Information Resources and Services to Physically Challenge in Plateau State Special Educational Institutions

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Abstract

The study investigated information resources and services provision to physically challenged in Plateau State Special Educational Institutions. Survey research method was adopted for the study and the population of the study consists of staff and students of the special educational institutions in Plateau State. The three selected institutions were the Plateau State School of the Deaf, Gindiri School for the Blind and University of Jos Special Education Department. Data was collected using questionnaire, interview and observation, frequency tables. The study found among others that computer and Braille are the most available information resources for the physically challenged in Plateau State. It was also revealed that large print books, audio descriptive videos and talking books are the most accessible information resources by the physically challenged in Plateau State. The study concluded that information resources and services provided for the physically challenged are not suitable. Therefore, adequate and relevant information resources should be provided in order to meet the needs of the physically challenged in Plateau State. The need for collaboration between parent institutions and Non Governmental Organization (NGOs) to enhance effective provision and use of information resources and services by the physically challenged in Plateau State is highly recommended.

Introduction

There are persons with physical challenges in all parts of the world and at all levels in every society. The physical challenge has a substantial long-term adverse effect on one's ability to carry out normal day to day activities. Both the causes and the consequences of physical disability throughout the world. According to The United Nations (1993), those variations are the result of different socio-economic circumstances and of the different provisions that States make for the wellbeing of their citizens. According to Sandhu et al. (2001), environmental, technical, and attitudinal barriers and consequent social exclusion reduce the opportunities for physically challenged contribute productively to the household and the community and further increase the risk of falling into poverty. However, through education and rehabilitation, they cease to be a liability to the society and contribute to the national development. In Nigeria according to Adamu (2009), there are more than 19 million physically challenged people. Between 75 and 90 per cent of them live below poverty line due to years of neglect by the society, especially their lack of access to paid employment. Many misconceptions of the physically challenged is express by Alamu (1991), when he stated that society often regards physically Nigerian challenged persons as unwell, unable to work, read and in need of help, people that deserve pity.

The Physically Challenged

All human beings are born equal and all have rights to education, equal opportunities and participation in society. But in the real world, there are some groups of people that do not have these rights due to their physical, mental, and social conditions. These people include the physically challenged. There is no single definition appropriate to all

people with disabilities. Definitions are only useful in that they indicate how different disabilities affect the use of facilities such as libraries. It is, however, important to understand the distinction between the terms impairment, disability and handicap. As defined by the World Health Organisation (1996) impairment refers to an abnormality of body appearance, organ structure. and system functioning. Disability is the consequence of an impairment in functional performance and activity, handicap is the consequence which is reflected in interaction with, and adaptation surroundings. According to Bopp and Smith(2001), the physically disabled population includes persons who are blind and visually impaired, individuals who are deaf and hearing-impaired, and persons with mobility impairment.

According to World Health Organizations (1980) disability means any restriction or lack of ability to perform any activity in the manner within the range considered normal for a normal being. Physically handicapped children are defined as those whose non-sensory physical limitation or health problems interfere with the school attendance or learning to such an extent that special services, training equipment, materials or facilities are required. The term currently in use to denote such children is physically challenged. Physically challenged children are faced with those disabilities, which relate primarily to disorders of the skeleton, joints and muscles including club foots, poliomyelitis, amputation (a missing limb) and fractures or burns that cause contractures.

The nature and characteristics of physically challenged

There is a diverse range of disabilities in this category including such conditions as cerebral

palsy, spina bifida, amputations or limb absences, and muscular dystrophy. According to Connor et al. (1988), the physiological and functional problems of the physically challenge population are complex and diverse, and their handicaps may be temporary, intermittent, chronic, progressive, or terminal. Sandhu et al. (2001) describes the characteristics of the physically challenged to include:

- i. *Mobility*. People who have reduced function of legs and feet depend on a wheelchair or other aid for mobility. In addition to people who are born with a disability, this group includes a very large number of people whose condition is caused by age or accidents including illnesses caused by polio.
- ii. **Vision**. Blindness implies a total or nearly total loss of the ability to perceive form. Low vision implies an ability to use some aspects of visual perception, but with a greater dependency on information received from other sources.
- iii. *Hearing*. Hearing impairment can affect the whole range or only a part of the auditory spectrum. The term "deaf" is used to describe people with profound hearing loss, whereas "hard-of- hearing" is used for those with mild or severe hearing loss.
- iv. Speech and language. Speech impairment may influence speech in a general way or only certain aspects of it, such as fluency or voice volume. Language impairment may be associated with an intellectual impairment.

