

ICT Literacy among Library Professionals in Faculty of Arts and Social Sciences in Aligarh Muslim University, Aligarh

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Abstract

A questionnaire based survey method on ICT literacy of Library professional in faculty of Arts and Social Science in Aligarh Muslim University. The findings of the study show that the Social Science Faculty's Professionals are more ICT literates than the Arts Faculty's seminar library professionals. The seminar library professionals need to enhance their level of ICT literacy. Some of them have technophobia, for which they are afraid of using information and communication resources. Some of them are old who don't take interest in computer related learning and assignments. The University should provide state-of-the-art ICT infrastructure including hardware, software and e-resources with full-fledged Internet access. The authors recommend that the seminar library professionals should be provided with more chances of formal training to introduce all possible ICT-based resources and services that can improve their ICT literacy. Moreover, the study emphasizes the need for redesigning the course curriculum of library and information science curriculum in universities of India supporting the appropriate skills and expertise to be able to handle the application of ICT.

Keywords: ICT, Internet, E-resources, Academic libraries, Seminar libraries, AMU

Introduction

ICT (information and communications technology - or technologies) is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so

on, as well as the various services and applications associated with them, such as videoconferencing and distance learning. ICTs are often spoken of in a particular context, such as ICTs in education, health care, or libraries. The term is somewhat more common outside of the United States¹

Information and communication technology are indispensable and have been accepted as part of the contemporary world, especially in the industrialized societies. In fact, cultures and societies have adjusted to meet the challenges of the knowledge age. So, the pervasiveness of ICT has brought about rapid changes in technology, social, political, and global economic transformation. However, the field of education has not been unaffected by the penetrating influence of information and communication technology (Brosnan & Davidson, 1996; Rekabdarkolaei & Amuei, 2008).

Information technology has been evolving rapidly during the last half of the 20th century, particularly since the 1960's and 1970's. The current era has acquired the name "information era" It has revolutionized the media and modes of computing, storing and communicating information. Man's infinite capacity for invention and desire for discovery, exploration and research has led to rapid growth of technologies and there by information technology, Information explosion has created problems for proper processing and dissemination of information, which can only be solved, with the aid of this information technology (Chidnandappa, 2004).

LIS departments have been experiencing change and have been determining how to cope with it. As a result, ICT courses need to be modified (addition of new skills) to include new ICT skills, such as trouble shooting (King *et al.*, 2006). Such change has been witnessed in new types of teaching and learning using ICT and in developing new courses in LIS education (Buarki, et al, 2011). To this effect evaluation of different cases and practices plays the most crucial role which the authors want to explore here through a specific case.

Review of literature

Haneefa K (2007) presented the results of an investigation in the study "Use of ICT Based Resources and Services in Special

Libraries in Kerala, India. The email service was used by the largest percentage of the users. WWW was being used by 60 per cent of the library users. A good no. of users were not satisfied with the application of ICT in the libraries and indicated 'inadequate ICT infrastructure' as their reason for dissatisfaction. Users proposed a variety of measures of formal orientation and training in ICT based resources and services.

Rekabdarkolaei, and Amuei (2008) in their study, 'Evaluation of ICT literacy differences in trainee student teachers from the view of sexuality' found no significant differences between females' and males' previous experience with ICT. However, males on average worked with computers significantly more hours per week than females. Significant differences between males' and females' technical ICT capabilities and situational and longitudinal sustainability were observed. Males' scores were higher. In the regression analysis, when the impact of the background and ICT experience variables was controlled, gender failed to be a significant predictor of the sustainability scores. Ghosh and Ghosh (2009) in their paper, "ICT and information strategies for a knowledge economy: the Indian experience" presented the practice-based examples of how information and communication technology (ICT) projects are influencing contemporary Indian society and an account of government policies in regard to ICT implementation and development towards knowledge economy.

