



## Library and Information Service Delivery for the Blind and Physically Challenged in University of Nigeria Nsukka Library

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### **Abstract:**

*This paper is an investigation into the evolution of library services for the blind people - library services for the blind and physically challenged in Nigerian universities with particular reference to the University of Nigeria, Nsukka (UNN), meeting the needs of persons with visually impaired through assistive technologies such as Screen reader, Braille translation software, Braille writing equipment, Closed -circuit television (CCTV), and Braille embosser and scanners. Challenges militating against service delivery for the visually impaired in Nigeria and workable strategies for improving library and information services to the visually impaired are suggested. The researchers recommend that special education teachers and the university authorities should attempt to provide facilities and employ teachers with solid Braille literacy skills to teach the visually impaired learners.*

**Key words:** Special education, Visual impairment, physical impairments, library information, service delivery

## **Introduction**

### **Historical Background of Library Services for Blind People**

In the nineteenth century, library services for blind people were virtually nonexistent. In 1868, the Boston Public Library acquired a collection of books in an embossed format and began serving local residents. The Chicago Public Library followed in 1894, the New York State Library in 1895, the Library of Congress in 1897, and the Philadelphia Free Library of Congress in 1899. Other collections were established, but most served only local populations. As many as six different systems of embossed formats were used by various library providers. Readers who learned one system could not necessarily read others. In addition, libraries could purchase only a few titles because of the high cost of production. These issues severely limited the blind community's ability to enjoy the same access to information as their sighted neighbors (Caulton and Prine 2010).

In 1917, the United States adopted Revised Braille (known then as grade 1 – ½ braille) as the standard for embossed materials. (Grade 1 – ½ Braille integrates elements of the letter-for-letter transliteration of grade 1 braille and the heavily contracted form of grade 2 braille). By 1925 the Library of Congress Reading Room for the Blind had expanded its readership from about 150 locally to 2400 nationally, and the collection had grown to 2400 volumes. Although improved, library service for blind people was still fairly sparse and the standard Braille used today had not yet been adopted.

### **Library Services for Blind and physically handicapped**

The path to providing quality library service to people who cannot read standard print with corrective lenses or who cannot handle printed materials has endured many advances, twists, and setbacks. The commitment and dedication of individuals and organizations and developments in Braille and recording technology have significantly improved access to written materials.

Library service delivery for blind and physically handicapped individuals is an ever-expanding phenomenon precipitated by both the innovative spirit of the community and the advances of technology. Libraries and librarians provide access to essential information that people need to participate in the emerging information society. Therefore, they have a moral obligation to make information available to all categories of users regardless of their gender, age, race, political affiliation or disability. Such inclusive, non discriminatory service however still remains the ideal rather than the norm as some people remain underserved in terms of access to information. Among this disadvantaged group are the visually impaired.

According to Friend (2009), 'visually impaired' is a general term used to describe people who are partially-sighted or completely blind. The term will be used in a similar sense throughout this paper. According to The World Health Organization (WHO) (2009) statistics, there are about 314 million visually impaired people globally, with 45 million totally blind. 87% of the visually impaired live in developing countries and women and people above 50 years of age are at higher risk. Although visually impaired people cannot read the conventional print, they have the right to information and the right to read information in formats that are accessible to them. The onus is on librarians to make information available in alternative formats like audio, Braille or large prints that can be easily accessed by the visually impaired.

Due to advances in Information and Communication Technologies (ICTs), information is now available in different formats that can be accessed through various media. Nevertheless, Friend (2009) asserted that less than 5% of the information materials available to sighted library users are accessible to the visually impaired. The pertinent question then is what is the level of library and information provision to the visually impaired in a developing country like Nigeria? How can information services to the visually impaired be improved? What roles do public and academic libraries have to play to ensure an inclusive library and information service to the visually impaired in Nigeria? These are the questions addressed by the present study.

