Digital Resource Services Used by the Visually Impaired Students: A Study of Central Library BHU, Varanasi

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Abstract

Visually impaired students consistently struggle for acquiring higher education learning due to disability. After technological development the vision impaired people are also used the information communication technology for information in education. There are limited digital contents available for visually impaired persons in higher education. Educational institute are lazy and did not pay any attention to developed digital course materials for vision impaired persons. In this regard Central Library, Banaras Hindu University has developed digital course materials for visually impaired students which provide a lot of help in learning of higher education. This paper describes the digital resource services for visually impaired students at central library, BHU. The digital resource services are used by the visually impaired students for acquiring higher education and getting better jobs.

Keywords: Visually Impaired, Digital Resources, Digital services, Central Library, BHU

1. Introduction

The major challenges are facing by the visually impaired students in getting the higher education. The educational organizations & libraries are bound to provide the better services to the library users as well as disable users also. The Banaras Hindu University is reputed university in India for higher education; the central library of BHU is the largest library and information system in higher education in the India. The Central Library is not only serving the students who are studying in the Banaras Hindu University but also the students who come to consult the library from different educational institutions of India. The different types of user including disabled students come to the Central Library, B.H.U. from different parts of the country in order to seek the information. There is need for better digital library resource and services for those students who are visually impaired. Therefore, the Central Library is providing the digital resources collection and services, which can be conveniently and comfortably used by the disabled people. Such digital technology is to be made available to those people in order to facilitate easy access to information. The disabled students must be benefited with the special kind of the digital services of the library which will be helpful in assisting them for getting higher education & better jobs. Thus, they will have a better recognition in the society and they can improve their status in the country.

2. Need for Digital Services to the Visually Impaired Students of BHU, Varanasi

The Banaras Hindu University library system is the largest library system in the country. About 100 visually impaired users in the library. They face so many problems in using the library facilities such as:

- Non availability of all course books and reference books in the braille script.
- Lack of proper and special assistance in using the library services.
- Lack of special sitting arrangement in the library.
- Many of the standard input devices and functions, such as mouse navigation or the use of key combinations (short cuts) proves difficult or painful for them to use the library.
- Visually Impaired students prefer material in digital format so that they can use new ICT technology.

The Central Library is trying hard for fulfilling the demands of these types of users. But for that purpose the following limitations are there:

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- Enough funds are not available for the basic infrastructure development, which is necessary for these kinds of users.
- The documents (like Talking books) are required to be acquired by the library as a reading material for the visually impaired students.
- The tools and equipments related to the new information and communication technology are also needed to be acquired in order to facilitate and provide the better digital services to the visually impaired users.

Library has created a new section for visually impaired students. The library wants to develop this section as **Visually Impaired Digital Resource Centre** for better digital and information services to visually impaired users.

3. Digital Resource Services Used by the Visually Impaired Students, BHU

The central library, BHU has started the digital resource & services to visually impaired students in November 2007, when the visually impaired students come in library for accesses digital & internet services. They want to digital course materials for education & reading purpose. As per discussion with some visually impaired students the library was started the recording of the course materials and developed digital course materials for the visually impaired students of BHU. Presently 502 digital course materials in audio format have been developed in different subjects (i.e. English, Hindi, Sanskrit, History, Sociology, AIHC, Philosophy, Political Sciences, Education, etc). The visually impaired students are using these digital course materials for learning and higher study and get better jobs. The details of digital course materials developed for visually impaired are given in the following table 1.

Table 1. Digital Course Materials Developed in Central Library, BHU for the Visually Impaired Students of Banaras Hindu University

Year	No. of Digital Courses Materials Developed	Developed Digital Course Materials Databases in Audio Format (MP3)
2007-2008	51	13.23 GB
2008-2009	37	19.97 GB
2009-2010	30	17.10 GB
2010-2011	95	52.01 GB
2011-2012	134	67.09 GB
2012-2013	45	27.42 GB
2013-2014	49	35.57 GB
2014-2015	30	27.76 GB
2015-2016	31	35.71 GB
Total	502	295.86 GB

The library is providing digital access to the course materials for visually impaired students of BHU. Digital services started in November 2007 in that time only 10 visually impaired users are benefited by this service. After development of digital course materials the strength of visually impaired is consistency increased due to used of digital course materials as developed by central library, BHU. Currently about 100 visually impaired users are benefited by this digital collection. During this period 5 visually impaired students registered in PhD programs, 7 visually impaired students get UGC Net/JRF and many students got higher degree and get better jobs. Mr. Manoj Kumar Pandey (Research Scholar English) is example of the visually impaired students. He wants to study material in digital form and learn English literature subject. The recording work is started in November 2007, when he is the student of graduation. The library initiated the work for development of digital course materials in audio form. After using the digital course materials he got higher degree in English subject from BHU and also gets UGC NET/JRF. He is doing PhD in English subject and recently he qualified for the post of Lecturer (English) from Bihar Public Service Commission in general category. The digital course materials is regularly using by the visually impaired students of BHU. It seems that the work of development of digital course materials is beneficial for the visually impaired users. Mr. Manoj Kumar Pandey was awarded by the central library, BHU for qualifying the UGC JRF/NET examination as shown in Fig.-1.



Figure 1: Mr. Manoj Kumar Pandey awarded by the Hon., V. C., BHU, Varanasi

The Visually impaired students of BHU are fully depends on digital course materials for higher education, which is developed by central library BHU. A digital course material used by the visually impaired users of central Library, BHU is seen in table 2.

Table2. Digital Course Materials Used by the Visually Impaired Students Users of Central Library, Banaras Hindu University

Year	Digital Course Materials Used by Visually Impaired Students Users for Reading & Learning for Education
2007-2008	49.01 GB
2008-2009	24.16 GB
2009-2010	47.63 GB
2010-2011	113.21 GB
2011-2012	191.22 GB
2012-2013	361.05 GB
2013-2014	323.77 GB
2014-2015	356.21 GB
2015-2016	244.73 GB

Table 2 showed that visually imaired users are using digital course materials for reading & education purpose. The study indicated that used of digital course materials is consistently increasing. The study also showed that used of digital course materials by the visually impaired students is highest in the year 2012-2013. Hence, we told that digital course materials are very useful for visually impaired students for education and they are regularly uses for reading & learning for higher education.

4. Recommendations of the Digital Resource Services for the Visually Impaired

- To provide access to the academic information through digital services.
- To serve maximum number of users by providing document (talking books etc.) matching their physical disability.
- To provide convenient separate reading space suitable for them in the library for electronic services.
- To get the users familiar with the new information communication technology services and make them trained in accessing the recent information by using the information communication technology.
- To improve the services and collections of the library for providing the digital library services.

5. Conclusion

We are now in digital era and new technology is gradually replaced the traditional library and information services. The special people with disabilities have special attention in the society. In the education they have many problems to get materials for the higher study. In this connection the central library BHU has started the digital services for the visually impaired students by using new ICT tools and techniques. The library has developed the digital course materials in audio format for visually impaired students of BHU. Visually impaired students are using digital course materials smoothly.

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