Adeleke and Olorunsola (2010) revealed that the use of online tools has advantages over manual methods. Librarians perceived the method to be useful and easy to use. The paper reveals ICT infrastructural facilities as major constraints facing libraries in the use of online tools. Williams & Adio (2013) studied the significance of the relationship between age of respondents and use of ICT which was affected with increasing age of respondents higher than

39. However, the present study intends to present the picture of ICT Literacy among library professionals of Aligarh Muslim University that remains unexplored.

Objectives of the study

- To find out the reasons responsible for the people illiteracy about information and communication technology applications;
- To know the reasons for which the library professionals use information and communication technology applications;
- To know whether library professionals are comfortable with computer or uncomfortable;
- To find out the confidence in handling some internet task by library professionals;
- To know familiarity of library automation software and application software among seminar library professionals; and
- To know the impact that information and communication technology has brought on the seminar library professionals.

Methodology

A survey method based on a structured questionnaire was used for the study. The questionnaires were distributed among departments' library professionals to elicit their responses to the endeavor. The purpose of administering questionnaire was to obtain data regarding the contemporary use of ICT resources and services by the departments' library

professionals in Faculty of Arts and Social Science in Aligarh Muslim University, Aligarh. 26 department libraries were selected for the study. A total of 37 questionnaires were distributed to the professionals. Finally, 29 filled in questionnaires were received back from which one questionnaire was not usable, so response rate was 96.56 per cent.

Results of the study

Results are the ultimate steps in research process and analysis is the link between raw data and significant results leading to conclusions. The process of analysis has to be result oriented. The results of the study are presented in succeeding sections.

Usage of computer

Table.1 shows that most of the seminar library professionals in Arts Faculty and Social Science Faculty have been using computer. In Arts Faculty 8 seminar library professionals use computer, on the other hand 15 seminar library professionals of Social Science Faculty use computer while 3 do not use it. Due to the availability and easy access to computer, most of the seminar library professionals are using it. However, 3 library professionals who are not using computer may be attributed to the fact that either they lack self interest or their respective seminar libraries do not have such facilities.

Table 1. Usage of computer by seminar library professionals

<i>Category</i>	<i>Arts Faculty</i>	<i>Social Science Faculty</i>
Yes	08	15
No	00	03

Compatibility of using computer

An effort has been made to find out library professionals' compatibility of using computers. Respondents have been given two options like comfortable and uncomfortable. Table-2 shows that in Arts Faculty 7 Seminar Library Professionals are comfortable and 1 is

uncomfortable. On the other hand in Social Science Faculty 13 are comfortable and 5 are uncomfortable. The respondent who don't use computer may be due to the fact that they are aged person with eye-sight, hence they might be afraid of damaging their eyes by using computer.

Table 2. Compatibility of using computer

Category	Arts Faculty	Social Science Faculty
Comfortable	07	13
Uncomfortable	01	05

Place of use of computer

The table 3 depicts that in Arts Faculty 2 out of 8 respondents use computers only in seminar, 1 use at home, 4 respondents use on both the place and only 1 respondent don't use computer anywhere. As we talk about the Social Science Faculty we recognized that 5 respondents out of 18 use computer in seminar library, 5 use computer at home, 5 use it on both the places,

while 3 respondents use computer nowhere. The seminar library professionals who are not using computer anywhere because neither they have computer in the seminar library nor at their home or may be due to the fact that they have no interest in using it. On the other hand the persons who are using computer on both the palaces either their seminar library is computerized or they have computer at their respective homes.

