

Full Length Research Paper

Utilization of internet among distance learners in a dynamic higher education setting at the Bharathiar University, India

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Internet use in Indian academic institutions and their libraries is creating an environment that is continuously changing. Multimedia and the Internet have further made the teaching and research functions of students and faculty members more challenging. The important features that have affected the quality of information are accuracy, currency, comprehensiveness and time. As the academic community is becoming aware of potential uses of Internet, these are being put to more use; there is a need to evaluate the purpose of utilizing Internet sources in order to provide relevant services. Such studies on Internet information usage pattern also facilitate library professionals to provide effective services by modifying old information provision process by using electronic tools. The findings indicated that 79.80 % of the post graduate students were aware about the availability of internet whereas only 73.75 % of under graduate students. The study revealed that most of the respondents 61.36% use internet for studying course work. 48.48% of respondents use internet for writing papers, 36.36% respondents use for updating subject knowledge, 32.95% of respondents use internet for entertainment and 14.39% of users using internet for research work. The paper highlighted the various problems, and issues involved in handling internet and gave suggestions to improve the library services to meet the demands of the users.

Keywords: Distance Learners, Internet, e-resources, CD-ROM, e-journals, web sites, Barathiar University.

INTRODUCTION

The rapid advancement of information and communication technologies (ICTs) has brought a revolutionary change in the information scenario giving rise to a number of options to handle varied information sources conveniently and effortlessly as a result of which. The internet have become the most sought after modern library's reserves conventionally sources in satisfying varied needs of students, teachers, and researchers with minimum risk and time. Information technology has changed the world and has become one of the important tools for retrieving information. The electronic information resources constitute a major portion of library collections. The value and use of information resources, particularly internet, have increased with the time. Therefore, there is necessity to make study on the different aspects of internet use among the students of academic institutions. The convergence of ICTs as embodied in the Internet has transformed the present day society into a knowledge society. Earlier, information and knowledge were passed

by words of mouth or through manuscripts, and communication was a slow process. Today it is passed from one individual to an infinite number of other users through a number of media and formats which makes rapid and widespread dissemination of information possible. New technologies bring us an unparalleled flood of information. Along with word processing, the Internet is considered to be the most valuable of the many computer technologies available to the society today.

ICT Use in Education

India actively promotes the use of information and communication technologies (ICTs) in education in the formal education sector today, as it has in the non-formal sector for more than 40 years. From the use of radio to spearhead the green revolution, to satellite-based, one-way and interactive television for rural development in

some of the most backward districts, to today's thrust for the use of open and distance learning models to serve the larger populations, India has tried it all, with varying degrees of success. In fact, since the early 1950s, Indian policy documents have identified the need to use all media for promoting development and, implicitly, for education. The subsequent policy and plan documents on education, prepared from time to time, have chalked out a role for technology applications, especially in the non-formal education sector.

There has been a dramatic shift from the 1980s to the present day in terms of access to technology by the population in general. Deregulation of the airwaves and the telecommunication industry has spurred the revolution in basic telephony and Internet services. Technologies like Wireless in Local Loop (WLL) and Very Small Aperture Terminal (VSATs) are being used for Internet and intranet purposes. Data on teledensity reported in the UNDP Human Development Report, 20035 can no longer be considered accurate. The current annual rate of growth in the telephone sector is at 48 per cent for mobile telephony. Radio has a penetration of 100 per cent in the country while satellite and terrestrial television cover nearly 80 per cent of the country. Theoretically, availability of ICTs is widespread in large parts of the country, with pockets of saturation. In other areas, availability is lower due to terrain or extreme deprivation. With the availability of cyber cafes, people can get access to government documents (such as birth and death certificates, land registration and government schemes) for only INR 15 (US\$ 0.3) each. Farmers can get daily updates on market prices of locally produced food grains and vegetable crops from around the district for INR 5 (US\$ 0.1).

