
Availability and Utilizations of Library Information Resources in Secondary Schools by Special Patrons

Isibhakhhome Eleaena Asuata*, Helen Uzoezi Emasealu**

ARTICLE INFO

Article history:

Received 21 June 2021

Revised 09 July 2021

Accepted 25 July 2021

Keywords:

Library information resources,
Availability,
Utilization,
Special patron,
Secondary schools

ABSTRACT

This study adopted the descriptive survey research method. The population of this study comprised of the hearing impaired students in selected government secondary schools in Rivers state. The population of hearing impaired students in Rivers State is 257. A simple random sampling technique was used to select a sample size of 159. A self-developed instrument titled "Availability and Utilization of Library Information Resources Questionnaire (AULIRQ)" was utilized for data collection. 153 responses were collated, indicating a 96.2% response rate. The data collected was arranged and analyzed using frequency count, percentages, and mean and standard deviation. Finding reveals that information resources in the libraries understudied were inadequate and under-utilized. Also, it was established that among other barriers, under-funding is a major barrier to making information resources available for the physically challenged. It was recommended that schools offering special education for the hearing impaired should pace up in their developmental gap by providing such resources and ensure adequate funding by all stakeholders.

1. Introduction

Libraries are primarily concerned with providing access to accurate, timely and accessible information to their patrons. The library services are aimed at knowledge acquisition, preservation, management, dissemination and utilization of information, and are, therefore, the chief custodians of information. From time immemorial, in the constant search for knowledge to attain developmental goals, mankind has found information as a vital tool for finding solutions to problems (Emasealu, 2019). Consequently, information is important to each individual for capacity building for the ideal development including those with disabilities. Libraries are enablers for the education of societal members and can be found in every academic institution. Alarmingly, according to the statistics taken during the enactment of the Individuals with Disabilities Education Act (IDEA, 1975) over 5.83 million students had

* Faculty of Education, University of Port Harcourt, Department of Library and Information (isiasuata@gmail.com) (First Author)

** Head Reader Services, Donald E.U. Ekong Library, University of Port Harcourt, Port Harcourt, Nigeria (helenemasealu@yahoo.co.uk) (Corresponding Author)
International Journal of Knowledge Content Development & Technology, 12(1): 35-47, 2022.
<http://dx.doi.org/10.5865/IJKCT.2022.12.1.035>

special needs just in the United States alone. The study reported that up to 1 of the 5% of the world population are disabled. A world report on deafness and hearing loss by the World Health Organization (2019) states that over 5% of the world's population – or approximately 466 million people – have disabling hearing loss (about 432 million adults alongside 34 million children). It is also projected that by 2050 over 900 million people or one in every ten people will have disabling hearing loss. This trend not just in the United States alone but all over the world, Nigeria inclusive had won the attention of concerned academic bodies.

In the present-day society, information is very important to the survival of human beings all over the world including the hearing-impaired. Libraries are known to be the major custodian of information as it holds various information resources that are systematically planned and collated to satisfy the information need of the members of the society. This includes those who are physically challenged. The purpose of education, thus, being to foster the worth of an individual as well as imbue them with appropriate skills needed in order for them to adequately contribute meaningfully to society is of great importance. This, therefore, means that it bears a more significant impact on people dealing with physical challenges. According to (Seth & Parida, 2010) libraries can perform an important function in developing physically challenged persons' intellect, imagination and general knowledge by making available several library resources. The School library for the deaf can be seen as a learning laboratory where these hearing impaired learners find the world of knowledge which enables them to interact directly with library information resources to acquire information and develop research skills for lifelong training.

This research recognizes the hearing impaired as individuals if provided with adequate library information resources that are well utilized can be of great importance in the development of society. However, in order to accommodate their needs, facilities and measures have been put in place to assist them. Such facilities include an assistive listening system, closed caption television decoders, sign language and oral interpreters, computer-assisted real-time captioning and visible warning signals among others for unabridged access to library resources. Without those assistive technologies, these special members of society will be prevented from discovering and maximizing their potentials. Schools that offer special education play a key role in providing library information resources for the hearing impaired and creating an atmosphere in the library that can help them assimilate what they learn. It is against this background that this study is concerned with the availability of library information resources as well as the extent to which they are utilized in special and inclusive secondary schools.

