

## An analysis of library access and utilization by students with special needs at the University of Calabar, Cross River State

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### Abstract

*This study assesses library utilization among students with special needs at the University of Calabar, using a survey research design. The population consisted of 80 students with disabilities (42 male and 38 female). Due to the small and homogenous population size, the entire group was surveyed. Data were collected via questionnaires, focusing on library usage patterns, challenges faced, and the adequacy of existing services. Responses were analyzed using percentages to determine the frequency and distribution of responses, offering a quantitative evaluation of accessibility and utilization. The study found that 85% of students had access to assistive technologies such as screen readers and Braille displays, while 90% reported the availability of support services and trained staff. However, 42.5% of students lacked training in the use of assistive technologies, highlighting a significant gap in resource utilization. Recommendations include improving assistive technology training, website usability, and expanding information literacy programs to enhance support for students with special needs.*

**Keywords:** Accessibility, Assistive Technology, Information Literacy, Library Utilization, Special Needs

### Introduction

Libraries play a crucial role in the academic journey of students, serving as hubs of knowledge, resources, and support. For students with special needs, the accessibility and inclusivity of library services are particularly vital, as these factors can significantly impact their ability to succeed academically. As institutions of higher learning continue to embrace diversity

and inclusion, it becomes imperative to assess how well libraries are meeting the unique needs of students with disabilities.

The University of Calabar, located in Cross River State, has taken steps to ensure that its library services are accessible to all students, including those with special needs. This involves providing assistive technologies, accessible physical spaces, and support services tailored to the requirements of students with various disabilities. However, as educational landscapes evolve, so too must the resources and strategies employed by academic libraries to support their users effectively. This study, titled "Assessing Library Utilization by Students with Special Needs at the University of Calabar, Cross River State," aims to evaluate the current state of library services provided to students with special needs at the university. It seeks to understand the availability and effectiveness of library materials, technological resources, and support services, as well as to identify areas where improvements may be necessary. By examining how these students interact with and benefit from the library's offerings, this research contributes to the broader discourse on creating inclusive academic environments that foster equal opportunities for all students.

### **Statement of the Problem**

Despite the critical role that libraries play in supporting academic achievement and intellectual growth in higher education, there is a significant gap in understanding how students with special needs utilize these services at the University of Calabar. While the university's library offers a range of resources designed to support diverse learning needs, the specific experiences and challenges faced by students with disabilities in accessing and using these resources remain largely unexplored.

Existing research on library utilization often focuses on the general student population, with limited attention given to the unique needs and circumstances of students with disabilities. As a result, there is insufficient data on whether the current library services at the University of Calabar are fully accessible to these students, and how effectively these services meet their academic and informational needs.

This gap in understanding is problematic because it hinders the development of targeted strategies to improve library accessibility and inclusivity for all students. Without a clear understanding of the barriers that students with special needs may encounter, the university cannot effectively address these issues or optimize its library services to ensure equitable access for everyone.

The problem that this study seeks to address is the lack of comprehensive data and analysis on how students with special needs at the University of Calabar utilize library services, what challenges they face, and how these challenges impact their academic experience. By identifying and exploring these gaps, the study aims to provide insights that will inform the enhancement of library services to better support the diverse needs of all students.

### **Objectives of the Study**

The primary objectives of this study are as follows:

1. to assess the availability of materials for students with special needs
2. to evaluate the technology provided for students with special needs
3. to investigate the accessibility of information resources for students with special needs
4. to review the services offered to students with special needs

## Research Questions

Based on the objectives of the study, the following research questions were formulated:

1. what types of materials are available in the library for students with special needs, and how suitable are they for supporting their academic activities?
2. what technological resources and assistive tools are provided by the library to support students with special needs, and how effective are these technologies?
3. how accessible are the library's information resources to students with special needs, including both physical access and digital usability?
4. what are the specific academic and informational needs of students with special needs at the university of Calabar?