However, access to ICTs is still limited because of physical infrastructure constraints such as lack of electricity, poor maintenance of telephone lines and distance from the kiosk or cyber cafe; economic constraints such as extreme poverty; educational limitations such as illiteracy and the lack of relevant content in the local language; and social constraints of gender, class, community and caste. Data are not readily available to indicate the extent to which social constraints limit access to technology. India has extensive experience in the use of broadcast technologies for both formal and non-formal education. This includes using radio and television for agriculture and rural development, for non-formal education and out-of-school children, and school telecasts from 1983 onwards in national and regional languages. Satellite-based teleconferencing (one-way video, two-way audio) for formal and non-formal education has been operational since 1992 at a national and regional level.

These efforts have culminated in the launch of Gyan Darshan, a dedicated satellite-to-cable educational television channel, and Gyan Vani, a dedicated educational radio project. The launch of EDUSAT will add

a 70-channel capacity for use by all state governments and publicly funded educational institutions. Although deregulation of the airwaves has taken place in the country, the Indian government retains its role as the major player in the use of broadcast technologies for education, holding control over allotment of frequencies. Thus, community radio is nascent and has not had any effect beyond a few localised interventions. Private sector broadcasting has not ventured into education.

Distance Education of Bharathiar University

The Postgraduates Centre of the University of Madras where was functioning educational core in Coimbatore before 1982. The Bharathiar University was established at Coimbatore by the Government of Tamilnadu in February, 1982 (Bharathiar University, Act 1 of 1982) with motto "Educate to Elevate" appreciation to the great national poet Subramania Bharathi. In May 1985, the Bharathiar University purposed and received grants from University Grants Commission (UGC) New Delhi. The University has become the temple of learning and its aim is inculcating necessary knowledge, creative attitudes and values among the skillful youth of the country to contribute more effectively towards establishing an equitable social and economic and secular ideal of our nation.

The School of Distance Education (SDE) of Bharathiar University was established during the academic year 1991-92. The school has limited its operation for the obvious reason of strengthening its base to provide quality education. Having realized the objective, the school has started extending its action by identifying and approving study centres throughout the country to help achieve higher gross enrolment ratio and higher literacy rate. The school has presently 202 centres spreading over 23 states as study centres cum spot admission centres, and the number is steadily increasing as more and more evinced interest in starting study centres. The school directly admits candidates and conducts the personal contact programmes at specified Personal Contact Programmes (PCP) centres in Coimbatore. Study centers cum spot admission centres enroll candidates and conduct the Personal Contact Programmes in their centres or at specified regional centres. The study materials prepared in the prescribed format of Distance Education Council (DEC) are provided to the students supplemented by compact discs for hassle free use anywhere at any time without the burden of carrying the course materials. Contemplated to provide video conference based learning facility.

Literature Review

Gatenby (2003) states that the greatest phenomenon of

recent years has been the explosion of the Internet. Salaam (2003), in a survey of the use of Internet services in Nigerian university libraries, found that access to Internet services in the libraries surveyed was restricted to staff only. The survey further identifies a poor telecommunication system, unreliable electrical supply, lack of Internet service providers in some parts of the country, and poor funding of the university system as major problems militating against access and use of Internet facilities. "Internet Access and Use by Students of Private Universities in Ogun State, Nigeria," M.O. Salaam, A.M. Adegbore.

Akporido (2005) in research carried out on Internet use in a Nigerian suburban setting- Abraka, Delta State, observes that in order to enable students at Delta State University, Abraka to use the Internet, users must pay for access in cybercafés. They are usually given a ticket password that is keyed into the system before getting access. As soon as the access time paid for expires, the system automatically logs the user off.

Jones (2002), in research carried out on the Internet and American life, found that college students use the Internet more to communicate socially than they do for academic work. Nwokedi (2007) posits that lack of searching skills is still hindering good use of Internet. He asserts that acquisition of Internet skills can lead to discovery of valuable research and teaching resources, which would in turn cause the users to use the Internet to enhance their research and learning capabilities. Internet access ability would be expected to stimulate regular use of the Internet and minimize the perceived barriers to its use.

Bansode and Pujar (2008) highlight the purpose of use, methods of locating information, and search techniques used in retrieving the information by the research scholars of Shivaji University, Kolhapur. The authors find that scholars use the internet for research and communication purposes, and conclude that more awareness about Internet resources and training in their use should be provided by library professionals. Biradar, et al., (2006) conducted a study on Internet use at Kuvempur University. The results indicated that 42 percent of students use the Internet twice a week, and more than 30 percent of faculty use it daily. The majority of students and faculty use the Internet for study and teaching. They use the Internet in the library, as well as in commercial places. Most respondents are satisfied with Internet sources and services.