The social, political and economic environment of the visually impaired also constitutes barriers to their information seeking. Access to Information and Communication Technology is a major determinant of how information rich or information poor a country is. The developing countries are disadvantaged in terms of access to information infrastructure and this greatly limits their capacity to meet the information needs of the visually impaired (Rowland 2008). The visually impaired, like other handicapped people, suffer social discrimination and cultural bias that negatively impact on their information seeking behavior. People who are physically challenged are generally viewed as abnormal and are often excluded from the mainstream of public services including library and information provision.

### **Information needs for visually impaired**

Shon (1999) asserted that visually impaired persons exhibit a spectrum of special needs as a result of their sensory limitations. The range of such needs is manifested in the series of differences demonstrated by the person's abilities, attitudes, learning styles and motivation. The number of individuals with visual impairment is growing, most of whom demonstrate various development, postural and behavioral problems. McCarthy (2002) views that not only visually impaired need access to an adequate collection of materials, but they need to learn information literacy skills as well. Many do not receive even rudimentary instruction in area such as the arrangement of the library, the library classification system – Dewey or LC or even the differences between fiction and notification.

Visually impaired students must learn how to utilize a wide variety of resources, both print resources in the library and on-line resources including the internet and periodical database, just as their sighted peers do. In order to allow visually impaired students to use materials that are available only in print, they might need access to an optical scanner and optical character recognition programme such as omri page pro, open book or a CCTV for low vision students. It is important to have at least a small browsing collection for the visually impaired students in the library. Many school libraries, media

centers, have a small collection of audio books, listening library and Record books that can benefit the students. If the library is automated, assistive technology as JAVA'S, Zoom text should be loaded on a computer. Many automated library catalogues can be used to give access to the visually impaired students to search for library materials.

What are the information needs of the visually impaired and in what ways are those needs being met? What is the role of the internet and digital information in meeting their needs, what are the barriers to use nanotechnologies and access the computer and the web? A literature search revealed a poverty of studies about information need and information seeking behaviors of this group of people. Williamson (1998) explored both information needs and the preference for sources of information in 202 older people, many of which had visual disability. It has been found out that the most important information need are media sources, newspapers, television, or radio. The University of Alberta (Canada) survey of the information needs of visually impaired citizens in the province of Alberta revealed that they have their conceptual framework based on studies which have emphasized the need to explore information seeking behavior or activities.

## **Library and Information Services Available to the Blind and Visually Impaired**

Libraries and information centers around the world have developed specialized information services to meet the library and information needs of their visually impaired clientele. Babalola and Haliso (2011) identified these to include:

(1) Braille books- Braille is a system of reading and writing whereby raised dots are used to represent letters which are read by touch. Braille books are appropriate for users who have both visual and hearing impairment.

(2) Talking books- these are audio versions of books that could be recorded on cassettes, CD-ROM, DVD and on the internet as e-books. Talking books are preferred by the majority of the visually impaired.

(3) Talking newspapers- audio recordings of news articles in the dailies.

(4) Large printed materials- these are documents printed in large fonts for use by partially sighted users.

Libraries are also taking advantage of advances in ICTs to increase information access for the visually impaired. A broad range of ICTs otherwise called adaptive or assistive technologies are now available to provide access to information in electronic databases and on the internet, giving blind users equal opportunity as the sighted. These innovative technologies include:

(1) Screen magnifier- this is software that allows text or graphics on computer screen to be magnified up to sixteen times the original.

(2) Screen reader: a software that reads out the content of a document to the reader.

(3) Voice recognition software: this allows the user to input data into the computer by voice.

Atinmo (2000) observed that only three out of the 36 state libraries in the federation have library and information services to the blind. In Nigeria, library and information services to the visually impaired are largely undertaken by Non-Governmental Organizations (NGOs). Government intervention, on the other hand, is very minimal and focuses more on establishment of special education schools where teachers of physically handicapped children are trained rather than provision library materials for the visually impaired (Atinmo 2000). The NGOs are highly committed to the education and empowerment of the visually impaired students. They produce textbooks in Braille and sell them to blind secondary school students at cost price of the printed copies.