## Research Methodology

This study employs a survey research design to assess library utilization among students with special needs at the University of Calabar with four objectives and four research questions. The population for the study comprised 42 male and 38 female students with disabilities enrolled at the university. The entire population was used for the study because of its small size and homogeneity. Data was collected using questionnaire. The questionnaire is designed to gather comprehensive information on library usage patterns, challenges faced, and the adequacy of existing services. To facilitate a clear and organized visualization of the responses, data was presented using tables. It was analyzed using percentages to determine the frequency and distribution of various responses, allowing for a quantitative assessment of library utilization and accessibility issues. This methodological approach ensures a systematic and objective evaluation of the research questions. The study revealed among other findings that, the University of Calabar's library is largely effective in supporting students with special needs, and it has made significant progress in providing technological resources for students with special needs, with high availability of specialized software for cognitive impairments. Recommendation were made based on findings

## Literature Review

The concept of accessibility and inclusion is fundamental to the mission of libraries, especially when serving students with special needs. Moirangthem & Phuritsabam (2022) highlight that libraries should create environments where all users, including those with disabilities, can access information equitably. An inclusive library empowers users by offering resources that help them expand their knowledge and become self-reliant. Obuezie, Babayi & Nwosu (2022) further emphasize the need for specialized formats, such as large print books and microfilms, to ensure effective access for students with disabilities.

Simon (2020) stresses the importance of both physical resources and assistive technologies in helping students with disabilities manage academic challenges. However, Baylor et al. (2023) caution that without proper training, these tools may not be fully utilized, highlighting the need for both access and effective use of resources.

The removal of physical and digital barriers is a critical focus, as noted by Petersen (2020), who advocates for accessible design to create inclusive learning spaces. Evmenova (2018) and Kurt (2019) stress the importance of well-designed websites, allowing students with disabilities to independently access digital resources. Bharti & Verma (2021) support this by emphasizing that accessible online databases and e-books are crucial for modern libraries.

Withorn et al. (2021) argue for expanded information literacy programs to ensure students with disabilities can engage fully with available resources. Diaz, Morgado & Seale (2024) underscore the need for specialized materials, reinforcing earlier research that emphasizes making academic resources compatible with assistive technologies.

In summary, the literature highlights the crucial role libraries play in providing equitable access to resources for students with special needs. Libraries must offer a combination of physical materials, digital resources, and training to meet the diverse needs of these students, providing a strong foundation for assessing library services at the University of Calabar.

## Analysis/Discussion of Results

**Table 1**  
**QUESTIONNAIRE RESPONSE RATE**

| Number of Questionnaires Administered | Numbered Retrieved | Percent (%) Retrieved | Number |
|---------------------------------------|--------------------|-----------------------|--------|
| 80                                    | 80                 | 100                   |        |

A total of 80 questionnaires were administered to the respondents in the study on assessing library utilization by students with special needs at the University of Calabar. All 80 questionnaires were successfully retrieved, representing a 100% response rate. This complete retrieval of questionnaires ensures that the data collected is comprehensive and fully representative of the targeted population, enhancing the reliability of the study's findings.

**Table 2**  
**Demographic Distribution of Respondents**

| Gender         | Frequency (f) | Percent (%) |
|----------------|---------------|-------------|
| Male           | 42            | 52.5        |
| Female         | 38            | 47.5        |
| Total          | 80            | 100         |
| Age            |               |             |
| 18-24          | 28            | 35          |
| 25-29          | 37            | 46.25       |
| 30-34          | 13            | 16.25       |
| 35 and above   | 02            | 2.5         |
| Total          | 80            | 100         |
| Marital status |               |             |
| Single         | 72            | 90          |
| Married        | 8             | 10          |

|       |    |     |
|-------|----|-----|
| Total | 80 | 100 |
|-------|----|-----|

The demographic data as presented in table 2 shows that the respondents were nearly evenly split by gender, with 52.5% male and 47.5% female. The largest age group was 25-29 years (46.25%), followed by 18-24 years (35%). A smaller portion of respondents were aged 30-34 (16.25%), and only 2.5% were 35 or older. In terms of marital status, the vast majority of respondents were single (90%), with just 10% being married.

**Table 3**

Library Materials for Students with Special Needs Available in the Library

| SN | ITEM                                                                                                                                                           | Available | Not Available |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------|
| 1  | Are assistive technology like screen readers, Braille displays available in the library to support students with special needs                                 | 68 (85%)  | 12 (15%)      |
| 2  | Are large print books, audiobooks available in the library for students with special needs                                                                     | 56 (70%)  | 24 (30%)      |
| 3  | Are study spaces in the library equipped with facilities that are accessible to students with special needs (e.g., adjustable desks, quiet rooms)?             | 74 (92%)  | 6 (15%)       |
| 4  | Are e-books, online databases provided by the library equipped with accessibility features (e.g., text-to-speech, adjustable font sizes)?                      | 48 (60%)  | 32(40%)       |
| 5  | Are support services (e.g., staff assistance, special needs counseling) available in the library, and are staff trained to assist students with special needs? | 72 (90%)  | 8 (20%)       |

