Information Seeking Behaviour of Visually Challenge Students in Public Universities: A Study of University of Ghana, Legon and University of Education, Winneba.

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Introduction

Information is needed in all human activities and this modern world has been termed as the period of information dispensation, with information-bearing materials in different formats (Ortlieb, 2014). Giving equal access to information is essential to the establishment of an information community which also applies to people with disabilities. Visually challenged students experience varying degrees of sight loss that may necessitate diversity in the level of their information needs and types of library resources required to cater for them. In managing their work load, this set of students often experience difficulties in accessing information to suit their needs in university libraries. Accessing information is a good resource required by students to excel in their educational pursuits (Katz, 2013).

Many a time, to search for relevant information of any format is more often challenging especially for the visually challenged students. At times, most of the information seekers give up in the course of seeking information due to various challenges they encounter (Halloway, 2001). Visually challenged students require specialized materials to help in accessing and seeking relevant and useful information (Hill, 2013). This means that extra time is required for information processing and transcription from information sources by visually challenged students (Case & Davidson, 2011). It may become difficult or impossible for visually challenged students to find materials in the library without specialized assistance. Understanding the information needs of different library users is essential in set-up of information systems. Meanwhile, if librarians are to serve the library patrons realistically, they need to bear in mind the changing needs and variations
in information gathering of these patrons to be able to provide services that would be most useful to their needs (Luo, 2011).

Blindness and visual impairment can be found in all countries in the world and Ghana is not exempted. Considerable changes in the education of people with impairments have led to an increase in their educational aspirations and thus, an increasing number of visually challenged people are in tertiary institutions. Since the publication of “The Standard Rules on the Equalization of Opportunities for Persons with Disabilities” (1994) by the United Nations General Assembly (1994) and “Public Library Manifesto” by UNESCO (1994), “the awareness that information is a key and fundamental right even of the disabled has developed extensively”. The International Federation of Library Associations (IFLA) Guidelines for Development of The Public Library Service (2001) assert that: “the development of collections should be based on the principle of access for all and include access to formats appropriate to specific patrons, for example braille and talking books for blind people.” In view of this, libraries and librarians ought to make information accessible to all information users to contribute to the provision of information to the general public. Hence, they have the duty to make information available to all kinds of patrons irrespective of their disability. Yet, some people are left out and among these unfortunate ones are the visually challenged (Friend, 2009).

Even though visually challenged students cannot read the print materials, they can access/use information in different formats. Due to individual differences, the ways people search for information differ in respect of physical characteristics, motivations and source preferences (Saumure & Given, 2004). With the help of Information Communication Technology (ICT) and adaptive technology, the chances for the visually challenged students to find and use information
have been greatly enhanced and their independence has also increased. More researches are therefore required to learn more on how students with visual impairment find and access information.

**Statement of the Problem**

Universities in Ghana enroll students from different backgrounds and with different medical conditions, into different programmes. Some of these are described as special needs students with varying forms of disabilities. In relation to information needs and seeking behaviour, these students encounter more challenges than the other groups of students on campus. Some of the challenges include inadequate sign language interpreters for hearing impaired students, unfriendly physical structures for physical handicapped and visually challenged students, lack of computers to read electronic texts and use Internet resources, lack of funds and financial assistance for their services. The most vulnerable of the groups are the visually challenged individuals.

Information seeking behaviour of visually challenged students in their everyday life has been studied by many information studies professionals including Sehic (2013), Davies (2007) and Saumure & Given (2004) respectively. Again many researchers have shown interest in studying the information needs of various library patrons. However, a literature search reveals very little study of the challenges faced by visually challenged students in seeking information in tertiary institutions (Islam & Ikeda, 2014).

Literature on user studies in Ghana is deficient in information seeking behaviour of the visually challenged. Ofosu- Tenkorang (2011) studied the information needs and information seeking behaviour of the legal profession in Ghana. Tackie & Adams (2007) also investigated the information seeking behaviour of engineers in Ghana. However, no such study has been done with
focus on information needs and information seeking behavior of visually challenged students in Ghanaian universities. With this gap in mind, the researchers aimed at finding out the information seeking behaviour of visually challenged students of the University of Ghana, Legon and University of Education, Winneba respectively.

