LIBRARY USE BY STUDENTS OF AKROPONG SCHOOL FOR THE BLIND, EASTERN REGION, GHANA

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Abstract

The aim of this study was to investigate the provision of library services to visually - challenged students at Akropong School for the Blind in the Eastern Region of Ghana. A mixed methodology was used as the research design. The study population was sixty-seven. All the JHS 1 to 3 students of the school were issued with copies of a questionnaire in braille format while two Library staff and the Headmaster of the School were interviewed. Quantitative data was analyzed using the Statistical Package of Social Sciences (SPSS) while qualitative data was analyzed thematically. The study reveals the lack of policy in providing information services to visually - challenged students, lack of assistive technology devices, lack of braille textbooks, inadequate library resources and the library being too small to accommodate even two classes. The study recommended that assistive technology devices such as voice recognition software, screen magnifier and computer with JAWS are needed for visually challenged students. It is further recommended that, the School authorities should appeal to the Parent/Teacher Association, the District Assembly and other philanthropic organizations to expand the Library to make it more accommodating for the student population. The School was found to be doing a good job of providing a welcoming library environment for the students. It still has a lot of work to accomplish to create an enabling environment for the visually - challenged students. The Library should also enhance services delivery tailored for visually challenged students.

Keywords*: Visually - Challenged Students, Library Resources, Library Services, Assistive Technology Devices, Special Needs*

Introduction

Access to education and information must be a fundamental right for individuals in any society. Libraries are essential in any educational setup because they provide current information which promotes the learning process. Libraries also circulate information and knowledge and provide users with up to date information, thereby facilitating their efforts to improve their understanding of life and the world at large. It is therefore important that they are accessible to all individuals, be it in a school, college, university or in the community (Majinge & Stilwell, 2013).

A study by Kharamin & Siamian (2011) reported that libraries must not discriminate against people on the basis of disability and should make sure that every user has a fair access to library materials. It is important that the library provides services and resources that will enable the visually - challenged students have access to its collection in the appropriate format that will suit them and meet their information needs. The library service delivery to the visually - challenged students in any country either in the basic schools, secondary schools or tertiary institutions is very important to every society. As information is a fundamental right of people including the visually - challenged, libraries perform an important part in the provision of good information materials in appropriate formats and services

especially when they are servicing the visually - challenged students who have special information needs.

Visually-challenged students, for instance, encounter challenges accessing libraries, apart from mobility challenges; they also encounter challenges in accessing the library resources. For instance, only 5% of the world's published output in English is made accessible in alternate formats for people who cannot use printed materials (Abdelrahman, 2016). This data indicates that reading materials available to visually - challenged people are insignificant. In line with this, Adetoro (2011) in his study indicated that information materials become useful to people with visual impairments when they are transcribed into alternative formats. From time immemorial, a large part of information (printed work) has therefore remained out of reach of pupils/students with special needs especially visually - challenged students in academic institutions.

Libraries are all about availability and access to information and for the visually - challenged their information needs should be available in alternative formats, such as electronic formats for students who have difficulty accessing print but use assistive technology devices.

Research in both developed and developing countries has indicated that some of the challenges facing people living with disabilities are lack of proper access to library buildings, inadequate use of information resources, and lack of specific services tailored to suit people living with disabilities (Ekwelem, 2013). The Akropong School for the Blind located at Akropong, Eastern Region of Ghana has been set up to provide information and library services to support both teaching and learning activities. The intention to provide a special school for the visually - challenged is good, but it seems that architects of this system failed to recognize the fact that visually - challenged students require special aids (for example, in Braille format, in large print and closed- circuit television CCTV) to facilitate the use of library and information services.

The information needs of these categories of students appear very limited. For students with special visual needs to participate fully and actively in academic programmes, library and information services must be provided in suitable formats and with adequate facilities.

Since the Akropong School for the Blind Library was established in 1945, no study has been conducted to assess its use by the students. Hence, this study sought to investigate the provision of library services to visually - challenged students at Akropong School for the Blind in the Eastern Region of Ghana. This study therefore aimed at examining library use in this Special School and how it facilitates learning experiences of the visually - challenged students.