Special Education in Nigeria

Students receiving special education fall into many categories. How to provide them with the most suitable education measures in order to give them the opportunity to fully develop their potential has become the chief task of special education. Nigerian government has put into place policies program to ensure that educational opportunities are extended to the physically challenged in the society. To achieve this there are various organizations involved. Some governmental sectors, some are private, and some are non-profit organizations. The governmental organizations include Federal and State Ministry of Education in which the Division of Special Education is responsible for special needs students. In developed countries like the United States Special education programs were made mandatory in 1975 when the United States Congress passed the Education for All Handicapped Children Act (EHA) in response to discriminatory treatment by public educational agencies against students with disabilities. The EHA was later modified to strengthen protections to people with disabilities and renamed the Individuals with Disabilities Education Act (IDEA).

In Nigeria special education policies are embedded into the overall educational policies set by the Federal Ministry of Education. A department of the Ministry was created to provide divergent contexts for advancing special education in Nigeria. In addition according to Obiakor (1998) the Federal Ministry of Education establish a committee to conduct special education activities in collaboration with the Ministries of Health, Local Welfare and Labour. Teacher training colleges were required to provide general and basic courses for all prospective teachers who were willing to teach in special educational institutions.

According to a publication by the Federal Ministry of Education (1981), Nigerian institutions of higher learning have been instrumental in training special educators, and frantic efforts have been made to train some of the needed specialists abroad. However, there continues to be an insufficient number of special educators to meet the *special* needs of students (Ihunnah, 1984; Obiakor, 1991; Obiakor, Maltby and Ihunnah, 1990; Ogbue, 1975; Oluigbo, 1986). It is becoming increasingly apparent that special students in Nigeria are not acquiring the knowledge, skills and competencies they will need to be contributing members of society. Sadly, the millions of naira invested in education have not yielded the desired dividends

The special education unit of the Federal Ministry of Education has directed its attention to the provision of curriculum for persons with cognitive disabilities. The stated aim of the curriculum is to guide persons with mental disabilities in adjusting to life. Like every educational institution the library plays an important role in the attainment of the goals/aim of the curriculum. The institutional library makes information resources and services accessible and available to students, teachers and administrators. In general sense, in an educational institution the central function of the library will be to support the curriculum of the school. Access to information to support teaching and learning in special educational institution is hampered by several challenges depending on the severity of the disability, their institution, the society at large, and failure to address their needs.

In Nigeria today blind and visually impaired students are found at all educational institutions in primary and secondary schools, polytechnics, universities, and vocational training centers. They, like their sighted counterparts, are in search of

academic laurels. Unfortunately, the production and distribution of information resources in alternative formats to meet the needs of these blind and visually impaired students is haphazard.

Library information resources and services for the physically challenged

Libraries are often in the unique position of being a community's sole source of impartial information. They have a responsibility to collect and provide information to their physically challenged clientele also. Wright (1979) posits that all library and information services available to other persons should be made available to the physically challenged individual in a manner which does not stress the individual. Information should be in a format that the physically challenged can use and one readily acceptable to such individuals. He suggests for the construction of ramp for the handicapped to have access into a room or building, or an isolated ramp attached to one side of it with special sign to indicate where the physically challenged should go through. Library services for the physically challenged must enable them have access to equipment and information resources that best suits a particular physically challenged.

According to Ibironke (2007), the Federal Government of Nigeria's involvement in educating the physically challenged tended more toward establishing educational institutions to train special teachers rather than providing information material or library services for the physically challenged. The establishment of the Federal College of Education (Special) (1977) and the Department of Special Education in the Universities of Ibadan (1974), Jos (1977), Bayero, Calabar, and Uyo, without establishing libraries and providing information resources for the physically challenged, no quality education can be provided for the physically challenged. In agreement with these assertions, people with various disabilities who are undergoing training in skills acquisition at the Competent Handicapped Industry Vocational Training Centre (CHIVTC), Lagos, have faulted the nation's education system for not adequately catering for the interest of disabled people (Adenipekun, 2006).