### **Meeting the reading needs of persons with visual impairment through assistive technology**

Scholl (1986) defined this as “the process of constructing meaning through the dynamic interaction among the readers existing knowledge, the information suggested by the written language and the context of reading situation.” The World Encyclopedia (1992) in Adesina (2007) reported that people in many countries of the world read for various reasons. Some read for pleasure, other for information, students read to pass

their examinations while some others read for fun. Reading can also be defined as “a skill or activity of getting information from books, that is, an occasion when something written (literacy work) is spoken to an audience. As Lucky and Achebe (2013) described, the assistive technology devices include:

- Screen reader
- Braille translation software
- Braille writing equipment
- Closed-circuit television
- Braille embosser
- Scanners

*Screen reader:* Software program that works in conjunction with a speech synthesizer to provide verbalization of everything on the screen including menus, text and punctuation. It gives persons with visual impairment direct access to the world of print. It also creates independence in reading to the visually impaired. It helps a blind person to read freely at his/her own pace without assistance.

*Braille translation software:* Translate text and formatting into appropriate Braille characters and formatting.

*Braille writing equipment:* Used for creation of paper Braille materials; it can be manual or electron devices.

*Closed circuit television:* Magnify a printed page through the use of a special television camera with a zoom lens and displays the image on a monitor.

*Braille embosser:* A Braille printer that embosser’s computer-generated text as Braille on paper.

*Scanners:* Device that convert an image from a printed page to a computer file. Optical Character Recognition (OCR) software makes the resulting complete file capable of being edited. With the help of ICT, the visually impaired have been rendered special attention to fully participate in the world by providing them with best possible support necessary to bridge gaps between accessibility and literacy. More importantly, careers in science are now within the reach of the visually impaired and some of them have become successful in many scientific fields, including engineering, physics and chemistry.

## **Library and Information Services Available to the Visually Impaired in University of Nigeria, Nsukka**

Institution	Braille Books	Talking Books	Audio Books	Talking Newspapers	Assistive Technologies
Nnamdi Azikiwe Library University of Nigeria, Nsukka	No	No	Yes	No	No

Table 1 above shows that the library surveyed has no Braille books, talking books, talking newspapers and assistive technologies. The only materials that were available were audio books which, according to the librarians, were not acquired to serve the visually impaired. As a matter of fact, most of the audio materials came with textbooks and encyclopedia that the libraries acquired. In essence, the library lacks most of the materials that can be accessed by visually impaired users. The reason for this was that the library has never had to face the challenge of serving blind students. Apparently, there is an urgent need to improve the current level of library and information services available to the visually impaired in Nigeria.

### **Challenges militating against service delivery for the blind in Nigeria**

One of the major challenges for librarians in their attempts to provide services to the blind in Nigeria is the lack of reliable figures for the number, age, sex, and educational level of the blind. Statistical data has always been a problem for African countries, generally speaking. This makes it difficult to draw up a programme based on specific targets. Other challenges include:

- Limited financial and human resources in this aspect of library services.
- Lack of production and distribution facilities for reading materials.

- Lack of properly trained library personnel. Library staffs are therefore often unable to handle the need of the blind.
- Architectural barriers. Most of the libraries (especially university libraries) were built long before the libraries ever considered providing materials for the blind. Therefore such barriers are: steps, high book shelves, narrow doorways and lack of elevators are still prevalent in libraries. These obstacles can be extremely frustrating, if not impossible for the blind to cope with.
- Inadequacy of appropriate reading materials, blind adults have no opportunities for participating in these programs.

### **Way forward for improving library services for the visually impaired learners in Nigeria**

Babalola and Haliso (2011) asserted that the challenge of providing equitable library and information services to the visually impaired is one that can only be tackled with the involvement and cooperation of all stakeholders. Government, State and academic libraries, NGOs and other agencies serving visually impaired people must work together on the following strategies to improve library and information services for the visually impaired. These strategies are: (1) provision of adequate funding for state and local libraries, (2) periodical review of policies guiding the implementation of funding for the libraries, (3) networking, (4) training and retraining of librarians, (5) production of talking books, and (6) investment in assistive technology.

