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## EVALUATING THE EXTENT OF ASSISTIVE SERVICES TO SPECIAL NEEDS STUDENTS BY UNIVERSITY LIBRARIES: THE CASE OF FEDERAL UNIVERSITIES IN NIGERIA

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### Abstract

The ambition plan of action of the international Community, the 2030 Agenda of leave no one behind major aim is to create a peaceful and prosperous world, where dignity of an individual person and equality among all is applied. In this regard, people with special needs are supposed to be considered in every facet of human activities especially when it comes to formal education setting. In the university, the library is seen as pivot on which every academic activity rotates therefore, a home for students and faculty regardless of form. The study therefore is an empirical inquiry into the extent assistive services are provided by University Libraries to students with special needs. The study applied descriptive survey research design. The sampled population for the study stood at 200, drawn among certified librarians working in 42 federal university libraries in Nigeria. The major instrument used for data collection was a self-designed questionnaire and data collected were analyzed using frequency, simple percentile and mean and presented in a table and charts. The outcome of the study shows among other things that the only categories of students with special needs the libraries under study provide services for are, physically challenged, and intellectually disabled students, the libraries lack major assistive devices to facilitate assistive services to special needs students, few assistive services are being provided by the libraries to students with special needs and the study also found that with the exception of personalized library assistance, provision of accessible study space and extension of loan periods for students with special needs that are provided to a high extent, others may be said to be in nonexistence. The study also identified that inadequate funding; lack of infrastructural support, cramped library spaces, lack of or outdated assistive tools, absence of inclusive library policies, as well as weak collaboration with relevant stakeholders are major challenges militating against provision of comprehensive assistive services to students with special needs by the libraries. The study based on the findings recommended inter-alia that the libraries should be adequately funded and equipped with contemporary assistive technologies by government while the libraries on their own; should apply user-centered service design principles.

**Keywords:** Assistive Service, Special Needs, Students, Disability, University Library, Assistive Technologies

## 1.0. Introduction

Library of every type from inception is a social institution that is designated to serve heterogeneous customers. The implication is that the library is meant to serve all strata of people in search of information and knowledge regardless of background, creed, race, status or nature. In the case of university libraries, it is seen as the hub of every academic activity in the university whose aim is to support in the realization of the tripartite functions of the university which are; teaching/learning, research and extension services. This privileged position of the university library makes it a home for all students, faculty members and management. Be that as it may, the library with the librarians are by implication suppose without any form of reservation to provide desirable services to all forms of students including those with special needs. This apart from the nature of librarianship that makes a librarian a social worker, it is in tandem with the ambition plan of action of the international Community, the 2030 Agenda of leave no one behind, aimed at creating a peaceful and prosperous world, where dignity of an individual person and equality among all is applied as the fundamental principle, cutting across the three pillars of the work of the United Nations Development, Human Rights and Peace and Security (United Nations, 2016).

This implies that the sole aim of librarianship is to provide the needed information to library users and so to speak to the society regardless of class; creed, sex, status or race. On the other hand, libraries do not exist in isolation of users as it is the ability of any library to satisfy the information needs of its various clients determines its worth. The emphasis therefore is that library users in all perspective form a complex whole of the library in that without them, there is no library of any form. Apart from classification by objectives, users can also be categorized in accordance with other criteria, for instance religion, education, environment, sex, employment, profession, age or status. The heterogeneity of the users is further emphasized by their various unspoken reading needs and motives. As stated by Onwubiko (2021), the task of the librarians in respect to library users, therefore, is not to adopt an attitude of passive expectancy, but to stimulate use of the library so that everyone's requirements can be met. Because the influence exercised by books, among other things, can be either good or bad, and because the majority of library users require only relevant sources on a subject, the librarian

is obliged through reader guidance and reader service to make available not the maximum, but a limited selection of the collection. The librarian as a social worker is also obliged to be of help to any class of users including those with special needs which is an aspect of exceptionality a term Ugwu (2015) describes as a state of deviation from normal standard of being or existence of certain human attributes, abilities, capabilities and traits from the average and should exhibit positive attitude towards them. While generally special need library users may be described as those users with disabilities or conditions that make it harder for them to learn or participate in typical library activities, and therefore require specialized support and accommodations to succeed. In other words, special needs refer to individuals who require assistance for disabilities that may be medical, mental, or psychological.

Excluding such users while planning a library like a university library or worse still, not giving them special attention in form of support to assist them optimally utilized the library and satisfy their information needs, negates the ambition plan of action of the international Community, the 2030 Agenda of leave no one behind and the principle of inclusiveness as being campaigned by the UN (Onwubiko, 2024). Inclusive education so to speak, is one important avenue through which children are given that ample opportunity to go to school with the sole purpose of learning, developing the required skills to succeed in life. This implies that inclusion is carry every child along a message that is in line with the United Nations Sustainable Development Goals (UN-SDGs) (UNESCO (n.d.). Inclusion in education in a broad term means that all students should be able to access and gain equal opportunities to education and learning and on no ground should any child be discriminated upon as to denying him or her the right to effective formal education. This is built on the premise that special and personalized educational programs are more effective with children with special needs as such mixed experiences will enhance their social interactions leading to successful life. The idea behind inclusion in education is to make way for the utilization of special classrooms, schools and facilities for students with disabilities. The underlying factor is that the protagonists of inclusion in education main intention is to move away from seclusion models of special education to the fullest extent practical. This on

the believe that that it is to the social benefit of general education students and special education students alike, with the more able students serving as peer models and those less able serving as motivation for general education students to learn empathy (UN Department of Economic and Social Affairs Disability, 2018).

Be that as it may, the realization of this philosophy will be better pronounced when students with special needs are included in every aspect of the global educational program or process including the use of libraries. Examples of special needs include physical disabilities, sensory impairments, and learning disabilities like dyslexia, in addition to conditions such as autism, ADHD, or Down syndrome. Many countries have laws and educational systems in place to ensure these students receive a free and appropriate education tailored to their individual needs in which case, libraries are designed and equipped in line with their needs. For instance, in the United States "special needs" which was derived from the language in the Adoption and Safe Families Act of 1997 is seen as a legal term and applies in foster care (Seelye, 1997) The underscore is that it is a diagnosis used to classify children as needing more services than those children without special needs who are in the foster care system. So the underlined words there are; needing more services.

In the Nigerian context, Shekarau (2015) as then Minister of Education did revealed that indeed that children with special needs in Nigeria were not receiving the desired attention. He did declare that based on research at global, continental and regional levels and by human rights groups, there was need to overhaul the already existing policy on special needs. In his words, these have therefore necessitated the need to review the policy to ensure best practices in the field of Special Needs Education. Based on the above, government will, in future, drive Special Needs Education on the following principles: creating the least restrictive environment; zero reject that is, education for all irrespective of circumstance of life, setting and services, total inclusion of Persons with Special Needs within the ambience of societal operation, as well as diversification of services beyond the school setting to include the home and the hospital. How realistic has this been especially in university libraries, is a question that needs an answer? It is against

this backdrop, that this study has become imperative as to ascertain the extent assistive services are rendered to students with special needs by libraries in federal universities using Nigeria, as area of study and also to close the gap in knowledge in this area of study as there is, noticeable dearth in literature.