**Objectives of the Study**

The specific objectives of the study were:

- To identify the information needs of visually challenged students in the University of Ghana, Legon and the University of Education, Winneba.
- To identify the sources of information for the visually challenged students in the University of Ghana, Legon and the University of Education, Winneba.
- To identify the reason(s) for seeking information by the visually challenged students in the University of Ghana, Legon and the University of Education, Winneba.

**Literature Review**

Information professionals have undertaken a number of researches with a view to understand why people seek information, how they seek it, and what influences their information seeking behavior (Case, 2003). A number of studies have been done on some aspects of information seeking behaviour of library users (Seyame, 2009, Tackie & Adams, 2007 and Saumure & Given, 2004). Although information behaviour of visually challenged people, especially in the context of their everyday life information behaviour has been studied by a number of information professionals and scholars, very little literature has been published specifically on the information behaviour
thus, information needs, information source and information seeking behavior of people with visual impairment (Case, 2003).

The Canadian National Institute for the Blind (CNIB, 2005) undertook a study to investigate needs of visually challenged people in a two-year study. The study explored a range of issues including income levels, employment, education and social integration of visually challenged people as well as services provided and required to fulfill unmet needs. A significant outcome was a recommendation made by CNIB to integrate accessible library services into the standard library system.

Kumar & Sanaman (2015) conducted a study to analyse the challenges faced by the blind/vision-impaired users during the web access in the leading academic and special libraries of Delhi, India. The result clearly stated that there are barriers faced by blind and visually challenged users in the libraries of Delhi, India during their web access. Kumar & Sanaman (2015) therefore recommended three types of web-based resources that can be offered by libraries to their users. These include access to the Internet, access to subscription databases and a library’s own web pages/website which need to be accessible to people with disabilities. Kumar & Sanaman (2015) further concluded that accessibility barriers to print, audio and visual media can be easily overcome through web technologies.

Sehic (2013) conducted a study on six blind and three visually challenged students and reported that academic libraries used by respondents only sporadically responded to their needs and that blind and visually challenged students, when looking for information and materials for academic
purposes relied most often on interpersonal sources, radio and the Internet. Sehic (2013) further stated that, in seeking and using information respondents put more value on information quality and reliability than the level of effort and time needed to find it. The preferred format for this specific user group was not the Braille, but electronic documents. Thus, assistive technologies played a major role in their information seeking.

A study by Smith & Rosenblum (2013) revealed that students with visual impairments find themselves in a condition that triggers the need to seek and use information. For example, students constantly find themselves in need of information to write assignments, essays, tests and any other academic related information. They further stated that during lecture time, visually challenged students needed specialized tools like specialized Braille computers to generate required information.

Case (2002) reported that, irrespective of students’ visual impairment every individual has needs which will not be similar to others. In addition, individuals’ needs are often specific to a particular situation to be met at a certain time. In such instances a “one-size-fits all” approach to the provision of services should not be adopted not unless the services are universally designed. Case (2002) further opined that, an appropriate assessment of these unique educational needs in all areas related to a student’s disability and instruction adapted to meet these needs was essential to ensure appropriate educational programming. In other words, it can be said that these students have sophisticated needs. For example, it is important to realize that the student who is visually challenged must accomplish the same work as his sighted peers using disability-specific skills which generally require greater time to master in order to tackle tasks which take more time to
complete. Both the reading and writing of Braille, even by a proficient Braille user, is time consuming.

McCarthy (2002) reviewed literature of information needs of visually challenged students. His analysis revealed that not only visually challenged students need access to an adequate collection of materials they also need to learn information literacy skills as well. McCarthy (2002) additionally stated that many do not receive even basic instruction in areas such as the arrangement of the library, the library classification system. He continued that visually challenged students must learn how to utilize a wide variety of resources both print resources in the library and on-line resources including the Internet and periodical databases just as their sighted peers do. McCarthy (2002) then concluded that visually challenged students can use materials that are in print, when provided an optical scanner and optical character recognition programme such as open book or a Closed-Circuit Television (CCTV) for low vision students.

Saumure & Given (2004) examined information seeking behaviour of visually challenged students in Canada, with special emphasis on the adaptive technology. They found out that technology plays an important role in the information behaviour of visually challenged students. Saumure & Given (2004) proceeded to conclude that development of adaptive technology and the rise of information in electronic format has largely improved their independence and increased the opportunities of the visually challenged persons to locate and use information.

