



CHAPTER 7

REPOSITIONING SPECIAL LIBRARY SERVICES FOR MEANINGFUL TEACHING AND LEARNING OF CHILDREN WITH SPECIAL NEEDS

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Introduction

The key to a successful and meaningful teaching and learning is in the availability of efficient information gathering and processing through the services of special library. By delivering a high quality specialized information services, one can be sure of a meaningful teaching and learning of children with special needs and other learners. Children with special needs are individuals who require assistance for disabilities that may be medical, mental, or psychological- Wikipedia. Rendering library services to this group of users is very challenging, (but they are usually grouped as visually impaired, mental disabilities, deaf and hearing impaired for more organised services.this sentence should be rewritten)

Over centuries, libraries have served as knowledge organisations in human existence; their ability to skillfully organize information resources in all formats and facilitate access to them has made them a beacon of enlightenment to generations of people in ways that enrich the lives of users in all fields of human endeavour Alabi and Sani, (2013). Irrespective of the type of library, the nature of most library collections have varied from print to electronic materials such as books, periodicals, newspapers, manuscripts, films, maps, prints, documents, microform, CDs, excetera. These are organised with the goal of stimulating individual learning and advancing the knowledge system of the society which they are also part of. However, with increasing advances in Information and Communication Technology (ICT), libraries of all types are today experiencing a shift from traditional service provisions to offering unrestricted access to digital information resources in ways that transcend time and space to diverse clientele including those with special needs.

An ideal library has the responsibility of selecting, acquiring and organizing books, periodicals, documents, newspapers, maps, digital databases, audio-visual materials and other materials that will effectively assist teaching, learning, research and other recreational activities of their clientele. However, unlike other types of libraries, the roles and responsibilities of special libraries provide specific kinds of information resources to a limited or specialized group of clientele. Services offered by special libraries can be described as being information-dependent, that is to say, they are specifically designed to offer exceptional or distinctive information



services to their users in ways that help to increase and strengthen the research, teaching and learning activities of their parent organisations. Consequently, librarians within such institutions or organisations have the responsibility of providing exceptional services by performing a variety of tasks such as information analysis and interpretation, packaging and dissemination of information; design, development and delivery of current awareness services and information products; database, index construction and selection, configuration and evaluation of individual systems among other things Anaobi & Lawal, (2021). Similarly, innovations in ICTs have impacted the nature of service delivery in most special libraries. Since the universalization of the Internet in the 1990s and the emergence of social media platforms in 1994 and beyond, there is abundant evidence that millions of people across the world use social media on a regular basis for various reasons including easy access to information resources (Daluba & Maxwell, 2013). This development has thus created a greater challenge for special libraries to reposition themselves through the adoption of unique technological applications to meet the specialised needs of their clients.

In the past, children with special needs were completely rejected by some cultures, while in some they were treated as economic liabilities. Disability impacts negatively on children's social participation. As social institutions, libraries have the responsibility to offer equitable services to all people irrespective of gender, race, religion, social status or physical ability. Libraries have different types of users including people with special needs, also called special users of the library. Special users range from visually impaired, deaf and hearing impaired, mental disabilities, children with special needs amongst others Chima,(2018). A special user in this context is an individual that cannot utilize the information resources in the library without adaptive equipment. It is also a situation where there is inability to do what is considered 'normal' to a non-disabled person (Bassey & Iyishu, 2007). Children with special needs tend to pose some concern to the society in the sense that they have some difficulty in performing tasks unlike the non-disabled people. However, like the non-disable, they have some inherent abilities, aspirations, visions and dreams which given the proper attention and guidance, will be actualized. This is true in all areas of life including the area of library and information services. Atabor, (2015) reasoned that the involvement of libraries in provision of information services to individuals with special needs will afford them the opportunity of wider exposure, as they will be able to learn more about themselves as well as other people.

Access to information is a unique and unavoidable attribute for sustainable development and self-education in all societies. Accessing information is of utmost importance to the teaching and learning process; users that are denied access to library resources because of their physical or mental abilities are therefore hindered from fulfilling their goals and contributing to societal development(Craddock, 2001). According to Cheunwatten (1993), persons with any form of disability or special need tend to be despised, marginalized and to a great extent, discriminated



against in various societies. For this reason, even the range of information services rendered to them in libraries is usually limited. Atinmo (2012), also observed that access to information is not often equitable because some group of users, especially people with special needs or those living with disabilities are marginalized in terms of access to information provision. Among the many challenges encountered by this category of people in using the library include the fact that most library collections are often in standard print format which constitutes a hindrance to the visually impaired. Similarly, physically challenged persons also encounter difficulty in accessing the library when the architectural plan and layout of the library is not designed to facilitate easy access and mobility.