### 1.1. Objectives of the Study

The main objectives of this study therefore are:

- a. To identify categories of students with special needs benefit from the library facilities;
- b. To identify the types of assistive services being provided by the university libraries to users with special needs,
- c. To ascertain the extent to which they are being provided,
- d. To ascertain the availability of assistive tools, and
- e. To ascertain the challenges militating against assistive services to users with special needs

### 1.2. Research Questions

The study is further guided by the following four research questions.

- a. What categories of students with special needs benefit from the library facilities?
- b. What types of assistive services are being provided by the universities to students with special needs?
- c. What types of assistive tools are available in the library?
- d. To what extent are assistive services offered to student with special needs?
- e. What are challenges faced by librarians in serving students with special needs?

## 2.0. Literature Review

### 2.1. Conceptual Overview

#### 2.1.1. Special Needs/ Special Educational Needs

The definitions of special needs or special educational needs which go hand-in-hand, could be liken to the adage; "different strokes for different folks" as no one can lay hand or claim to a generally accepted definition or definitions. All the same, the inference is that special needs students are children with disabilities or conditions that make it harder for them to learn or participate in typical educational activities therefore, require specialized support and accommodations to succeed. Instances of SN

as have been highlighted include: physical disabilities, sensory impairments, and learning disabilities like dyslexia, in addition to conditions such as autism, ADHD, or Down syndrome. Many countries have laws and educational systems in place to ensure these students receive a free and appropriate education tailored to their individual needs (Khattak, 2013).

Special needs are further explained to include; physical conditions such as cerebral palsy, vision or hearing impairments, or missing limbs, intellectual/developmental like intellectual disabilities, Down syndrome, or learning disabilities like dyslexia, dyscalculia, and dysgraphia. There also the issue of behavioral/emotional conditions that affect behavior and emotional regulation, or gifted children with advanced academic abilities, and speech and Language issues with communication, such as speech and language impairments or stuttering. Emphatically, special needs can range from people with autism, cerebral-palsy, Down syndrome, dyslexia, dyscalculia, dyspraxia, dysgraphia, blindness, deafness, AD HD, and cystic fibrosis. They can also include cleft lips and missing limbs. The types of special needs vary in severity, and a student with a special need is classified as being a severe case when the student's IQ is between 20 and 35 (Khattak, 2013). These students typically need assistance in school, and have different services provided for them to succeed in a different setting. According to Jamaica Association for the Deaf (2015), students or children with special needs are those who have disability or a combination of disabilities that makes learning or other activities difficult. As explained, special needs students include: those who have mental retardation which causes them to develop more slowly than other children. Speech and Language Impairment, such as a problem expressing themselves or understanding others. Physical Disability, such as vision problem, cerebral palsy, or other conditions. Learning Disabilities, which distort messages from their senses. Emotional Disabilities, such as antisocial or other behavioral problems. As revealed by World Health Organization, disability is part of being human and available evidence did show, that an estimated 1.3 billion people which represents about 16% of the global are currently experiencing one form of disability or the other. This situation is being attributed to increase in

noncommunicable diseases, environmental effect and interaction between individuals with a health condition such as cerebral palsy, Down syndrome and depression (WHO, 2025)

On the other hand, inasmuch as there is no true state of the definition of SEN, in that, different countries have different definitions of, and terms for, special educational needs, countries like England and Ireland, have established legal definitions of SEN that emphasize inclusivity and the right to education for all students, regardless of their needs. These legal frameworks often provide broad definitions intended to encompass a wide range of individual needs, reflecting the commitment to inclusive education (Inclusive Teach, 2015).

In this regard, special educational needs (SEN) are seen as a spectrum of conditions that require specific educational interventions to support learning and development. These definitions can vary across countries and educational contexts, but they generally aim to ensure that students with unique challenges receive appropriate educational resources and support. SEN encompasses various categories, including physical disabilities, learning difficulties, and emotional or behavioural disorders (Inclusive Teach, 2024). This implies that SEN refers to learners and in the case of the library users who experience difficulties that make it harder for them to learn or use the library facilities than most of their mates and colleagues.

In the United States for instance, the term "Special Education" is commonly used, specifically under the Individuals with Disabilities Education Act (IDEA). According to IDEA, a student or a child with a disability is defined as one with various impairments, including intellectual, hearing, speech or language, visual, emotional, orthopedic, autism, traumatic brain injury, and learning disabilities, who consequently require special education and related services (U.S. Department of Education, 2024). While in Australia the term that is used for SEN is "Students with Disability." The Disability Discrimination Act 1992 offers a broad definition that encompasses physical, intellectual, psychiatric, sensory, neurological, and learning disabilities, among others, highlighting inclusivity for various types of disabilities. Whereas in Canada, definitions of special educational needs vary by province since education is a provincial responsibility.

Most provinces utilize the terms “Special Education Needs” or “Exceptionalities.” For instance, Ontario defines an “Exceptional pupil” as one whose exceptionalities necessitate placement in a special education program, addressing diverse behavioural, communicational, intellectual, and physical needs (Inclusive Teach, 2023). In the case of New Zealand, it has transitioned to the term “Learning Support” from its previous designation of Special Education. The Ministry of Education identifies students requiring learning support as those who struggle to meet curriculum expectations due to disabilities, at-risk factors, or behavioural challenges that impede learning. In Germany, the term “Sonderpädagogischer Förderbedarf” reflects the concept of Special Educational Needs. This term is used to describe the necessity for additional educational support resulting from disabilities or significant disadvantages impairing the learning process. While Japan employs the term “Special Needs Education” (特別支援教育, tokubetsu shien kyōiku) to cater to students with various disabilities. This includes educational provisions for those with visual and hearing impairments, intellectual disabilities, physical disabilities, health issues, speech and language impairments, autism spectrum disorders, and learning disabilities, and in South Africa, the designation “Learners with Special Educational Needs” (LSEN) is utilized. The South African Schools Act of 1996 outlines learners having barriers to learning which include those with physical, mental, sensory, neurological, developmental, or psychological, to ensure appropriate educational support (Inclusive Teach, 2024).

All said and done, there are five common themes from global definitions of SEN and these are; inclusivity and equal access to education; broad spectrum of needs encompassing various disabilities and challenges, emphasis on individualized support and accommodations, legal frameworks ensuring rights to appropriate education and recognition of diverse learning styles and abilities. As we navigate the complex landscape of Special Educational Needs, it becomes evident that the global community is united in its pursuit of equitable education for all learners. The diverse definitions and approaches across nations reflect a shared commitment to recognizing and addressing the unique challenges faced by students with varying abilities.

