Information Communication Technology (ICT) and Internet Awareness Amongst the College and University Teachers

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Abstract

The of the paper deals with the brief introduction of ICT, Internet and brief account of the status of Higher Education in India , role of UGC in imparting quality education, and Refresher and Orientation Courses being offered by the Academic Colleges of India with special reference to Himachal Pradesh University, Shimla. Further, described in the paper about the need and purpose of the study, objectives, methodology adopted and finally highlights the important survey findings in respect of ICT Awareness and Internet Use pattern of the participants of the refresher course. Besides this, some suggestions and recommendations have also been enumerated in brief.

Keywords: Higher Education –India, Refresher Course, Himachal Pradesh University, Shimla, Academic Staff College-India

1.   Introduction

Information Communication Technology (ICT) is one of the important buzzwords of today's IT world. It has changed the society into information society and our way of life. It has been integrated in every walk of our life. Its impact has been evident in railway, air reservations, banking and insurance sectors, postal services, biotechnology, bioinformatics, biomedical sciences, health care sector, telemedicine, media and communications, teaching –learning, library and information services, printing technology, e-resources, digitization of documents, digital library, library networking, e-commerce, & trade, entertainment, and what not? It has penetrated in everywhere and its makes our life comfortable and easy.

Throughout the developed world, changes in technologies are permitting the more extensive use of electronics and telecommunications to access information. The trend in information technology use has been described in a number of ways. In USA it is described as 'Information Superhighway', and in Canada it is termed as 'Information Highway'. The European Commission has adopted the term 'Information Society'- emphasizing that the application and development in information infrastructure will have significant social as well as economic impact (Development of Information Society, 1996)

During the last couples of years since 1990s, the university libraries and other institutional libraries in India are coming under the impact of information technology. Since last two decades several initiatives have been taken by the Govt. of India for computerisation and networking of Indian of Indian libraries. Recently a Task Force for quick implementation of National Information Policy has been established and the recommendations of Task Force Committee have already been submitted to the Govt. of India for its quick implementation (Sinha and Satish, 2000).

1.2 Internet: A Network of Network

The Internet is one of the most important and complex innovations of mankind. It is a powerful means of communication, dissemination and retrieval of information. Now the facility of Internet has been increasingly used for educational course delivery (Sinha, 2004 C).

Writing in the Harvard International Review, philosopher Slabbert (2006) a writer on policy issues for the Washington DC-based Urban Land Institute, has asserted that the Internet is fast becoming a basic feature of global civilization, so that what has traditionally been called "civil society" is now becoming identical with information technology society as defined by Internet use. Some suggest that as low as 2% of the World's population regularly accesses the internet (http://www.internetworldstats.com/usage/use009.htm).

1.3 Scenario of Higher Education in India

The University Grants Commission (UGC) came into existence in 1953 and became a statutory organisation by an Act of Parliament in 1956. It is a national body for the coordination, determination, and maintenance of standards of university education. The UGC serves as a coordinating body between the Union and State Governments and the institutions of higher learning. It also acts as an advisory body to these Governments and institutions on issues relating to higher education.

1.4 Growth of Colleges and Universities in India

Over the past 50 years, there has been a significant growth in the number of new Universities & institutions of higher learning in specialized areas. At the time of Independence in 1947, there were only 20 universities and 500 colleges in the country. The number of students and teachers in the higher education system was also very small. But after Independence, there has been an exponential increase in all these numbers. There has been a twelve fold increase in number of universities, and 23 fold increase in number of colleges while student enrolment has gone up by nearly twenty nine times. Now Indian Universities constitute one of the largest higher education systems in the world

During 2000-01, there were 273 which increased to 294 universities/institutions, 13,150 affiliated colleges, 88.21 lakh students and 4.27 lakh teachers in the country which are uniformly spread all over the country from metropolitan cities to very remote areas and are directly under the preview of UGC (As per Latest Figure 2002).

According to Gupta (2006), at present the total number of universities and colleges has increased to more than 350 and 14000 respectively. It shows that after independence, there has been an exponential increase in the colleges and universities. It has recorded an eighteen fold increase in the number of universities and twenty-eight fold increase in the number of colleges, while students enrolment has gone up by nearly thirty four times. To check the quality of these institutions, national assessment and UGC accreditation is there. So far only 94 universities and 418 colleges have been

accredited .It is suggested that to maintain quality of higher education, Universities and colleges should apply to UGC for accreditation.

