SJIF IMPACT FACTOR: 2.996 CRDEEPJournals
International Journal of Social Sciences Arts and Humanities Yougal Joshi Vol. 4 No. 4 ISSN: 2321 – 4147
International Journal of Social Sciences Arts and Humanities Vol. 4 No. 4. 2017. Pp. 185-193

Review Paper

Awareness and Usage of Electronic Resources with Reference to UGC-Infonet Program of Central Library Kumaun University Nainital: A User Study

Yougal Joshi
Information Scientist, Kumaun University, Nainital, Uttrakhand, India.

Article history
Received: 28-07-2017
Revised: 15-08-2017
Accepted: 30-08-2017

Corresponding Author
Yougal Joshi
Information Scientist, Kumaun University, Nainital, Uttrakhand, India

Abstract
The purpose of this study is to assess the use of e-resources by the Faculty members, Research Scholars and Post Graduate Students in the Central library of Kumaun University Nainital. The focus of the study is an in-depth analysis of the e-resources among the faculty members, researchers and post graduate students and how they use the e-resources along with their preferred choices. Also the awareness of available e-resources under the UGC-Infonet Digital Library consortium in university library is considered.

Keywords: *Kumaun University Central Library, Electronic Resources, Electronic Services, E-Journals,*

Introduction

The phrase *"electronic resources"*, has broadly been defined as information accessed by a computer maybe useful as bibliographic guides to potential sources but, as of yet, they infrequently appear as cited references in their own right (Graham, 2003). Moreover, electronic resources refer to that kind of documents in digital formats which are made available to library users through a computer based information retrieval system. Because of the effective presentation with multimedia tools, electronic resources have become the source of information.

These e-resources present themselves in innumerable ways to the global audience. The beauty of e-resource is that it is infinitely creative and limitless in its presentation. The traditional models of scholarly communication are still in practice. However the design and approach of an e-resource offers limitless possibilities to communication and import knowledge.

Objectives of the Study

The objectives of the present study are enumerated as under:

- *To know the awareness, degree of use and purpose of using e-resources among the faculty members, post graduate students and Research Scholars of Kumaun University under UGC-Infonet;*
- *To identify as to what extent faculty members, post graduate students and research scholars have access to, and to evaluate if orientations and training are needed to access the e-resources of UGC-Infonet Digital Library Consortium and to suggest the ways and means for effective use of the e-databases and internet search;*
- *To access the impact of e-resources use, preferred e-resources and alert services of library and availability of infrastructure on use of UGC-Infonet e-resources.*

Methodology

Attempt has been taken to analyze and interpret the collected data using simple statistical techniques. A well designed structured survey based questionnaire was designed to collect the data in order to obtain a better understanding of the scholars 'use of searching techniques to access online database' in Central library of Kumaun University, Nainital. The questionnaires were distributed among the faculty members, research scholars and post graduate students who are the registered members of central library through a random sampling technique as per the list obtained from the records (user entry register) of Central library, Kumaun University, Nainital. The list of the research scholars were collected personally from various departments in view of its varying nature. Out of the 220 questionnaires distributed, 180 were received with a response rate of 81.82%. In the first phase, 140 questionnaires were received. Personal contact was made through e-mail and telephone for the remaining; as a result an additional 20 questionnaires were collected. Again after few reminders, 33 more questionnaires were received. Out of these responses 13 questionnaires were not considered due to the incomplete data and finally 180 questionnaires were considered for data analysis. The respondent's data were coded and entered in a specially designed Microsoft Excel sheet. Then the data were used in the Statistical Package for Social Science (SPSS) 16.0 for windows and descriptive Statistics was used to assure the validity of the findings from this.

Sampling

First of all we define the sample data, which is collected by us from users of Kumaun University library. The collected data presented in Table 1.

Table 1. Demographic Data of Library Users

Library User Category	Number of responses	Percentage
Faculty Members	42	23.33
Research Scholars	80	44.44
Post Graduate Students	58	32.22
Total	180	

Fig. 1 Demographic Data of Library Users

Table 1 displays the breakdown response of the total number of Faculty Members, Research Scholars and Post Graduate Out of the 180 questionnaires, 80 (44.44%) completely filled questionnaire received from Research Scholars and 42 (23.33%) from Faculty Members and remaining 58 (32.22%) received from Post Graduate Students, which is represented in the Fig.1.1

Per Day Using Frequency of Online Database

The study gives a picture of the frequency of use of online database and time spent on access to online database per day. Table 5.6 presents the breakdown of the frequency of use of the online database per day in terms users i.e. faculty members versus the research scholar versus post graduate students of Kumaun University.