### 2.1.2. Inclusivity/Inclusive Education

Inclusivity is the practice or policy of providing equal access and opportunities and resources for people who might otherwise be excluded or marginalized, such as those having physical or intellectual disabilities or belonging to other minority group. It has also been defined as the practice of interacting appropriately with all individuals, fostering a hospitable and welcoming environment (Oxford English Dictionary of Languages, 2025). All the definitions, portend a policy of not excluding members or participants on the ground of gender, race, class, sexuality, disabilities among others. Inclusive education therefore could be said to be one important avenue through which children are given that ample opportunity to go to school with the sole purpose of learning, developing the required skills to succeed in life (Onwubiko, 2024). This implies that inclusion is carry every child along a message that is in line with the United Nations Sustainable Development Goals of 2015 (UN-SDGs). The realization of this philosophy will be better pronounced when students with learning disability are included in every aspect of the global educational program or process which the library is part of (UNESCO, n.d.). As an ambition plan of action of the international Community, the 2030 Agenda of leave no one behind, is aimed at creating a peaceful and prosperous world, where dignity of an individual person and equality among all is applied as the fundamental principle, cutting across the three pillars of the work of the United Nations: Development, Human Rights and Peace and Security. Its main purpose is to ensure the full and equal participation of persons with disabilities in all spheres of society and creating an enabling environments by, for and with persons with disabilities. This implies that inclusion education is a global campaign against disparity of what type of child stays in a particular classroom and a particular school. It is all about therefore, all children, same classrooms and same schools whether with disability or not even speakers of minority languages (UN 2016).

Inclusion in education in a broad term means that all students should be able to access and gain equal opportunities to education and learning and on no ground should any child be discriminated upon as to denying him or her the right to effective formal education. This is built on the premise that special and personalized

educational programs are more effective with children with special needs as such mixed experiences will enhance their social interactions leading to successful life. The idea behind inclusion in education is to make way for the utilization of special classrooms and schools for students with disabilities. The underlining factor is that the protagonists of inclusion in education main intention is to move away from seclusion models of special education to the fullest extent practical. This on the believe that that it is to the social benefit of general education students and special education students alike, with the more able students serving as peer models and those less able serving as motivation for general education students to learn empathy [UN Department of Economic and Social Affairs Disability (2018)]. It is pertinent to state that the application of these practices differs as some schools most frequently utilize the inclusion model for selecting students with mild to moderate special needs. (Taylor and Ferguson, 1985). While those schools that implement to the fullest inclusiveness, though rare, do not separate "general education" and "special education" programs; rather, such schools are restructured in such a way that all students learn together

The popular biblical dictum 'He who created them, created them male and female could be likened to inclusive education and students with learning disability. As it was to close the education gap for children with disabilities, that United Nations International Children Education Fund (UNICEF) supports government efforts to foster and monitor inclusive education systems (Waltham, 2018). Inclusive education is like a fundamental right whereby everyone is equal before the law as there is no disparity as a result of strata of any form. The implication is that in a formal classroom, inclusiveness put into consideration the individual contribution of every student regardless of background which paves way for different group to work together for the good of all. The above aphorism is an affirmation of the National Association for the Education of Young Children (NAEYC) and the Division for Early Childhood (DEC) that the gain of inclusive experiences for students of all sort and their families is that it gives a sense of belonging and membership, positive social relationships and friendships, and development as well as learning to reach their full potential (Division for Early Childhood/National

Association for Education of Young Children, 2009).

As noted by Iowa Department of Education (2024), education in the field of special needs has evolved significantly over the years, with a shift towards inclusive practices and individualized learning plans. Previously, students with disabilities were often segregated from mainstream education, but the focus has now moved towards embracing diversity and providing tailored support which is what inclusivity is all about.

### 2.1.3 Assistive Tools

In recent time, evidence has shown that technology is playing a pivotal role in shaping the future of special needs education. This it has achieved by harnessing the power of innovative tools and strategies in that educators can now create inclusive and supportive environments that empower every student to reach their full potential. This is the reason behind an ongoing revolution in special education spearheaded by assistive technology all geared towards providing the educational needs of students with special needs. It is not only helping students with disabilities communicate effectively, it is also offering personalized learning experiences, and plays a vital role in creating an inclusive educational environment. These tools have been of immense help to students with disabilities even in the face of shortage of special education teachers (Child Psychiatry, 2024). Assistive technology or devices which have been defined as items, equipment or system that help people with disabilities, limitation or impairments perform tasks, maintain or improve their functional capabilities and increase independence (White, 2025), encompasses a wide range of tools and solutions that aid individuals with disabilities in their day-to-day activities and education. They range from simple low-tech solutions like pencil grips to high-tech devices such as speech-to-text software and the scope of assistive technology is vast and continuously evolving (Iowa Department of Education, 2023). Instances of assistive technologies added Iowa Department of Education (2023) include hardware, software, and beyond. While Hardware solutions include devices like adapted keyboards and screen readers, the software options encompass apps for cognitive skill development and communication. Beyond these, are emerging

technologies such as virtual reality systems that have shown promising potential in enhancing learning experiences for special needs students.

Presently, it is on record that assistive technology tools have become veritable tools that can help students with certain disabilities learn more effectively. Ranging in sophistication from 'low' technologies such as a graphic organizer worksheet to 'high' technologies including cutting-edge software and smartphone apps, assistive technology is a growing and dynamic field. Several areas of assistive technology and sample products may be found in any given learning centre, making a difference in how students of all abilities learn. Some of these tools as explained by Neese (2024) and Inclusive Teach (2023) include;

Text-To-Speech Assistive Tools (TTS) is a software exclusively designed to assist learners who have difficulties reading standard print. The print disabilities include; blindness, dyslexia or any type of visual impairment, learning disability or other physical condition that impedes the ability to read. However, other students can benefit from TTS technology, such as children that have autism, attention deficit hyperactivity disorder (ADHD) or an intellectual disability. The technology works by scanning and then reading the words to the student in a synthesized voice, using a large number of speech sounds that make up words in any given context. With the advances in speech synthesis, TTS technology is more accurate and lifelike than ever.

There is also Assistive Listening Systems also known as hearing assistive technology which has variation that can assist students who are deaf or hard of hearing, as well as those with other auditory and learning problems. According to the National Association of the Deaf (2025), assistive listening systems can be used to enhance the reach and effectiveness of hearing aids and cochlear implants, or by children who do not need those tools but still need help hearing. Assistive listening systems use a microphone, a type of transmission technology and a device for capturing and bringing the sound to the ear. The specific transmission technology used in the system is typically what contrasts one type of assistive listening system from another.

Another tool, is the Sound-field systems which is recommended for any learning environment that needs to assist listening for all learners within the environment. ASHA notes that these systems benefit not only children that have hearing loss, but those that have other auditory and learning problems, such as language delays, central auditory processing disorder, articulation disorders and development delays. Additionally, sound-field systems can be used for students who are learning English as a second language. The product supports Windows, Macintosh and Linux based computers. Two pressure switches connect the system to the user interface solution for use on electronic devices.

Also mentioned is the Proofreading software an offshoot of assistive technology that goes above and beyond the typical proofreading features found in a word processing system, such as correcting words frequently misspelled by students with dyslexia. A number of other features offered within this category can help students work on his or her English skill set to become a more effective and accurate writer. Although primarily geared towards individuals with dyslexia, proofreading software can be helpful to those with any type of learning disorder that makes writing and reading challenging.

Further is the [Ginger, a device that](#) offers several features that can help students with dyslexia and other learning disorders with writing. It is also designed for speakers of languages other than English. Some of the features as highlighted are: Grammar checker that analyzes context to determine any errors or misspellings. For instance, it can recognize whether 'there,' 'their' or 'they're' should be used in a sentence, which is a common mistake in writing; Word prediction and sentence rephrasing tools that can be helpful for students learning how to construct sentences properly, TTS functionality so students can hear what they've written as well as A personal trainer that provides practice sessions based on past mistakes made by the student and Ginger is available for Windows and Mac, as well as iOS and Android mobile devices.