### **Conclusion and Recommendation**

Handicapped people have special needs because they are special people. But they must not to be set apart and always treated differently either. They also have the needs as sighted people and the able-bodied do. History of the library and information services delivery for blind and physically challenged has revealed that in overseas it has been a normal practice. But it appears the education system in the developing

countries including Nigeria has neither fully embraced nor adopted the technology associated with this special library service. This is apparently as a result of several issues which include: nonchalant attitudes of university authorities whose onus it is to finance needed facilities, librarians who should emphasize the need for such services and also out of their limited budget give some percentage to the provision of facilities in question.

The loss of vision seriously inhibits persons with visual impairment from accessing very useful information, especially those available in print. The blind also have their hobby reading needs, vocational reading needs, and recreational reading needs, just as the sighted do. It is time that the library profession in Nigeria paid close attention to these individuals and made provisions for their reading needs and welcomed them into the regular library community.

On this note, it is recommended that those in Special Education in University of Nigeria Nsukka should recommend to the university authority on the urgent need to consider the special students (especially the blind and physically handicapped) in the library and information service delivery which will create encouraging environment to perform competitively with their sighted counterparts. Administrators should ensure that they employ teachers with solid Braille literacy skills to teach the visually impaired learners. For an efficient and effective provision of library services to the blind in University of Nigeria Nsukka Library additional funds will be needed to be provided for the services. Modern technology for the services should be procured and installed.

## **BIBLIOGRAPHY:**

Adesina, J.O., 2007. "In Search of Inclusive Development: Introduction." In *Social Policy in Sub-Saharan African Context: In Search of Inclusive Development*, edited by J. Adesina, 1-53. Palgrave: Macmillan, Basingstoke.

Atinmo, M.A. 2000. "Including the Excluded: The Challenges of Library and Information Services for visually handicapped readers in Nigeria in the new millennium." Paper

presented at the International Special Education Congress, Manchaester, UK, July 2000.

Babalola, Y. T., and Y. Haliso. 2011. "Library and Information Services to the Visually Impaired-The Role of Academic Libraries." *Canadian Social Science* 7(1): 140-147.

Caulton, J., and S. Prine. 2010. "Blind and Physically Handicapped: Library Services." In: *Encyclopedia of Library and Information Sciences*, Third Edition. 635 – 641. DOI: 10.1081/E-ELIS3-120044524.

Friend, C. 2009. "Meeting the Needs of the Visually Impaired Persons: What Challenges for IP?" Paper presented at a meeting hosted by WIPO in Geneva, July 13<sup>th</sup>, 2009. Accessed July, 2010. Available at [http://www.wipo.int/meetings/en/2009/vip\\_ge/presentations/chris\\_friend.html](http://www.wipo.int/meetings/en/2009/vip_ge/presentations/chris_friend.html)

Lucky, A.T., and N.E.E. Achebe. 2013. "Information Service Delivery to the Visually Impaired: A Case Study of Hope for the Blind Foundation Wusasa, Zaria (Nigeria)." *Research Journal of Information Technology* 5(1): 18-23.

McCarthy, J.J. 2002. *A Thematic Guide to Optimality Theory*. Cambridge: Cambridge University Press.

Scholl, E.S. 1986. "Growth and Development." In *Foundations of Education for Blind and Visually Handicapped Children and Youth*, edited by E.S. Scholl, 65-85. New York: American Foundation for Blind.

Shon, K.H. 1999. "Access to the world by visually impaired preschoolers." *Review* 30(4): 160-173.

Williamson, K. 1998. "Discovered by chance: The role of incidental information acquisition in an ecological model of information use." *Lib. Inform. Sci. Res.* 20(1): 23-40.