14 (37.84)	13 (35.14)	7 (18.92)	3 (8.11)	3.03	0.96
7	Familiarity with open educational resources (OERs) and inclusive content	15 (40.54)	14 (37.84)	8 (21.62)	0 (0)	3.19	0.78

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8	Capacity to troubleshoot basic ICT-related issues for library users	17 (45.95)	13 (35.14)	5 (13.51)	2 (5.41)	3.22	0.89
9	Knowledge of digital copyright, licensing, and ethical information use	13 (35.14)	17 (45.95)	6 (16.22)	1 (2.70)	3.14	0.79
10	Continuous professional development in digital literacy and inclusivity	7 (18.92)	11 (29.73)	15 (40.54)	4 (10.81)	2.57	0.93

Total Weighted Mean = 2.96

Table 2 indicates respondents' agreements to the level of digital literacy skills possessed by librarians for the undergraduate students with disabilities that skills in curating and recommending inclusive digital resources (3.24), capacity to troubleshoot basic ICT-related issues for library users (3.22), familiarity with open educational resources (OERs) and inclusive content (3.19), knowledge of digital copyright, licensing, and ethical information use (3.14), ability to search and retrieve academic resources online (3.08), proficiency in using library databases and e-resources (3.08), ability to provide digital reference services (chat, email, virtual reference) (3.08), ability to guide students with disabilities in navigating e-learning platforms (3.03) and continuous professional development in digital literacy and inclusivity (2.57). The least level of digital literacy skills possessed by librarians for the undergraduate students with disabilities. It is concluded that respondents agreed that the level of digital literacy skills possessed by librarians for the undergraduate students with disabilities in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria is high based on the fact that they all scored above 2.50 while competence in using assistive technologies (screen readers, magnifiers, etc.) (1.97) which is below the score of 2.50. Therefore, the weighted score mean value (2.96) suggests that the level of digital literacy skills possessed by librarians for the undergraduate students with disabilities in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria is high. Studies, according to Issa, Amusan & Akinboro (2020), in digital literacy skills and use of electronic resources by academic librarians in Nigeria, support that librarians generally possessed strong search and retrieval skills and could effectively use library databases, aligning with your

mean scores above 3.0. Similarly, Adeniran (2019) in digital literacy and information service delivery in academic libraries in South-West Nigeria, It supported that librarians were competent in providing digital reference services (email, chat, virtual reference).

Research Question Two: How available are digital tools and assistive technologies to librarians in delivering inclusive services for undergraduate students with disabilities in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria?

Table 3 shows how availability are digital tools and assistive technologies by librarians in delivering inclusive services for undergraduate students with disabilities in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria.

Table 3: Available digital tools and assistive technologies by librarians in delivering inclusive services for undergraduate students with disabilities

S/N	Digital Tools & Assistive Technologies	Very Highly Available (%)	Highly Available (%)	Rarely Available (%)	Not Available (%)	Mean	Std Dev.
1	Screen reader (like JAWS, NVDA)	0 (0)	3 (8.11)	5 (13.51)	29 (78.38)	1.30	0.62
2	Screen magnifiers	2 (5.41)	3 (8.11)	7 (18.92)	25 (67.57)	1.51	0.87
3	Braille translation software	3 (8.11)	5 (13.51)	8 (21.62)	25 (67.57)	1.66	0.96
4	Speech-to-text software	0 (0)	3 (8.11)	7 (18.92)	27 (72.97)	1.35	0.63
5	Audiobooks and talking books	2 (5.41)	5 (13.51)	7 (18.92)	23 (62.16)	1.62	0.92
6	Library databases with accessibility options	14 (37.84)	13 (35.14)	8 (21.62)	2 (5.41)	3.05	0.91