Wright (1979) suggests that libraries should begin to think on how they can modify their programmes and services to serve the physically challenged, such library services, according to Zaki (1990) will help to re-orientate the thinking of the disabled and make them live better lives. This can help them overcome the educational cultural and economic deficiencies in their lives.

As members of the society, the physically challenged should have the right to education, and library and information services. According to Kerscher (2006), the libraries in special educational institutions represent the physically challenged they serve and are also centers of expertise as it relates to information services for the physically challenged. A major role of libraries serving the physically challenged is the development of the standards for fully accessible, highly functional information systems that is effective in meeting their information and educational needs.

Different types of disability require different types of specialized services such as library and information services. Pulman (2004) categorized services to be provided by libraries for the physically challenged in general into four main areas:

- a. Physical access to buildings, service counters, workstations, reading rooms, and shelves where possible. This can include providing:
 - ii. entrances with suitable, clear openings or automatic doors (preferred door width 900mm):
- iii. ramps outside and within the building; in case of stairs: no open treads, handrails on both sides; ideally: elevators;
- iv. barrier-free hallways (no floor mats or furniture);
- v. colour contrast in carpets and on walls (also to function as warnings near stairs and doorways);
- vi. effective lighting;
- vii. accessible tables, computer stations and public service desks (table height and width, turning spaces, ergonomic chairs, lighting);
- viii. accessible public areas such as toilets and public telephone;
 - ix. shelving: should ideally fall within 750-2000mm from floor level;
 - x. signage: plain typeface (sans serif such as Helvetica, Univers or Arial) on signs and websites:
- b. Intellectual access to the content of information carriers, including the availability of alternative format materials, adapted workstations and special software. Access can be facilitated on a wide variety of levels, requiring both technical and human solutions. Alternative format materials including Braille, large print audio-cassettes and digital files are part of the solution
- c. Training for library staff members in helping physically disabled. All staff, regardless of where in the library they work, should be sensitive to and have a basic knowledge of different forms of impairments. Also the ways

- in which different conditions affect the ability to make use of services and the built/physical environment as designed for the general population.
- d. Virtual access to library services for those not able to visit the actual building. People who are prevented from getting to a library because of disability should not be denied access to any of the library's services. The services offered should provide the same quality of access to information about stock as the services offered in the actual library building, and the same opportunities for reserving or requesting books.

Similarly, Maina (2009), Roy and Bandyopadhyay (2009) and the Library Association of Australia (1998) guidelines on library standards for people with disabilities, stated that librarians will need to take into consideration the following points for effective library and information service to the physically challenged:

- i. Library services for the blind must enable them to have access to equipments such as Braille printers, Braille embosser and tape duplicators, Kuzweil reader (a text- to speech reading machine with synthesized speech output), closed circuit TVs for magnifying regular text, PCs with CD ROMS, Power Macs with CD ROMS, large print type writers, special track tape recorders, computers that are having adaptable equipments such as voice eyes.
- ii. The library facility must be barrier free to wheel chairs and other mobility devices and ensuring that all devices including door handles are designed for easy manipulation.
- iii. Provide information resources for the deaf and hearing impairment which include collection of books, caption videos, assistive listening device, specialized alerting devices, technological communication aids.
- iv. Reader service section to increase the accessibility of their library. As all documents are not available in their technological form like Braille or talking book and some documents are needed by these users. According to Roy and Bandyopadhyay (2009) reader service is the only way to provide 'right information to the right user at the right moment'.
- v. Employ librarians who are qualified in sign language and use of Braille technology.
- vi. Sign interpreters for effective communication with the deaf

Statement of the problem

The researcher has observed that that physically challenged in Nigeria who do not access to rehabilitation or any form of educational training end up being fully dependent on their extended families or engaged in begging as the only source of livelihood. It can be argued that this is part of the reasons why the government of Nigeria and some states like Plateau established special institution to cater for their educational needs. An educated physically challenge individual will have the opportunities to contribute productively to the household, community and nation at large.

