

**INFLUENCE OF USE OF ASSISTIVE TECHNOLOGIES ON THE ACADEMIC  
ACTIVITIES OF STUDENTS WITH SPECIAL NEEDS AT KASHIM IBRAHIM  
LIBRARY, AHMADU BELLO UNIVERSITY, ZARIA, NIGERIA**

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***Abstract***

*This study investigated the Influence of the Use of Assistive Technologies on the Academic Activities of People with Special Needs in Ahmadu Bello University Library, Zaria, Nigeria. This study was guided by three research questions: What types of assistive technologies are used to support the academic activities of students with special needs? How has assistive technology influenced the academic activities of students with special needs? And what challenges hinder the effective use of assistive technologies by students with special needs? Adopting a qualitative research methodology and a case study research design, the purposive sampling technique was employed to recruit a sample of 6 participants from a total of 15 registered students. A semi-structured interview was used to collect data. Data collected was analysed using thematic analysis. The findings revealed that no fewer than 20 assistive technologies, such as braille embossers, computers, and "Be My Eyes," are available to support the academic activities of students with special needs in the library. Similarly, assistive technologies have a significant influence on their academic activities as they support the conversion of their lecture notes, printing, and the conduct of assignments. The challenges that hindered the effective use of assistive technologies by students with special needs in the Library were: architectural design, staffing, stigmatization, and power outage. The study concludes that Ahmadu Bello University Library, Zaria, has made a giant stride in supporting the academic activities of students with special needs by providing various assistive technologies and making them accessible.. Therefore, the study recommends that to sustain the provision of assistive technologies, especially modern ones, the library needs to annually budget funds for the acquisition, and the collection needs to be proportionately balanced among the different students with special needs. Similarly, both library staff and users should be regularly trained and user guides produced to equip users with the necessary skills for effective service provision.*

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**Keywords:** Students with Special Needs, Assistive Technologies, Academic Activities, Kashim Ibrahim Library, Ahmadu Bello University, Zaria

### Introduction

The adage that says: “There is ability in every disability” is manifesting in Nigeria, especially now that people with disabilities are receiving more attention as a result of special recognition by the United Nations Convention on the rights of Persons with disability. Apart from respect for difference and acceptance of persons with disabilities as part of human diversity and humanity, the Convention ensures non-discrimination, equality of accessibility, and opportunities for education and other socio-economic empowerment. To avoid negative connotations, discrimination, and stigmatization, the initial term handicap has since been replaced with people with disabilities; and, more dignifying, people with special needs. Many scholars have defined people with special needs in a variety of ways. For instance, the World Health Organization (WHO, 2011) refers to disability as a broad term for impairments leading to activity limitations and participation restrictions. It, according to WHO, encompasses any condition that restricts an individual's ability to perform tasks or engage in activities in a typical manner.

However, Dada (2022) expanded the scope of impairment to include any loss or abnormality of psychological, physiological, or anatomical structure or function, which Merck (2023) refers to as physical, cognitive, emotional, or developmental challenges. Therefore, from these and other definitions, it can be deduced that people with special needs encompass a broad spectrum of conditions and disabilities, ranging from physical impairments like mobility limitations or visual and hearing impairments to cognitive challenges such as intellectual disabilities or learning disorders. Thus, this group of people requires additional support and accommodations to participate fully in various aspects of life. It involves recognizing the unique characteristics, challenges, and strengths of individuals who fall under this category, as well as knowing that each type of disability is unique and requires tailored support to help them navigate daily life effectively.

Following the United Nations declaration on the rights of persons with disability and Sustainable Development Goals (SDGs) number 4 inclusive and equitable quality education and promotion of lifelong learning opportunities for all people, people with disabilities inclusive, the Federal Government of Nigeria proclaimed in the National Policy of Education (NPE) its commitment to accelerate the implementation of equal educational opportunities for people with special needs. Therefore, the NPE holds limitless promises and expectations for people with special needs. The introduction in 1976 of Universal Primary Education (UPE) gave this category of people equal participation in education along with normal children. Although as pointed out by the Global Education Monitoring Report (GEM, 2020) that the Gindiri School for the Blind Children was established in Plateau State in 1953, the 1970s witnessed the proliferation of vocational centers teaching subjects such as crafts, typing and farming to young blind children and in some cases academic subjects with adaptation to suit the peculiar needs of the blind children. At the federal level, the Special

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Education Unit within the Federal Ministry of Education, which is responsible for policy provisions and guidelines development, ensures that its role has progressively led to a shift from segregation to integration of learners with hearing, visual, physical, and health impairments. Accordingly, the 2017 National Policy on Inclusive Education assigns definite tasks, advocating for closer collaboration between the Ministry of Education and other relevant ministries, departments, and agencies, such as the Ministries of Health, Women Affairs, Justice, Youth, finance, labour, and environment.