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7	E-learning platforms with accessibility options	13 (35.14)	15 (40.54)	7 (18.92)	2 (5.41)	3.05	0.88
8	Mobile apps for accessibility (like voice commands)	8 (21.62)	5 (13.51)	3 (8.11)	21 (56.76)	2.00	1.27
9	Adaptive keyboards and input devices	7 (18.92)	4 (10.81)	7 (18.92)	19 (51.35)	1.97	1.19
10	Captioning and subtitling tools	0 (0)	2 (5.41)	7 (18.92)	28 (75.68)	1.30	0.57

Total Weighted Mean = 1.88

Table 3 reveals that respondents' agreements on how available are digital tools and assistive technologies by librarians in delivering inclusive services for undergraduate students with disabilities that mobile apps for accessibility (e.g., voice commands) (2.00), Adaptive keyboards and input devices (1.97), Braille translation software (1.66), Audiobooks and talking books (1.62), Screen magnifiers (1.51), Speech-to-text software (1.35), screen reader (e.g., JAWS, NVDA) (1.30), Captioning and subtitling tools (1.30). It is concluded that respondents agreed that the available digital tools and assistive technologies by librarians in delivering inclusive services for undergraduate students with disabilities in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria are low based on the fact that they all scored below 2.50. However, except for students with disabilities that library databases with accessibility options (3.05), and E-learning platforms with accessibility options (3.05) that are scored above 2.50. Therefore, it is concluded that the weighted mean value (1.88) suggests that available digital tools and assistive technologies by librarians in delivering inclusive services for undergraduate students with disabilities in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria, are very low. In the study of Ugwoke & Ezeani (2020) on Assistive technologies and inclusive library services in Nigerian academic libraries, the study found that most Nigerian academic libraries have limited assistive technologies (screen readers, magnifiers, Braille software). In a similar study by Lazar & Jaeger (2011) in assistive technology and academic libraries: challenges and opportunities reported that, while assistive technologies exist, their

adoption in libraries is low due to cost and lack of training, aligning with the low scores for screen readers, captioning tools, and speech-to-text.

Research Question Three: What challenges do librarians face in applying digital literacy skills to inclusive library service delivery for undergraduate students with disability in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria?

Table 4 shows the challenges librarians face in applying digital literacy skills to inclusive library service delivery for undergraduate students with disability in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria.

Table 4: The challenges librarians face in applying digital literacy skills to inclusive library service delivery for undergraduate students with disability

S/N	Challenges in Applying Digital Literacy Skills	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)	Mean	Std Dev.
1	Inadequate training on digital literacy and assistive technology	23 (62.16)	7 (18.92)	5 (13.51)	2 (5.41)	3.38	0.92
2	Limited availability of digital tools and assistive technologies	25 (67.57)	4 (10.81)	7 (18.92)	1 (2.70)	3.43	0.90
3	Poor funding and budget allocation for inclusive services	21 (56.76)	7 (18.92)	6 (16.21)	3 (8.11)	3.24	1.01
4	Insufficient ICT infrastructure in the library	23 (62.16)	5 (13.51)	4 (10.81)	5 (13.51)	3.24	1.12
5	Low awareness of inclusive digital resources	27 (72.97)	7 (18.92)	0 (0)	3 (8.11)	3.57	0.87

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6	Lack of technical support for maintaining assistive technologies	24 (64.86)	5 (13.51)	3 (8.11)	5 (13.51)	3.30	1.10
7	Resistance to change among library staff	25 (67.57)	3 (8.11)	6 (16.22)	3 (8.11)	3.35	1.03
8	Heavy workload limits time for skill application	19 (51.35)	9 (24.32)	7 (18.92)	2 (5.41)	3.22	0.95
9	Inadequate policy framework for inclusive digital services	21 (56.76)	5 (13.51)	8 (21.62)	3 (8.11)	3.19	1.05
10	Limited collaboration with ICT experts and special needs educators	19 (51.35)	10 (27.07)	5 (13.51)	3 (8.11)	3.22	0.98