2. Literature Review

The library can be described as a place where information materials of different formats are systematically acquired, organized, stored, preserved and disseminated to users at the appropriate time to meet their information needs. Hammed (2010) defined a library as a “collection of records of human culture in diverse formats and languages preserved, organized and interpreted to meet broad and varying needs of individual for information, knowledge, recreation and aesthetic enjoyment”.

According to Ode and Omokaro (2010), a library is a designated building where information in print and in other formats are collected, organized, carefully prepared according to some specific or definite plan, and made accessible for reading and consultation by all ages and interests. The library refers to any room, corner, or place where various information materials of different kinds are stored for easy access and retrieval for the users, aiding them to find the needed information material that is needed for research or any other purpose.

Knowledge and information is very important to all sorts of people irrespective of their discipline or state in life. The most important objective of any library is to provide or offer the best possible services to its users. The supply and demand for knowledge to meet the various and complex need for the world is of great importance. Ashikuzzaman (2016) states that the library is divided into four different types according to the mode of services rendered, and are academic library, special library, public library, and national library.

Special libraries provide specialized information resources on a particular subject, serve as a specialized and limited clientele and delivers specialized services to that clientele. American library association (ALA) glossary of library and information science defines a special library as “a library established, supported and administered by a business firm, private cooperation, association, government agency, or other special interest groups of agency to meet the information needs of its members or staff in pursuing the goals of the organization. Scope of collection and services is limited to the subject interest of the host or parent organization.” Special libraries are established for specific purposes to suit the needs of a particular firm. They give precise information resources promptly in the concerned field. Most often, special libraries are found in organizations, industries, special schools and such related places.

Special education is a form of education designed to help individuals with special needs or disabilities to achieve a higher level of self-sufficiency and to be successful in all engagements. Students in these schools are taught in such a manner that is quite different from other pupils in the regular schools. This involves a different learning environment in which they get special care, attention and treatment. Special schools play a key role in the special education process, since many goals and objectives such as academic success and intellectual development can be achieved. According to Anjiode (2010), special education is the education of persons who have learning difficulties due to circumstances of birth, inheritance, mental and physical health pattern, or accident. Education is of primary importance to each and every human irrespective of the physical, emotional and psychological state of the person. Special education has played a key role in advancing education for those who have several disabilities. According to The policy objective of special education, the aim of special education is to provide a conducive learning environment for students with special educational needs (SEN) so as to facilitate their education and training, help them develop their potential to the full, enhance their independence and enable them to become well-adjusted individuals in the community. Special education is not only of benefit to students but also to teachers. It helps teachers to appreciate the importance of individual differences because humans do not learn and understand at the same pace. Some take longer while some understand better within a short while.

Hearing loss, also known as hearing impairment, is a partial or total inability to hear. A deaf person has little to no hearing. According to Disabled World (2019) Hearing loss can occur on

only one side (unilateral) or on both (bilateral) hearing loss and deafness, hard of hearing, anacusis. Hearing impairment is defined as a partial or total inability to hear. There are two main types of hearing loss:

- One happens when your inner ear or auditory nerve is damaged. This type is permanent.
- The other kind happens when sound waves cannot reach your inner ear due to ear wax build-up, fluid or a punctured eardrum.

According to the World Health Organization (2019) Hard of hearing refers to people with hearing loss ranging from mild to severe. People who are hard of hearing usually communicate through spoken language and can benefit from hearing aids, cochlear implants, and other assistive devices as well captioning people with more significant hearing losses may benefit from cochlear implants.

Congenital causes may lead to hearing loss being present at or acquired soon after birth. Hearing loss can be caused by hereditary and non-hereditary genetic factors or by certain complications during pregnancy and childbirth, including low birth weight, birth asphyxia, and inappropriate use of particular drugs during pregnancy such as aminoglycosides, cytotoxic drugs, antimalarial drugs etc. Severe jaundice can also be a cause-and-effect.

Acquired causes such as infectious diseases including meningitis, measles and mumps, chronic ear infections, collection of fluid in the ear (otitis media), use of certain medicines, such as those used in the treatment of neonatal infections, malaria, drug-resistant tuberculosis, and cancers. It could be caused by injury to the head or ear, excessive noise, including occupational noise such as that from machinery and explosions, recreational exposure to loud sounds such as that from use of personal audio devices at high volumes and for prolonged periods of time and regular attendance at concerts, nightclubs, bars and sporting events including aging, in particular, due to degeneration of sensory cells and wax or foreign bodies blocking the ear canal.