To provide education to the students, the total number of teachers in colleges and universities were 4.27 lakhs, out of which 82% are in affiliated colleges and the remaining 18% in university departments during 2001-02. In the University departments and University colleges, 33% of the total strength was in the grade of Readers followed by lecturers (29%), professors (20%), Sr. lecturers (16%) and tutor & demonstrators (2%) during 2001-02.On comparison with colleges we find that 51% of the total teaching strength was in the grade of lecturers followed by readers 21%,sr lecturer16%,professors 7 % and tutor /demonstrators5%. Since majority of the teachers are in colleges, there is need to reorient the quality of teaching in colleges. In the area of research universities are not lacking behind. The number of research degrees awarded by various universities increased from 11,296 in 1999-2000 to 11,450 in 2000-01. The faculty of arts awarded the maximum number of degrees i.e. 4330, followed by the faculty of science with 3734 research degrees. These two faculties together accounted for 70% of the total number of research degrees awarded. There is need of more quality research even in other faculties (Gupta, 2006).

2.   Background Information on Academic Staff College, Established by UGC (www.ascshimla.ac.in)

"For improving the quality of higher education, different Commissions including Radhakrishnan Commission (1948) and Kothari Commission (1966) on higher education have recommended a sustained and purposeful development of academic staff. The National Policy on Education 1986 (NPE) has, inter alia, suggested that the present educational system does not provide opportunities to the teachers for professional and career development, initiative for innovative and creative work, and internalizing the techniques and value system to fulfill their roles and responsibilities.

Programme of action of NPE 1986 categorically mentioned a comprehensive programme of professional development through ASCs. Consequently, in 1987 the UGC sanctioned the setting up of 48 ASCs. The ASCs started functioning with the premise that the objective of Academic Staff Development Scheme is to enable academic staff to become effective facilitators of student learning through becoming effective managers of the conditions that affect learning. At present the number of ASCs in India is 52.

2.1   Academic Staff College, Himachal Pradesh University, Shimla

Established in June 1989, the Academic Staff College of Himachal Pradesh University conducted its First Orientation Programme in Sept. 1989. It has pursued the objective of improving the professional competence of teachers in tertiary education with a difference. By the end of September 2006, it had organized 210 programmes (85 orientation programmes and 167 refresher courses in which about 7800 teachers participated.

UGC Expert Committee reviewed the ASC in September 1998 and March 2004. It recommended that the ASC should be made a Centre for the Entire Himalayan Region and also be developed as a National Centre in chosen disciplines. In view of the excellent working of the ASC, it should be continued on a permanent basis. The Committee also observed that the College had the infrastructure and capability to undertake leadership role for other ASCs".

2.2 Types of Courses Required for Career Advancement of Teachers and Library Professionals

2.21 Orientation Courses

The orientation courses are essentially meant for college/university teachers with not more 8 years of continuous service. Then after a gap of one year, such teachers may opt for Refresher Course.

2.22 Refresher Course

The eligibility for attending Refresher Course for teachers who have not attended earlier Orientation Course will be two years of service. There should normally be a gap of two years between two successive Refresher Courses".

2.3. Need and Purpose of the Study

The present study was conducted during the Refresher Course on "Information Technology (RC-167)" at Academic Staff College, Himachal Pradesh University, Shimla where about 50 college and university teachers have participated for their up gradation of knowledge and career advancement. In this course the first author (MKS) was himself one of the participants. For the successful completion of the course, there was a requirement to carry out a project work on the topic suggested by the faculty of the Academic Staff College. The above topic was selected by the author and the study on the ICT and Internet Awareness amongst the participants of the Refresher Course has been carried out by administering the self designed questionnaire.

The present study was carried out in order to know the ICT and Internet awareness amongst the participants. In the middle of the course the study was conducted and the data were analysed and interpreted which gave an interesting findings.

2.4 Objectives of the Study

In order to carry out the study, following objectives were taken into account:
- ◆ To examine the Information Technology awareness among the participants;
- ◆ To find out period from which the participants are using computers;
- ◆ To know the view of the participants for using computer and applying ICT skills for their class work and teaching;
- ◆ To evaluate the facilities of ICT available at their colleges /universities;

- To know about availability of computers at their home for academic purposes
- To investigate the Internet Literacy among the participants ;
- To find out their choice of ISP , Internet Connectivity type, search engines and services; and
- To examine usage of Internet services / INFLIBNET Services available in the colleges and universities

2.5   Hypotheses Framed

- All the participants may not be well aware of ICT use; and
- All the participants may not be comfortable using Internet.