Besides, there is the Ghotit which is specifically designed for students with dyslexia and other learning disorders such as difficulties with writing. The name Ghotit was coined from the word "Ghoti," a constructed term that illustrates

irregularities in the English language. Considering the fact that many spellings are counterintuitive more so for those with dyslexia, Ghotit is tailored towards assisting children and adults who struggle with writing accurately. It features include, the ability to learn from the user's past mistakes, personalizing suggestions for spelling and grammatical errors, words prediction, contextual check of text in passages as well as reading aloud text by applying TTS technology and the recognition of split and merged words. The tool further has an integrated dictionary for students in which they can hastily look up a word.

Finally is the math tools with math talk. While the math tools is a range of technology and tools that can help students that have trouble with math, most commonly found in a learning disability called dyscalculia which makes it difficult to grasp numbers and it is characterized by a general lack of understanding in the field of math. Assistive technology in math is not just for those with dyscalculia. It can also help students with blindness, fine motor skill disabilities or some other type of disability that makes it difficult to perform math-related work. The math talk is a speech recognition software program for math that can help students with a range of disabilities. From pre-algebra to doctorate level mathematics, students can perform math problems by speaking into a microphone on their computer. The program works with Dragon NaturallySpeaking programs for voice-to-text functionality, making it ideal for students who have fine motor skill disabilities. Besides, students with blindness or vision disabilities can use the integrated braille translator.

## 2.2. Empirical and theoretical overview

A reasonable number of students with special needs are found in our universities and are entitled to make use of the library. These disabilities explains National Center for Learning Disabilities (NCLD) (2012), were not caused by the students themselves rather by developmental, environment, home and school related problems noting that improper development or accidents before or after birth can cause learning disabilities. Furthermore, the center believes that children who do not receive support necessary to promote their intellectual development early may show sign of learning difficulties one they start school. Since learning

disabilities are not any student's fault, it is expected that librarians' attitude towards such students should not be that of discrimination; hostility; prejudice and rejection. As noted by Izuchi and Opara (2014), these students already have the problem of frustration, anger and feeling of inadequacy because of their predicament as well as struggling with low self-esteem. This group of students requires special intervention by various agencies such as government; libraries, non-governmental organizations (NGOs), well placed individuals, institutions and parents and their education should be given more attention believing that education is a tool for personal and national development as well as capacity building they added.

A librarian, who by every standard a teacher who imparts knowledge, skills and attitude to learners posits Karanwi (2010), should be a symbol of good example inasmuch as some library users with special needs sometimes constitute a burden to librarians it behooves librarians to take much time to effectively teach and transfer the right value to them. It is a known fact that librarians and libraries are at the fore-front of learning process because of their strategic importance in human and national development. To this end, it is the responsibility of the librarian just like teacher to exhibit positive attitude towards library users generally and those with special needs in particular in order to achieve the objectives of education as enshrined in the child's rights act which states that the child has a right to education and that the aims of education among others shall be to develop the child's personality, talents, mental and physical abilities to the fullest extent; education shall prosper the child for an active adult life in a free society and foster respect for the child's parents, his/her cultural identity, language, values and for the cultural background and values of others (Onwubiko, 2021).

In his contribution, Ugwu (2015) highlights the four types of specific learning disabilities as dyslexia, dysgraphia, dyspraxia and dyscalculia. He explains that people with dyslexia have troubles making connections between letters, sound and with spellings and recognizing words, those with dysgraphia have problems with writing while those with dyscalculia have problem understanding basic arithmetic concepts like fractions; number lines, positive

and negative numbers and dyspraxia victims have problems with motor task

Sawhney and Bansal (2014) revealed that a learning disability cannot be cured or fixed; it is a lifelong challenge. Unfortunately, most of these children they noted are never identified as learning disabled. Due to lack of awareness among teachers and school authorities, these children are usually labeled as slow, behind, incapable and failures. Repeated failures results in low self-esteem and these children slowly stop trying to learn and achieve and eventually drop out of school. Later on these dropped out adolescents and teens with learning disabilities, who have not received proper academic attention and support services, run a higher risk than average for becoming involved with tobacco, alcohol and drug abuse. School drop-out is linked to illegal activities and eventual incarceration, and for becoming prone to teenage pregnancies. As revealed, in India around 13-14% of all school children suffer from learning disorders. These children are labeled as failures by the society we live in but in reality it is not that these children who have failed but it is the education system that has failed, failed in recognizing and helping them (Sawhney and Bansal, 2014). As teachers are the link between the children and education system, it is their level of understanding and awareness that sets the path for these children's future.

Al Khatib (2007) investigated the Jordanian regular education teachers' knowledge of learning disabilities and whether this knowledge differed as a function of selected variables. The sample consisted of 405 regular classroom teachers teaching 1st to 6th grade students in 30 schools in three Jordanian districts. Teachers completed a 40-item test designed by the researcher, which had adequate psychometric properties. The results of the study revealed that teachers had a moderate level of knowledge of learning disabilities. Female teachers were found to be significantly more knowledgeable than male teachers. Teachers' level of knowledge was unrelated to teachers' age, teaching experience, or academic qualifications.

Malusu and Kamau-Kang'ethe (2010) assessed the teacher awareness and intervention for pupils with learning disabilities in inclusive education in Makadara Division. The study concluded that: teachers were aware of inclusive education in their schools, teachers had different interventions in place to ensure the success of

inclusive education e.g. the use of corrective approaches, direct instructions, systematic phonics and using connectivity' with pupils' individual learning needs and that teachers were not professionally prepared to cope with pupils with learning disabilities in inclusive education.

Aladwani and Shaye (2013) investigated Kuwaiti primary school teachers' knowledge of the early signs of dyslexia and their awareness level of the related difficulties that dyslexic children suffer. They concluded that Kuwaiti teachers are aware of this problem, but lack of time and being overloaded with daily school routines and responsibilities, prevent them from helping and assessing these children.

Sharma and Samuel (2013) studied the awareness that teachers have about learning disability and the provisions made by the government and CBSE board. It was a cross sectional study with sample size of 100 teachers from private English medium schools in Ludhiana, Punjab. They concluded that although the teachers claimed to have knowledge regarding Learning disability but they only had a vague idea about it, only a few teachers were aware about the provisions provided by the government. Most of the teachers blamed the student's attitude and home environment for performing poorly in studies.

Onwubiko (2021) carried a survey with a population sample of 450 librarians on the attitude of librarians towards users with learning disabilities and the result did show that the task of the librarians in respect to library users is not to adopt an attitude of passive expectancy, but to stimulate use of the library so that everyone's requirements can be met. This implies that it behooves librarians as social workers to exhibit attitude that will give every library user regardless of class, creed, sex and status a sense of belonging and membership, positive social relationships and friendships, and development and learning to reach their full potential. The study suggested that for librarians to fully contribute in UNESCO's inclusion education policy, they must brace up to knowing users with learning disabilities inasmuch as greater number exhibits positive attitude. Noting that in librarianship as a social institution, the act of exhibiting positive attitude to every class of users is a must possess by all librarians.

