Online Resource for Visually Challenged

Udaya Kiran K. T.
Faculty, Dept. of Music.
University College of Fine Arts
University of Mysore.

Abstract:
The paper deals with the electronic information resources available in electronic form for visually challenged. The coverage is mainly the books and journals available on the web for visually challenged students and faculty. The use of assistive technology for the self-reliance of the visually challenged is also highlighted. Also focuses on the electronic information sources in music and the lacunae being faced in the discipline.

Key words: Electronic Information, Visually Challenged; Web Information, Visually Challenged; Music, Visual Impairment.

Visual Impairment is no more an impediment to pursue the subject of their choice. Presently the technology solutions has opened up a new world of exploration, experimentation and effective implementation of skills, knowledge, in the fields of their choice. It could be arts, science and commerce. The opportunities that were blocked from ages are gradually turning into source of information, as well as self-reliance and E-resources come handy while studying, research, practice and also helpful for innovations at times. Digital Library is an innovative concept which not only saves the space, but also indirectly promotes inclusive development thus enabling visually challenged to have access the information which in turn, creates an equipped, knowledgeable group, whose contribution to various fields will pay dividend for generations to come.

There are two means through which a visually challenged has access to online resources. One is "Human Read" another being "Computer Generated". The first category requires sufficient financial, as well as trained and skilled human resources to create a book, reference material etc. Whereas, technology can convert any available resource into digitally accessible source of information enabling visually challenged aspirant to gain knowledge, thus contributing their share to the society. Presently there is abundant information which is being digitised by a few dedicated groups which is almost unnoticed. Provided, these groups or team of dedicated enthusiasts are supported by the scholarly society and the govt. visually challenged can equally contribute to the society and will not have to be looked upon as benefit seekers.

We come across a few variety of online resources, which can be categorised as follows:

- Web Resources.
- Blogs.
- Podcasts.
- E-books.
- Web based services.

These sources of information are almost self-explanatory. In these online resources, we can further divide into two major categories, which are academic and non-academic. "Accessibility"
Library and Information Services for All

is not confined to academic but has many advantages outside the realm of education. Academically there are a few website, which hosts information such as; course wear, articles, information pertaining to examinations and so on. These websites are hosted and sometimes owned by higher education institutions such as Universities, Colleges and Research institutes. Non academic resources are helpful for daily living, to build an inclusive society etc. The computer generated online resource are more reliable and accurate while human read resource with all the above, adds an extra feeling which many information seekers prefer. However, the choice of obtaining information through a media is subjective but, usefulness of the information is considered to be the main fact for rating those sources.

Blogs or Weblog’s are a place on the website where exchange of information can take place. A blog creator or writer will post information which can be of use to those who are in need. This can inspire someone to write, comment, create new piece of information which could be useful for both academic and non-academic purposes.

Podcasts are recorded based on a particular topic of interest and uploaded to web feed which is delivered to the subscribers via the web service. Many portable devices are capable of receiving these podcasts and can be a useful resource.

E-books are yet another digital source of information which integrates reading into the digital devices thus promoting the habit of reading in this digital era. Most of the e-books are accessible hence it will contribute towards inclusive development in sharing the repository of knowledge.

There are a few web based services which converts printed material into accessible formats such as brail, large print, daisy and high contrast, which can benefit thousands of users. Some of these groups also provide transcription and transliteration services which makes the world more accessible.

Adaptation and Application of Assistive Technology for Greater Independence and Boost Self Confidence among Visually Challenged Professionals

Inclusive Development is a part of Digital Era, Globalization, and Information for All. In this rapidly growing economy, inclusion of differently abled persons can contribute their share provided they are given an equal opportunity, full participation and access to information which are essential in professional and personal advancement. Today the innovation of technology is a boon for persons with special needs and has changed the outlook of both employers as well as employee’s towards engaging highly acclaimed jobs/professional forefront. Differently abled are gradually entering many professional areas where they were considered incongruous. Assistive technology has empowered people with challenges to face the competitive world and to meet the expectation at work place.

"Accessibility" is the key to success for differently abled. Through adaptation, application and need based solutions; differently abled can contribute their share thus participating in economic growth of the Nation. The term "Accessibility" is used to indicate a few high tech devices which can be exemplified with many internet resources, and press and media coverage. Actually the term "Accessibility" denotes the information, service and resource which are provided by
alternative methods, formats or systems for differently abled or people with special needs. In order to achieve this goal the alternative formats of the above quoted resources must be prioritised and made available as per the requirement.

**The Areas of Accessibility:**

Apart from computer related software and hardware’s there are many other aspects which are hardly considered to be the priority service. Currency detectors are not fully equipped to enable visually challenged to transact with cash. Colour detectors are not completely reliable to identify and manage tasks which require sense of colour. Boards, signage and indications at public places need more accessibility either in the form of device, app or an alternative system which can be integrated with presently available technology.

"**Need Based Solutions**:" It will be more appropriate to devise technology based solutions, which cater to the needs of people with special needs for all the developments. Making the 'Education, 'Transport, 'Work environment more accessible will enhance the productivity of differently abled at all areas.

**Web Resources/Internet Resources:**

The hub of knowledge and the media of access gradually transforming from conventional methods to more and more digitised solutions, with its own possibilities and limitations, professionals prefer portable and integrated solutions that are affordable and easily accessible. Presently the numbers of web based/internet based resources are gaining more focus as the "go-green" initiative and limitations in physical space for hosting the repository. Making the "Web Resource" more accessible must be prioritised as it would benefit "print disabled" thus including them to the realm of mainstream knowledge and updated information which makes them more efficient in work as professionals. Making the web resource accessible involves a few step and positive approach towards screen-reader users. This doesn't require compromising in either page style, content, look/appearance of web page. A link on a page optimised for screen-reader users or people with special needs can enhance the quality of work, making them more efficient and competent. Presently there are guidelines laid by "W3C Consortium" for web accessibility and "CAG" guidelines for "Mobile Accessibility", which has informations in details for those who want to include professionals with special needs in their team for better digitally accessible and inclusive India with bright economic future, less dependency, more efficiency and most importantly making differently abled self reliant.

**Accessibility and Music**

The amount of information available for a sighted user and a screen reader user differs greatly because of non-availability of digital resource related to music. There are a few groups in the west who have realised the importance of accessibility in music are providing many useful resources on the web including accessible formats. However, it is still a dream project in India specially related to "Carnatic Classical Music. The importance of making the source of information accessible is yet to be recognized and supported by academicians. Even though
there are a few braille books published related to music, the number and its reach is very limited due to various reasons. There is not even a single accessible software to create/write/write music notation. Most of the recording software’s are not completely accessible. On the other hand, a few web resources which are accessible can be called a "ray of hope", which could inspire many groups to create and present resource related to music in an accessible format.

**Conclusion**

Considering the facts related to problems and challenges in having access to online resources for visually impaired, there are still barriers which are, technological, social, economical in nature which has posed challenges in various phases and socio-economic aspects. Taking into consideration of all odds faced by visually impaired the progress in academics, art and culture, science and technology speaks volumes about self-confidence and competence of differently abled. The concept "**Reaching the unreached**" becomes reality when aspiring individual meets informative enthusiast. However, the need of the hour is "need based solution" rather than accumulating the repository or technology solutions in order to achieve digital equality for differently abled.

**References:-**

http://www.internet4classrooms.com/exceptional_children/vision_impaired_disability_assistive_technology.htm

www.teachingvisuallyimpaired.com/online-resources--webinars.html

www.perkins.org/elearning

http://www.afb.org/info/living-with-vision-loss/using-technology/12