Table 3. Place of use of computer

Category	Arts Faculty	Social Science Faculty
In Seminar Library	02	05
At Home	01	05
Both	04	05
None	01	03

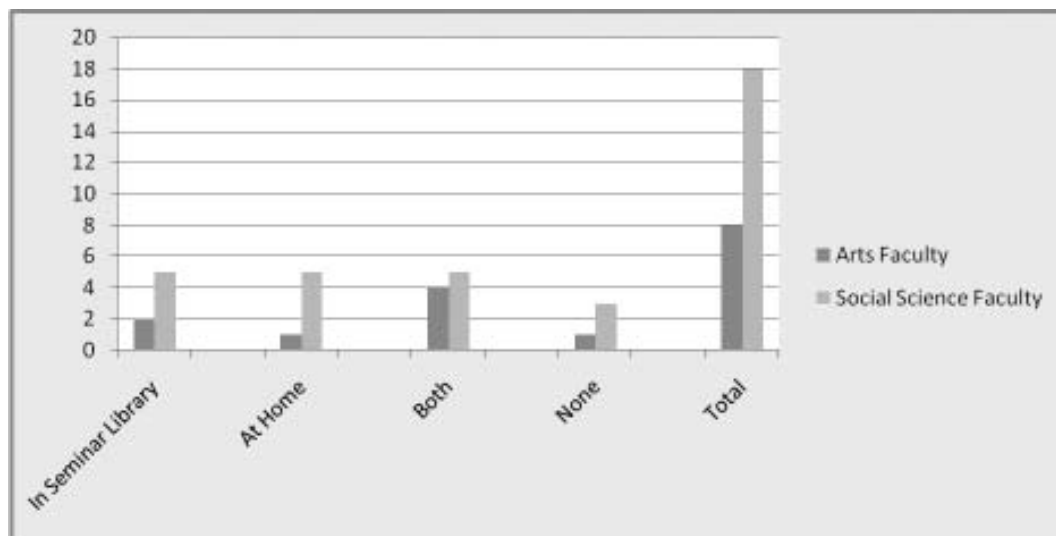


Fig 1. Place of use of computer

Frequencies to access the computer

The table-4 shows that most of the seminar library professionals, 5 respondents from the Arts Faculty and 8 respondents from the Social Science Faculty daily access to the computer. However, 3 respondents from the Arts Faculty and 2 respondents from the Social Science Faculty rarely access to the computer. There is no response for the option to access to the computer weekly and monthly from the Arts

Faculty, whereas in the Social Science Faculty 5 and 3 respondents are using weekly and monthly respectively. The seminar library professionals who access to computer daily may be attributed to the fact that they are trained and their seminar library is computerized. The seminar library professionals are accessing rarely, weekly or monthly may be due to non availability of computer in their seminar library or at their respective homes.

Table 4. Frequency to access computer

<i>Category</i>	<i>Arts Faculty</i>	<i>Social Science faculty</i>
Rarely	03	02
Daily	05	08
Weekly	00	05
Monthly	00	03
Total	08	18

Training courses undertaken

The main purpose of asking this question was to know the percentage of the seminar library professionals. It is found that 5 seminar library professionals have taken training of computer while 4 professionals of Arts faculty declined to have received any such training. On the other hand in Social Science Faculty there is high

percentage of the seminar library professionals that have undertaken training course in comparison of the Arts Faculty. The reason of high number of seminar library professionals undertaking training courses in the social science faculty is that in the Social Science Faculty, more numbers of training programmes are probably being organized.

Table 5. Training courses undertaken by seminar library professionals

<i>Category</i>	<i>Arts Faculty</i>	<i>Social Science Faculty</i>
Yes	04	11
No	04	07

ICT related training courses undertaken

The seminar library professionals were asked to indicate the type of computer training course possessed by them. The data reveals that 2 respondents possessed PGDCA, 4 possessed DCA computer training course in the Social Science Faculty while, 2 respondents each from

Arts faculty and Social Science Faculty possessed short term course respectively. On the other hand, 2 respondents from Arts Faculty and 3 respondents from Social Science Faculty opined that they possess other diplomas besides PGDCA and DCA may by PGDLAN or similar such advanced courses. Table-6 further reveals that PGDCA, DCA and CCA have not been opted

by anyone in Arts Faculty, while in Social Science Faculty only CCA has not been opted by anyone. Due to computerized seminar libraries in social science faculty most of the seminar library professionals have been undertaking training course, while in the arts faculty except department of English and Persian, no other

seminar library is computerized so seminar library professionals have not been undergoing ICT related computer courses. Significantly, due to availability of computer in English and Persian seminar library, they also search OPAC of Maulana Azad Library frequently through internet.