Source: Field survey, 2024

Table 3 presents data on the availability of library materials and services for students with special needs at the University of Calabar. Assistive technologies, such as screen readers and Braille displays, are available to 85% of students, while 15% report a lack of these tools. Large print books and audiobooks are available to 70% of respondents, with 30% noting their absence. Study spaces equipped with accessible facilities, such as adjustable desks and quiet rooms, are available to 92% of students, while 8% indicate these are lacking. Additionally, 60% of respondents report that e-books and online databases provided by the library have accessibility features, while 40% find these resources inaccessible. Finally, 90% of students affirm the availability of support services and trained staff, while 10% report these services as unavailable. These findings highlight areas where the library excels and others where improvements are needed to better support students with special needs.

**Table 4**

Research question on technological resources and assistive tools provided by the library to support students with special needs, and the effectiveness of the technologies. The result is presented in table 4

| SN | ITEM | Available | Not Available |
|----|------|-----------|---------------|
|----|------|-----------|---------------|

|   |                                                                                                         |             |            |
|---|---------------------------------------------------------------------------------------------------------|-------------|------------|
| 1 | Are there specialized software programs or computer peripherals for students with cognitive impairments | 76 (95%)    | 4 (5%)     |
| 2 | Is there access to speech-to-text software for students with learning disabilities                      | 78 (97.5%)  | 2 (2.5%)   |
| 3 | Does the library provide hearing assistance devices for students with hearing impairments               | 75 (93.75%) | 5 (6.25%)  |
| 4 | Are adjustable desks and ergonomic chairs available for students with physical disabilities             | 79 (98.75%) | 1 (1.25%)  |
| 5 | Does the library offer assistive technology training for students with special needs                    | 46 (57.5%)  | 34 (42.5%) |

Source: Field survey, 2024

Table 4 presents data on the availability and effectiveness of technological resources and assistive tools provided by the library to support students with special needs at the University of Calabar. The majority of respondents (95%) confirmed the availability of specialized software programs or computer peripherals for students with cognitive impairments, while 5% noted their absence. Speech-to-text software for students with learning disabilities is available to 97.5% of respondents, with only 2.5% lacking access. Hearing assistance devices are available to 93.75% of students, and 98.75% confirm the availability of adjustable desks and ergonomic chairs for students with physical disabilities. However, only 57.5% report the availability of assistive technology training, leaving 42.5% of students without access to this support. This indicates that while most technological resources are available, there is room for improvement in providing training for their effective use.

**Table 5**

Result of how accessible the library's information resources are to students with special needs, including both physical access and digital usability, as presented in table 5

| SN | ITEM                                                                                                                                                                    | Accessible | Not Accessible |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------|
| 1  | Ease of access to library facilities, including ramps, elevators, and designated seating areas for students with mobility impairments.                                  | 80 (100%)  | 0 (0%)         |
| 2  | Availability of physical library materials (books, journals, etc.) in accessible formats such as Braille, large print, or audio versions.                               | 79 (97.5%) | 2 (2.5%)       |
| 3  | Accessibility of online databases, e-books, and other digital resources, including compatibility with screen readers and other assistive technologies.                  | 76 (95%)   | 4 (5%)         |
| 4  | Ease of navigation and usability of the library's website for students with special needs, including features like keyboard navigation and screen reader compatibility. | 54 (67.5%) | 26 (32.5%)     |
| 5  | Availability of accessible information literacy training sessions or materials for students with special needs (e.g., tutorials in accessible formats).                 | 75 (93.5%) | 5 (6.5%)       |

Source: Field survey, 2024

Table 5 presents data on the accessibility of the library's information resources for students with special needs at the University of Calabar. All respondents (100%) reported that physical access to library facilities, including ramps, elevators, and designated seating, is fully accessible. Additionally, 97.5% confirmed that physical materials, such as books and journals, are available in accessible formats like Braille, large print, or audio, while 2.5% noted the lack of these resources. Online databases and e-books are accessible to 95% of respondents, though 5% found them incompatible with assistive technologies. Ease of navigation and usability of the library's website for students with special needs was reported by 67.5%, leaving 32.5% indicating challenges. Finally, 93.5% of students confirmed the availability of accessible information literacy training or materials, while 6.5% found these resources lacking. This data suggests strong physical accessibility and digital resource availability, though improvements could be made in website usability and information literacy training.