Deaf education is a form of education of students with any degree of hearing loss or deafness which addresses their differences and individual needs. This involves individually planned, systematically monitored teaching methods, adaptive materials, accessible settings and other interventions designed to help students achieve a higher level of self-sufficiency and success in the school and community than they would achieve with typical classroom education.

Deaf education focuses on the needs of the deaf and hard of hearing as their teachers are trained with appropriate instructions to help the deaf and hard of hearing to imbue them with the educational needs. Deaf education is designed to meet the need of a deaf child, which involves the use of special techniques, special facilities and equipment in making education success for them. This would help them find out the strength and weaknesses of the students in order to figure out how to teach each one of them well. Deaf education aims to address the educational, linguistics, social and cultural needs of students who are deaf and hard of hearing by providing services for their needs. Schools where students, who are deaf or hard of hearing are taught, vary depending on the level of integration of the students. The passing of the Individuals with Disabilities Education Act (IDEA), which required states to provide “free appropriate public education” in the least restrictive environment (LRE) as determined by the child’s individualized education plan (IEP), had an impact on the number of deaf and hard-of-hearing children who were then placed in regular classrooms.

There are three communication methods used in the communication of deaf and hard of hearing students which are as follows:

- The oral approach
- Total communication approach
- The bilingual bicultural approach also known as the American Sign Language/English bilingual approach

Popoola and Haliso (2009) described library information resources as information-bearing materials that are in both printed and electronic formats such as textbooks, journals, indexes, abstracts, newspapers, magazines, tapes, diskettes, etc. These materials are the raw materials acquired by the library, cataloged and preserved for them to be retrieved by users to help them get the information they need. All other information-bearing materials that can be found in a modern library that are provided in response to the information needs of users are also called library resources (Edoka, 2000). Library information resources can be seen as those library materials, which could be in print or non-print format that provide information of any kind to library users. These information resources are very important in helping to achieve the aim of education of the challenged. Iroeze et al. (2004) averred that the availability of these materials for the deaf and hard of hearing are not fully utilized. The authors stated that due to their peculiar nature, the effectiveness of utilization of the needed library resources seem to be greatly affected. It is worrisome too that information resources and services meant for this category of users tend to be rarely available for their utilization, and where they are available, they seem to be under-utilized. Agbaje (2000) lamented that no provision of reading materials is made to equalize educational opportunities of the deaf or hard for hearing children with the normal children. Basharu (2002) confirmed that the libraries serving physically challenged (visually impaired) persons in Nigeria are grossly ill-equipped to cope with the knowledge yearning of the individuals with special needs. Okpe and Unegbu (2012) also noted that there is considerable recognition that information is not easily accessed to be retrieved by people who are physically challenged especially those that are visually and hearing impaired.

There are specialized information resources for different types of challenges. They are:

- Braille - Braille is a system of touch reading and writing for blind persons in which raised dots to represent the letters of the alphabet. It is a code in which several languages can be read and translated to enable those that are visually impaired to get the needed information by placing their palm on it and moving the palm. According to AFB (American Foundation for the Blind), braille is produced by a machine known as a braille writer. It is quite different from a typewriter because it has only six keys, a spacebar a backspace and a line spacer while a typewriter has above fifty keys. The six main keys are numbered to correspond with the six dots of a braille cell because most braille symbols contain more than a single dot, combinations of the braille writer keys can be pushed at the same time.
 - Daisy books - DAISY means Digital Accessible Information System. Kearney (2011) sees Daisy book as the emerging world standard of digital talking books for people who are blind or have a print disability. DAISY books are designed to serve everyone from the blind Braille reader
-

with no sight at all to a person who is dyslexic with perfect vision but a limited ability to read.