In recent years, the Joint Admissions and Matriculation Board (JAMB) has made substantial efforts to enhance access to higher education for individuals with special needs (Idoko, 2023). These initiatives aim at creating an inclusive educational environment that supports diverse learning requirements. Therefore, the efforts by JAMB reflect a commitment to creating an inclusive educational environment where individuals with disabilities have equal opportunities to access quality higher education. The agency also plays an important role in facilitating admissions for qualified candidates into higher institutions of learning in Nigeria. Through sensitization programs, strategic planning, and collaboration with various stakeholders, according to NRCDC (2023), JAMB is working towards ensuring that all students, regardless of their physical abilities, can pursue their educational aspirations in Nigeria. As a result of the above initiatives by JAMB, many Nigerian tertiary institutions have extended educational opportunities to students with special needs, leading to a steady increase in admission for this group of students in most of the tertiary institutions. In this regard, Ahmadu Bello University, Zaria, has been recognized by JAMB as one of the best universities providing support to students with special needs. The university has, over the years, consistently admitted many students with special needs into various degree programmes such as English language, Mass Communication, Sociology, etc.

To complement and support the above laudable initiatives, some academic libraries in Nigeria, particularly Kashim Ibrahim Library, Ahmadu Bello University, Zaria, have over the years, acquired, processed, organized, and disseminated different types of assistive technologies as information resources to persons with disabilities. As designed to enhance the functional capabilities of students with special needs, the acquired varied types of assistive technologies are to meet the academic activities and goals of students with different disabilities. Assistive Technologies (ATs), as a derivative of Information and Communication Technologies, are, according to Dominic et al (2019), devices or applications made purposely to use as technical assistance for students and professionals with disabilities. Siddiqua, Parveen & Ansari, (2022) have comprehensively defined the term Assistive Technology (AT) as any object, equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of a child with a disability.

Assistive technologies (ATs) like information resources are varied and diverse, which, as pointed out by Disath (2007), may be low-tech devices, such as magnifiers, or high-tech ones, like computer software with large prints or voice outputs. AT devices also include:

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screen readers, speech recognition software, Braille displays, magnification software, alternative input devices, and other tools designed to accommodate various disabilities. Other devices commonly used, as listed by Venkatesha et al. (2016), are: Sticky Keys, On-screen keyboards, Voice recognition and dictation systems, Head Mouse, Foot Pedal Mouse, and Head stick Mouse. Damemayer, (2021) also postulates that AT consists of devices or software that help individuals work around challenges and enable them to learn, communicate, and function more successfully. However, the Individuals with Disability Education Act (IDEA) summed it up by indicating that any equipment that is used to improve the functional capabilities of individuals with disabilities is considered AT.

Like their counterparts, students with special needs are involved in academic activities that aim to enhance learning, knowledge creation, and intellectual development. These academic activities encompass both formal and informal tasks, such as lectures, tutorials, seminars, research projects, and practical sessions, which contribute to a holistic educational experience (Biggs & Tang, 2011). Academic activities are designed to challenge students cognitively, encouraging them to apply critical thinking, problem-solving skills, and creativity to solve real-world issues. Thus, according to Trowler (2010), academic activities are foundational to fostering deep learning and understanding, as they provide opportunities for students to explore theoretical concepts in depth while applying them in practical contexts. Therefore, assistive technologies play a vital role in enabling students with special needs to engage effectively in academic activities, enhancing their independence and learning outcomes. These technologies, such as screen readers, text-to-speech software, and Braille displays, as pointed out by Mates (2011), provide tailored support for students with disabilities, allowing them to access and interact with digital and print resources in ways suited to their abilities. Similarly, scholars such as Lazar & Briggs (2015) and Smith (2019) postulate that research has shown that using assistive technologies in academic settings significantly improves the confidence and academic performance of students with special needs. It also boosts students' confidence and motivation, as they provide the necessary support to overcome academic challenges and pursue higher levels of achievement. Consequently, integrating assistive technologies into academic activities not only fosters inclusion but also contributes to educational equity in higher education settings (Seale, 2013).