Objectives of the Study
The study was guided by the following objectives:
1. To investigate and determine the awareness of the School Library by visually challenged - students.
2. To assess the information services available for the visually - challenged students in the Akropong School for the Blind.
3. To identify assistive technology devices in the School Library.
4. To examine the policy for the blind relating to the provision of library services.
5. To identify challenges facing visually - challenged students in using the School Library

Brief History of Akropong School for the Blind
In 1932, a Scottish Missionary tutor called P. D. Harker took care of a visually - challenged boy at Akropong town. Harker taught the boy who was called Bernard good grooming and handicrafts such as weaving of baskets, stools and doormats. Harker also taught Bernard communication skills. In 1936, Bernard's paternal cousin, Isaac Ofori Addo also became blind through measles and was taken to Harker for training. Harker offered Addo a similar tutorial he gave to Bernard. Harker taught the two blind boys numeracy and literacy skills.

Similarly, Mrs Benxies, in 1941, took into her custody at Akropong, a six - year old visually - challenged girl called Hope Akosua Asor. Benxies also taught Asor numeracy and literacy skills in Braille. When Harker became the Supervisor of Presbyterian Schools of the Gold Coast (now Ghana) in1942, he reassigned the two visually- challenged boys to Mrs Benxies, who started an experimental school on her corridor to educate and train this small group of children. The total enrolment of the school was four consisting of a girl and three boys. The school started with four teachers comprising of two Ghanaians, Alexander Godfred Sakyiama Amoako and his wife Emily Amoako Sakyiama, and two expatriates, Mrs Margaret Benxies and Lilian Moore. Later on, Mrs. Greenwood, who taught in the blind school in Lancashire, England, came to Ghana to join her husband at the Colonial Department of Agriculture. She assisted the teachers at the newly established experimental school at Akropong on a voluntary basis. However, she did everything to make sure that the Colonial Government fully embraced the education and training of blind children into the educational system.

Mrs. Greenwood appealed to the then government for the consideration of a scheme for the education, training and care for the blind and other handicapped children. Consequently, in 1945, the School for the Blind was opened at Akropong Akuapem in the Eastern Region of Ghana with four pupils.

The School is currently a boarding institution from basic one to J H S three and it has vocational skills and a rehabilitation centre for adults who become blind due to accidents or diseases. The main teaching curriculum at the primary one is to learn how to read Braille and also acquire daily living skills. The basis for the establishment of the School for the Blind was to provide education and information services that will enable the students integrate into the society and live normal lives to contribute to national development through the collaborative effort of staff, library and information service delivery and quality learning environment.

The School has a resource centre which provides services for the students in terms of transcribing of materials, mobility orientation, brailling, recording etc.

The vision of the School is to graduate students who are independent, disciplined, talented and academically sound to cope with the tasks and challenges of life.

Brief History of the School Library
The Library of the Akropong School for the Blind was started by the first Headmaster of the School in 1945. He used his personal collection of few Braille materials and story books to form the nucleus of the Library. When he retired, the Library became the property of the School. The Library was moved from the Headmaster's Hall to the Administration Block. Later on, Cathy Knowles who established the Children's Library at Osu, Kuku Hill, Accra constructed a new library block for the School. The new Library was opened on 30th September 2000.

The School Library has two staff. The Head in charge of the Library holds O' Level Certificate. The two staff have no training in librarianship. The School Library has a total stock of about three hundred books and are mainly story books. There were no Braille textbooks in the Library at the time of the study. The Library provides only reading and lending services to the students.

Literature Review
The literature review was done in line with the main research objectives and covers the following issues: awareness of school library, library service provision for visually - challenged students, assistive technology devices available in the library, policy guiding the services rendered for visually - challenged students and challenges facing these students in accessing the library resources. The reason for reviewing the existing literature for this study was to find the similarities in the existing studies and to search for the available knowledge in the study area and to have a clear picture linking the problem and the body of the knowledge in the area of study.