- Sign language Videos - Sign Language Videos are videos that involve the display of a visual language known as sign language that has to do with the distinctive movements of the hands called signs, movements of the body and facial expression in place of spoken words to pass information across to the deaf or hearing impaired. Hearing-impaired worldwide uses various sign languages depending on the origin.
- Periodicals - Periodicals are magazines or newspapers that are published at regular intervals. It can be published daily, weekly or monthly.
- Picture books - A picture book is a book, typically for children, in which the illustrations are more important than the words in telling the story. It contains mostly pictures to enable the users to grasp the message. Students get to recall easily what they see than what they read. Picture books have traditionally been 32 pages long.
- Story books - Story books are books that contain a collection of stories about a particular theme.
- Craft books - These are books that inspire you to learn new things. These craft books teach the hearing impaired how to create arts on their own such as using papers in making paper-like animals such as fishes.
- Text Telephone TTY - This is a special device that lets people who are deaf, hard of hearing or speech impaired use the telephone to communicate by allowing them to type messages back and forth to one another instead of talking and listening. It is required at both ends for communication.
- Wall maps - Wall maps are maps designed to be hung up on the wall of a room which displays the geographical diagrammatic representation of an area of land or sea showing physical features, cities, roads, and to be read while in that position.
- Signing books - Signing books are books that involve the display of a visual language known as sign language on printed books in form of pictures to alongside explanations of the distinctive movements of the hands called signs, movements of the body and facial expression to pass information across to the hearing impaired.

3. Objectives

The aim of this study is to investigate the availability and utilization of library information resources specifically for the hearing impaired in selected schools in Rivers State. The specific objectives are to investigate:

- The availability of library information resources for the hearing impaired in the school libraries.
 - The extent to which library information resources are utilized by the hearing impaired in secondary schools.
 - The barriers affecting the availability of library information resources for the hearing impaired in secondary schools.
 - The barriers affecting the utilization of library information resources for the hearing impaired
-

in secondary schools.

4. Methodology

This study adopted the descriptive survey research method. The population of this study comprised of the hearing impaired students in selected government secondary schools in Rivers state. The population of hearing impaired students in Rivers State is 257 (Source: field survey). Taro Yemen's Formula ($S = N / (1 + Na^2)$) was utilized to determine the sample size of 159. While a simple random sampling technique was used to select the sample. A self-developed instrument titled "Availability and Utilisation of Library Information Resources Questionnaire (AULIRQ)" was utilized for data collection. Out of the 159 questionnaires distributed, 153 were retrieved, indicating a 96.2% response rate. The data collected was arranged and analyzed using frequency count, percentages, and mean and standard deviation.

5. Result and Discussions

From **Table 1**, the respondents in responding to the availability of information resources agreed that books (93%), Periodicals (68.4%), Sign language (75.4%), Picture books (184.2%), Story books(89.5%), Craft books (70.2%), are available in these schools with more than 50% of the responses as available, while Text telephone TTY (21.1%), Book tape kits (21.1%), Wall maps (29.8%), Assistive hearing aids (17.5%), Assistive listening devices(35.1%), Signing books (22.8%), Projectors (26.3%), Electronic Resources (17.5%), Computer (10.5%), Decoder(12.3%) is lower than the criterion point of 50%. Hence the availability of such library information resources in these schools are poor. This finding agrees with Iroeze et al. (2004) that the number of available information resources for the deaf and hard of hearing is also significantly less than appreciated. revealed that very few of the listed information resources are available in the centre libraries. Akerele et al. (2007) reveal that deaf school student stated that information resources accessible to them were significantly unavailable. This showed that the number of available information resources for the deaf and hard of hearing in the special education centre libraries far less than the number of information resources expected to be available for the deaf and hard of hearing.

Table 1. Availability of information resources for the hearing impaired

SN	Items	Available (%)	Not Available (%)	Total (%)
1	Books	142 (93.0)	11 (7.0)	153(100)
2	Periodicals	105 (68.4)	48 (31.6)	153(100)
3	Sign language videos	115 (75.4)	38 (24.6)	153(100)
4	Picture books	129 (84.2)	24 (15.8)	153(100)

5	Story books	137 (89.5)	16 (10.5)	153(100)
6	Craft books	107 (70.2)	46 (29.8)	153(100)
7	Text Telephone TTY	32 (21.1)	121 (78.9)	153(100)
8	Book/tape kits	32 (21.1)	121 (78.9)	153(100)
9	Wall maps	46 (29.8)	107 (70.2)	153(100)
10	Assistive hearing aids	27 (17.5)	126 (82.5)	153(100)
11	Assistive listening device	54 (35.1)	99 (64.9)	153(100)
12	Signing books	35 (22.8)	118 (77.2)	153(100)
13	Projectors	40 (26.3)	113 (73.7)	153(100)
14	Electronic resource	27 (17.5)	126(82.5)	153(100)
15	Computer/Internet	16 (10.5)	137(89.5)	153(100)
16	Decoder	19 (12.3)	134 (87.7)	153(100)