Table 6. ICT related training courses undertaken

<i>Category</i>	<i>Arts Faculty</i>	<i>Social Science Faculty</i>
PGDCA	00	02
DCA	00	04
CCA	00	00
Short Term Course	02	02
Other	02	03

Search engine awareness

Question about the awareness of search engine was asked and it was found (table 7) that most of the seminar library professionals know about search engine i.e. 6 respondents

from Arts Faculty and 10 respondents from Social Science. While two other respondents from Arts Faculty and 8 respondents from Social Science Faculty don't know about search engine.

Table 7. Search engine awareness among seminar library professionals

<i>Category</i>	<i>Arts Faculty</i>	<i>Social Science Faculty</i>
Yes	06	10
No	02	08

Internet access

In order to ascertain the accessibility to internet activity in the process of seeking, sharing and communicating information, we wanted to ask the seminar library professionals if they are comfortable with this. It is found that (table 8)

accessibility to computer is prevalent among seminar library professionals in both the faculties. The professionals belonging to both the faculties, who do not access the internet, are may be those without having internet connectivity at home or in the seminar libraries.

Table 8. Internet access by seminar library professionals

<i>Category</i>	<i>Arts Faculty</i>	<i>Social Science Faculty</i>
Yes	06	13
No	02	05

Confidence in handling Internet tasks

Internet literacy is a subject of computer literacy, which is generally defined as the basic knowledge, skills and attitudes needed by all citizens to be able deal with computer technology confidently in their daily life (Chou et al). The Internet skills are becoming very important for all library professionals as more and more library operations and services can be performed more effectively by using the Internet. The seminar library professionals were asked to indicate their confidence in handling internet task.

Table-9 shows that majority of the seminar library professionals in Arts Faculty and Social Science Faculty are able to copy/ download files from internet. However, 4 respondents from Arts Faculty and 11 respondents from Social Science Faculty know how to attach a file to an e-mail message. At the same time, 4 respondents from Arts Faculty and 9 respondents from Social Science Faculty are able to download a music files from internet. It is deduced that, seminar library professionals perform the following task because they are regularly needed to do the same.

Table 9. Confidence in handling Internet tasks

Category	Arts Faculty		Social Science Faculty	
	Yes	No.	Yes	No.
Copy downloads files from internet	06	02	11	07
Attach a file to an e-mail message	04	04	11	05
Downloads music files from internet	04	03	09	09
Write and send ane-mail	04	03	13	05

Favorite activities using ICT based services

Table-10 shows that most of the seminar library professionals are engaged in the e-mail and searching activities in both the faculties. It may be inferred that may be due to least interest

in other activities, ICT seminar library professionals are not active in Blogging, Chatting and Web PAC. It is presumed that the professionals have learned either by their friends or by trial and error, some of them have taken training so they perform these activities easily.

Table 10. Favorite activities using ICT based services

Category	Arts Faculty	Social science Faculty
E-mail	05	12
Searching	06	10
Blogging	01	01
Chatting	01	03
OPAC	03	06
Web PAC	02	02