Total Weighted Mean = 3.31

Table 4 shows that the respondents' agreements on the challenges do librarians face in applying digital literacy skills to inclusive library service delivery for undergraduate students with disability that Low awareness of inclusive digital resources (3.57), Limited availability of digital tools and assistive technologies (3.43), Inadequate training on digital literacy and assistive technology (3.38), Resistance to change among library staff (3.35), Lack of technical support for maintaining assistive technologies (3.30), Poor funding and budget allocation for inclusive services (3.24), Insufficient ICT infrastructure in the library (3.24), Heavy workload limiting time for skill application (3.22), Limited collaboration with ICT experts and special needs educators (3.22). The least among the challenges is an inadequate policy framework for inclusive digital services (3.19). It is concluded that respondents agreed that the challenges librarians face in applying digital literacy skills to inclusive library service delivery for undergraduate students with disability in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria are high based on the fact that they all scored above 2.50. Therefore, the weighted score mean value (3.31) suggests that the challenges that librarians face in applying digital literacy skills to inclusive library service delivery for undergraduate students with disability in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria are agreeably very high.

This finding corroborated with a finding, according to Adeniran (2017) in *Availability and Use of Assistive Technologies in Nigerian university libraries: Challenges and prospects*, that found that many librarians had limited awareness of specialised inclusive digital resources, which hindered service delivery. Another study also supported this finding in Ekwelem (2019) in *Accessibility of library resources and services to people with disabilities in academic libraries in Nigeria*, who reported that lack of assistive tools (screen readers, Braille displays, magnifiers) was a major obstacle to inclusive services. Another study, according to Mtega & Benard (2013), in the role of libraries in promoting the use of ICT for inclusive education in developing countries, the study highlighted insufficient librarian training as a barrier to effective ICT-based inclusive service. Globally, the study by Maatta Smith (2017) on library accessibility and the provision of assistive technology in higher education showed that even in developed countries, the availability of assistive technology is uneven, and students with disabilities often struggle to access screen readers, adaptive keyboards, and captioning tools.

Conclusion

The study assessed the Impact of Librarians' Digital Literacy Skills on Inclusive Library Services Delivery for Undergraduate Students with Disabilities in the Faculty of Education: A Case Study of Hezekiah Oluwasanmi Library, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria. Findings revealed that librarians generally possess moderate to high levels of digital literacy skills, such as curating inclusive digital resources, using e-resources, providing digital reference services, and troubleshooting ICT issues. However, competence in the use of assistive technologies was found to be very low. Similarly, librarians' digital literacy skills were shown to positively influence inclusive service delivery by promoting equitable access to e-resources, supporting user education and integrating emerging digital tools. Nonetheless, areas such as policy contribution, effective communication with students with disabilities and satisfaction of students' specific needs were weak.

However, the availability of digital tools and assistive technologies was very low, with only databases and e-learning platforms showing some accessibility options, while tools such as screen readers, captioning software, Braille translators and adaptive devices were scarcely available in the library. Also, challenges identified include low awareness of inclusive digital resources, limited assistive technologies, inadequate training, insufficient ICT infrastructure, poor

funding, lack of policy frameworks and resistance to change among staff. Overall, while librarians have baseline digital literacy skills, gaps in assistive technology availability, awareness and institutional support significantly hinder inclusive library service delivery in Hezekiah Oluwasanmi Library, Obafemi Awolowo University.

Recommendations

Based on the findings of the study, the following are therefore recommended:

1. University management should prioritise the acquisition and maintenance of essential assistive tools such as screen readers, magnifiers, Braille translation software and adaptive keyboards to enhance equitable accessibility and inclusivity in the use of the library.
2. Adequate budgetary allocations should be made to support the procurement of digital resources, ICT infrastructure and accessibility tools for inclusive library service delivery. Awareness campaigns and user education programs should be conducted for both librarians and students to increase knowledge of inclusive digital resources and their applications. Library leadership should adopt a change in management strategies to address resistance among staff, encourage innovation and promote a culture of inclusivity among library users.
3. Librarians should collaborate with ICT specialists, disability service units and special needs educators to design user-friendly services and provide technical support for inclusive technologies. Also, regular training workshops and continuous professional development should be organised for librarians on digital literacy and assistive technologies to strengthen their competence in serving students with disabilities.