Researchers such as Seale, (2013) and Thompson, (2017), etc. have shown that the inclusion of assistive technologies in university libraries is vital for promoting accessibility and supporting students with special needs in their academic pursuits, as well as substituting a more inclusive academic environment, as students with disabilities can fully engage with their studies and interact with academic content on equal footing with their peers. Similarly, the integration of assistive technologies in university libraries is a critical step toward equitable access to education, enabling all students to maximize their academic potential. These technologies help students overcome barriers that might otherwise hinder their ability to access resources, engage in research, and participate in academic activities effectively (Burgstahler, 2020). For example, as Mates (2011) pointed out, text-to-speech software,

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digital magnifiers, and customized keyboards provide essential tools for visually impaired or physically disabled students, enhancing their ability to learn independently and at their own pace.

The establishment of a section dedicated to students with special needs in Kashim Ibrahim Library, Ahmadu Bello University, Zaria, not only underscored the importance accorded to this group of students but also showed the readiness of the library to provide equalizing opportunities for students with special needs to effectively utilize the library, its resources, and services. As one of the innovative services introduced by the library in the last five years, different Assistive technologies have been provided to support the varied academic activities of this group of students, which aimed at improving their academic activities and, by extension, performance. However, despite these significant efforts by the library, it is observed as indicated by literature in the area that only few studies such as Vincent, Okeowo & Ariyo (2024) have been conducted on people with special needs in the Nigerian academic library environment in general, even more pertinent, is that since the inception of this section for students with special needs in Kashim Ibrahim Library no research has been carried out on the influence of these technologies on their academic activities, making the effectiveness of these technologies in improving academic activities remaining unexplored.

Therefore, there is a need for a better understanding of the different types of assistive technologies and how they can be integrated into educational environments to maximize academic outcomes for students with special needs. Hence, this study seeks to investigate the influence of assistive technologies on the academic activities of these students, identifying those that are available, accessed, and used. This study is found to be significant because the success and applicability of assistive technologies are measured by the ease of accessibility, their actual usage, and the satisfaction derived from interaction with the devices. The result of findings on the types and influence of assistive technologies on their academic activities will assist the library management in effecting necessary changes towards better improvement in service delivery, as one of the goals of the user study. The scope of the study is limited to findings about the types and influence of assistive technologies on their academic activities, and not a measure of their effect or impact on academic achievement, which can later be studied.

### **Research Questions**

This study answered the following research questions;

1. What types of assistive technologies are available to support the academic activities of students with special needs at Ahmadu Bello University, Zaria, Nigeria?
2. What is the influence of the use of assistive technologies for academic activities by students with special needs at Ahmadu Bello University, Zaria, Nigeria?
3. What challenges hinder the effective use of assistive technologies for academic activities by students with special needs at Ahmadu Bello University, Zaria, Nigeria?

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### **Literature Review**

The literature reviewed indicated that assistive technology is capable of providing great support for students with special needs. This is achieved by making available devices that enhance their learning experiences and bridge the gap that exists between them and their peers who can see, and enable them to interact favourably with their environment and participate in other activities that can boost their learning abilities (Ozor, Dodo & Bana, 2024). Similarly, Wang et al, (2023) discussed that AT interventions have been found to promote social inclusion and participation among students with disabilities, fostering a sense of belonging and acceptance within educational environments.

In the same vein, McNichol et al (2020) study on the influence of assistive technology use on educational engagement, academic self-efficacy, and well-being for students with disabilities in higher education in Ireland reveals that competence, adaptability, and self-esteem, and the use of assistive technologies were found to have a positive psychological impact. The study also reveals that when compared to individuals with unmet assistive technology needs, those with fully met assistive technology needs scored significantly higher on academic self-efficacy, well-being, and four of the ten educational engagement subscales. This showed the importance of assistive technology for students with a wide range of disability diagnoses in terms of both educational engagement and psychosocial well-being. Adopting the same methodology, this study will not only add to the existing body of literature but also investigate the influence of assistive technologies on academic activities to bridge the gap in knowledge of people with special needs.