A study conducted by Appiah (2017) on information seeking- behaviour of visually- challenged students in two universities in Ghana revealed that only one of

the universities provided special services to the visually- challenged students. Her study also indicated that the books in the two university libraries were all in print format; although the books were available they were not accessible to the visually - challenged students.

Appiah (2017) cited Alemna & Dodoo (2003) who in their study on library services delivery for visually - challenged people in Ghana, noted that library service delivery for visually- challenged students was significantly lacking in Ghana. In line with this, their study revealed that in Ghana, library and information service delivery were designed without considering the needs of visually- challenged people. The library service delivery in Ghana gives the impression that visually - challenged people did not exist.

A study done by Bodaghi & Zainab (2013) on library facilities, services and collections by visually impaired students at the University of Malay indicated that students felt at home, had a sense of belonging, were safe, comfortable and accepted in the carrels. They also indicated that the spaces were utilized for interaction with peers, volunteer readers and sighted students. Adetoro (2011) stated that there is a high request for the alternative formats used by visually- challenged people in Nigeria, but the level of use of information resources is restricted by availability.

Tungaraza's (2010) study on challenges facing students with disabilities at the University of Dar es Salaam revealed that most of the blind students graduated from that University without using the University Library because the Library materials were not accessible to them. His study also revealed that the visually - challenged students relied on their colleagues to read for them simply because the University Library collections were not accessible to them. Armstrong & Murray's (2010) study indicated that visually impaired students achieved grades similar to or higher than sighted students. They continued that a contributing factor was the availability of converted material in accessible and comprehensible format. They further stated that although, the students with visual impairments spent more time studying than the sighted students, their understanding of the concepts was more solid and their ability to apply theory to practice exceeded that of the sighted students.

Chang & Chang's (2010) study examined the information behaviour of twenty – three (23) visually impaired users of the National Taiwan Library. The findings indicated that their respondents encounter the following challenges when seeking information: individual disability, human relations problem(s), deficiency of information media and environmental limitation(s). They also stated that the respondents use the library to meet their daily life information needs.

A study conducted by Ndumbaro (2009) on library and information services provision for people with visual impairments in selected university and public libraries in Tanzania revealed that there was limited information and only a few study materials for these people. Seyama's (2009) study in Pietermaritzburg, South Africa was on the information - seeking behaviour of students with visual impairments. He stated that students must have alternative sources to manoeuver to access information to satisfy their general or specific needs.

Bangula (2005) carried out a study in Tanzania on the factors influencing the academic performance of students who were visually - challenged in the primary school. The study revealed that there was a shortage of text in Braille format. His study also revealed that the shortage of texts in Braille for students who were visually - challenged in primary schools denied them the opportunity to study to the maximum. He further reported that, apart from the shortage of material for students who were visually - challenged, the few materials available were worn out so the students could not effectively use them.

This study focused on the library services provided by visually-challenged students in Akropong School for the Blind and whether the materials in the Library were accessible to the students or not.

Methodology

The study investigated the library use by visually - challenged students at the Akropong School for the Blind. It employed a mixed method design that integrated both qualitative and quantitative data

collection. The study population consisted of the Junior High School (JHS) one to three students, the Headmaster and the two library staff of the School. All the students of Junior High School 1-3 were used for the study. The total population for the study was sixty - seven.

A questionnaire and interview guides were used as data collection instruments. The researcher administered the questionnaire in a Braille format to JHS one to three students and conducted interviews with the Headmaster and the two Library staff. All the sixty-four copies of questionnaire administered were returned, representing 100% response rate, while three interviews were conducted with the Headmaster and the two Library staff.

Data was collected between August and November 2017. Quantitative data collected from the research was analyzed using the SPSS while qualitative data was analyzed thematically.

Results and Discussion

Characteristics of Respondents

The characteristics of respondents were not part of the study objectives but are presented for the benefit of the reader to give some background information about the respondents involved in the study. Therefore, the study presents the characteristics of respondents who were involved in the study in terms of gender, age, causes of blindness and hall of residence.

Respondents were asked to indicate their gender and 46 (71.9%) were male while 18 (28.1%) were female. The results indicate that there were more males than females among the respondents. This tends to reinforce the tradition that gives preference to males over females in education (Appiah, 2017).