Williamson, Schauder & Bow (2000) investigated information seeking by blind and sight impaired students with particular emphasis on the role of the Internet. Their study addressed issues
of the information needs, information source, the role of the Internet and the barriers to the use of the Internet. Williamson, Schauder & Bow (2000) concluded that people who are blind and sight impaired deserve to be provided with a variety of ways of meeting information needs, as are available for people with normal sight. They further stated that, given the inexorable continuing impact of the information age, then ways must be found so that people with disabilities can participate equitably in the information economy.

A study conducted by Fakoya (2015), examined how visually challenged university students accessed information and the challenges they faced in a rural university context. Fakoya (2015) reported that the neglect to meet the information needs of visually challenged students has negative consequences at improving their academic performance as well as the future development and benefit of a rural based society. Fakoya (2015) then suggested that librarians, as well as university administrators, should consider investing more resources in information sources to meet the needs of the visually challenged and other disabled students.

Seyame’s (2009) study on information seeking behaviour of visually challenged students at the University of KwaZulu- Natal, Pietermaitzburg Campus (UKZN-PMB) revealed that information needs of the students revolved around their academic information needs. His study further revealed that all the respondents used the library as the primary resource when searching for information. However, the Disability Unit of the University played a major role in ensuring that information that the students found was repackaged for them in a usable format. Friends and classmates according to Seyame’s (2009) were also found to be useful in this regard by some of the respondents. Most of the students preferred electronic compared to print information formats,
depending on their level of sightedness. Seyame (2009) also concluded that barriers experienced by the students were as a result of the lack of incorporating the needs of the visually challenged students into the design of the institution’s information systems, specifically the Cecil Renaud Main Library which has been given the primary responsibility by the institution through the UKZN policy on students and staff with disabilities to ensure efficient access to information for students and staff with disabilities.

A study conducted by Shunmugam (2002) indicated that librarians, colleagues and resource personnel play a significant role in their information seeking experience and serve as key facilitators in disabled students information seeking.

The literature review shows that there are threads of similarities that can be found between the present work and the previous studies.

**Methodology**

The instrument used for the data collection was the administration of a questionnaire to visually challenged students of University of Ghana, Legon (UG) and University of Education, Winneba (UEW). The total population for the study was eighty. This consisted of 20 and 60 students from UG and UEW respectively. In view of the small size of the population, the entire population was used as the sample size therefore there was no sampling procedure. The questionnaire was designed to cover the objectives of the study. There were questions to elicit information on the background of the respondents in terms of demographic data, and included variables such as gender, age, level of study, course offered, institution and hall of residence. There were also
questions on information needs, sources of information and reasons for seeking information by the respondents. The study was carried out between January and February 2016.

The questionnaire for visually challenged students in the two universities was transcribed to Braille format to make it easier for respondents to answer. The questionnaire was administered to visually challenged students by the researchers and the answered questionnaire was retrieved from respondents on a later visit. The answered copies of the questionnaire were then sent to the Resource Centre of the University to transcribe their responses from Braille format to print format. After getting the responses into print format the Statistical Package for Social Sciences (SPSS) was used to analysis the data obtained from the questionnaire. Simple descriptive statistics such as frequencies, tables, percentages and figures were used.

**Data Analysis and Discussion**

A total of eighty (80) copies of the questionnaire were sent out to visually challenged students in the University of Ghana, Legon and University of Education, Winneba. Out of the 80 copies of the questionnaire that were distributed to the respondents in both universities, a total of sixty-eight (68) copies were returned giving a response rate of 85% which is representative of the entire population. Twelve copies of the questionnaire were not returned despite a number of follow-ups by the researchers.
Background Information of Respondents

Table 1: Respondents by Gender per Institution

<table>
<thead>
<tr>
<th>Institution</th>
<th>Female</th>
<th>Male</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UEW</td>
<td>10 (14.7%)</td>
<td>38 (55.9%)</td>
<td>70.6</td>
</tr>
<tr>
<td>UG</td>
<td>4 (5.9%)</td>
<td>16 (23.5%)</td>
<td>29.4</td>
</tr>
<tr>
<td>Total</td>
<td>20.6</td>
<td>79.4</td>
<td>100</td>
</tr>
</tbody>
</table>

The results indicated that within University of Education, Winneba there were more males 38 (55.9%) and females 10 (14.7%) students as compared to 16 (23.5%) males and 4 (5.9%) females from University of Ghana, Legon. On the whole, it can be observed that more males (79.4%) were covered than females (20.6%) from both universities. Generally, admission to higher institutions in Ghana is skewed in favour of males to females. It is possible to conclude that this trend is the same with visually challenged students in the two universities.