Eynon (2005) conducted a study on the use of the Internet in higher education and use of ICTs for teaching and learning. The most common use of ICTs in all subjects was to provide students with the access to a range of online resources. Academics motivations for using ICTs were enhancing the educational experience for their students; to compensate for some of the changes occurring in higher education; and personal interest and enjoyment. The difficulties encountered were lack of time; dissatisfaction with the software available, and copyright

issues.

Mahajan (2006) conducted a study of Internet use by researchers in Punjab University, Chandigarh, which analyzed the technologies that have transformed society into a knowledge society. It was stated that the Internet is considered to be the most valuable of all computer technologies. Mulla and Chandrashekara (2006) conducted a study on Internet users of Mysore University. The study was conducted using faculty, students, and researchers in different science subjects. The study revealed that a majority of users used the Internet and were satisfied with the information available.

Objectives

The objective of this study was to analyze the patterns of use of Internet and the Internet skills of the distant learners of the Bharathiar University, and problems faced by them while using the Internet. The study was conducted to find the satisfaction derived by the researchers with the Internet and electronic resources and to find an answer to the question: Can Internet and electronic resources replace print resources?

METHODOLOGY

Keeping in view the above objectives in mind, a structured questionnaire was prepared to collect data from the distance learners of Bharathiar University. Questionnaire contains various questions pertaining to the use of internet. For this purpose a total of 300 questionnaires were distributed among distance learners of Bharathiar University. Out of 300 questionnaires distributed, 264 valid questionnaires were collected and then data was analysed, tabulated, interpreted and presented in form of this paper. The pertinent data has been collected from the distance learners by administering questionnaire method. The respondents are encouraged to give free and frank information. The respondents have extended their full cooperation in data collection. The data collection was carried out from June, 2010 to October, 2010.

Data Analysis

Analysis of data is the ultimate step in research process. It is the link between raw data and significant results leading to conclusions. This process of analysis has to be result oriented.

Population Study

Personal detail section of the questionnaire provides

Table 1: Sex wise distribution of Respondents

Gender	No. of Respondents	Percentage
Male	166	62.88
Female	98	37.12
Total	264	100.00

Table 2: Category wise distribution of Respondents

Academic Status	No. of Respondents	Percentage
Post Graduate Students	104	39.40
Under Graduate Students	160	60.60
TOTAL	264	100.00

Table 3: Awareness about Internet

Category	Aware	Not Aware
Post Graduate Students	83 (79.80%)	21 (20.20%)
Under Graduate Students	118 (73.75%)	42 (26.25%)
Total	201 (76.13%)	63 (23.87%)

Table4: Level of Internet and computer literacy

Variables	Number	Percentage
Expert	149	56.44
Average	64	24.25
Below Average	51	19.31
Total	264	100.00

Table 5: Place of Internet and electronic resources access

Variables	Number	Percentage
Home	121	45.83
University	79	29.92
Cafe	64	24.25
Total	264	100.00

information regarding the sex and different qualifications as can be seen from Table 1. It is shown in table-1, 62.88% of population studied were males and only 37.12% of total were females, who can use internet and e-resources available through library for different purposes.

Table 2 shows that 60.60% of the respondents were under graduate students and only 39.40% were post graduate students.

Awareness about Internet

Table 3 shows the awareness of internet among the respondents available through the library. 79.80 % of the

post graduate students were aware about the internet whereas only 73.75 % of under graduate students were aware about the availability of internet. It can be seen that post graduate students are more aware about internet than under graduate students.

The respondents were asked to indicate their level of Internet and computer literacy. It is evident from Table 4 that majority of the respondents (56.44%) have an expert level of Internet and computer literacy. Only 24.25% admitted that they are average level of internet and computer literacy. 19.31% of the respondents reported that they have below average level of Internet and computer literacy.