Regarding age distribution of the students, six (9.4%) fell within the age group of 10-14 years, 35 (54.7%) were within 15-19 years, 12 (18.8%) fell within 25-29 years. The results show that most of the respondents were within 15-19-year category and were mainly adolescents.

With regards to the source of visual conditions of the students, 20 (31.2%) of the respondents were partially

blind and 44 (68.8%) were totally blind. Thus, there were more students who were totally blind than those who were partially blind among the respondents.

Their causes of blindness were as follows: 24 (37.5%) students said that their visual condition was from birth, five (7.8%) said it was caused by an accident and 35 (54.7%) said that their visual condition was caused by some diseases. Disease was found to be one of the main causes of visual impairment among those respondents. All the respondents indicated they were resident in the school and enjoyed the boarding facilities.

Awareness of School Library

This main research objective was to determine whether the respondents were aware of the School Library. All the respondents indicated that they were aware and they got to know of the availability of the Library through orientation.

On the frequency of use, none of them uses the library daily, nine (14.1%) of the respondents use it occasionally, 53 (82.8%) use it once a week and two (3.1%) use it twice a week. Students also stated that, they have a library period on their time table but their constraint was that it normally clashed with other classes, and the Library too was not big enough to cater for two classes.

All the respondents indicated that they use the School Library, in spite of the poor library stock. The results showed that the Library was quite patronized and this was supported by both the Headmaster and the Head in-charge of the School Library.

In a further question, the respondents were asked to indicate whether the opening hours of the Library were adequate. The significance of this question was to find out whether the opening and closing hours affect the students' studies. The results showed that six (9.4%) of the respondents stated that the opening and closing hours were adequate while 58 (90.6%) stated that, it was inadequate. The results show that most of the students were not comfortable with the opening and closing hours. Majority (90.6%) of them requested that the Library should open from 9 am to 9pm. It was observed that when the School closes in

the afternoon (at 2:00 p.m.), students did not have any other place to study apart from the Library and the dormitory so most students prefer the extension of the current library hours.

Services Provided by the Library to Visually - Challenged Students

The second research objective sought to identify services provided by the Library to visually - challenged students. Data to address this objective were collected through the use of a questionnaire and semi - structured interview schedule. In the questionnaire, the researcher wanted to know if the library provides services to visually- challenged students. These services are designed to enhance information delivery to visually- challenged students. Respondents were asked to list the types of services provided by the Library in meeting their information needs. The results showed that 34 (53.1%) of the respondents used the Library for reading whilst 30 (46.9%) indicated borrowing as their preferred service. The respondents also indicated that most of the services were provided by the Resource Centre of the School. This study is in line with Mbugua, Odini & Chege's (2018) study which established that (86%) of the respondents stated reading as their preferred service and 14% access the Library for borrowing.

Regarding the level of user satisfaction of library services, the responses made by the visually - challenged students indicated that three (4.7%) were satisfied; 32 (50%) were dissatisfied; and 29(45.3%) were very dissatisfied. In addition, they said even the books which are in normal print are not provided in sufficient numbers to fulfil their needs. The results show that a great majority (95.3%) of the respondents were not satisfied with the library services.

The Headmaster of the School was also asked if the School Library provides services to visually-challenged students. He answered in the affirmative and further indicated that most of the services were provided by the Resource Centre, which administratively falls under the School. Materials and equipment suitable for visually- challenged students of the School are housed in the Resource Centre adjacent to the School Assembly Hall.

Assistance given by library staff helps users to make better use of library materials. Respondents were further asked whether they seek assistance from the Library staff. All the respondents answered in the affirmative. This result supports Abdelrahman's (2016) assertion that any institution of learning, be it tertiary or secondary, where the visually- challenged exist either as students or staff, the visually - challenged would require assistance to enable them undertake and achieve their educational aim.