The library as one of the hubs for educational training has been established by special educational institutions to support the training of the physically challenged. Williamson et al. (2007) stated that libraries have always had problems in providing information for people with disabilities. This is because unlike the other types of libraries, libraries services for the physically challenged must enable them have access to equipment such as Braille, Braille embosser, tapes, hearing aids, Kuzweil reader, talking books, and services such as sign language. In providing information resources and services for the physically challenged library staff must have an insight into the problems faced by these user groups. This study will investigate the availability of appropriate information resources, equipment and information services for the physically challenged in the selected special education.

Research Questions

This study will address the problems identified above by answering the following research questions.

- 1. What type of information resources and services provided by the selected special educational institution for the physically challenged?
- 2. How accessible are the information resources and service provided by the selected special educational institution to the physically challenged?
- 3. How suitable and relevant are the information resources and service for the physically challenged in the selected special educational institutions?

Research Methodology

The methodology adopted for this research is survey method. Interview and questionnaire methods of survey research were adopted for this study. The population of the study is made up of all management staff, heads of library, all the professional and paraprofessional staff working the library that supports the special education

institution in Plateau state. In addition all the students attending these special educational institutions formed part of the population.

Due to the small number of library staff working in the libraries in the physically challenged the researcher decided that the entire library staff will be selected for the study while a random sampling of 30% of 856 students was sampled for the study.

Discussion and Analysis

The data collected for this study was discussed using descriptive analysis and presented below:

Type of Library Resources and Information Services provided by the Libraries Some of the questions the study intends to provide solutions with respect to the information resources and services to the physically challenged in Plateau State special educational institutions. Identifying the types of library resources and information services provided by the libraries in the special educational Institutions in Plateau State will provide an assessment of all the available information services in the libraries of the three institutions. Where a common resource and services were identified a comparative analysis is used. The opinion of the respondents on the availability of the information services is presented in frequencies and percentages in Table 1.

Table 1: Library Information Resources Available in the Special Educational Institutions

Information resources available	School of the	ne Blind Gindri	Plateau Sch Deaf	nool of the	University of Jos Special Education			
	Provided	Not provided	Provided	Not provided	Provided	Not provided		
Computers		X		X		X		
Book scanners with software	X	V	X	√		X		
General scanners with software	X	V	X	√	X	V		
CCTV magnifying aid unit	X	V	X	V	X	V		
Kuzweil reader (a text-to speed reading machine with synthesized speech out put)		V	X	V	X	V		
Braille		X	X	√		X		
Sub-titled DVD and videos (for the deaf)	X	V	V	X	\	X		
Large print books	X	V	X		X			
Talking books		X	X	√	X			
Audio descriptive videos	$ \sqrt{} $	X	X	√	X			

Table 1 revealed that computers were information resources available in all the institutions. None of the special educational institutions in Plateau state provide book scanners with software, general scanners with software, CCTV magnifying aid unit, Kuzweil reader and large print books.

The provision of brail for the School of the Blind Gindri and University of Jos Special Education as indicated in the table clearly indicated by the staff of the library might be because the have blinds students as their client. Sub-titled DVD and videos were available at both the Plateau School of the Deaf and the University of Jos Special Education. The availability of most of the information resources that can be used by the blind and the deaf in University of Jos Special Education

Department can be attributed to the fact that they cater for the needs of almost all the physically challenged. This patter of distribution of the information resources is reflected in the provision of large print books, talking books and audio descriptive videos in the table.

The library staff response indicated that University of Jos Special Education provided reader services, sign language service, training on the use of Braille, computer service, adjustable furniture and library literacy services.

From table 2 it can be seen that in the case of adjustable furniture, reader services and library literacy services was provided by the school of the blind Gindri and University of Jos Special Education.

Accessibility of the information resources and service provided by libraries.

The opinion of the respondents on the access they have to the libraries information resources and services in the institutions are categorized into two options of agreement or disagreement for the respective items. The available information resources and services in the institutions are listed in Table 3.