N = 153

Table 2 shows that among the items, Books (3.43), periodicals (2.98), sign language Videos (2.98), picture books (2.83), Story books (2.98) and craft books (2.91). These information resources obtained mean scores higher than the criterion mean score and are therefore utilized ($\bar{x} \geq 2.50$). While other information resources such as Text telephone TTY (2.15), Book Tape Kits (1.89), Wall maps (1.85), Assistive hearing aids (1.98), Assistive Listening devices (1.85), Signing books (1.80), Projectors (1.65), Electronic resources (1.65), Computer/internet (1.72), Decoder (1.46) obtained mean scores lower than the criterion mean score and are therefore under-utilized. Iroze et al. (2004) assert that the available materials for the deaf and hard of hearing are not fully utilized. This implies that library information resources are poorly utilized.

Table 2. Utilization of information resources by the hearing impaired

SN	Items	Often	More Often	Rarely	Never	\bar{x}	\pm	Decision
1	Books	82(53.7)	60(38.9)	6(3.7)	6(3.7)	3.43	1.3	Utilized
2	Periodicals	57(37.0)	60(38.9)	14(9.3)	23(14.8)	2.98	1.5	Utilized
3	Sign language videos	48(31.5)	57(37.0)	23(14.8)	26(16.7)	2.83	2.5	Utilized
4	Picture books	54(35.2)	60(38.9)	23(14.8)	17(11.1)	2.98	1.8	Utilized
5	Story books	43(27.8)	65(42.6)	34(22.2)	11(7.4)	2.91	4.2	Utilized
6	Craft books	28(18.5)	48(31.5)	57(37.0)	20(13.0)	2.56	3.5	Utilized
7	Text Telephone TTY	20(13.0)	48(31.5)	20(13.0)	65(42.6)	2.15	2.3	Under-utilized
8	Book/tape kits	14(9.3)	26(16.7)	43(27.8)	71(46.3)	1.89	2.4	Under-utilized
9	Wall maps	11(7.4)	34(22.2)	28(18.5)	79(51.9)	1.85	2.8	Under-utilized
10	Assistive hearing aids	26(16.7)	17(11.1)	40(25.9)	71(46.3)	1.98	2.2	Under-utilized
11	Assistive listening device	28(18.5)	6(3.7)	34(22.2)	85(55.6)	1.85	2.1	Under-utilized

12	Signing books	14(9.3)	26(16.7)	28(18.5)	85(55.6)	1.80	2.5	Under-utilized
13	Projectors	9(5.6)	23(14.8)	28(18.5)	94(61.1)	1.65	2.3	Under-utilized
14	Electronic resources	9(5.6)	17(11.1)	40(25.9)	88(57.4)	1.65	2.8	Under-utilized
15	Computers/Internet	9(5.6)	31(20.4)	23(14.8)	91(59.3)	1.72	4.2	Under-utilized
16	Decoder	6(3.7)	17(11.1)	20(13.0)	111(72.2)	1.46	3.1	Under-utilized
Grand mean						2.23		Poor

Table 3 shows that the respondents agreed that items 1 (Poor funding) with a mean score of 3.07, items 2 (Poor maintenance culture) with a mean score of 2.72, items 3 (Inadequate structures) with a mean score of 3.11, item 4 (Unavailability of a librarian) with a mean score of 2.87, item 5 (Poor knowledge of available resources) with a mean score of 2.94 and item 5 (Developmental gap) with a mean score of 3.07. This proves that items 1 to 6 are barriers that affect the availability of library information resources for the hearing impaired in schools. This finding concurs with several researchers on the opinion of varied challenges faced by libraries especially library irregular annual budget, inconsistent source of funding, and government insensitivity (Atinmo & Iroze, 2004; Akerele et al., 2018). This proves that the stated barriers affect the availability of library information resources.