Writing on the way forward towards improving learning disabilities, Sawhney and Bansal,

(2014) noted that though early intervention helps to improve every disability, it is helpful in early detection of the problem as well as is required for appropriate planning of any intervention programme but the lack of awareness among the general public as well as educators is the first problem that needs to be addressed. The educators have to be persuaded to develop a system of early detection and education so that capabilities of these children are identified. For this, the role of teachers is most important. Once teachers learn how to handle these children in classrooms, the status of these children could improve significantly. One such type of disability which is widely misunderstood, that the teachers need to be aware of is learning disability.

Writing on the importance of assistive tools to students with special needs Neese (2024), revealed that there is now the inclusion of AI in assistive technology which provides personalized learning through Intelligent Tutoring Systems. As noted, AI plays a crucial role in intelligent tutoring systems. These systems adapt to the individual needs of learners, providing tailored lessons and feedback. By analyzing the user's behaviour and responses, AI can also create a **personalized** learning experience that enhances educational outcomes. It can also be used in Predictive Analytics through which early intervention opportunities are identified. As explained, it can also be used to identify early intervention opportunities, predictive analytics powered by AI can as well forecast learning difficulties or challenges. By analyzing patterns in student performance and behaviour, AI can predict potential hurdles and enable timely support interventions. The emphasis is that, assistive technology playing prominent role in contemporary digital ecosystem in supporting students with physical disabilities through adaptive hardware. To this end, customized input devices and mounting systems are tailored to individual needs, allowing students with limited mobility to interact with technology and educational materials more effectively.

Child Psychiatry Today (2025) further underscored the importance of this technology as she declares that ultimately, the role of assistive technology in special needs education is paramount in facilitating inclusive learning environments and empowering students with disabilities. By providing personalized solutions to accommodate diverse learning needs,

assistive technology enhances student engagement, independence, and academic success. It is a vital tool for educators, enabling them to cater to individual requirements effectively and promote a more inclusive educational experience for all learners. The addendum is that some individuals with special needs face challenges in accessing education due to various barriers. In this regard, Assistive technology plays a crucial role in enhancing accessibility by providing tools and solutions that cater to diverse learning needs, such as screen readers for visually impaired students or speech-to-text software for those with physical disabilities. On the other hand, there is this expression of fear of key challenges in adopting assistive technology and they are, the integration into existing technical systems and teaching practices as well as ensuring compatibility with current technology infrastructure and providing adequate training to educators which are seen as vital for a successful implementation.

On the best way to support students with special needs, it was suggested that educators including librarians must accommodate different learning styles such as; visual, auditory, and kinesthetic knowing that assistive technology plays a crucial role in this aspect by providing tools and resources tailored to each student's specific learning style as creating inclusive learning environments requires incorporating Universal Design Principles to ensure that all students, regardless of their abilities, can access and participate in educational activities. This involves designing materials, activities, and spaces that are accessible, flexible, and supportive for everyone providing communication aids that will enable expression and interaction such as Augmentative and Alternative Communication (AAC) Systems. This is because as expressed, there is this communication flowing with Augmentative and Alternative Communication (AAC) Systems that empower students with special needs to express themselves effectively. These systems range from simple picture exchange communication to high-tech speech-generating devices, catering to individual communication requirements as well as Speech-Generating Devices that aim at giving voice to students with disabilities in that systems like speech-generating devices play a pivotal role in enabling students with disabilities to communicate confidently and independently.

These devices utilize advanced technology to convert text or symbols into spoken words, helping students participate actively in classroom discussions and social interactions (IOWA Education Department, 2024; Child Psychiatry, 2024; Neese, 2024).

On surmounting the challenges in implementing assistive services to students with special needs, IOWA Education Department (2024), noted that inasmuch as the use of assistive technology in special needs education can sometimes be daunting for educators, there is need for the right professional development opportunities that can build confidence and equip educators and librarians alike with the necessary skills to effectively integrate these tools into their practices. It also suggests the need for collaboration for effective implementation strategies. Collaboration and sharing of ideas as noted are necessary strategies for successful implementation of assistive technology in any learning environment with libraries inclusive. The inference is that by working together, librarians as educators can pool their expertise and resources to create inclusive and supportive library environments for all students. Above all, with collaboration, in the case of libraries and librarians, there is opportunity to share best practices, troubleshoot challenges, and provide each other with moral support, ultimately enhancing the overall learning experience for students with special needs.

### 3.0. Methodology

The study applied descriptive survey research design. The sampled population for the study stood at 200, drawn among certified librarians working in 45 federal university libraries in Nigeria through proportionate stratified random sampling technique based on gender and years of experience. The librarians who were selected

were invited to participate in the research. The aim and objectives of the study were thoroughly explained to them. Those who agreed to participate signed the written informed consent forms and the questionnaire sent through e-mail. Participation was therefore completely voluntary, anonymous and confidentiality of the information generated was ensured. It comprised of 75 male and 125 female librarians. The major instrument used in collecting data for the study was the questionnaire titled '**Assistive Services to Special Needs Students by University Libraries Questionnaire**' (ASSNSULQ) and validated by professionals in psychology and Educational evaluation and Measurement based on face and construct validity. The ASSNSULQ was a structured questionnaire developed by the researcher. The instrument has two sections of A and B. Section A is the bio-data while section B has 58 items on Assistive Services Provided by University Libraries to Students with Special Needs was developed in a modified four point Likert grid with the following response options of Strongly Agree (SA); Agree (A), Disagree (D) and Strongly Disagree (SD), Available and Not available and VHE, HE, LE and VLE. These options with the exception of the one with available and non-available options, others were weighted 4, 3, 2 and 1 respectively for positive items and 1, 2, 3 and 4 respectively for negative items. To establish the reliability of the instrument, Cronbach's Alpha Statistical technique was used and a reliability coefficient of 0.82 as a measure of internal consistency was established. Data collected were analyzed using frequency, simple percentile and mean and presented in charts and a table.

### 4.0. Presentation and Analysis of Data

What categories of students with special needs benefit from the library facilities?