Regarding the question of the usefulness of the Library staff to students, 37 (57.8 %) of the students said they were very useful, 23 (35.9 %) said they were useful, three (4.7%) said they were not useful and only one (1.6%) said they were not very useful. The results show that at least a large majority (93.7%) of the respondents find the Library staff useful. To them, the Library staff have no training in librarianship but they were very helpful and supportive. Majinge & Stilwell (2013) cited Alemna (1993) that positive attitudes are an essential ingredient in making the library available to people with visual impairments. In the same vein Seyama (2009) indicated that library staff should portray good behaviour towards library users especially the visually - challenged students.

Assistive Technology Devices in the Library
Assistive technology has become critical in the lives of visually challenged students. Assistive technology is used in a variety of ways. Printed materials are scanned into electronic format and then transformed into audio or tactile forms and electronic information are accessed using screen readers or magnifiers, voice synthesizers, tactile displays and mouse settings (Kleynhans & Fourie, 2014).

This section provides findings regarding the research objective on the provision of assistive technology devices purposely for visually - challenged students in accessing information. In this section, the researcher wanted to identify assistive technology devices available at Akropong School for the Blind Library.

Table 1: Assistive Technology Devices Available

Devices	Frequency	Percentage (%)
Closed Circuit Television (CCTV)	64	100
Tape Recorder	0	0
Screen Enlargement	0	0
Braille Printer	0	0
	64	**100**

Source: Field Survey, 2017.

The respondents were asked to indicate the assistive technology devices available in the Library and Table 1 shows the various responses from them. All the respondents indicated that the Library had only a closed – circuit television for low vision students which was even out of use. Tape recorders, screen enlargement and Braille printers are not available in the Library. These were confirmed by the Head in-charge of the School Library that the Library did not have any of these devices (Tape recorder, Screen enlargement and Braille Printer). The closed - circuit television is usually used by only partially blind students but was spoiled and had not been repaired due to lack of funds.

In a probing question that followed, the respondents were asked to indicate whether the assistive technology devices have any impact on their information needs. All the 64 respondents (100%) responded in the affirmative that assistive technology devices would facilitate access to their information needs. They also explained further that assistive technology would help them to access information easily and independently as well as converting information to a suitable format to ease their challenges. In view of this, the researcher asked the respondents to indicate the assistive technology they wanted the school administration to acquire for their Library in the scale of preference. The results indicated that the students preferred the following: computer with JAWS, voice recognition software, screen reader, screen magnifier, tape recorder and Braille translator.

In line with this, Babalola & Haliso (2011) suggest that libraries should embrace ICT to enhance access to information for visually-challenged students. In addition, a broad range of assistive technologies are now available to provide access to information in electronic databases and on the Internet, giving users with visual impairments opportunities equal to those available to the sighted. In the same vein Seyama (2009) confirmed that assistive technologies can assist visually - challenged students to access information easily without any difficulties. This result also supports Eligi & Mwantimwa's (2017) conclusion that Information Communication Technology (ICT) has the potential to provide the visually-challenged with an enabling environment to communicate and collect information anywhere in the world. Students will also have to be trained to use the computer to access the Internet.

Policy Guiding Services for Visually - Challenged Students

The question on library policy regarding services provided to visually- challenged students was also asked. The Headmaster of the School indicated that there was no such existing policy. This was confirmed by the Head in-charge of the School Library. As a response to why the administration had not thought of formulating such a policy, the Headmaster confirmed that the School has a Library Committee which caters for the needs of the students and the Library. When asked about those who

constituted the Library Committee, he made mention of the Head in-charge of the School Library, two English teachers, the Headmaster and the School Accountant. This was corroborated by the Head in-charge of the School Library.

Library and information service policies for visually-challenged differ from country to country and from institution to institution. A study conducted by Uzohue & Yaya (2016) reported that it is the library policy that will be used to clarify objectives, ensure effectiveness of operations as well as provision of equal services to all especially the visually-challenged. If policies are not in place, services will not be developed to meet the needs of the visually - challenged. After providing library and information services policies, the libraries need to examine and revise these policies when necessary to reflect the services being provided and the application of new technologies.

Bodaghi & Zainab (2012) in their study also indicated that there is a lack of policies, procedures or guidelines that cater for the needs of people with disabilities. For example, visually- challenged students require most of their written materials to be in Braille, talking book and large print.