Table 3. Barriers of availability of information resources in the library

SN	Items	SA	A	D	SD	\bar{x}	\pm	Decision
1	Poor Funding	68(44.4)	48(31.5)	17(11.1)	20(13.0)	3.07	1.2	Agree
2	Poor maintenance culture	37(24.1)	62(40.7)	28(18.5)	26(16.7)	2.72	2.5	Agree
3	Inadequate structures	48(31.5)	79(51.9)	20(13.0)	6(3.7)	3.11	2.4	Agree
4	Unavailability of a librarian	43(27.8)	65(42.6)	28(18.5)	17(11.1)	2.87	1.3	Agree
5	Poor knowledge of available resources	40(25.9)	79(51.9)	20(13.0)	14(9.3)	2.94	4.4	Agree
6	Developmental gap	51(33.3)	71(46.3)	23(14.8)	9(5.6)	3.07	2.8	Agree

N = 153

The response from **Table 4** shows that the respondents accepted items 1 (Poor maintenance culture with a mean score of 2.93 and items 2 (Unavailability of a librarian) with a mean score of 2.67, item 3 (Inaccessibility of the library information resources) with a mean score of 2.83, item 4 (Unavailability of library information resources) with a mean score of 2.76, item 5 (Relevance of the material) with a mean score of 3.06, item 6 (Lack of internet services) with a mean score of 3.00, item 7 (Inadequate education and training program) with a mean score of 2.87, item 9 (Technophobia) with a mean score of 2.72, item 10 (Difficulty in communication) with a mean score of 2.93 and item 11 (Lack of library orientation) with a mean score of 2.76. This shows that all the listed items are barriers that affect the utilization of library information resources for the hearing impaired in schools. This agrees with Agbaje (2000) as the author lamented that no

provision of library materials is made to equalize educational opportunities for the deaf. Basharu (2002) opined that there is inadequate provision of internet services. This implies that the stated barriers affect the utilization of library information resources for the hearing impaired in schools.

Table 4. Barriers of Utilization of Information Resources in the Library

SN	Items	SA	A	D	SD	\bar{x}	\pm	Decision
1	Poor maintenance culture	48(31.5)	65(42.6)	20(13.0)	20(13.0)	2.93	1.3	Agree
2	Unavailability of a librarian	28(18.5)	68(44.4)	34(22.2)	23(14.8)	2.67	2.7	Agree
3	Inaccessibility of the library information resources	34(22.2)	77(50.0)	26(16.7)	17(11.1)	2.83	2.5	Agree
4	Unavailability of library information resources	31(20.4)	74(48.1)	28(18.5)	20(13.0)	2.76	1.5	Agree
5	Relevance of the materials	48(31.5)	82(53.7)	6(3.7)	17(11.1)	3.06	2.6	Agree
6	Lack of internet services	51(33.3)	65(42.6)	23(14.8)	14(9.3)	3.00	2.4	Agree
7	Inadequate education and training programme	43(27.8)	79(51.9)	20(13.0)	11(7.4)	3.00	2.9	Agree
8	Communication barrier	37(24.1)	71(46.3)	34(22.2)	11(7.4)	2.87	2.2	Agree
9	Technophobia	28(18.5)	74(48.1)	31(20.4)	20(13.0)	2.72	1.5	Agree
10	Difficulty in communication	40(25.9)	77(50.0)	23(14.8)	14(9.3)	2.93	1.7	Agree
11	Lack of library orientation	28(18.5)	71(46.3)	43(27.8)	11(7.4)	2.76	1.8	Agree

N = 153

6. Conclusion

Availability of library information resources for the hearing impaired is of utmost importance to this group of users as it aids these individuals in the utilization of information resources. This helps in providing them with the needed knowledge base required to support them educationally and morally to become productive citizens in society. The findings from the study show that information resources in the understudied libraries are inadequate and are under-utilized. Consequently, the study recommends that schools that offer special education to the hearing impaired should improve on the provision of information resources in their libraries. Also, library information resources for the hearing impaired should be made accessible in a conducive library environment to aid the utilization of these information resources. Similarly, schools that offer special education for the hearing impaired should pace up in their developmental gap by providing such information resources and ensure adequate funding by all stakeholders. This would help in providing reliable structures and the recruitment of qualified librarians that should sustain the library culture. School libraries must also endeavor to eliminate barriers that affect the utilization of library information resources by the hearing impaired so that the students would experience maximum benefit.