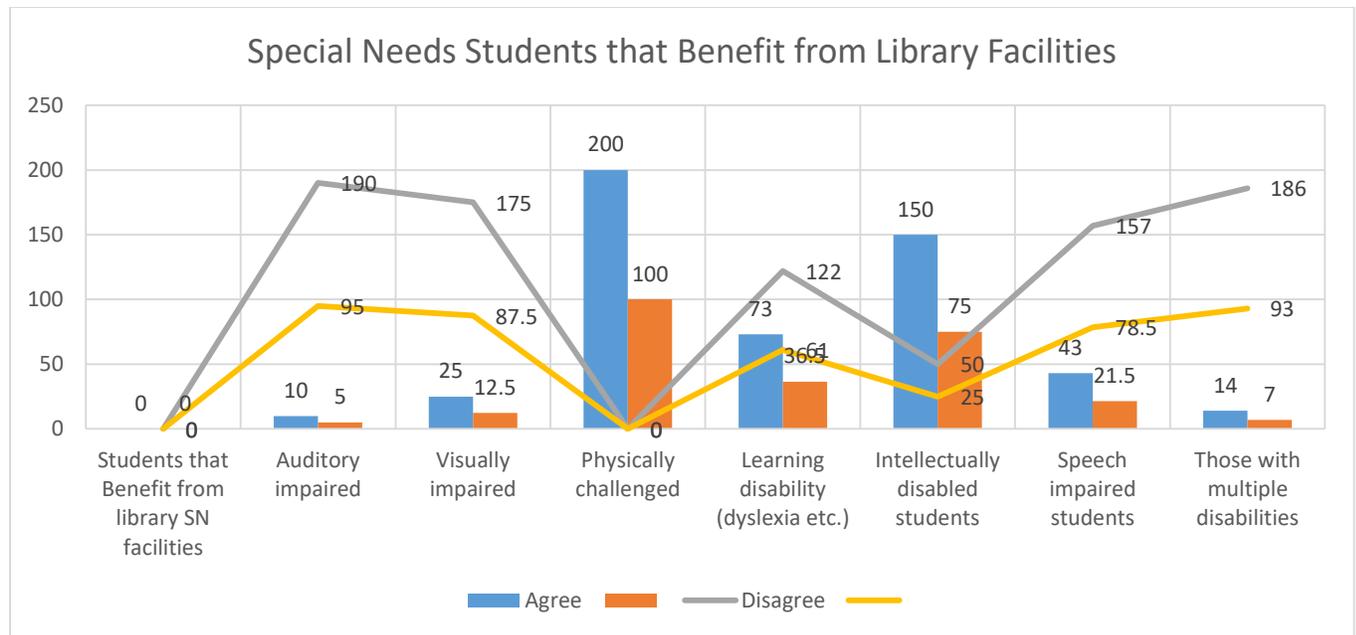


Figure 1: Special needs students that benefit from the library facilities

The data as displayed in figure 1 above are on students with special needs that benefit from the university libraries facilities. The data did show that 100% representing 200 respondents strongly agree or agree that physically challenged students benefit from the facilities, while 150 of the respondents or 75% agree that those that are intellectually disabled benefit from the facilities. The data on the other hand

revealed that those with learning disability such as dyslexia, speech, auditory and virtually impairments do not benefit much from the facilities as well as those with multiple disabilities.

What type of assistive devices are available in the library?

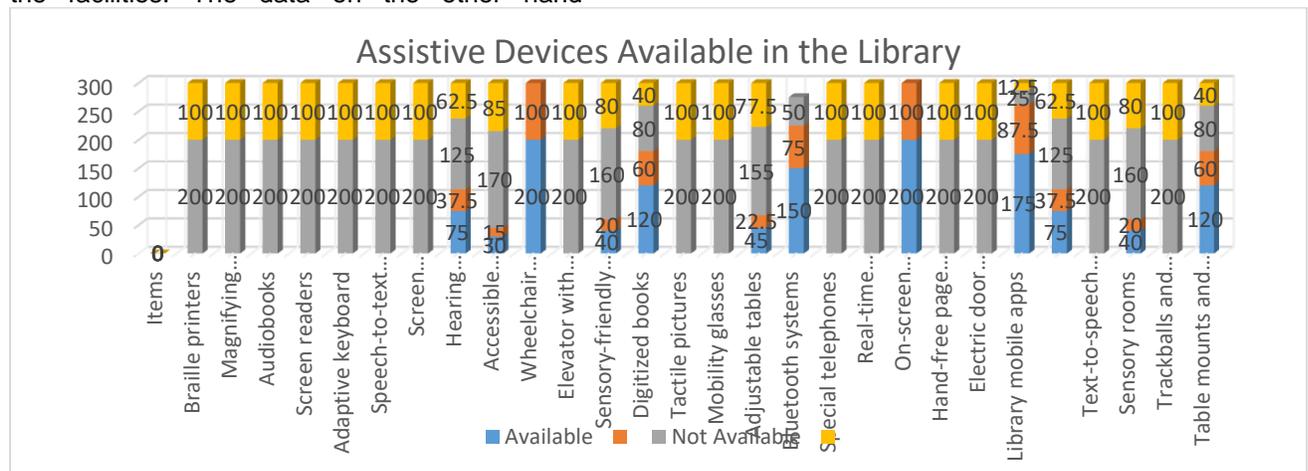


Figure 2: Assistive Devices available in the libraries

Figure 2, houses the data on the existence of assistive devices. The data as displayed revealed that the 200 respondents or 100% indicated the availability of wheelchair ramps/accessible entrance and on-screen keyboards in the libraries, while 175

representing 87.5 indicated the availability of Library mobile apps, another 150 of the respondents or 75% agree to the availability of Bluetooth systems and 60% of the respondents accepted the availability of digitized books and table mounts and holders. On the other hand, the entire 100% of the respondents, indicated

the non-availability of Braille printers; magnifying devices (e.g. CCTV magnifiers), Audiobooks, Adaptive keyboard, Speech-to-text software, Elevator with braille bottom/voice alert and Tactile pictures. The same, 200 respondents (100%) also indicated the non-availability of mobility glasses, special telephones, real-time captioning, hand-free page turners, electric door openers as well as text-to-speech apps and Trackballs and adaptive mice. Furthermore, 85% or 170 respondents indicated the non-availability of Accessible signage like tactile and braille signs, 160 or 80% also indicated the non-

availability of Sensory-friendly spaces (quiet rooms) and Sensory rooms. In the same vein, did 155 respondents or 77.5% indicated for Adjustable tables. The indication of the availability and non-availability of other assistive devices were in different proportions of neither here nor there.

What types of assistive services are provided by the libraries to students with special needs?

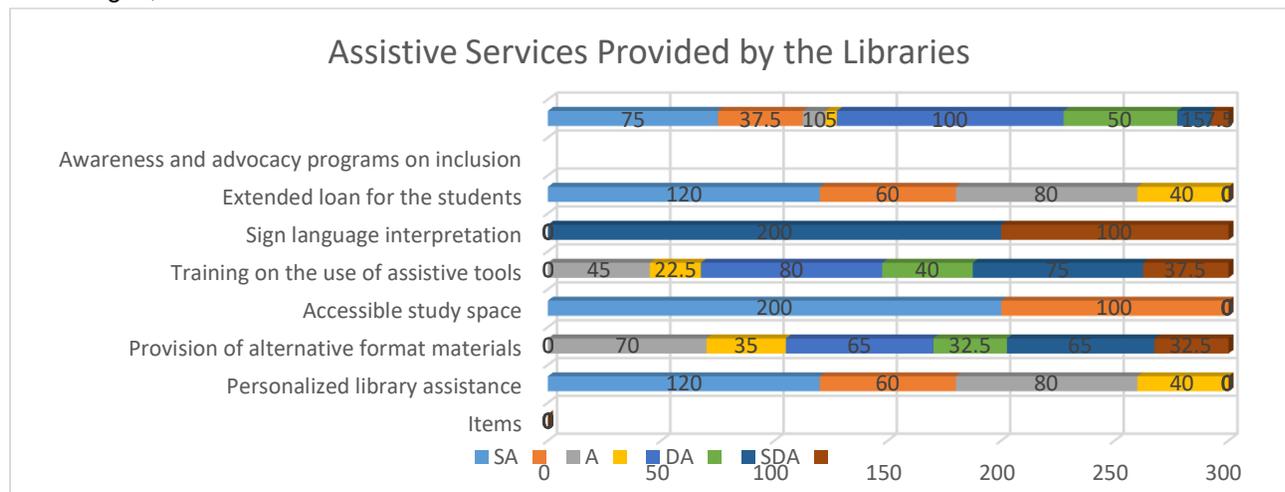


Figure 3: Assistive services provided by the libraries

As shown in figure 3 above, the 200 respondents which is 100% strongly agree that their libraries provide for accessible study space for the library users, 120 and 80 respondents which represents 60% and 40% of the respondents strongly agree and agree respectively that the library provides personalized services and extended loans for students with special needs whereas, a total of 85 respondents or 42.5% strongly agree or agree that the offer awareness and advocacy programs on inclusion and 35% or 70 respondents agree that the library provides alternative format materials for students with special needs.