The Headmaster and the Head in-charge of the School Library were interviewed to find out whether they received any kind of assistance from external agencies, specifically for the Library. They made mention of the Royal National Institute for the Blind (R.N.I.B.) in the UK, philanthropists and individuals. A probing question was asked whether the School had an annual budget allocated for Library services for the students but there was no response to that question.

Challenges Facing Visually - Challenged Students in Accessing Information

A study conducted by Eskay & Chima (2013) indicated that individuals with visual impairment face many challenges. The students have challenges of physically accessing the library building, lack facilities to access information without guidance, are unable to personally gain access to technologies that would help them to become independent in society,

shortage of books and other published materials in appropriate formats that are accessible to them. They also depend so much on the library staff in the use of library services, it takes them much time in reading library materials and in doing assignments. Above all, most of the library materials are not usually current, so there is lack of current informational materials in accessible format available to the students.

Besides, it was observed that the following challenges were experienced by the students of Akropong School for the Blind Library: lack of computers and other assistive technology devices for use by the visually- challenged students; the Library was being manned by untrained library staff to handle visually- challenged students in mobility within the library and in reading, lack of information materials in Braille, large print and other alternative formats, unsuitable library opening and closing hours, the library is not spacious enough to accommodate two classes, inadequate furniture and also there are no inscriptions on the shelves in Braille format to assist the students access the materials.

Conclusion

The issues involved in the library and information service delivery to the visually - challenged students in any institution need to be constantly examined in order to provide better library and information services to this small group of students.

The study established that the students were aware of the library and its resources. Though, the school has a library with information materials which are informative, educational and recreational, these materials are inadequate, outdated and are not in Braille format. All the respondents indicated that they use the School Library in spite of the poor library stock.

Concerning information services that are available in the Library for the visually - challenged students in meeting their information needs, the study established that only reading and lending services were provided by the Library to the visually - challenged students. Services such as transcribing,

brailing, mobility, orientation, conducting of training courses and recorder used to record written notes were not available in the Library.

With regards to the assistive technology devices available in the Library, only one Closed – circuit television which was out of use due to lack of funds was in the Library for low vision students. There was no tape recorder, screen enlargement and Braille printer in the Library.

In the case of library policy regarding services provided for visually- challenged students, the study established that there was no such existing policy. However, the Library Committee caters for the needs of the students and the Library on ad hoc basis.

Some of the challenges encountered by the students of Akropong School for the Blind Library were lack of computers and other assistive technology devices, lack of information materials in Braille format, inadequate furniture and lack of inscription on the shelves in Braille format.

The School was found to be doing a good job of providing a welcoming library environment for the students. It still has a lot of work to accomplish to create an enabling environment for the visually - challenged students.

The study established that the School Library lacked adequate funding. Inadequate funding has hindered the effective development of the Library. As a result, the Library collection is limited and cannot satisfy the information needs of the students.

Recommendations

On the basis of the findings of the study, the following recommendations are proffered to enhance library use in special schools:

- There should be provision of assistive technology devices and also basic ICT equipment should be installed for the use of the visually- challenged students.
- The collection in the Library should be in line with the curriculum. Also story books and other library materials that are current should be provided to attract and boost the morale of visually- challenged students to enhance their use.

- The District Director of Education of Akropong in collaboration with the Headmaster of
  Akropong School for the Blind should organize in-service training for the School Library
  staff. Alternatively, they can be attached to the Regional Public Library at Koforidua
  especially when the School is on holidays to undergo training to upgrade their skills.
- The School Management should appeal to the Parent/Teacher Association, the District Assembly and other philanthropic organizations to expand the Library to make it more spacious for the students.
- The Headmaster of the School should appeal to the Akropong District Director of Education to provide more furniture for the Library to ease the pressure on the few chairs currently available.
- The School Library should collaborate with the Resource Centre to provide services to visually- challenged students.
- A policy should be formulated by the Headmaster of the School and the Library Committee on the use of the Library by the visually- challenged students as a distinct group.

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