References

- Agbaje, S. A., & Olabode, S. O. (2000). Resources Availability to the Visually Impaired Library Users in Nigeria: the Way out. *Journal of Association of Libraries for the visually impaired*, 1(1), 67-73.
- Agboola, I. O., & Bamigboye, O. B. (2011). Students' Level of Study and User of Library Resources in Nigerian Universities: A Comparative Study. *Library Philosophy and practice*, 1. <https://www.researchgate.net/profile/Olusola-Dr-Bamigboye/publication/265975002>
- Aguolu, C. C. (1989). *Libraries, Knowledge and National Development: Inaugural Lecture Delivered on 29th March, 1989* (No. 45). University of Maiduguri Press.
- Aina, R. F., & Omeluzor, S. U. (2008). User Education and Use of Library at Babcock University, Nigeria. *International Review of Politics and Development. A Journal of the Department of Political Science and Public Administration, Babcock University*, 6, 17-38.
- Akerele, J. A., Egunjobi, R. A., Awoyemi, R. A., & Ogunniyi, S. O. (2018). Funding, Communication and Marketing as Correlates of Library Service Delivery to Persons with Hearing Impairment in Nigeria. *Library Philosophy and Practice*, 1. <https://core.ac.uk/download/pdf/189477578.pdf>
- Akporhonor, B. A. (2005). Library Funding in Nigeria: Past, Present and Future. *The Bottom Line*, 18(2), 63-70.
<https://www.emerald.com/insight/content/doi/10.1108/08880450510597505/full/html>
- Aladeniyi, R. C., & Owokole S. T. (2018). Utilization of Library Information Resources by Undergraduate Students of University of Medical Science Ondo, Ondo State, Nigeria. *American International Journal of Contemporary Research*, 8(4), 92-99.
http://www.aijcrnet.com/journals/Vol_8_No_4_December_2018/9.pdf
- Anjiode, K. J. (2010). Information Resources and Services to Physically Challenge in Plateau State Special Educational Institutions. Samaru. *Journal of Information Studies*, 10(1-2), 1-11.
<https://www.ajol.info/index.php/sjis/article/view/75675>
- Antia, S. D., Jones, P. B., Reed, S., & Kreimeyer, K. H. (2009). Academic Status and Progress of Deaf and Hard-of-hearing Students in General Education Classrooms. *The Journal of Deaf Studies and Deaf Education*, 14(3), 293-311.
<https://academic.oup.com/jdsde/article/14/3/293/330644?login=true>
- Ashikuzzaman. N. (2016). *E-learning and Digital Library*.
<http://www.lisbdnet.com/e-learning-digital-library>
- Atinmo, M. I. (2000). The Library and the Public it Serves: Need for more Dynamic Approach to Attract Patroness. *Library Forum*, 8(2), 3-4.
- Barfi, K. A., Afful-Arthur, P., & Agyapong, E. M. (2018). Utilization of Library Resources by Lecturers in University of Cape Coast. 10(1), 10-16.
<https://ir.ucc.edu.gh/xmlui/handle/123456789/4132>
- Basharu, D. (2000). Equipping Libraries for the Blind with Reading Materials. *Journal of Association of Libraries for the Visually Impaired*, 1(1), 56-61.
- Charles, R. C. (2017). *Psychological Determinants of Depression among Hearing Impaired Adolescents in Port Harcourt*. Rivers State.
-