On the other hand, the 200 respondents, agree that they do not offer sign language interpretation service to students with special needs and 155 respondents which stands for 77.5% indicated that the library does offer training on the use of assistive tools for students with special need as they indicated strongly disagree and disagree to the positive item.

To what extent are assistive services offered to student with special needs in the libraries?

Table 1: Extent of assistive services provided by the libraries

Items	VHE		HE		LE		VLE		Mean (X)
	F	%	F	%	F	%	F	%	
Personalized library assistance	120	60	80	40	****	****	****	****	3.60
Accessible study space	180	90	20	10	****	****	****	****	3.90
Provision of alternative format materials	****	****	70	35	65	32.5	65	32.5	2.03
Training on the use of assistive tools	****	****	35	17.5	80	40	85	42.5	1.75
Sign language interpretation	****	****	****	****	****	****	200	100	1.00
Extended loan for the students	120	60	80	40	****	****	****	****	3.60
Awareness and advocacy programs on inclusion	****	****	80	40	****	****	120	60	1.80

Table 1 shows the data collected and analyzed in respect of the extent at which assistive services are offered to student with special needs by the libraries under study. From the available data, the 200 respondents or 100% indicated that personalized library assistance, provision of accessible study space and extended loan for the students are services

provided to students with special needs to a very high extent or high extent with mean (X) score of 3.90 and 3.60 respectively and the same 100% also indicated that the library service in respect of sign language interpretation to special needs students was to a very low extent with a mean (X) score of 1.00.

What are challenges faced by librarians in serving students with special needs?

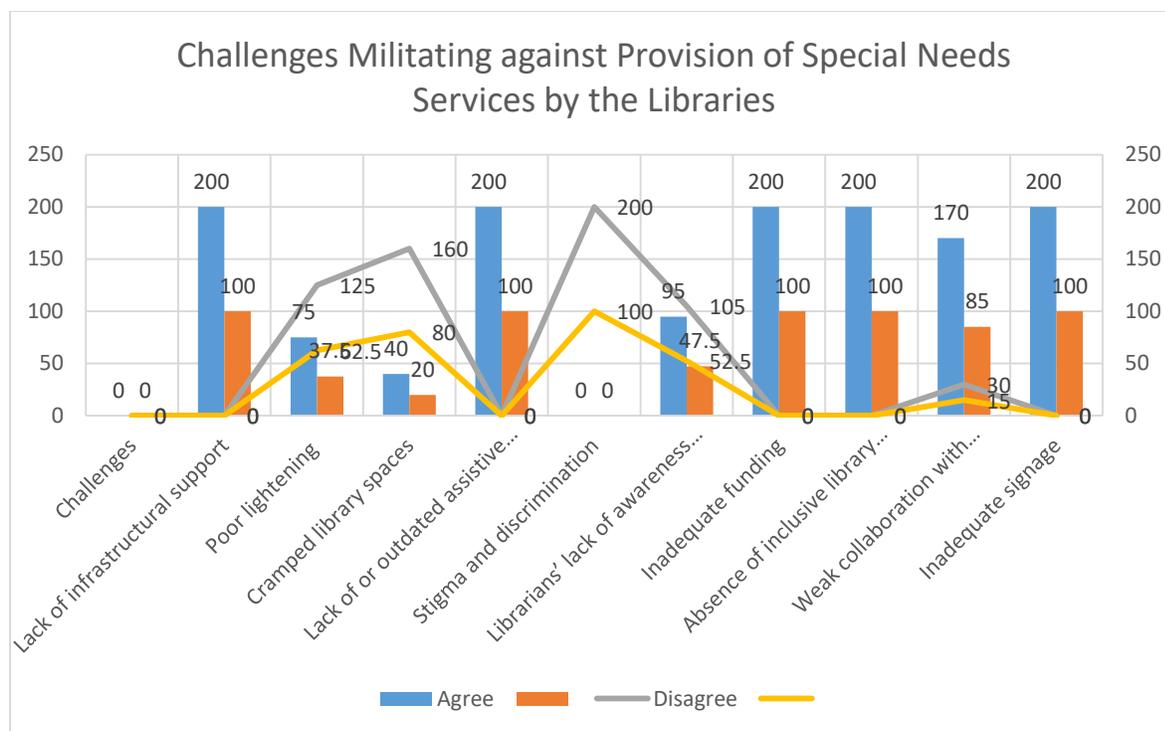


Figure 4: Challenges militating against provision of assistive services by the libraries

The data in Figure 4 above as synthesized showed that the 200 (100%) respondents strongly agree that lack of infrastructural support, inadequate funding and absence of inclusive library policies are major challenges militating against the provision of assistive services to students with special needs. These were followed by lack of or outdated assistive tools with 170 respondents or 85% indicating strongly agree, weak collaboration with relevant stakeholders with 120 respondents strongly affirming and inadequate signage that has strongly agree or agree of the 200 respondents which is 100%, but in the ratio of 90:110. While, 100% or 200 of the respondents disagree that stigma and discrimination are one of the challenges, 160 respondents or 80% also did not agree that cramped library spaces is one of the challenges militating against providing such services to special needs students. Other notable challenges indicated include Poor lightening with 75 agree indication and Librarians' lack of awareness and training with 95 respondents or 47.5% indicating agree while over 50% of the respondents did not see challenges that can militate against providing assistive services to students with special needs.

### 5.0. Discussion of Results

The outcome of this study did show, that the only categories of students with special needs the libraries under study provide services for are physically challenged, and intellectually disabled students while only one or two libraries, could boast of providing assistive services to students with learning disability such as dyslexia, visually impairment, speech impairment, those with multiple disabilities and auditory impairment (see figure 1). This indicates that such special needs students, depend solely on parental support and personal assistance and from friends to scale through their academic hurdles. This outcome is contrary to the ambition plan of action of the international Community, the 2030 Agenda of leave no one behind and the principle of inclusiveness as being campaigned by the UN (Onwubiko, 2024) and it is also a social denial considering the National Association for the Education of Young Children (NAEYC) and the Division for Early Childhood (DEC) aphorism that the gain of inclusive experiences for students of all sort and their families is that it gives a sense of belonging and membership, positive social relationships and friendships, and development as well as learning to reach their full potential (Division for Early Childhood/National Association for Education of Young Children, 2009). The result further confirms the revelation of Shekarau (2015) that

indeed children with special needs in Nigeria, were not receiving the desired attention.