Table 2: Library Information Services Available in the Special Educational Institutions

Information resources and services	School of th	ne Blind Gindri	Plateau Sc Deaf	hool of the	University Education	of Jos Special		
	Provided	Not provided	Provided	Not provided	Provided	Not provided		
Reader services		X	X	√	V	X		
Sign language	X	V		X		X		
Use of brail		X	X	$ \sqrt{} $		X		
Computer services		X	X		V	X		
Adjustable furniture		X	X	$ \sqrt{} $		X		
Library literacy skill	V	X	X	√		X		

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Table 3: Opinion of the respondents on the access to information resources and service in the institutions

Information resources and service in the institutions	School of the Blind Gindri			Plateau School of the Deaf				University of Jos Special Education				
	Disagree		Agree		Disagree		Agree		Disagree		Agree	
	F	%	F	%	F	%	F	%	F	%	F	%
Accessibility of computers	25	89.2	3	10.7	39	78	11	22	17	60.7	11	39.3
Accessibility of book scanners and its software's	25	89.2	3	10.7	34	68	16	32	15	53.6	13	46.4
Accessibility of general scanners with software	25	89.2	3	10.7	42	84	8	16	18	64.3	10	35.7
Accessibility of CCTV magnifying aid unit	25	89.2	3	10.7	40	80	10	20	15	53.6	13	46.5
Accessibility of kuzweil reader(a text-to speed reading machine with synthesized speech output	28	100	0	0	37	72	13	28	20	71.4	8	28.5
Accessibility of brail	3	10.7	25	89.3	50	100	0	0	28	100	0	0
Accessibility of sub-titled DVD and videos(for the deaf)	28	100	0	0	40	80	10	20	28	100	0	0
Accessibility of large print books	3	10.7	25	89.3	32	64	18	36	11	39.3	17	60.7
Accessibility of talking books	14	50.0	14	50.0	34	68	16	32	10	35.7	18	64.2
Accessibility of audio descriptive videos	16	57.2	12	42.8	40	80	10	20	9	32.2	19	67.8
Accessibility of readers services	8	28.6	20	71.5	43	86	7	14	15	53.5	13	46.4
Accessibility of sign language	28	100	0	0	47	94	3	6	14	50	14	50
Accessibility on the use of brail	3	10.7	25	89.3	42	84	8	16	24	85.7	4	14.2
Accessibility of computer services	26	92.9	2	7.1	50	100	0	0	28	100	0	0
Accessibility of adjustable furniture	14	50.0	14	50	50	100	0	0	28	100	0	0
Accessibility of library literacy skill	14	50.0	14	50	48	96	2	4	25	89.2	3	10.7

The access to some of the information resources and services are directly associated with the types of physical disability of the respondents as indicated in the table 3. In item 1 for example, the respondents from the School of the Blind Gindri did not have access to computers even where it was available. But for respondents in the other two institutions, access to computer was obtainable even if it was relatively low as indicated in the table. The case for computers was the same for book scanners and its software, general scanners with software and CCTV magnifying aid unit. Other information resources that have this pattern of accessibility in the table were Accessibility of Kuzweil reader (a text-to speed reading machine with synthesized speech output, brail, sub-titled DVD and videos (for the deaf), sign language, use of brail, computer services and adjustable furniture. The access to these items could be associated with the

type of disabilities of the students in the respective schools.

But some of the information resources and services of the libraries in the institutions were common to the respondents. Such common resources included the print books, audio descriptive videos, and library literacy skills. The access to these information resources and services varies according to the type of schools as indicated in the table.

Suitability of Information Resources and Services Provided in the Institutions.

This is aimed at determining the suitability or otherwise of the information resources and services provided to the physically challenged in the selected institutions. Table 4 below shows the response from the respondents.