Table 5 highlights the location from where the Internet and electronic resources are mostly accessed by the

Table 6: Frequency of using Internet

Duration	Number	Percentage
Daily	74	28.03
Weekly twice	89	33.72
Weekly	63	23.86

Frequency of Using Internet

Monthly	38	14.39
Total	264	100.00

Table 7: Purpose of using Internet

Purpose	Number	Percentage
For studying course work	162	61.36
For update subject knowledge	96	36.36
Entertainment	87	32.95
For research work	38	14.39
For writing papers	128	48.48

Note: Total sample exceeds the required size since the questions are multiple choices

Table 8: Methods of learning Internet skills

Variables	Number	Percentage
Trial and Error	37	14.02
Guidance from Colleagues and Friends	34	12.87
Training Courses Offered by University	32	12.13
External Courses	161	60.98
Total	264	100.00

distance learners of Bharathiar University. A majority of the respondents i.e. 45.83% access the Internet from the home, while 29.92% also access from university and 24.25% use cyber cafes for accessing the Internet and electronic resources.

Frequency of Using Internet

In response to the question how frequently do you use Internet? The respondents have responded in different ways (Table 6) Majority of respondents used internet weekly twice (33.72%), daily (28.03 %) and weekly (23.86%). Only few respondents (14.39) used internet monthly.

Purpose of Using Internet

From the table 7, it is clear that most of the respondents 61.36% use internet for studying course work, 48.48% for writing papers, and 36.36% respondents use for updating subject knowledge. 32.95% of respondents use internet

for entertainment and 14.39% of users using internet for research work.

Methods of learning internet skills

Table 8 depicts that the most popular method of acquiring the necessary skills to use Internet is via training courses offered by external agency. A majority of the respondents (i.e. 60.98%) used this method to learn the Internet, followed by trial and error method with 14.02% responses. 12.87% of the respondents learnt the Internet through guidance from colleagues and friends and 12.13% through training courses offered by university. Table 9 depicts the problems faced by the users in surfing. 34.85% of the respondents find it difficult to get the relevant information from the Internet. 43.29 % find overload of redundant information on the Internet. 28.78% opinion that they face the problem of virus in the computer. 12.12% of the respondents also reported that data available on the Internet is not much authentic. A majority of the respondents (63.64%) feel that Internet and electronic resources can replace print resources.

Table 9: Problems faced by the users

Variables	Number	Percentage
Difficulty in finding relevant information	92	34.85
Overload of information on the Internet	64	24.25
Virus	76	28.78
Data authenticity	32	12.12
Total	264	100.00

Table10: Do you think Internet and electronic resources can replace physical resources?

Variables	Number	Percentage
Yes	168	63.64
No	96	36.36
Total	264	100.00

Only 36.36 % of the respondents feel that the Internet and electronic resources cannot replace the physical resources (print resources), but only supplements the print resources.

Recommendations

Based on the findings of the study the following suggestions are made:

- The Internet and allied technologies should be included in the curriculum of all distance education programmes
- Libraries of distance education study centers should subscribe more e-journals and e-databases.
- Some orientation training programmes should be organized by the university at regular intervals so that the maximum users can improve their excellence or proficiency in the use of the Internet for academic purposes.
- Information regarding the popular and the latest websites with their addresses should be displayed on the notice board in the study center computer lab.
- The qualified IT staff should be appointed to provide the expert guidance to users about e-resources and Internet.

CONCLUSION

The library environment has currently undergone drastic change in terms of collections and services. The proliferation of e-resources has had a significant impact on the way the academic community uses, stores, and preserves information. The advantages of e-resources have drawn attention of the library users to a great extent. Accordingly, these resources have occupied a significant place in the collection and budget of almost all libraries. The study showed that Internet has radical impact on the changing higher education environment. It is interesting that Internet use among distance learners of Bharathiar

University, Coimbatore is much higher than expected. Academic resources offered online in their disciplines are reported to be inadequate (as compared to online academic resources in Sciences) and mostly in English language. The other issue was lack any formal training about how to locate these resources by saving time and efforts. Slow speed, lack of computers, lack of time, and lack of access from home are found to be the major problems. For this purpose, The Bharathiar University of Coimbatore needs to improve its IT infrastructure, including providing distance access. The use of electronic information sources for study and research purposes must be encouraged and proper training should be provided.

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