The study also discovered that the libraries lack major assistive devices to facilitate assistive services to special needs students as wheelchair ramps/accessible entrance, library mobile apps, Bluetooth systems and digitized books were the only available assistive devices in almost all the libraries studied, while only few libraries could lay claim to having sensory rooms, optical character recognition, adjustable tables, sensory-friendly spaces (quiet rooms) and hearing aids/audio induction loops. On the other hand, the whole libraries studied, never had braille printers, magnifying devices such as CCTV magnifiers, audiobooks, screen readers, adaptive keyboard, speech-to-text software, text-to-speech apps, electric door openers, hand-free page turners, trackballs and adaptive mice among many other assistive technologies (see figure 2). This result no doubt negates IOWA Education Department (2024) and Child Psychiatry (2024), suggested best way to support students with special needs and that is that educators including librarians must accommodate different learning styles such as; visual, auditory, and kinesthetic knowing that assistive technology plays a crucial role in this aspect by providing tools and resources tailored to each student's specific learning style as creating inclusive learning environments requires incorporating Universal Design Principles to ensure that all students, regardless of their abilities, can access and participate in educational activities

The result further revealed that only few assistive services are being provided by the libraries to students with special needs. The data as analyzed (see figure 3), showed that the libraries provide personalized library assistance, accessible study space and extended loan service for the students while skeletal number were involved in awareness and advocacy programs on inclusion. Emphatically, the libraries do not provide alternative format materials, training on the use of assistive tools as well as interpreting sign language for special needs students. Worse still, good number of the libraries were not involved in awareness and advocacy programs on inclusion. This finding is not in any way in conformity with the discovering of Onwubiko (2021) that the task of the librarians or libraries in respect to library users is not to adopt an attitude of passive expectancy, but to

stimulate use of the library so that everyone's requirements can be met. This implies that it behooves libraries as social institution to exhibit attitude that will give every library user regardless of class, creed, sex and status a sense of belonging and membership, positive social relationships and friendships, as well as development and learning to reach their full potential.

On the extent at which these assistive services are being provided to special needs students by the libraries, the study found that with the exception of personalized library assistance, provision of accessible study space and extension of loan periods for students with special needs that are provided to a high extent, others may be said, not to be provided (see table 1). This finding further buttresses the assertion by Shekarau (2015) as then Minister of Education in Nigeria that children with special needs in Nigeria were not receiving the desired attention and emphasized on the need to overhaul the already existing policy on special needs in Nigeria.

The study also identified some challenges that are militating against the provision of assistive services to students with special needs by the university libraries studied. These challenges as mentioned include: inadequate funding; lack of infrastructural support, cramped library spaces, lack of or outdated assistive tools, absence of inclusive library policies, weak collaboration with relevant stakeholders as well as inadequate signage and librarians' lack of awareness and training (see figure 4). This result is in conformity with IOWA Education Department (2024) suggestion that to implement comprehensive assistive services to special needs students, librarians need to be equipped with the necessary skills and libraries must work in collaborations with concerned stakeholders and organizations while librarians should share ideas with a view to knowing how to tackle identified challenges.

### **5.1. Conclusion and Recommendations**

The results of this study did underscore one fact and that is, special needs students in Nigerian universities are not provided with the needed and desirable assistive services by university libraries. Furtherance, the libraries lack necessary assistive technologies, funds and trained librarians to carry out these services. Be that as it may, as we navigate the complex

landscape of special needs students, available evidence shows that the global community is united in its pursuit of equitable education for all learners. The diverse definitions and approaches across nations reflect a shared commitment to recognizing and addressing the unique challenges faced by students with special needs. Nevertheless, if university libraries in Nigeria will take it upon themselves to continually refine their understanding and implementation of special education needs support, they will pave the way for a more inclusive educational ecosystem. This evolution in perspective will not only benefit those with identified special needs but will also enrich the learning environment for all students, fostering a culture of acceptance, adaptability, and mutual growth. As we move forward, it is crucial for university libraries as social institutions serving heterogeneous users to maintain open dialogue, share best practices, and remain responsive to the ever-changing needs of our diverse student populations, ensuring that every learner has the opportunity to thrive and reach his or her full potential. It is against this backdrop, that this study puts forward the following suggestions:

- i. One fact is that funding has remained a significant obstacle in the running of university libraries in Nigeria though not be peculiar to Nigeria. The underscore is that any effort to implement these technological driven assistive services to students with special needs, must navigate tight budget constraints to ensure inclusivity. The implication is that for the university libraries to successfully implement to the fullest assistive services to students with special needs, they must go the extra miles to securing fund and exploring cost-effective solutions as they are crucial steps in making these tools accessible to all students with special needs.
- ii. There is no doubt that the use of assistive tools in providing services to students with special needs can sometimes be daunting for librarians, the right professional development opportunities can build confidence. To this end, university library management and the university management should equip librarians through regular training and re-training with the necessary skills to effectively integrate these tools into their service delivery practices.
- iii. One other major challenge identified that is militating against provision of services to students with special needs is lack of

collaboration. To this end, university libraries as suggested by IOWA Education Department (2024) should ensure strategic collaboration with all stakeholders especially bodies and associations of special needs people. This is because effective implementation strategies collaboration are necessary strategies for successful implementation of assistive devices in a place like the university library. By working together, libraries as well as librarians can pool their expertise and resources to create inclusive and supportive learning and reading environments for all students. Indeed, with collaboration, librarians can share best practices, troubleshoot challenges, and provide each other with moral support, ultimately enhancing the overall reading/learning experience for students with special needs.

- iv. As a result of the emergence of avatar technology and the likes, there is the availability of wearable technologies that are now enhancing accessibility and mobility for people with special needs. The underlying position is that there are presently many innovations in wearable technologies that are revolutionizing the way individuals with special needs access information and improve mobility. They range from smart glasses providing real-time feedback to wearable GPS devices enhancing navigational skills, these technologies are enhancing accessibility and independence. The suggestion is that university libraries in this part of the globe should in their budget include the acquisitions of these technologies as to helping users with special needs effectively utilize their services in line with the policy of inclusivity.
- v. The government should come up with a legislative frameworks that will protect the rights of students with special needs as to ensuring equal access to education for all students. This is because, legislative frameworks globally, play a crucial role in safeguarding the rights of students with special needs.
- vi. Still on funding of the university libraries, the government should not only promote the enactment of laws establishing public universities with a view to scoring political points but should go ahead, to do the needful. The needful is equipping these libraries with state-of-the-art facilities that

- vii. are all inclusive and to regularly fund the libraries so as to meet up with global trends. Finally to the university libraries, user-centered service design principles should be applied; materials should be provided in their alternative format to meet the needs of students with special needs, there should be radical awareness campaign to reduce stigma and discrimination, students with special needs should be included in planning, the libraries should collaborate with disability oriented bodies and organizations, there should be infrastructural improvement for accessibility as well as continuous staff training and capacity building for librarians and above all, there should be adoption of contemporary assistive technologies such as hearing aids/audio induction loops, accessible signage like tactile and braille signs, audiobooks, braille printers and mobility glasses among many others.

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