Table 2: Per Day Use of Online Database by Users

User Category	Use per day					
	0.30 to 1Hrs.		1 to 2 Hrs		More than 2 Hrs	
	No. of Response	%	No. of Response	%	No. of Response	%
Faculty Members	16	8.89	17	9.44	9	5
Research Scholars	19	10.56	38	21.11	23	12.78
Post Graduate Students	15	8.33	29	16.11	14	7.78

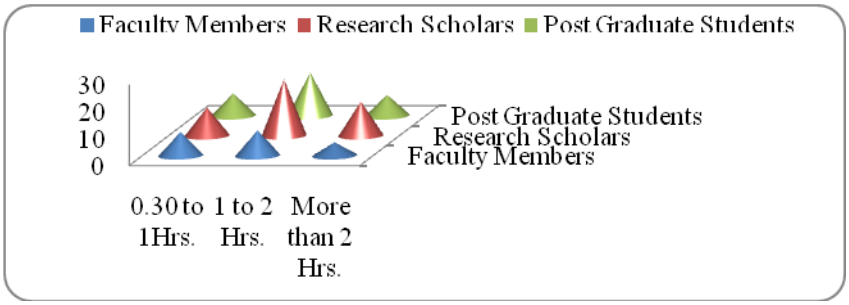

Fig.2: Per Day Use of Online Database by Users

Table 2 shows that 8.33% (15) post graduate students use the online database for 0.30 to 1hrs. 16.11% (29) post graduate students use the online database for 1 to 2 hrs and only 7.78% (14) post graduate student use the online database for more than 2 hrs. The largest group of respondents said that they 'use the online database for 1 hour to 2 hours' i.e. 21.11% (38) research scholar. 16.11% (29) post graduate students have used the online database for 1 hour to 2 hours and 10.56% (19) post graduate students have used the online database for 0.30 to 1 hrs.

Among the faculty members only 9.44% (17) members used the online database for 1 hour to 2 hours and 5% (9) faculty member used the online database for more than 2 hrs. Only 8.89% (16) faculty member used the online database for 0.30 to 1 hrs.

Knowledge about Online Database (e-Resources)

A study is conducted about how the respondents come to know about online database and e-journals and other resource of university library. The findings of the study are presented in Table 3.

Table 3: Knowledge about Online Database (e-Resources)

Name of Source	Number of Response	Percentage
Friends/Colleagues	72	40
Library staff	42	23.33
Faculty Member	40	22.22
News Paper	12	6.67
Any Other Source	14	7.78

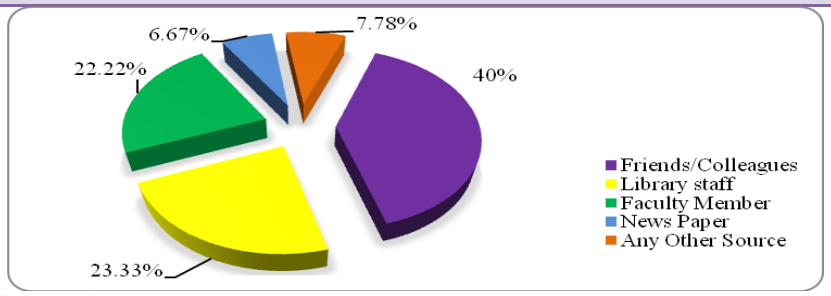

Fig 3: Knowledge about Online Database (e-Resources)

Table 3 shows that 40%(72) respondents have knowledge of e-resources of university library because they informed by their friends/colleagues. Library staffs have a major role in success of a library. Library staff provides knowledge about e-resources to 23.33% (42) users. Faculty members of university give knowledge to 22.22% (40) users of library. 6.67% (12) Library users find some kind of information about e-resources in news papers. 7.78% (14) respondents have information about e-resources of library from other sources.