**Table 6**

Result of research question 4

Academic and Informational Needs of Students with Special Needs at the University of Calabar

| SN | ITEM                                                                                                                                                                                            | Agree       | Disagree  |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------|
| 1  | Students with special needs require access to specialized learning materials, such as Braille textbooks, audio books, or large-print materials.                                                 | 80 (100%)   | 0(0%)     |
| 2  | The university's online resources, including the library's digital collections and course materials, need to be fully accessible to students with disabilities.                                 | 79 (97.5%)  | 1 (2.5%)  |
| 3  | Students with special needs benefit from personalized academic support, such as tailored tutoring services or adaptive study plans.                                                             | 72 (90%)    | 8 (10%)   |
| 4  | There is a need for more inclusive classroom environments where teaching methods are adapted to accommodate students with special needs.                                                        | 73 (91.25%) | 7 (8.75%) |
| 5  | The provision of assistive technologies, such as speech-to-text software, screen readers, or alternative input devices, is essential to meet the academic needs of students with special needs. | 71 (88.75%) | 9 (%)     |

Source: Field survey, 2024

Table 6 highlights the academic and informational needs of students with special needs at the University of Calabar. All respondents (100%) agreed on the importance of specialized learning materials, while 97.5% stressed the need for accessible online resources. A majority (90%) supported personalized academic assistance, and 91.25% saw the need for inclusive teaching methods. Additionally, 88.75% agreed that assistive technologies are crucial for supporting the academic success of students with disabilities.

## Summary and Discussion of Findings

### **Library materials available to students with special needs**

The first research objective and question focuses on the Library materials available to students with special needs. The presented data reveals that the University of Calabar's library is largely effective in supporting students with special needs, with strengths in areas such as the availability of assistive technologies, accessible study spaces, and support services. Specifically, 85% of students have access to essential tools like screen readers and Braille displays, while 92% benefit from study spaces equipped with facilities like adjustable desks. Additionally, 90% of students affirm the availability of support services and trained staff, highlighting the library's commitment to inclusivity. This research findings conform to the investigation of Moirangthem & Phuritsabam (2022) who asserts that, Accessibility and inclusion are at the very core of what libraries are all about. The scholars insisted that, the main objectives of an inclusive library is to promote the rights of every user including people with special needs to be able to access information to develop their knowledge index and be independent and self-reliant. The availability of the library materials as advocated by the research findings is in tandem with the findings of Obuezie, Babayi & Nwosu (2022) who argued that, at least, microfilms and large print books must be available for use by users with special needs.

### **Technological resources and assistive tools provided by the library to support students with special needs, and the effectiveness of the technologies.**

The second research objective and question focuses on the technological resources and assistive tools provided by the library to support students with special needs, and the effectiveness of the technologies. The study reveals that, the University of Calabar's library has made significant progress in providing technological resources for students with special needs, with high availability of specialized software for cognitive impairments (95%), speech-to-text software (97.5%), hearing assistance devices (93.75%), and adjustable desks and ergonomic chairs (98.75%). These findings align with research findings of Simon (2020) emphasizing the importance of accessible educational resources for students with disabilities. However, the data also reveals a significant gap in the provision of assistive technology training, with 42.5% of students lacking access to this support. Studies suggest that without proper training, the benefits of these technological tools may not be fully realized (Bayor et al, 2023). This highlights an area where the library can improve to better support students in utilizing the available resources effectively.

### **The accessibility of the library's information resources by students with special needs, including both physical access and digital usability**

The third research objective and question is concerned with the overall accessibility of the University of Calabar's library resources for students with special needs, highlighting both strengths and areas for improvement. The finding that 100% of respondents reported full physical access to library facilities, including ramps, elevators, and designated seating, underscores the university's commitment to ensuring that the physical environment is fully inclusive. This aligns with best practices in accessible design, which emphasize the importance of removing physical barriers to ensure equitable access for all students (Petersen, 2020).