- Disabled World. (2019). <https://www.disabled-world.com/>
- Duhaney, L. M. G., & Duhaney, D. C. (2000). Assistive Technology: Meeting the Needs of Learners with Disabilities. *International Journal of Instructional Media*, 27(4), 393-393. <https://go.gale.com/ps/i.do?id=GALE%7CA67531180&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=00921815&p=AONE&sw=w&userGroupName=anon%7E37ca5654>
- Edoka, B. (2000). *Introduction to Library Science*. Palma Publishing and Links Company Ltd.
- Ellis, E. S. (1997). Watering up the Curriculum for Adolescents with Learning Disabilities: Goals of the Knowledge Dimension. *Remedial and Special Education*, 18(6), 326-346. <https://journals.sagepub.com/doi/abs/10.1177/074193259701800603>
- Emasealu, H. U. (2019). Availability and Use of Home-based Library Resource among Adolescents. *Tincity Journal of Library, Archival and Information Science (T-JOLAIS)*, 8(1&2), 45-55.
- Grobecker, B. (1999). Mathematics Reform and Learning Disabilities. *Learning Disabilities Quarterly*, 22, 43-58.
- Hammed, A. B. (2010). *Use of library: Essential manual for beginners*. Akacom Publications Ltd.
- Harris, K. R., & Graham, S. (1996). Constructivism and Students with Special Needs: Issues in the Classroom. *Learning Disabilities Research and Practice*, 11(3), 134-37. <https://eric.ed.gov/?id=EJ530718>
- IDEA. (1975). *The Office of Special Education and Rehabilitative Services Celebrates 35 Years of the Individuals with Disabilities Education Act (IDEA)*. <https://www2.ed.gov/about/offices/list/osers/idea35/index.html>
- Iroeze, P. C., Chima-James, A., Agim, E., & Opara, I. (2004). *The Study of Special Library Services to Visually Impaired Library Users: A case study of Imo State Library Board*. University of Calabar.
- Kearney, M. (2011). A Learning Design for Student-generated Digital Storytelling. *Learning, Media and Technology*, 36(2), 169-188. <https://doi.org/10.1080/17439884.2011.553623>
- Ode, E. O., & Omokaro, D. A. (2007). *Basic principles and practice of librarianship*. PSG-France publications.
- Ogunduyilemi, K. S. (2018). The Relationship of Undergraduate Study Habits with Use of Library Resources in Two Universities in Oyo State. *Nigeria. Library Philosophy and Practice*, 4(1), 1-28. <https://core.ac.uk/download/pdf/188140201.pdf>
- Okpe, J. I., Unegbu, V. E. (2012). Provision of Information Resource for the Visually Impaired by libraries in Ogun State. *Nigeria. Delta Library Journal*, 6(1), 35-42.
- Oyegunle, J. (2013). History, philosophy, challenges, nature, roles of academic library in Nigeria. *Library and Information Science Materials*.
- Pagliari, C. M., & Ansell, E. (2000). Primary-level Deaf Education Teachers' Pedagogical Content Knowledge related to Arithmetic Story Problems. In *Poster presented at the annual meeting of the American Educational Research Association, New Orleans, LA*.
- Pagliari, C. M., & Ansell, E. (2002). Story Problems in the Deaf Education Classroom: Frequency and Mode of Presentation. *Journal of Deaf Studies and Deaf Education*, 7(2), 107-119. <https://academic.oup.com/jdsde/article/7/2/107/381469?login=true>
- Popoola, S. O., & Haliso, Y. (2009). Use of Library Information Resources and Services as Predictor
-

of the Teaching Effectiveness of Social Scientists in Nigerian Universities. *African Journal of Library, Archives & Information Science*, 19(1). 65-77.

<http://eds.b.ebscohost.com/eds/detail/detail?vid=0&sid=0662ea60-3cd2-432f-8ba5-525fae1d6a1e%40sessionmgr103&bdata=Jmxhbmc9a28mc2l0ZT11ZHMtbGl2ZQ%3d%3d#AN=39342345&db=asn>

Seth, M. K., & Parida, B. (2006). Information Needs and Use Pattern of Disadvantaged Communities: A Case study. *Library Philosophy and Practice*, 9(1), 1-8.

<https://core.ac.uk/download/pdf/188044746.pdf>

Steele, M. M. (2005). Teaching Students with Learning Disabilities: Constructivism or Behaviorism?. *Current Issues in Education*, 8.

<http://cie.asu.edu/ojs/index.php/cieatasu/article/download/1607/650>

Tariq, H., & Zia, M. W. (2014). Use of Electronic Information Resources by the Students of Faculty of Science, University of Karachi. *International Journal of Digital Library Services*, 4(3), 80-91. <http://www.ijodls.in/uploads/3/6/0/3/3603729/8434.pdf>

[About the authors]

Isibhakhome Eleaena Asuata is a graduate. She holds a bachelors degree in Library and Information Science from the Department of Library and Information Science, Faculty of Education, University of Port Harcourt.

Helen Uzoezi Emasealu studied at the University of Ibadan, Nigeria, where she obtained the following degrees: Bachelor of Arts (B.A. Hons.) Russian Language in 1991; Masters in Library Science (MLS) in 1998, and Ph.D. in Library Science in 2014. She was appointed as Librarian II in 2006 at the University of Port Harcourt. She has worked in different units in the library. Dr. Helen Emasealu is currently the Acting Head, Department of Library and Information Science, Faculty of Education, University of Port Harcourt. She is an advocate of the provision, availability, access, and utilization of information resources by researchers in general and people with special need in particular. Dr. Helen Emasealu is currently a Principal Librarian. She has attended several international and local conferences, workshops and seminars.