Awareness about UGC-Infonet programme

User's awareness of UGC-Infonet programme is analysed and the findings of the same is shown in Table 4.

Table 4: Awareness about UGC-Infonet programme

	Number of Response	Percentage
Yes	78	43.33
No	102	56.67

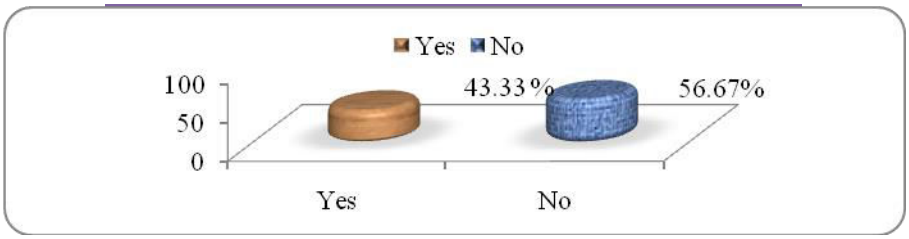

Fig. 4. Awareness about UGC-Infonet programme

Table 4 reveal that 56.67% (102) respondents have no awareness about UGC-Infonet programme. Only 43.33% (78) respondents aware about UGC-Infonet programme and use e-resources of library.

Use of UGC-Infonet Digital Library Consortium e-resources

In this context the respondents provide a valid and key opinion regarding the use of UGC–Infonet resources. The results are shown in

Table 5. Use of UGC-Infonet by Users

	Faculty members		Research scholars		Post Graduate students	
	%	Responses	%	Responses	%	Responses
Yes	73.81	31	82.5	66	32.76	19
No	26.19	11	17.5	14	64	39
Total		42		80		58

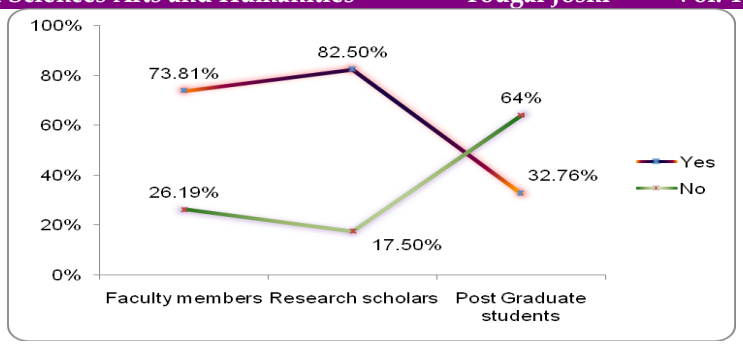

Fig. 5: Use of UGC-Infonet by Users

Table 5 showed that 64% (39 out of 58) post graduate students answered 'Yes' and 32.76% (19 out of 58) post graduate students replied 'No' regarding the use of UGC-Infonet Digital Library Consortium. Out of 80 research scholars 82.5% (66) replied 'Yes' and 17.5% (14) replied 'No' regarding the use of UGC-Infonet Digital Library Consortium. Out of 42 faculty members 73.81% (31) replied 'Yes' regarding the use of UGC-Infonet Digital Library Consortium. It is also observed from the result that 26.19% (11) faculty members are either unaware or not using the UGC-Infonet services.

Purpose of using the online e-resources

We study the various purposes of using online e-resources along with the most frequently used internet based services by the respondents. The findings are shown in Table 6.

Table 6: Purpose of using the e-resources

Types of Resources	Least use	Average use	Good use	High use
Bibliographic Services	32 (17.78 %)	36 (20.00 %)	60 (33.33 %)	52 (28.89 %)
Online Database	12 (6.67 %)	26 (14.44 %)	47 (26.11 %)	95 (52.78 %)
E- Journals	14 (7.78 %)	23 (12.78 %)	53 (29.44 %)	90 (50.00 %)
E-mail	18 (10.00 %	26 (14.44 %)	38 (21.11 %)	98 (54.44 %)
E-books	59 (32.78 %)	35 (19.44 %)	28 (15.56 %)	58 (32.22 %)
E-Chatting	32 (17.78 %)	43 (23.89 %)	48 (26.67 %)	57 (31.67 %)
E-Learning	17 (9.44 %)	18 (10.00 %)	78 (43.33 %)	67 (37.22 %)
WebOPAC	37 (20.56 %)	55 (30.56 %)	39 (21.67 %)	49 (27.22 %)
UGC-Infonet	35 (19.44 %)	20 (11.11 %)	38 (21.11 %)	87 (48.33 %)
Other Internet Services	37 (20.56 %)	32 (17.78 %)	41 (22.78 %)	70 (38.89 %)