2.6   Delimitation of the Study

The present work is delimited to the college and university teachers / library professionals who have participated in the Refresher Course, RC-167 (IT), organized at Academic Staff College, Himachal Pradesh University, Shimla only. For more generalized findings , this study may be carried out on the bigger population.

3.   Review of Literature

For the present study, the primaries as well as the secondary source of literatures have been consulted. Some journal articles and theses have also been consulted. Sinha (2004 A) has studied the Internet Use pattern of the academic community and local population of Barak Valley and find the interesting findings in respect of Internet use pattern.

Sinha (2004 B) has described the detail accounts of importance of information technology in the various library activities. Besides that the information has also been collected from the deliberations of the resource person.

4.   Methodology Adopted

4.1   Survey Method

For any empirical study, the researcher has to identify the method of study. For the present study survey method has been adopted by the investigator, which comprises of administration of questionnaire, observation of the participants, and interview of some of the participants for knowing the opinion of the respondents in respect of usage of ICT and Internet for their day to day activities.

4.2   Selection of Sample

All the participants of the Refresher Course –RC-167 (IT), 2006 have been selected as samples of the present study. There are two categories of the samples-

First Category: For those participants who are having little awareness of Information Communication Technology.

Second Category: For those who are from computer background and are comfortable in using Internet.

4.3   Design of Questionnaire

The questionnaire has been designed by the investigator himself. The questionnaire comprising of 34 questions, has been prepared for the two groups of samples.

4.4   Administration of Questionnaire

The self –designed questionnaire has been distributed among the participants of the Refresher Course and the author has requested them to fill the questionnaire in time return back to the investigator..

4.5   Collection of Filled up Questionnaire

The filled up questionnaires have been collected from the respondents for the data analysis and interpretations. The authors are very much thankful to them for their timely response.

4.6   Data Analysis and Interpretations of the Responses Received from the Respondents

On the basis of filled up questionnaire the data has been analysed and tabulated. All the results have been highlighted in major findings section. For data analysis only percentage technique has been adopted.

5.   Data Analysis and Interpretations

After collection of filled up questionnaire from the respondents the data has been tabulated using SPSS Software and in the present report only results has been shown in percentage (%). All these results have been shown in the graphical format using MS-Excel. (Table & Chart-1-26). Due to paucity of space, all results with table and graphs have not been shown and only important findings have been enumerated. For any quires the first author may be contacted for details.

6.   Important Findings

Followings are the major findings of the present study:

6.1   Personal Background of the Respondents

◆   Questionnaires were distributed to 49 respondents and out of which 41 (83. 67 %) respondents have respondents.

◆   Designation wise analysis shows that maximum numbers of respondents are Senior Lecturer (65.85 %), which is followed, by Lecturer (24.39 %) and library professionals stands for only 9.75v %.

♦ Subject wise analysis shows that 17.07 % respondents are from Computer Science / IT background, which is followed by 9.75 % each for English, Physics, Library & Information Science, commerce & Management Studies; 7.31% belongs to Mathematics and Public Administration, 4.87 % each are from chemistry, Zoology, Geography, and finally 2.43 % each from Biotechnology, History, Geophysics, Education, economics and Botany

♦ Age - Group wise analysis shows that 60.97 % respondents belongs to 31 to 40 Years age group which is followed by 19.51 % for 41-50 Years, 17.07 % are below 30 years whereas only one (2.43 %) is above 50 years of age.

♦ Income Group wise analysis shows that 56.09 % come under income group between 15,000 to 20,000, which is followed by 41.46 % who are in between 20001 to 25000 whereas 2.43 % is drawing above 25000 /- salary.

♦ Sex wise analysis shows that 68.29 % are male whereas 31.70 % are female participants.

6.2 Information Communication Technology (ICT) Awareness

♦ 75.60 % participants are using computers whereas 24.39 participants are not using computers.

♦ Similarly all respondents (75.60 %) who are using computers are saying that they are comfortable in using computers for their day to day work whereas remaining 24.39 % are not comfortable using computers.

♦ 21.95 % respondents came across the computer during 1996-2000 which is followed by 19.51 % respondents who have been using computers from 1991-1995 and 17.07 % are using computers prior to 1990 whereas 14.63 % come in contact with computer use during 2001-2005 and 12.19 % have not responded.

♦ 90.24 % teachers are using IT in their classroom activities whereas only 9.75 % are not using IT for this purpose.