Table 4: Suitability of available information resources and services in the institutions

	Types of Institutions											
Information resources and services	School of the blind Gindiri				Plateau School of the Deaf				University of Jos Special Education			
	Disagree		Agree		Disagree		Agree		Disagree		Agree	
	F	%	F	%	F	%	F	%	F	%	F	%
Computers	25	89.2	3	10.7	50	100	0	0	10	35.7	28	64.3
Book scanners and its software's	22	78.6	6	21.4	39	82.0	11	18.0	11	39.2	17	60.7
General scanners with software	25	89.3	3	10.7	38	76.0	12	24.0	18	64.2	10	35.7
CCTV magnifying aid unit	25	89.3	3	10.7	42	84.0	8	16.0	15	53.5	13	46.4
Kuzweil reader(a text-to speed reading machine with												
synthesized speech output	25	89.2	3	10.7	39	78.0	11	22.0	17	60.6	11	39.3
Brail	8	28.5	20	71.4	40	80.0	10	20.0	13	46.4	15	53.6
Sub-titled DVD and videos(for the deaf)	20	71.5	8	28.6	41	82.0	9	18.0	16	57.1	12	42.9
large print books	8	28.6	20	71.4	38	76.0	12	24.0	16	57.2	12	42.9
Talking books	13	46.4	15	53.5	39	78.0	11	22.0	18	64.3	10	35.7
Audio descriptive videos	10	35.7	18	64.3	37	74.0	13	26.0	18	64.2	10	35.7
Readers services	5	17.8	23	82.1	41	82.0	9	18.0	5	17.9	23	82.1
Sign language	20	71.3	8	28.6	33	66.0	17	34.0	8	28.5	20	71.5
Use of brail	10	35.7	18	64.3	32	64.0	18	36.0	10	35.7	18	64.3
Computer services	25	89.3	3	10.7	39	78.0	11	22.0	10	35.7	18	64.3
Adjustable furniture	19	67.9	9	32.1	42	84.0	8	16.0	17	60.6	11	39.2
Accessibility of library literacy skill	16	57.1	12	42.9	37	74.0	13	26.0	14	50.0	14	50.0

The suitability of the information resources as indicated in the table 4 reflected the pattern of usage of such information and services. This is clearly indicated in the opinion of the respondents in most of the resources like computers scanners DVD and other such resources and services associated with certain disabilities in the table. Where common application of the resources and services were observed, the associated differences attributable to the disabilities could still be observed to reflect in the expressed opinion of the respondents in the respective institutions. It could therefore be said that the available information resources and services were suitable to the respondents to the extent of their usage. This is seen in the suitability of Brailel large print books reader services and computer services in the table. This is in agreement with Kerscher (2006) that library patrons must be served using the technology that is appropriate for each person

The Table 4 also revealed that while respondents from the Plateau School of the Deaf did not agree with the suitability of information resources and services in their library, those in Gindiri and University of Jos agreed with the suitability of the information resources and services with a response score of 50% - 72%. This implies that information resources and services in University of Jos and Plateau School of the Deaf are tailored to meet the need and aspirations of the users.

Summary of findings

In the light of the above analyses and discussions, it was discovered that:

- Computer was the most available information resources in the institutions studied. None of the special educational institutions in Plateau State provided book scanners with software, general scanners with software, CCTV magnifying aid unit, Kuzweil reader and large print books.
- 2. The information resources and services commonly accessible to the physically challenged are print books, audio descriptive videos, and library literacy skills.
- 3. The most prevalent information services provided are readers services, use of Braille computer service, adjustable furniture and library literacy skills
- 4. The most accessible information resources are the large print books, audio descriptive video, and talking books

Conclusion and Recommendations

This study investigated the information resources and service for the physically challenged in Plateau State Special Education institutions. From the analysis of the data collected from the respondents, it was concluded that the information resources and services available for the physically challenged in the special education were inadequate for any significant impact in teaching and learning. On the basis of the findings of this study, the researcher wishes to make the following recommendations:

- 1. The special educational institutions in Plateau State should provide book scanners with software, general scanners, CCTV magnifying aid unit, Kuzweil reader and large print books.
- 2. That fund should be provided to meet current information resources and services.
- 3. There should be adequate provision of the required information resources and services of the libraries to enable maximum satisfaction of the special students in the institutions through the intervention of NGOs and government.
- 4. That personalized information services should be provided to the physically challenged in Special Education institutions in Plateau State.
- 5. Information resources like Kuzwel reader, subtitled DVDs and large prints books should be made available for the physically challenged in Special Education institutions in Plateau State.
- 6. More ICTs should be introduced to the libraries for the physically challenged in Plateau State.

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