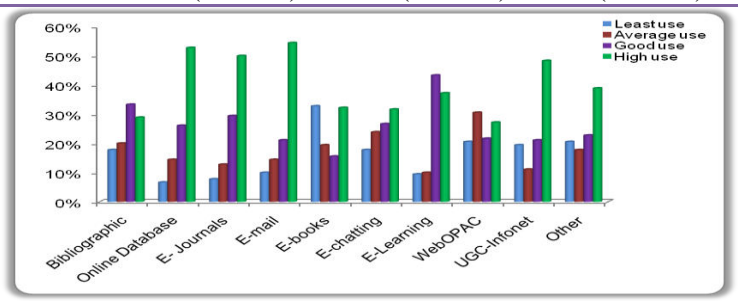

Fig. 6: Purpose of using the e-resources

Table 6 shows that the e-mail dominates the list of resources with 54.44% (98 out of 180) respondents, followed by use of online database 52.78% (95 out of 180) respondents, 50% (90 out of 180) respondents use the e-journals, UGC-Infonet uses by 48.33% (87

out of 180) respondents, use of other internet services by 38.89% (70 out of 180) respondents, e-learning uses by 37.22% (67 out of 180) respondents, e-book uses by 32.22% (58 out of 180) respondents, e-chatting uses by 31.67% (57 out of 180) respondents, 28.89% (52 out of 180) respondents use bibliographic service and WebOPAC uses by 27.22% (49 out 180) respondents.

Preferred E-resource under UGC-Infonet

The respondents were also asked to specify the preferred choice of database used through the UGC-Infonet consortia. The Table 1.7 represents the various e-resources covered under UGC-Infonet services. It also includes the frequency count and percentage opted by the faculty members, research scholars and post graduate students.

Table 7. Preferred E-resource under UGC-Infonet

Publishers/ Aggregator	Least Use	Average Use	Good Use	High Use	Total Response
American Chemical Society (ACS)	72 (40%)	54 (30%)	9 (5%)	45 (25%)	180
American Institute of Physics (AIP)	55 (30.56%)	45 (25%)	15 (8.33%)	65 (36.11%)	180
American Physical Society (APS)	68 (37.78%)	34 (18.89%)	11 (6.11%)	67 (37.22%)	180
Annual Reviews (AR)	55 (30.56%)	34 (18.89%)	8 (4.44%)	83 (46.11%)	180
Cambridge University Press (CUP)	58 (32.22%)	69 (38.33%)	41 (22.78%)	12 (6.67%)	180
Elsevier Science Direct	17 (9.44%)	26 (14.44%)	38 (21.11%)	99 (55%)	180
Emerald Database	109 (60.56%)	48 (26.67%)	17 (9.44%)	6 (3.33%)	180
Institute of Physics (IOP)	21 (11.67%)	46 (25.56%)	52 (28.89%)	61 (33.89%)	180
JSTOR	13 (7.22%)	26 (14.44%)	37 (20.56%)	104 (57.78%)	180
Nature	46 (25.56%)	21 (11.67%)	55 (30.56%)	58 (32.22%)	180
Oxford University Press (OUP)	149 (82.78%)	19 (10.56%)	9 (5%)	3 (1.67%)	180
Project Muse	23 (12.78%)	33 (18.33%)	45 (25%)	79 (43.89%)	180
Royal Society of Chemistry (RSC)	17 (9.44%)	29 (16.11%)	38 (21.11%)	96 (53.33%)	180
Springer Link 1700 collection	18 (10%)	26 (12.78%)	39 (21.67%)	97 (53.89%)	180
Taylor & Francis Online	11 (6.11%)	37 (20.56%)	71 (39.44%)	61 (33.89%)	180
Web of Science (WoS)	147 (81.67%)	19 (10.56%)	9 (5%)	5 (2.78%)	180
Ebsco ebooks Academic Collection	151 (83.89%)	22 (12.22%)	5 (2.78%)	2 (1.11%)	180
Institute for Studies in Industrial Development (ISID)	147 (81.67%)	23 (12.78%)	7 (3.89%)	3 (1.67%)	180
Any Other	162 (90%)	11 (6.11%)	5 (2.78%)	2 (1.11%)	180