In order to ensure that disadvantaged groups are not excluded from benefitting from their services, the roles and responsibilities of most libraries have often been designed to address issues of social justice in communities particularly with respect to poverty, racism, disability and human rights Lawal, (2016). Consequently, special libraries play a key role in promoting and building an inclusive society through the provision of quality information resources. Through special library services, easy and efficient information service especially within an academic setting enhances teaching and learning and provides the potential for building a strong base for future professionals. For people with special needs, it serves as an integrating tool for inclusive learning there by limiting the risks of marginalization.

With the constantly changing context of ICT and its application to education, it has become necessary for special libraries to reposition themselves in order to seek new strategies aimed at understanding the information needs of people with special needs. In this regard, this chapter seeks to examine the role of special libraries in providing accurate, relevant and complete information to people with special needs in the effort to encourage inclusive teaching and learning. The chapter will focus on the following issues:

- what technological applications can be used by libraries to enhance teaching and learning of children with special needs?
- what types of learning problems does assistive technology address?
- what kind of assistive technology tools are available?
- how special libraries can reposition themselves for more efficient services to children with special needs.
- implications of assistive technology tools to teaching and learning of children with special need.

Technological Applications to enhance Teaching and Learning of Children with Special Needs.

Technology provides numerous tools that teachers can use in and out of the classroom to enhance student learning. But only few of such shall be discussed. They include:

- **Assistive Technology**



Assistive technology for children with learning disability is defined as any device, piece of equipment or system that helps bypass, work around or compensate for an individual's specific learning deficits. If a child has a learning disability, he or she may benefit from assistive technology tools that play to their strengths and work around their challenges. It is available to help individuals with many types of disabilities – from cognitive problems to physical impairment Stanberry and Raskind, (2009).

Assistive technology is available to help individuals with various types of disabilities ranging from cognitive problems to physical impairment. The use of technology to enhance learning is an effective approach for many school children. Students with learning disability often experience greater success when they are allowed to use their abilities (strengths) to work around their disabilities (challenges). Assistive technology tools combine the best of both of these practices to achieve success in school, in recreation and eventually at work.

- **Instructional software**

Instructional software is used to teach specific academic skills (like reading and writing) or subject matter content (such as history and science). It differs from AT in that it provides instruction rather than bypassing areas of difficulty.

- **Universal Design for Learning (UDL)**

This is a philosophy that encompasses learning models, methods and products to enhance the educational experience of diverse learners (whether or not they have learning disabilities). In this approach, AT is often built into educational materials and can be customized to guarantee the success of students with disabilities in the use of general curriculum.

Relevance of Assistive Technologies in Tackling Learning Challenges.

Assistive technologies can enhance the following learning skills:

Listening

Certain assistive technology tools can help learners who have difficulty processing and remembering spoken language. Such devices can be used in various settings (e.g., a class lecture, library or a meeting with multiple speaker).

Mathematics

Assistive technology tools for mathematics are designed to help people who struggle with computing, organizing, aligning, and copying math problems down on paper. With the help of visual and/or audio support, users can better set up and calculate basic math problems.

Organization and memory

Assistive technology tools can assist learners to plan, organize, and keep track of their calendar, schedule, task list, contact information, and miscellaneous notes. These tools allow learners to manage, store, and retrieve such information with the help of special software and hand-held devices.

Reading



There is a wide range of assistive technology devices available to help individuals who struggle with reading. While each type of tool works a little differently, all of these tools help by presenting text as speech. These tools facilitate decoding, reading fluency, and comprehension.

Writing

There is a wide range of assistive technology tools available to assist students who struggle with writing. Some of these tools help students circumvent the actual physical task of writing, while others facilitate proper spelling, punctuation, grammar, word usage, and organization.

Available Assistive Technologies for Special Needs Learners

The term "assistive technology" has usually been applied to computer hardware and software and electronic devices. However, many assistive technology tools are now available on the Internet. Those designed for assisting learners with learning disabilities include:

Abbreviation expanders

This technology is used with word processing software programs. They allow users to create, store, and re-use abbreviations for frequently-used words or phrases. This can save the users' keystrokes and ensure proper spelling of words and phrases he has coded as abbreviations.

Alternative keyboards

These programmable keyboards have special overlays that customize the appearance and function of a standard keyboard. children who have trouble typing may benefit from customization that reduces input choices, groups keys by color/location, and adds graphics to aid comprehension.

Audiobooks and publications

Recorded books allow users to listen to texts. They are available in a variety of formats, such as audiocassettes, CDs, and MP3 downloads. Special playback units allow users to search and bookmark pages and chapters. Subscription services offer extensive electronic library collections.

Electronic math work sheets

Electronic mathematics worksheets are software programs that can help users organize, align, and work through math problems on a computer screen. Numbers that appear onscreen can also be read aloud via a speech synthesizer. This may be helpful to learners who experiencing difficulty in aligning mathematics problems with pencil and paper.

Freeform database software

This is used in conjunction with word processing or other software, this tool allows the user to create and store electronic notes by "jotting down" relevant information of any length and on any subject. User can later retrieve the information by typing any fragment of the original note.