Additionally, the availability of physical materials in accessible formats, confirmed by 97.5% of respondents, reflects the library's efforts to cater to students with visual impairments by providing resources in Braille, large print, or audio formats. This is consistent with findings of Evmenova (2018) that stress the necessity of offering diverse formats to meet the varying needs of students with disabilities. Furthermore, the high accessibility of online databases and e-books (95%) suggests that the library is effectively integrating digital resources that are compatible with assistive technologies, which according to Bharti & Verma (2021) is crucial in the modern, technology-driven educational landscape.

However, the data also indicates that 32.5% of students experience challenges with the usability and navigation of the library's website. This is a significant concern, as a well-designed website is vital for ensuring that students with disabilities can independently access and utilize digital resources (Kurt, 2019). Similarly, the 6.5% of students who reported a lack of accessible information literacy training or materials suggests that while the library is providing some support, there is room for improvement in ensuring that all students can fully benefit from these educational resources. Enhancing website usability and expanding information literacy training according to Withorn, Eslami, Lee, Clarke, Caffrey, Springfield & Haas (2021) would further align the library's offerings with inclusive educational practices, ultimately fostering a more supportive learning environment for all students.

### **Academic and Informational Needs of Students with Special Needs at the University of Calabar**

Research objective and question four focuses on the academic and informational needs of students with special needs at the University of Calabar, reflecting a broad consensus on the resources and support necessary for their success. The unanimous agreement (100%) on the importance of specialized learning materials highlights a critical need for resources that are tailored to the unique learning requirements of these students. Diaz, Morgado & Seale (2024), emphasized that specialized materials are essential for enabling students with disabilities to engage fully in their academic work.

Furthermore, the data shows that 97.5% of respondents stress the need for accessible online resources, indicating that digital accessibility is a key priority for these students. This supports previous research that underscores the importance of making online academic resources compatible with assistive technologies, ensuring that students with disabilities have equitable access to the same information as their peers (Gin, Guerrero, Cooper & Brownell, 2020). The high level of support (90%) for personalized academic assistance also points to the value of individualized support strategies, which have been shown to significantly enhance the learning experiences and outcomes for students with disabilities (Hollins & Foley, 2013).

Additionally, 91.25% of respondents emphasized the importance of inclusive teaching methods, which suggests that there is a strong demand for teaching approaches that accommodate diverse learning needs. This is consistent with the principles of Universal Design for Learning (UDL), which advocates for flexible teaching methods that can be adapted to the individual needs of all students (Hartmann, 2015). Finally, the recognition by 88.75% of students that assistive technologies are crucial for academic success reinforces the idea of Izzo & Bauer (2015) that these tools are not just supplementary, but integral to the academic achievement of students with disabilities. Overall, the data from Table 6 highlights a clear need for ongoing support and the

implementation of inclusive practices to ensure that students with special needs are fully supported in their academic endeavors.

## **Conclusion**

The assessment of library utilization by students with special needs at the University of Calabar reveals that while the institution has made significant strides in creating an inclusive and accessible environment, there are still areas that require improvement. The availability of assistive technologies, accessible study spaces, and specialized support services demonstrates the university's commitment to meeting the diverse needs of its student population. However, gaps remain in areas such as assistive technology training, digital resource usability, and the provision of personalized academic assistance. Addressing these gaps is crucial for ensuring that all students, regardless of their physical or cognitive abilities, can fully engage with and benefit from the library's resources.

## **Recommendations**

To further enhance the library's support for students with special needs, the following recommendations are proposed:

1. **Enhance Assistive Technology Training:** The university should develop comprehensive training programs to ensure that students with special needs can effectively use available assistive technologies. This would maximize the impact of these tools and empower students to overcome academic challenges.
2. **Improve Website Usability:** The library's digital platforms, including its website and online databases, should be redesigned to better accommodate students with disabilities. Adopting best practices in web accessibility will ensure that these students can navigate and utilize digital resources independently.
3. **Expand Information Literacy Programs:** The library should offer more accessible and tailored information literacy training sessions, ensuring that students with special needs are equipped with the skills to efficiently find, evaluate, and use information resources.
4. **Promote Inclusive Teaching Methods:** The university should continue to advocate for and implement inclusive teaching strategies, such as Universal Design for Learning (UDL), to address the diverse learning needs of all students, particularly those with disabilities.
5. **Regularly Update and Expand Accessible Resources:** The library should continuously update its collection of accessible materials, including Braille, large print, and audio formats, to meet the evolving needs of students with special needs and to support their academic success.

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