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FACTORS AFFECTING STUDENTS' WITH SPCIAL NEEDS USE OF DIGITAL RESOURCES IN LIBRARIES: THE CASE OF STUDENTS AT THE FEDERAL COLLEGE OF EDUCATION (TECHNICAL), BICHI

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Abstract- *This paper investigates the information-seeking behaviors of students with special needs, such as their ability to retrieve and use digital resources, their reading methods, the time it takes to retrieve a single digital resource, and the frequency with which they use digital resources. It also investigates the availability of adequate assistive technologies in the library and identifies some of the factors influencing the use of digital resources among students with special needs, such as a lack of training on how to use adaptive technology, an inaccessible library website, and a lack of adequate adaptive technology in the library. The study recommends that adequate adaptive technologies be provided in the library, as well as adequate training and awareness on how to use digital resources for students with special needs. The study included 40 students with special needs. Data was gathered through individual interviews with every member of the workforce. The surveys were distributed to 37 of the 40 students who were sampled. When the data was collected from the school, three students were absent. In total, 32 of the questionnaires distributed were collected. This indicated an 86% return rate. Despite some difficulties for the researcher due to the nature of the respondents, data collection was successful. The research materials must be made available in a variety of costly formats, such as Braille, soft copy, and extra-large print for people who require magnifying glasses.*

Keywords: digital resources, factors, affecting, students with special needs.

I INTRODUCTION

The information environment is rapidly changing all over the world. Libraries face new challenges as information technologies and communication systems advance. Printed materials are being converted to digital formats. Librarians have evolved to meet the needs of their customers. Librarians must adopt new tools and techniques to satisfy modern users as they transition from human-dependent to machine-dependent operations, from stand-alone systems to network computing, and from print resources to digital resources. Libraries are one industry that has benefited from advancements in information and communication technologies. Libraries have raised their barriers to wider access to their resources and services with the introduction of digitization in library resources and services. This means that libraries have gained access to a larger number of users from all over the world since the advent of digitization. Aside from increased digital services and resources, information technologies have provided other advantages. To name a few, these include increased efficiency, improved durability of digitized resources and services, and increased use of digital library services. Despite the advantages of technological progress, digital library services and resources were underutilized. One might wonder why, but the reason is simply a lack of technical skills and support needed to access digital services and resources. Today's libraries should have a special needs section that caters to users with visual, hearing, learning, and physical disabilities. As a result, it is critical to ensure that such electronic information resources are accessible to all types of users, including students with special needs. To be able to access a specific digital service or digital resource, every library user must be equipped with operational skills on how to use the library's associated technologies. That was why ICT applications had recently been introduced into the library science curriculum. This was done to ensure that all library staff and users had a basic understanding of how to use these technologies to further the library's goals. According to recent research, students with special needs underutilize library digital resources and services for a variety of reasons, which this study intends to investigate.

II Literature Reviews

Research Questions

The research would be based on the following questions:

(i) Which factors affect digital information seeking behavior by students with special needs?

(ii) What kinds of accessibility challenges are encountered by students with special needs in retrieving and using digital resources?

(iii) How do students with special needs receive training in accessing digital resources?

OBJECTIVES OF THE STUDY

i) To establish the factors that affect information seeking behavior by students with special needs

ii) To identify the challenges that students with special need face in accessing digital resources.

iii) To find out whether adaptive technology affect students with special needs in accessing digital resources.

iv) To describe the training offered to students with special needs on accessing digital resources.

SIGNIFICANT OF THE STUDY

The study's goal is to provide information and data to those interested in the use of digital resources in libraries by students with special needs, such as educators and trainers, researchers, students, practitioners, policymakers, civil society, and international development partners. Furthermore, it is hoped that this research will influence how library policies regarding the use of digital resources by students with special needs are developed, as well as assist the institution under study in improving its services, particularly its library services, in order to better serve students with special needs who require digital library services.

FINDING OF THE STUDY

Information Seeking Behavior of Students with special needs

The initial goal of this study was to identify the factors that influenced how students with special needs behaved when looking for information online at the Federal College of Education (Technical) Bichi library. The findings of the investigation into various aspects were presented, interpreted, and discussed in the following ways:

Ability to retrieve and use digital resources

The researcher was curious whether the participants could access and use online resources on their own.

The responses are as presented in table 1

Ability to retrieve and use e-resource	Frequency	Percentages
Yes	4	13%
NO	28	87%
TOTAL	32	100%

The majority of respondents (87%) were unable to find and use online resources on their own, according to the responses in table 1. This could be due to extremely low levels of literacy when using online resources. A lack of formal training in the use of adaptive technology may also contribute to the large proportion of students who cannot access online information. These findings are consistent with those of Shukla and Tripathi (2016), who discovered that students with visual impairments relied on social contacts such as friends, librarians, and counselors to ensure access to information. As a result, the students' information-seeking behavior was lackluster. According to Adin and Kerry (2019) research, people with disabilities are more likely to be at risk of being excluded from access to digital resources in libraries, and in particular, people who are blind or visually impaired.