The age distribution of all the students indicated that within University of Ghana, Legon 10 (14.7%) students were within 22-26 years and were young adults. Findings from University of Education, Winneba also showed that 30 (44.1%) students were between the ages of 22-26. These findings show that in both Universities majority of the (58.8%) respondents were within the age range of 22-26. Generally, there were more elderly students 18 (26.5%) within the ages of 37-41 among University of Education, Winneba than University of Ghana, Legon which was 3 (4.4%). Thus 30.9% of the students from both universities fell within the 37-41 age groups.
With regard to the level of study, University of Ghana, Legon had only one (1.47%) student in level 600 pursuing a post graduate programme whilst University of Education, Winneba had none on such a programme. On the whole, there were more level 100 students 30 (70.0%) in both universities. From the responses gathered 67 (98.5%) of the students were undergraduates in both universities. Concerning the courses they offered, most of the students 35 (51.5%) from University of Education, WInneba offered Special Education and Social Studies whilst University ‘of Ghana, Legon 10 (14.7%) students offered Social Work and Religion. It can be concluded that most of the students in the study from both universities belonged to the social sciences. The social science is basically the largest group of programmes in most universities in Ghana. On whether they stay on campus or not, all the students from both universities confirmed that they were resident in the University and on the ground floor of their halls because of the nature of their conditions. All the respondents from both universities indicated that, there were open gutters on the road and the distance from their halls of residence to their lecture halls was far, but the distance was longer in the case of University of Education, Winneba than University of Ghana, Legon.

**Information Needs**

The first objective of the study was to determine the information needs of visually challenged students. This objective had multiple or varied responses. Respondents’ opinions were sought and the results are presented in Figure 1 below.
From Figure 2, regarding the information needs by respondents, the results that were gathered show that all the 68 (100%) respondents from both universities required information on academic issues, 31 (45.5%) required employment information, 29 (42.6%) required health information, 16 (23.5%) required financial information and 3 (4.4%) required all the mentioned types of information. In this study, University B had the highest number of respondents 21 (30.8%) seeking employment information because most of the respondents were adults. The findings therefore indicate that academic, employment and health information were the information needs, needed by respondents of the two universities. This goes on to show that students’ needs are varied, it is clear from the data that academic, employment and health information needs form a fundamental part of visually challenged students’ life on their campuses. This finding corroborates with Canadian National Institute for the Blind (CNIB, 2005) research which found out that visually
challenged young people information needs include finance, employment, education and social integration.

**Information Sources Used by the Visually Challenged Students**

The second objective of the research was to determine the sources of acquiring information by respondents. The two universities under study were randomly designated University A or B to ensure confidentiality in our subsequent presentation and discussion. Respondents’ opinions were sought and the results are presented in Table 2 below.

**Table 2: Sources of acquiring information from both universities**

<table>
<thead>
<tr>
<th>Sources of information</th>
<th>University A</th>
<th>University B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency (F)</td>
<td>%</td>
<td>F</td>
</tr>
<tr>
<td>Radio</td>
<td>10</td>
<td>14.7</td>
<td>15</td>
</tr>
<tr>
<td>Colleagues</td>
<td>8</td>
<td>11.7</td>
<td>30</td>
</tr>
<tr>
<td>Text book</td>
<td>3</td>
<td>4.4</td>
<td>7</td>
</tr>
<tr>
<td>Group Discussion</td>
<td>5</td>
<td>7.3</td>
<td>8</td>
</tr>
<tr>
<td>Lecturers</td>
<td>7</td>
<td>10.2</td>
<td>12</td>
</tr>
<tr>
<td>Handout</td>
<td>3</td>
<td>4.4</td>
<td>1</td>
</tr>
<tr>
<td>Internet</td>
<td>14</td>
<td>20.5</td>
<td>12</td>
</tr>
</tbody>
</table>

*Source: Field Survey, 2016*

From the responses in Table 2, it can be deduced that 38 (55.8%) relied on colleagues as their source of information, 26 (38.2%) browsed the Internet as their source of acquiring information while 25 (36.7%) of the respondents from both universities indicated radio as their source of acquiring information, 19 (22.9%) relied on lecturers to acquire information, 13 (19.1%) got information through participation in group discussions as their source of information, 10 (14.7%) consulted textbooks to acquire information and 4 (5.8) indicated handout as their source of acquiring information. The results also indicated that the main source for acquiring information by
20.5% of respondents from University ‘A’ was the Internet whilst University ‘B’ 41.1% of the students obtained their information through colleagues.