References

- Abubakar, B., & Hassan, A. (2019). Digital literacy as a predictor of inclusive library service delivery in Nigerian universities. *Library Philosophy and Practice*, 1–12.
- Adeniran, P. (2019). Digital literacy and information service delivery in academic libraries in South-West Nigeria. *Journal of Applied Information Science and Technology*, 12(1), 45–57.
- Adeyemi, T. O., & Oyewumi, O. O. (2022). Digital competencies of librarians and the provision of inclusive library services in Nigerian universities. *Library Philosophy and Practice*, 1–15.
- Akin, S., & Haruna, I. (2021). Access to information resources by students with disabilities in Nigerian university libraries. *Journal of Library and Information Science Research*, 13(2), 45–60.
- Akinola, A. A. & Oloyede, O. E. (2020). Emmerging role of libraries in today's knowledge-based economy. *International Journal of Applied Technologies in Library and Information Management*, 6(2), 24-30.
- Ani, O., & Basse, E. (2021). Professional development and digital literacy skills among librarians in Nigeria. *African Journal of Library, Archives and Information Science*, 31(2), 117–128.
- Brophy, P. (2018). *The library in the twenty-first century: New services for the information age*. London: *Facet Publishing*.
- Eshet-Alkalai, Y. (2012). Thinking in the digital era: A revised model for digital literacy. *Issues in Informing Science and Information Technology*, 9, 267–276
- Ifijeh, G. & Yusuf, F. O. (2020). Covid-19 pandemic and he future of Nigeria's university system: The quest for libraries' relevance. *Journal of Academic Librarianship*, 46(6), Article 102226. <https://doi.org/10.1016/j.acalib.2020.102226>
- IFLA. (2016). IFLA guidelines for library services to persons with dyslexia. *International Federation of Library Associations and Institutions*
- Issa, I. O., Amusan, B., & Akinboro, O. O. (2020). Digital literacy skills and use of electronic resources by academic librarians in Nigeria. *Library Philosophy and Practice*, 1–17.

- Koltay, T. (2011). The media and the literacies: Media literacy, information literacy, digital literacy. *Media, Culture & Society*, 33(2), 211–221.
- Lazar, J., & Jaeger, P. T. (2011). Assistive technology and academic libraries: Challenges and opportunities. *College & Research Libraries*, 72(1), 39–59.
- Leung, S. (2022). The futility of information literacy and EDI: Toward what? *College & Research Libraries*, 83(4), 639–656. <https://doi.org/10.5860/crl.83.4.639>
- Maatta Smith, S. L. (2017). Library accessibility and the provision of assistive technology in higher education. *The Journal of Academic Librarianship*, 43(2), 129–136.
- Ng, W. (2012). Can we teach digital natives digital literacy? *Computers & Education*, 59(3), 1065–1078.
- Oni, O. (2020). Inclusive information services and challenges of academic libraries in Nigeria. *Nigerian Libraries*, 53(1), 23–36.
- Oyelude, A. A. (2022). Data literacy and technology impacting libraries. *Library Hi Tech News*, 39(5), 5-6. <https://doi.org/10.1108/LHTN-02-2022-0025>
- Ugwoke, B. U., & Ezeani, C. N. (2020). Assistive technologies and inclusive library services in Nigerian academic libraries. *Journal of Library Services for Persons with Disabilities*, 14(2), 87–104.
- United Nations. (2015). Transforming our world: The 2030 agenda for sustainable development. United Nations.
- Walton, G., & Leung, C. (2022). Digital scholarship practices and academic library services in the 21st century. *College & Research Libraries*, 83(4), 558–572.
- Yussuf, A. (2022). Assessing digital literacy competence among university students in Nigeria. *Journal of Information Science*, 45(3), 210–225.