### **Methodology**

Qualitative research methodology and survey research design were adopted for the research. Qualitative approach, according to Leavy (2017), values the depth of meaning and people's subjective experiences and their meaning-making processes. Furthermore, this approach allows the building of a robust understanding of a topic, unpacking the meanings people ascribe to activities, situations, circumstances, people, and objects. Thus, this methodology is found to be appropriate for this research. The population of the study consists of undergraduate students with special needs using the assistive technologies provided in the Kashim Ibrahim Library, Ahmadu Bello University, Zaria. According to records obtained from the section in charge of special needs, there are 15 registered undergraduate students with special needs. 6 participants were selected as a sample of the study because saturation was reached at this number and some of the registered students have graduated.

In-depth, semi-structured face-to-face interviews was the instruments used to collect data from the students. The interview was conducted by the researcher, during which the section, as well as some assistive technologies, were inspected. A consent form was issued to the participants for the study. The interview lasted for 45 - 60 minutes each, and a mobile handset was used to record, which was transcribed. The data was analyzed, and from the narratives, the themes and sub-themes that emerged were discussed.

**Result and Discussion of Findings**

Data collected through voice recordings from the six (6) participants with special needs who regularly use the Unit for People with Special Needs in the university Library were transcribed, and emerging themes and sub-themes were analyzed and discussed. This aligns with the interpretive paradigm in qualitative methodology. The overall findings indicated that the participants expressed diverse opinions based on the situation at hand about the influence of assistive technologies on academic activities. A total of 50 open codes were generated from all the research questions. 18, 12, and 24 narratives were generated from research questions one, two, and three, respectively. An iterative process, as described by Stockey (2015), utilized multifarious steps in coding narratives employing colour coding to distinguish narratives based on the responses that addressed the research questions either directly or indirectly. Employing these steps, the researchers scrutinized the data in search of similarities and dissimilarities in narratives and presented the results as follows:

**The types of assistive technologies available to support students with special needs in Ahmadu Bello University, Zaria, Nigeria**

The first research question sought to find out the types of assistive technologies available to support students with special needs in Ahmadu Bello University Library, Zaria. Two other sub-research questions were raised to gain responses to the main research question. From the data collected and presented in Table 1, some themes and sub-themes emerged from the narratives of the participants.

**Table 1: Types of assistive technologies available to support students with special needs in Ahmad Bello University, Zaria, Nigeria.**

Research question	Themes	Sub-themes
1. What types of assistive technologies are available to support students with special needs at Ahmadu Bello University, Zaria, Nigeria	1. Assistive technologies	1.1 Braille embosser
		1.2 Talking dictionary
		1.3 Braille
		1.4 Computers
		1.5 Smartphones
		1.6 Be My Eyes
		1.7 Braille watch.
		1.8 Seraphim machine
		1.9 Typewriter
		1.10 Job Access with Speech
		1.11 Speech-to-Text
		1.12 Magnifiers
		1.13 Walking Sticks
		1.14 Digital Braille Qur'an
		1.15 Tape recorders
		1.16 Abacus-counting devices
		1.17 Binding machine
		1.18 Screen reader
		1.19 Braille Paper
		1.20 Hearing Aids
How accessible are the assistive technologies	2. Accessible	
	3. Not Accessible	

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	2.1 accessible for daily activities
	2.2 Have access to some of the equipment
4. No formal training	
Are there forms of support on how to use the assistive technologies	3.1 Not accessible
	4.1 No formal support, only assistance from staff
	4.2 I teach my fellow students

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### Source: Interview Analysis, 2025

The findings from the above table revealed that Ahmadu Bello University library, Zaria, Nigeria, has no fewer than 20 different types of assistive technologies used to support students with special needs in their academic activities. These assistive technologies ranged from Braille Embosser, Talking Dictionary, Braille Machine, Computers, Smart Phones, “Be my Eyes”, Braille Watch, etc. However, the participants also indicated the non-availability of some very important assistive technologies like Braille Translating Software and Portable Note-Taking Devices. Similarly, they observed that most of the available technologies are manually operated, pointing out that modern assistive technologies are today run by suitable software. According to one of the participants, *Software enables the customization of digital content to suit individual needs, such as screen readers for visually impaired users or text-to-speech applications* (P4). Another participant also pointed out that *assistive technologies with software enhance accessibility and assist students with visual, auditory, or motor impairments to access digital content and perform tasks independently.* (P6)

Accessibility goes along with availability because assistive technologies can only be accessible if they are available. Therefore, participants, when interviewed, revealed that although they have unrestricted access to the section that holds the assistive technologies during the library's opening hours and days, some assistive technologies are accessible, and others are not accessible. For instance, they cited that Braille Embosser, Talking Dictionary, Braille Machine, and Computers as not accessible, while Smart Phones, Braille Watch, and Walking sticks are accessible. This revelation is not suppressing because even in the traditional library system, some information resources like reference resources, reserved material are kept with limited access, while others are open access. Assistive technologies also follow the same pattern as smartphones. Braille Watch, Walking sticks are regarded as open access and can be loaned out to students with special needs. Braille Embosser, Talking Dictionary, Braille Machine, and Computers have to be in close access. However, the students are allowed to use all the assistive technologies through the librarian or with his/her assistance. This was confirmed by (P3) when he said, *“We use the physical spaces, some assistive technologies, and my personal devices I brought into the library”*.