In this study, the visually challenged students’ responses revealed that they used a combination of sources which included colleagues, the Internet, radio, lecturers, group discussion, textbooks and handouts. The responses clearly showed that the students needed or used multiple sources of information for their studies and therefore did not depend on a single source of information. Colleagues were their main source of acquiring information. This confirmed a study conducted by Sehic (2013) that when visually challenged students are searching information and materials for educational purposes they relied mostly on interpersonal sources. From the study it also emerged that the students acquired the needed information through both formal and informal sources. This is in accordance with Wilson’s (1999) model which states that users make demands upon traditional or non-traditional information sources to acquire the needed information.

**Preferred Formats Used in Seeking Information**

The choices of students’ formats of information are greatly influenced by the degree of sightedness. With regard to the formats that they preferred to access information both students from the two universities had a high preference for electronic resources. This is because majority of the students 58 (85.2%) from the two universities preferred their information in the electronic format, followed by audio 23 (33.8%) and print 5(7.3%) and the reason for this was quite obvious as assistive technologies played a major role in their information seeking pursuits. This also confirms earlier studies conducted by Saumure & Given (2004), Seyame (2009) and Sehic (2013) who respectively reported that visually challenged students’ preferred electronic format but not print format because print slows their reading down and often make them dependent on other people. The most important thing is that the students had preference for more than one format.
This meant that no one format was regarded as the most sufficient, however, a combined or multiple choices of formats was the preference of the students. Therefore, selecting information sources for the visually challenged there should be a balance in the acquisition of the various formats. The different formats of information sources therefore are what are needed to satisfy visually challenged students as no one format alone is adequate to meet their needs.

**Reasons for Seeking Information**

The study sought to identify the reasons why the students sought for information. The respondents were given some options/ reasons as a guide to choose from in responding to this query.

The respondents were then asked to select one or a combination of the reasons for seeking information as identified above. Their responses are illustrated in Table 3 below.

**Table 3: Reasons for seeking information**

<table>
<thead>
<tr>
<th>Reasons</th>
<th>University A</th>
<th></th>
<th>University B</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>To pass examination</td>
<td>5</td>
<td>7.3</td>
<td>20</td>
<td>29.4</td>
<td>25</td>
<td>36.7</td>
</tr>
<tr>
<td>To keep up with new knowledge</td>
<td>10</td>
<td>14.7</td>
<td>14</td>
<td>20.5</td>
<td>24</td>
<td>35.2</td>
</tr>
<tr>
<td>To obtain materials for learning</td>
<td>16</td>
<td>23.5</td>
<td>24</td>
<td>35.2</td>
<td>40</td>
<td>58.8</td>
</tr>
<tr>
<td>To seek better understanding of a topic</td>
<td>4</td>
<td>5.8</td>
<td>10</td>
<td>14.7</td>
<td>14</td>
<td>20.5</td>
</tr>
<tr>
<td>To obtain materials that might be useful for research work</td>
<td>6</td>
<td>8.8</td>
<td>4</td>
<td>5.8</td>
<td>10</td>
<td>14.7</td>
</tr>
<tr>
<td>All the reasons above</td>
<td>3</td>
<td>4.4</td>
<td>2</td>
<td>2.9</td>
<td>5</td>
<td>7.3</td>
</tr>
</tbody>
</table>

*Source: Field Survey, 2016*

It is evident from Table 2 that, 40 (58.8%) of respondents from both universities sought for information to obtain materials for learning, 25 (36.7%) sought for information to pass examinations while 24 (35.2%) sought information to keep up with new knowledge. Also 14 (20.5%) sought for information to seek better understanding of a topic, 10 (14.7%) sought for
information to obtain materials that might be useful for research work and 4 (7.3%) required all
the above mentioned reasons for seeking information. In this study, majority (58.5%) of the
respondents from both Universities sought for information purposely to obtain materials for
learning followed by enabling them to pass examinations.