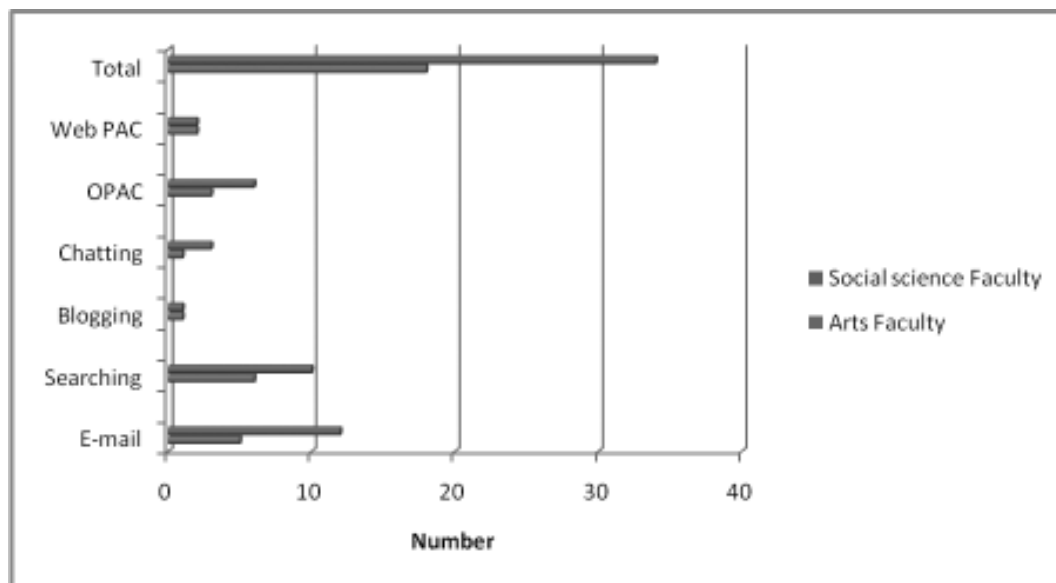


Fig 2. Favorite Activities Using ICT Based Services

E-mail services used

E-mail service is one of the services where people can mail each other without delay. In Arts Faculty 3 respondents and 8 respondents are the members of G-mail. However, Yahoo! mail is used by 2 respondents from Arts Faculty and 6 respondents from Social Science Faculty members. Rediffmail has the highest no of

registration in the Arts Faculty by 4 respondents, G-mail is used frequently by the users, so there is higher number of seminar library professionals registered on G-mail account. Another reason of using G-mail by high number of professionals is faster in comparison to others. G-mail has chat facility and it provides many other features which are not made available by many other service providers.

Table 11. E-mail account used by the seminar library professionals

Category	Arts faculty	Social Science Faculty
G-mail	03	08
Yahoo! mail	02	06
Rediffmail	04	03
Others	01	00

Use of social networks

Social networks on internet are one of the forums where the people can meet and get connected to share their ideas with each other. Recently the reports of Facebook, the largest

social networking site on the internet, was published as the total membership reached at more than 500 million active users with 50% of them log on to Facebook in any given day (Facebook.com).

It is found from table-12 that, 4 library professionals from Arts Faculty and 9 library professionals from Social Science Faculty, are the registered members of Facebook, while Orkut

is use by 1 respondent from Arts Faculty and 3 respondents from Social Science Faculty. Other popular social networks include Twiter, Ning, HI5, and Linked in which are less in use.

Table 12. Use of social networks by seminar library professionals

<i>Category</i>	<i>Arts Faculty</i>	<i>Social</i>
Orkut	01	03
Facebook	04	09
Twitter	01	02
Ning	00	02
HI5	00	02
LinkedIn	00	02

Awareness about the ICT related terminologies

Due development in the field of ICT, its application has also affected the Libraries. Moreover, new terms have emerged in the field such as Website, Digital Library, INFLIBNET,

E-journal, DELNET etc. The views of the respondents to this question are depicted in table13. It is evident that, the seminar library professionals are aware of ICT related terms because these terms are related to their field of work.