In terms of providing support on how to use the assistive technologies, the participants disclosed that some supports are rendered to them by the library staff. According to one of

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them, *the staff is always handy to assist us in navigating the technologies. Any topic we do not understand or whenever we have an assignment, she will go out of her way to assist us in conducting the research and completing the assignments. Even to use the braille, she put us through.* (P1). This finding implies that even though assistive technologies are available, disparities in accessibility and the lack of formal training lead to unequal benefits among users. This highlights the need for not only making assistive devices available but also ensuring they are truly accessible to all and supported by proper training programs. Without addressing these issues, the full potential of assistive technologies to enhance utilization may not be realized, and inequities among users can persist.

The participants informed the researchers that no form of training is provided for the users regarding the use of the assistive technologies available in the library. Likewise, providing formal training on the use of assistive technologies to students with special needs is important because it ensures that students can effectively and confidently operate the devices independently. Proper training helps maximize the benefits of the technology, promotes independence, reduces frustration, and minimizes the risk of misuse or accidents (Sekaran *et al*, 2025). It also enables users to adapt the tools to their individual needs, encourages continued use, and supports skill development, ultimately improving their quality of life and capacity for participation in various academic activities.

### **How assistive technology influences the academic activities of students with special needs in Ahmadu Bello University, Zaria, Nigeria**

The second research question sought to determine the influence of assistive technologies on the academic achievement of students with special needs in Ahmadu Bello University, Zaria. From the data collected to answer this question, two themes and five sub-themes emerged from the analysis of participants' narratives. Table 2 below shows the emergent themes and sub-themes which are discussed below.

Tables 2: **How assistive technology influences academic activities of students with special needs in Ahmadu Bello University, Zaria, Nigeria**

<b>Research question</b>	<b>Themes</b>	<b>Sub-themes</b>
<b>How has assistive technology influenced the academic performance of students with special needs in Ahmadu Bello University, Zaria, Nigeria?</b>	1. Not impactful	1.1 It did not assist me
	2. Boost academic achievement	2.1 research
		2.2 assignment
		2.3 up-to-date information
		2.4 Improve academic performance
	2.5 Conversion of notes for the blind	

#### **Source: Interview analysis, 2025**

The findings, as revealed in the above, show that the participants agree that the assistive technologies are very supportive of their academic activities. For instance, all the

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participants acknowledged the use of braille machine and embosser in converting lectures notes to the format readable and useful to them: *“Braille embosser is equally in the library and we use it to assist us in our academic work”* (P1, 2, 3, 4, 5 & 6), with one of the participants emphasizing that: *These assistive technologies have helped me in my academic activities particularly in carrying out researches which I cannot do anywhere unless in this section. When I discovered the section of people with special needs, my performance increased because I was provided with updated information, and I had a lot of experience in this section. (P3)*. The participants further acknowledged that coping with the rigour of academics would have been a herculean task without access to the ATs. This finding supports Alnahdi’s (2020) assertion that assistive technologies can significantly improve students' academic engagement, independence, and learning outcomes. Chu and Nanga, (2025) also affirmed that assistive technologies have a positive, moderate effect on the academic achievement of students with disabilities, highlighting the fact that technology-driven interventions are most effective when combined with instructional support and teacher training. However, the researchers learned that these ATs were not helpful to one of the participants and therefore did not assist him in his academic activities. The concerned participant complained bitterly that *the ATs are not helpful in any way in terms of academic activities because the ATs are for the visually impaired* (P3)

### **Challenges hindering the effective use of assistive technologies by students with special needs in Ahmadu Bello University, Zaria, Nigeria**

The third and final research question sought to identify the challenges that hinder the effective use of assistive technologies by students with special needs in Ahmadu Bello University, Zaria, Nigeria. From the data collected to answer this question, five themes and nine sub-themes emerged from the narratives of the participants. Table 3 below shows the emergent themes and sub–themes which are discussed below.