Information has a significant role in assisting, supporting and improving people’s life. It came out
of the study that, students seek information for various reasons, but the most prominent is, to obtain
materials for learning and to pass examinations. Some also seek information to keep up with new
knowledge and to seek better understanding for a topic. Smith & Rosenblum’s (2013) affirm this
purpose when they reported that students constantly find themselves in need of information to
write assignments, essays, tests and any other academic related endeavor.

**Conclusion**

The study has revealed that visually challenged students from University of Ghana, Legon and
University of Education, Winneba used both formal and informal methods in seeking information.
The study also revealed that visually challenged students of both universities have academic
information needs just like any other group of students and these needs must be met. Vision loss
prevents blind and visual impaired persons from retrieving relevant information presented in
standard print formats. It is very important in improving access to information for persons with
visually challenged. Assistive technologies have changed the information in print materials to
audio and through voice activation device.

However, the study revealed that not all of the expectations of the visually challenged students
were met by these university libraries. For example students from University “B” did not use the
university library because the collections were not tailored to their use and this limited accessibility.

**Recommendations**

The study identified various issues pertaining to the service provision for the visually challenged students in University of Ghana, Legon and University of Education, Winneba. The recommendations focus more on the universities’ libraries because the libraries have been given the primary responsibility by the institution to ensure access and provision of information in the university to all categories of users. Based on the findings from the study, the following recommendations have been made:

**Library/ Resource Centre/ OSSN Service Policy**

Institutions admitting special needs students should endeavour to have library policies for visually challenged students in place. These will serve as guidelines to direct and coordinate all services for the visually challenged. Such a policy should address issues regarding access to information, budgetary allocation, collection development and other privileges for the visually challenged. Without it there might only be a haphazard and uncoordinated system of providing service to the visually challenged.

**Budget Allocation**

Recognition of the needs of special needs should be included when planning budgets and allocating funds. There is a need for an increase in the budgetary allocation for university libraries in Ghana which admit such students so that they will be able to acquire special equipment for this group of
students. An adequate budget will be of paramount importance because purchasing assistive technology devices involves considerable funds.

**Provision of Assistive Technology Devices**

The availability of a wide range of assistive technology makes it possible for people with visual impairment to operate computers and telecommunication equipment. Assistive technology devices can play a major role in giving persons with visual challenge access to information technology that enhances their academic and career opportunities. For example, computers with screen readers, screen magnifiers, Braille embosser, Braille note takers, scanners, voice recognition software as well as Closed- Circuit Television are necessary and should be made available for use by special needs students. There is also the need to train at least one library staff to be able to use these items and be able to assist the students in their use.

**Improvement in Access Route**

It is also important that the route to the Library and Resource Centre/ OSSN be marked out appropriately so that visually challenged students can find their way to these facilities. The university authorities should therefore ensure that open gutters and drains are covered to prevent injuries by visually challenged students.

**Provision of more Computers with JAWS (Software)**

In order to make life more bearable for the visually challenged students and to enhance their computer literacy and information seeking levels, managements of the universities should make adequate provisions of computers with JAWS software at the Computer Laboratory for visually challenged students. This will enable more students have access to information at the Laboratory.
**Increased Personnel**

The Resource Centre/ OSSN and Computer Laboratory personnel in the Centre were understaffed. This basically accounts for the delay in transcribing printed materials to Braille format and assisting such students in seeking information. It is therefore recommended that each of the Centres should have full time staff. University Management should ensure that adequate personnel are available in the Centre increased to handle visually challenged students so that students are served satisfactorily and on individualized basis. The personnel should be versatile to handle special needs students and they must have special education and ICT background.

**Library Services for the Visually Challenged Students**

There are a number of library services which are specially tailored to satisfy the information needs and these should be provided so that the visually challenged students can make optimal use of the library resources. The specialized service include: Brailing, scanning and transcription services so that pressure on personnel in Resource Centre /OSSN will be reduced so that visually challenged students can get their reading materials on time. Also print characters should be changed to Braille characters. It is the expectation of the university library to meet the academic needs of all of its users, including those with special needs.

**Inter-Library Cooperation**

The cost of providing equipment and resources for visually challenged students is very high. It is therefore recommended that universities which enroll special needs establish collaboration and cooperation with organizations that provide services to these students. In this manner, some resources can be acquired collectively and used through inter-library cooperation.
References