Graphic organizers and outlining



Graphic organizers and outlining programs help users who have trouble organizing and outlining information as they begin a writing project. This type of program lets a user "dump" information in an unstructured manner and later helps him organize the information into appropriate categories and order.

Information/data managers

This device helps individuals to plan, organize, store, and retrieve their calendar, task list, contact data, and other information in electronic form. Personal data managers may be portable, hand-held devices, computer software, or a combination of those tools working together by "sharing" data.

Optical character recognition

This technology allows users to scan printed material into a computer or handheld unit. The scanned text is then read aloud via a speech synthesis/screen reading system. Optical Character Recognition (OCR) is available as stand-alone units, computer software, and as portable, pocket-sized devices.

Personal FM listening systems

A personal FM listening system transmits a speaker's voice directly to the user's ear. This may help listeners focus on what the speakers are saying. The unit consists of a wireless transmitter (with microphone) worn by the speaker and a receiver (with earphone) worn by the listener.

Portable word processors

A portable word processor is lightweight device that is easy to transport (e.g., from classroom to home). It can be helpful to users who may have trouble writing by hand and prefer to use a keyboard. Word processing allows users to edit and correct their written work more efficiently than doing so by hand.

Proofreading programs

Students who struggle with writing (e.g., spelling, grammar, punctuation, word usage, and sentence structure) would benefit from software programs (included in many word processing systems) that scan word processing documents and alert users to possible errors.

Speech-recognition programs

A speech recognition program works in conjunction with a word processor. The user "dictates" into a microphone, and his spoken words appear on the computer screen as text. This can help users whose oral language ability is better than their writing skills.

Speech synthesizers/screen readers

These systems can display and read aloud text on a computer screen, including text that has been typed by the user, scanned in from printed pages (e.g., books, letters), or text appearing on the Internet.

Talking calculators



A talking calculator has a built-in speech synthesizer that reads aloud each number, symbol, or operation key that user presses; it also vocalizes the answer to the problem. This auditory feedback may help him check the accuracy of the keys he presses and verify the answer before they transfer it to paper.

Talking spell checkers and electronic dictionaries

Talking spell checkers and electronic dictionaries help poor spellers select or identify appropriate words and correct spelling errors during the process of writing and proofreading. Talking devices "read aloud" and display the selected words onscreen, so spellers can see and hear the words.

Variable-speed tape recorders

Tape recorders/players enable user to listen to pre-recorded text or to capture spoken information (e.g., a classroom lecture) and play it back later. Variable speed control tape recorders speed up or slow down the playback rate without distorting the "speaker's" voice.

Word-prediction programs

Word prediction software can aid users during word processing by "predicting" a word the user intends to type. Predictions are based on spelling, syntax, and frequent/recent use. This prompts users who struggle with writing to use proper spelling, grammar, and word choices, with fewer keystrokes.

Imperative of Repositioning Library Services.

Special librarians should generally create a welcoming environment of special library services in structure and resources. This includes :

- integrating the universal design principles which enhances usability of objects and environment for them
- making profile chart of every child with special needs such as name, specific needs and challenges, academic skill areas he is struggling with, strengths, interest, skill and experience in using technology.
- providing braille library services for the blind and visually impaired persons
- providing guided tours of the library,
- repackaging of local information and;
- encouraging special librarian to attend conferences hosted by learning disability organizations

Implications of Assistive technology in Education teaching and Children with Special Needs.

Assistive technology facilitates the realization of goals of inclusive library services.. Children with special needs are able to live healthy, productive, independent and dignified lives, and to participate in education, the labour market and civic life. Assistive technology also guarantees the following benefits:

- eliminate the need for formal health and support services, long term care and the work of care givers;



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- improve individual's functioning and independence, there by promoting their well-being.
 - reduced to the barest minimum, impact of disease and disability on a person, family and society at large.

Conclusion

This paper has drawn attention to the need for effective special librarians to engage their administrative power in redesigning and repositioning library services to meet the needs of children with special needs. Provisions of braille library services for the blind and visually impaired, guided tours of the library, repackaging of local information, organization of story hours and then employment of professional library staff with special education background to work in a well-stocked library with appropriate resources for the special children are also emphasized. However, repositioning of special library services cannot be realized without resorting to retraining of librarians, good financial support and provision of modern technologies. If well considered, the aforementioned would guarantee some inclusive library services for all particularly individuals with disabilities.

Suggestions

It is true that the world in which librarianships exist is dynamic and has changed radically. The services needed of a special librarian are much the same as those of other librarians. However, several of the services may be needed to be repositioned to benefit children with special needs. This calls for improved qualities of special libraries/librarians to embrace the use of assistive technology to meet up with the dynamic nature of information services to children with special needs. It is therefore suggested that the school management should, through employment of good library administrator:

- create a welcoming environment
- develop inclusive library policy,
- stock the library with appropriate information resources and;
- employ ICT compliant librarian with experience on how to manage children with special needs.
- The librarian and the special education teachers should work hand in hand to achieve better results.

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