**Table 3: Challenges hindering the effective use of assistive technologies by students with special needs in Ahmadu Bello University, Zaria, Nigeria**

Research question	Themes	Sub-themes
<b>What challenges hinder the effective use of assistive technologies by students with special needs in Ahmadu Bello University, Zaria, Nigeria?</b>	1. Architectural design	1.1 Building not easily accessible 1.2 A difficult-to-access unit without assistance 1.3 mobility challenge
	2. Staffing	2.1 Inadequate human resources
	3. Stigmatization	3.1 discrimination 3.2 culture shock

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4. Nonuse of ATs for writing examination	4.1 Absence of assistive technology during exams
5. Power Outage	5.1 Power interruption 5.2 Erratic power supply

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### Source: Interview analysis, 2025

From the above table, it can clearly be seen that the use of assistive technologies by students with special needs in Ahmadu Bello University library, Zaria, is hindered by many challenges. Although the section is located on the ground floor of the library, many participants indicated that the architectural design, space, and facilities as critical factors to the accessibility of assistive technologies. They pointed out that lack of enough spaces has limited the ability to navigate, utilize, and benefit from the tools within learning environments. This finding collaborate with Ricaplaza et al,(2025) who reported that old buildings which were not designed inclusively for people with disabilities made it difficult for them to use and pointing that well-designed spaces that incorporate features such as ramps, wide doorways, accessible restrooms, adequate lighting, and minimized barriers ensure that students using mobility aids, sensory devices, or communication tools can move freely and access resources without difficulty.

Inadequate human resources is another challenge that significantly hinders the effective use of assistive technologies, according to the participants. They averred that, although the staff in the section are qualified librarians, they are inadequate in number. The participants also indicated that they lack knowledge and training on how to effectively handle assistive technologies. The participants argued that without adequately trained staff, they are not receiving the necessary guidance, instruction, and support to maximize the benefits of the assistive devices, leading to underutilization or misuse. Also, the absence of sufficient human resources impedes the integration of assistive technologies into the learning process, ultimately compromising students' access to equitable educational opportunities and hindering their overall academic and social inclusion.

The participants also mentioned stigmatization, discrimination, and culture shock as other major challenge significantly impeding their use of assistive technologies by fostering negative perceptions and misconceptions about their abilities and potential. When educators, peers, or family members hold stereotypical views, such as believing that students with disabilities cannot benefit from or do not deserve the use of assistive technologies, these biases lead to humiliation. These attitudes create a stigma, making students feel embarrassed or reluctant to participate in academic activities, thereby hindering their confidence, independence, and overall educational engagement. This is supported by Ripat and Woodgate (2011) observation that cultural misconceptions and stigmas surrounding disabilities and assistive devices often hinder acceptance and use, especially in communities where disabilities are misunderstood or stigmatized, thereby affecting students' access to and engagement with assistive technologies. This is buttressed better by one of the

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participants when he said, "Some students usually express this surprise and ask how a blind student can attain the level of university education. As a result of this, a student with a sight issue is usually followed and monitored to see how the student thrives. They follow me to the library (P1). Other challenges indicated by them comprise power outage as a serious deterrent to the use of many equipment and facilities, including assistive technologies. According to them, most assistive technologies depend on a regular power supply, and power outages always result in the disruption of the functionality of ATs, which disrupts learning and other academic activities. Similarly, they complained of the non-use of ATs for writing examinations, which was seriously affecting their performance. They suggested that, in order not to wait until their colleagues are served before the invigilators read out the question to them, their question papers can be produced using the braille machine and embosser in the library.

### Conclusion

The study concludes that Ahmadu Bello University Library, Zaria, has made a giant stride in supporting the academic activities of students with special needs by providing various assistive technologies and making them accessible. Despite the numerous challenges mentioned, the assistive technologies provided in the Ahmadu Bello University library, Zaria, have influenced and impacted the students with special needs' academic activities.

### Recommendations

Based on the findings of the study, the following recommendations were made;

1. To sustain the provision of assistive technologies, especially modern ones, the library needs to annually budget funds for the acquisition and maintenance of these technologies.
2. The collection needs to be proportionately balanced among the different students with special needs to ensure full utilization by all.
3. Similarly, both library staff and users should be regularly trained and user guides produced to equip users with the necessary skills for effective service provision.

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