♦ 63.41 % teachers are comfortable in using MS-Office for their class work whereas 36.58 % are not able to use this.

♦ MS-Office are using frequently by 42.30 % teachers which are followed by 38.46 % for moderately use whereas 19.23 5 are using MS-Office often for their class work.

♦ Rating IT in College/University shows that 29.26 % respondents have rated their colleges / university for good IT infrastructure. Excellent IT infrastructure is found I only 19.51 % whereas very good IT infrastructure is found in only 14.63 %. Only 12.19 % have satisfactory

IT infrastructure. 9.75 % are wiling to introduce and only one (2.43 %) have initiated action for procurement of IT for their college.

◆ 73 .17 % respondents say that they are having PC at their home and 7.31 % are willing to purchase it.

◆ The survey results indicates that 46.31 % have taken formal IT Training whereas 53.65 5 have not taken any formal training for IT.

◆ Course category wise analysis shows that 14.63 % are Diploma in computer Science, 9.75 % are MCA degree, whereas 4.87 % are having certificate in computer Science. Besides that 7.31 % each have undergone Short Term and One Month Training Programme.

◆ 82.92 % participants are allowed by their respective college/university authorities to take part in such training programmes whereas only 17.07 % have responded in negative.

◆ 53.65 % colleges /universities have conducted IT training programme for the faculty and staff whereas 46.31 % colleges/ universities have not arranged any such programme for manpower development.

◆ 77.27 % respondents say that they have participated in this training programme whereas 22.72 % have not participated in such parogramme.

◆ Those (80.48 %) who have attended this training programme find IT training programme interesting.

◆ UGC-ASC is a place where 51.21 % respondents have taken IT training first time which is followed by colleges (21.95 %), other places (7.31 %), ICSSR (4.87%) and 2.43 % each at University computer centre and INFLIBNET Centre.

◆ After taking IT training 80.49 % respondents say that they are able to learn the necessary IT skills whereas 12.19 % have not learn this skills.

◆ While asking the choice of place of IT training where the participants are intended to go, 36.58 % like to attend IT training at their University Computer Centre which is followed by some new places (24.39 %), outside colleges (19.52 %).

6.3   Internet Awareness amongst the Refresher Course Participants

◆ Internet literacy is very much poor among the respondents. Out of 41 participants only 36.59 % are Internet literate whereas maximum respondents (63.41%) are Internet illiterate.

◆ Out of 15 respondents (36.59 %) of the whole, 40.0 % are expert, 53. 33 % are intermediate and 6.66 % are novice in using Internet.

- While assessing the rating of Internet /e-mail services, e-mail ranks first which is followed by WWW (2nd), e-journals access (3rd), INFLIBNET Databases Search (4th) and Chatting (5th).

- For e-mail service, Yahoo (33.33 %) is emerged as most preferred e-mail service which is followed by Indiatimes mail service (26.66 %), BSNL and Rediffmail (13.33%) and 6.66 % for NICNET and Google mail service.

- 53.33 % respondents prefer www.goggle.com search engine which is followed by www.yahoo.com (26.66 %) whereas www.msn.com , www.rediffmail.com and www.indiatimesmail.com are preferred by only 6.66 % each.

- Home (46.66 %) is most suitable place of Internet usage which is followed by the University Computer Centre (20.0%) and 6.66 % each access Internet service at Cyber Café and Departments.

- Morning (40.0%) is the most preferred time for Internet /e-mail access which is followed by evening (33.33%), afternoon (13.33%) and Internet is being accessed least during night and late night hours (6.66 %) which may be non-supply of electricity.

7.   Suggestions and Recommendations

Followings are few suggestion and recommendations for imparting ICT training to the college, university teachers and administrative staff:

- Make all the faculty members Information Communication Technology empowered by giving them an opportunity to attend such type of courses and training programme;

- Teachers must acquire their own computer (PCs or Laptop) and use it for teaching –learning activities. This will also help in carrying out research activities;

- Colleges and Universities should arrange training programme for Information Communication Technology applications and Internet Use and all the faculty members and staff should be encouraged to take part in this activity.

8.   Conclusion

In concluding remark we can say that the present work is based on the response received from the respondents, which have been taken in the beginning of the course. The findings may certainly vary if we take response in post refresher course session. The findings will be more interesting and impressive. We may say that it is Information Technology, which makes our life faster and comfortable,

if it is used properly for the benefit of the self in particular and for the society in general.

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