Time used to retrieve a single digital resource

The students were asked to indicate the length of time it took them to retrieve a single digital resource. Their responses were as shown in table 2

Table 2 Time used to retrieve a resource

duration of time used to retrieve a single resource	Frequency	Percentages
Long time	27	84%
Short time	5	16%
TOTAL	32	100%

Table 2 shows that slightly fewer students took a short period of time rather than a long period of time to retrieve a single resource. However, the majority of participants, or 84% of the students,

was those who arrived late. The difficulties that this group of users encountered when accessing digital resources could explain why the majority took so long to obtain a single resource. These findings are comparable to those of Michal, Irena, et al. (2020), and Chigwada and Phiri (2021), which discovered that students with visual impairments seek information in a different way, requiring more time to ensure that the material is accessible.

III Methodology

Means of Reading

After the retrieval of an e-resource, the researcher sought to find out how the students read the retrieved resource. The findings were as indicated in table 3

Table 3: Reading means

Means of reading	Frequency	Percentage
Using other students	14	44%
Using library staff	3	9%
Using screen reader or screen magnifier	15	47%
TOTAL	32	100%

A higher percentage indicated that they were read to by other students. This was in contrast to those who used assistance, screen readers, and magnifying screens. However, nearly half of the students (47%) said they used adaptive technology such as screen readers or magnifiers. This shows the students' desire to be self-sufficient. To further motivate students and make it easier for them to access the knowledge bank in electronic resources, the librarian must provide appropriate electronic facilities as well as the necessary software for speech and magnification. It's also worth noting that only 9% of respondents said they read the retrieved resource with the assistance of the section's staff. A user with a visual impairment can use assistive technology (adaptive, enabling, or access technology) to access on-screen information and receive output that is appropriate for their needs. According to the study's findings, the majority of respondents preferred the use of assistive technology. As a result, it is critical that library administration encourage independent learning by making more enabling technologies available.

Frequency in using digital resources

The frequency of the students' with special needs use of the college library's digital resources was elicited from them. They were given the options of very often, frequently, seldom, and never. The results are presented in table 4

Table 4: Frequency in using e-resources

Frequency in using digital resources	Frequency	Percentage
Very often	0	0%
Often	5	16%
Not at all	27	84%
Total	32	100%

The study found that 84% of students never used the college library's online resources. This sets the stage for library administration to consider how to best support these users' access to digital resources in terms of infrastructure, tools, and personnel. This suggests that the difficulties in gaining access could be caused by a number of factors. Another indicator that students with special needs dislike using digital resources, do not know how to use them, or have difficulty obtaining them is the large number of students who said they rarely used them. However, only 16% of special needs students used the college library's digital resources. People are increasingly doing because of the Internet's near-universal availability and the rapid advancement of information technology. People are increasingly reading and gathering information on computers rather than in printed books.

Challenges in accessing digital resources by students with special needs

The study's second objective was to identify the difficulties that students with visual impairments encounter while trying to use electronic information sources. The researcher looked at the Following areas to help her reach her goal:

Table 5: Challenges of Accessing Digital Resources

Challenges	Frequency	Percentage
Inadequate staff	2	6%
Internet inconsistency	8	25%

Lack of awareness & training	10	31%
Lack of assistive technology skills	12	38%
Total	**32**	**100%**

The findings in table 5 show that learners with special needs face a variety of challenges when it comes to accessing digital resources. These are the difficulties that many users with disabilities face when using the college library for research purposes. The information extracted from the data above could be used by college librarians and other policymakers to design strategies to overcome challenges that affect multiple users before addressing the more specific challenges identified in the study's findings. However, the majority of respondents stated that the main factors influencing the use of digital resources in the library under study are a lack of assistive technology skills, a lack of awareness and training, and internet inconsistency

Use of Adaptive technology in accessing digital resources

Finding out how using adaptive technology affects students' with special needs access to online resources at Federal college of education (technical) Bichi library was the third objective of the study. Several factors were investigated in order to accomplish this goal, and the results are presented, analyzed, and discussed below:

Presence of adequate assistive technology

The researcher thought it was crucial to determine whether the assistive technology available at the library was sufficient to meet the demands of users with special needs in terms of information access. Table 6 findings are shown as follows:

Table 6: Presence of adequate assistive technology in the library under study

Presence of adequate assistive technology	Frequency	Percentage
Agree	13	42%
Disagree	17	53%
Uncertain	2	6%
Total	32	100%

Students agreed that assistive technology was insufficient to meet their needs for digital resource access, according to the findings. The majority of respondents, or 53%, disagreed with the

statement that "adequate assistive technology was available in the library" and thus supported it. This explains why students with disabilities rarely use digital resources in college libraries. As a good policy, the library administration should make sure that there is enough screen reading and screen magnification software for the facility's visually impaired patrons to use. The findings of this investigation are consistent with those of a previous study. Students with special needs require expensive assistive technology as well as accessible content, such as well-known books and textbooks. (Alabi and Mutula 2020).