Table13. Awareness about the ICT related terminologies

<i>Category</i>	<i>Arts Faculty</i>	<i>Social Science Faculty</i>
Web OPAC	05	10
Digital Library	05	11
INFLIBNET Database	02	11
E-journals	05	11

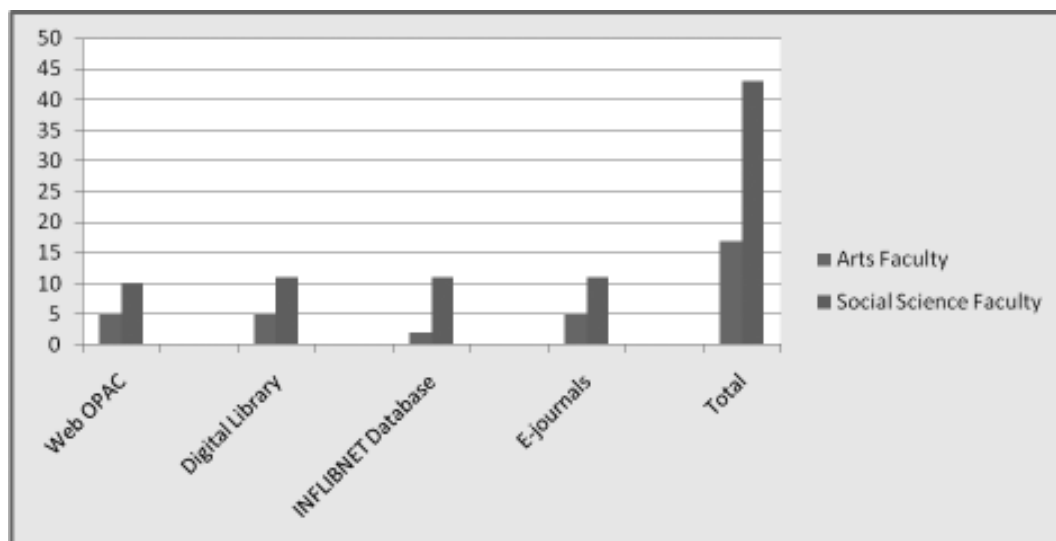


Fig 3. Awareness about the ICT related terminologies

Use of general purpose application software

The seminar library professionals were asked, whether they use any application software for general purpose. It is found that MS Word is

the most widely used application software for general purpose among the seminar library professionals. The views of the respondents are depicted in table 14 (figure.4).

Table 14. Use of general purpose application software

Category	Arts faculty	Social Science Faculty
MS Excel	04	10
Power Point	02	04
MS Access	02	03
MS Word	06	10
Photoshop	01	03
Coral Draw	01	03
Others	00	01
Total	16	34