Training and awareness in Assistive Technology

As was mentioned earlier, knowledge of assistive technology does not necessarily imply proficiency with it. The researcher wanted to know if the students received any instruction on how to utilize assistive technology in order to determine whether they were able to use it. The results are shown in table 7 as follows:

Table 7: Training in assistive technology

Training in assistive technology	Frequency	Percentages
Yes	17	53%
No	16	47%
Total	32	100%

More over half of the students got either official or informal instruction in the use of assistive technology, according to the findings. This can be explained by the students' backgrounds from elementary or secondary school or by the parents' capacity to help their children receive assistive technology training prior to enrolling in college. This may also be a result of people who already possess the necessary abilities providing peer instruction in assistive technology. However, a significant portion of respondents acknowledged that they lacked assistive technology training. Nearly half of the students that took part in the study were included in this sizeable group. This suggests that the administration could think about setting up official training sessions because the library is a crucial resource for information searching. This is consistent with findings from Singh and Chaurasia (2022), that appropriate device and technology selection, followed by training, is essential for ensuring proper use of such technology in the libraries.

Provision of information literacy in accessing digital resources

The study's fourth goal was to explain the user education on digital resource access provided to students with special needs. The researcher looked into a variety of areas to try to achieve this goal, and the results are presented, interpreted, and discussed as follows:

Presence of training on e-resources to students with special needs

The study investigated whether users with special needs received user instruction specific to using digital resources in order to achieve the aforementioned goal. Table 8 displays the results.

Table 8: Presence of training on Digital resources to students with special needs

Training in assistive technology	Frequency	Percentages
Yes	14	44%
No	18	56%
Total	32	100%

More than half of the students said they had received no user training on how to use digital resources. These findings back up previous research by Kumar and Sanaman (2015), which found that students generally have a poor understanding of the fundamentals of research and database searching. However, Burke (2013) proposes that academic virtual librarians can provide students who use assistive technology with training sessions on how to use library resources.

Reasons for not attending the training

For those who had not received training, the researcher attempted to determine why they had not attended or obtained user instruction on how to access digital resources. The outcomes are detailed below.

(i) The majority claimed that they had no idea such training was available at the library.

(ii) Many students claimed that there was no planned instruction in the section for users with special needs.

Others who were blind claimed that the user education was delivered through a projector and that they were unable to benefit from it.

The low rate of digital resource access literacy may be related to the following reasons for not obtaining user education on accessing resources: This type of training includes logistical considerations that may help library patrons with special needs. As a result, library

administration should ensure that training provided to users with disabilities is delivered by personnel who are adequately trained in both digital resource access and assistive technology.

CONCLUSION

The purpose of this study was to identify the factors influencing the use of digital resources by students with special needs at the Federal College of Education (technical) Bichi library. The following four key conclusions can be drawn from the study's findings: First, the study concluded that students with special needs lacked independence in using digital resources because they couldn't find and use the resources on their own. This conclusion was reached after realizing that it took a long time for students with special needs to obtain a single resource and that even after retrieval, they still needed to rely on other students to read and write for them. Second, in terms of access issues, the study concluded that the aforementioned information-seeking behavior was caused by the difficulties that students with special needs face when using online resources. Inaccessible websites, low literacy levels for using digital resources, and a lack of adequate assistive technology in the library were the most significant factors. Third, in terms of assistive technology, the findings of the study revealed that both staff and students had low levels of literacy in the field, limiting their access to online resources. However, the study discovered that assistive technology is a critical component of how people with special needs use online resources, so it should be prioritized. Finally, the study discovered that students with special needs had significantly lower reading levels. This was primarily due to a lack of knowledge and competence among both training personnel and students learning to use assistive technology. As stated in the conclusions section, recommendations were made to address the issues.

RECOMMENDATIONS

(i) The study thus suggests that library administration promote learners' independence by providing them with self-sufficient skills such as information literacy and AT knowledge. By doing it this way, they will be able to retrieve a resource in the shortest amount of time possible.

(ii) This study suggests encouraging and facilitating activities in which students who have received AT training can help others in their spare time.

(iii) More funds should be provided by the government to acquire new assistive technology for students with special needs.

(iv) Staff and student training and retraining should be encouraged through remuneration and other incentives. Furthermore, library managers should develop digital resource awareness strategies for students with special needs.

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