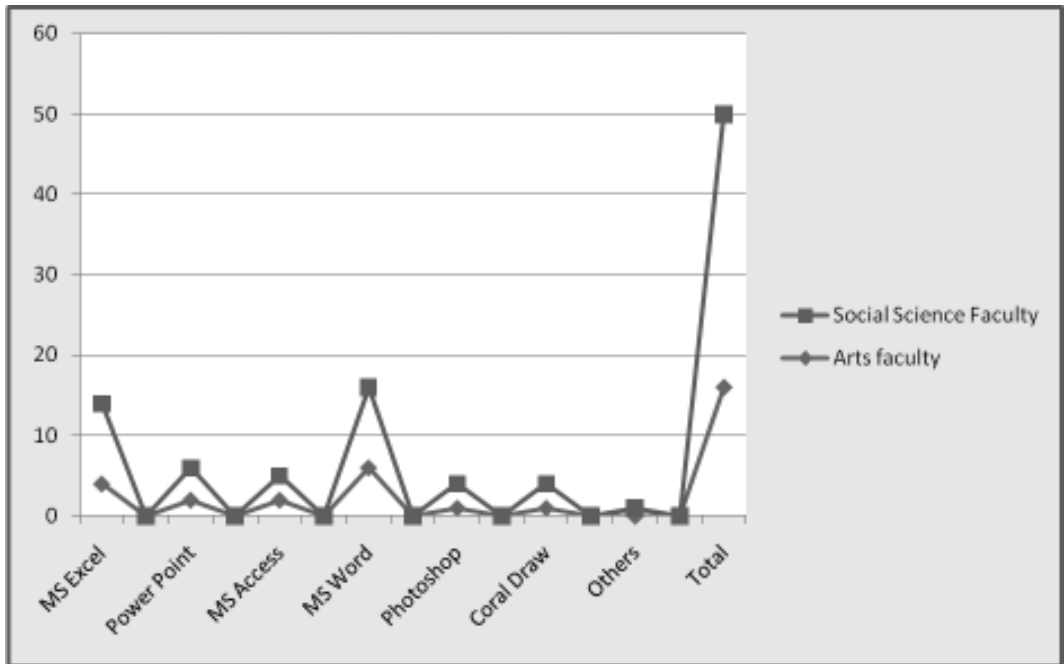


Fig 4. Use of general purpose application software

Use of operating system

The seminar library professionals were asked to indicate the extent of use of operating system. Table-15 shows that *Microsoft Windows* is the most widely used operating system by seminar library professionals of the Arts Faculty (7 respondents) and of the Social Science Faculty

(16 respondents). *Sun Solaris* is used only in the Social Science Faculty only by 1 (West Asian Department) Seminar library professionals. *Linux*, *Unix* and *Others* operating systems are not in use in both the faculties. *Windows operating system* being user friendly and relatively new version is used frequently by the seminar library professionals.

Table 15. Use of operating system by seminar library professionals

<i>Operating Systems</i>	<i>Arts Faculty</i>	<i>Social Science Faculty</i>
Windows	07	13
Linux	00	00
Unix	00	00
Sun Solaris	00	01
Others	00	00

Use of Internet resources

The table-16 shows that rate of using internet resources by seminar library

professionals is high in both the faculties. Nowadays, most of the resources are easily available on internet, so most of the seminar library professionals are using internet resources.

Table 16. Use of internet resources by seminar library professionals

<i>Category</i>	<i>Arts Faculty</i>	<i>Social Science Faculty</i>
Yes	05	12
No	03	06

Confidence in handling high level ICT tasks

The seminar library professionals were asked to indicate their confidence in handling high level ICT tasks. Table 17 reveals that 2 respondents from Arts Faculty and 9 respondents from Social Science Faculty are able to use a

database while, only 1 respondent from Arts Faculty and 4 respondents from Social Science Faculty are experts in using a database. The seminar library professionals are attending regularly conferences and seminars so they have also confidence in handling high level ICT task such as use of database and create a PPT.

Table 17. Confidence in handling high level ICT task by seminar library professionals

<i>Category</i>	<i>Arts Faculty</i>	<i>Social Science Faculty</i>
Use a database	02	09
Power point presentation	01	04

Conclusion

The findings of the study show that the Social Science Faculty’s Professional are more ICT literates than the Arts Faculty’s seminar library professionals. Though the seminar library professionals claim that they use different ICT based resources and services, the frequency of use of these resources and services is very low. The ICT literacy levels of the professionals are much influenced by the levels of ICT use in their seminar libraries. The seminar library professionals need to enhance their level of ICT literacy. Some of them have technophobia, so fear of using information and communication resources. Some of them are old who don’t take interest in computer. It is found that mostly professionals know only basic function of

computer and they don’t want to take their interest further to work ahead of that they already know. The University should provide state-of-the-art ICT infrastructure including hardware, software and e-resources with full-fledged Internet access. The seminar library professionals should be provided with more chances of formal training to introduce all possible ICT-based resources and services that can improve their ICT literacy. The present library and information science curriculum in universities of India are not supporting the appropriate skills and expertise of LIS professionals to be able to handle the application of ICT. Therefore, ICT literacy skills need to be integrated appropriately into the curricula to ensure improved ICT literacy among library and information professionals.

Note :

1. <http://searchcio-midmarket.techtarget.com/definition/ICT>

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