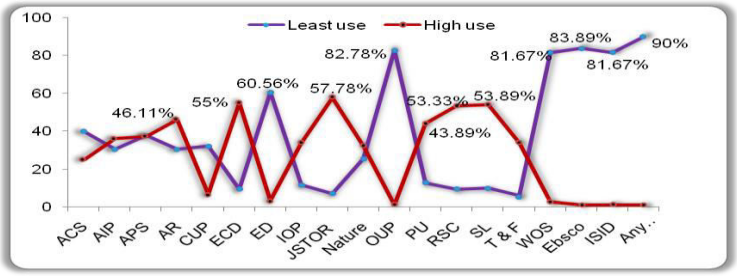

Fig. 7: High & Least Use of Preferred E-resource under UGC-Infonet

JSTOR database is the most popular choice among the users with 'high use' 57.78% (104) followed by Elsevier Science Direct 55% (99). Springer Link has 53.89% (97) user and is the third most preferred database. Springer Link and Royal Society of Chemistry with 53.89% (97) and 53.33% (96) occupied their place at 3rd and 4th place respectively. Next is Annual Reviews and Project Muse preferred as high use by 46.11% (83) and 43.89% (79) of respondents respectively and occupied the 5th and 6th place. Similarly American Physical Society marked by 37.22% (67), American Institute of Physics 36.11% (65), Taylor & Francis Online 33.89% (61), Nature 32.22% (58), American Chemical Society 25% (45), Cambridge University Press 6.67% (12), Emerald Database 3.33% (6), Web of Science 2.78 (5), Oxford University Press 1.67% (3) and Ebsco ebook 1.11% (2) occupied 7th, 8th, 9th, 10th and 11th place as the high use preference order. In 'Least Use' category Ebsco ebook is in 1st place with 83.89%, Oxford University Press at 2nd place with 82.78%, Web of Science and Institute for Studies in Industrial Development share 3rd palace with 81.67%. Similarly Emerald Database marked by 60.56%, American Chemical Society 40%, American Physical Society 37.78%, Cambridge University Press 32.22%, Annual Reviews 30.56%, American Institute of Physics 30.56%, Nature 25.56%, occupied 4th, 5th, 6th, 7th, 8th, 9th and 10th place as the least use preference order.

Awareness Programme Conduct by Library

A study is conducted by us on awareness programmes organized by library. The findings of the study are presented in Table 8.

Table 8: Awareness Programme Conduct by Library

	Numbers of Response	Percentage
Yes	58	32.22
No	122	67.78

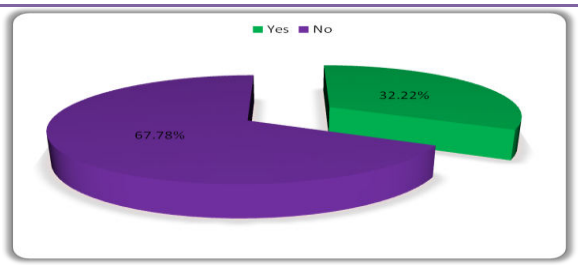

Fig. 8: Awareness Programme Conduct by Library

Regarding the orientation and user awareness programme organized by the Library or INFLIBNET/UGC, the data shows that majority 67.78% (122) of respondents replied that they are 'Not aware' of organizing such training or workshops by library. Only 32.22% (58) users are aware about these awareness programmes.

Usefulness of Awareness Programme

A study is carried out on the awareness programmes that these are useful or not useful to the users. The same is shown in Table 9.

Table 9: Usefulness of Awareness Programme

Status of Usefulness	No of Response	Percentage
Least Useful	125	69.44
Average Useful	33	18.33
Good Useful	20	11.11
Highly Useful	02	1.11
Total	180	

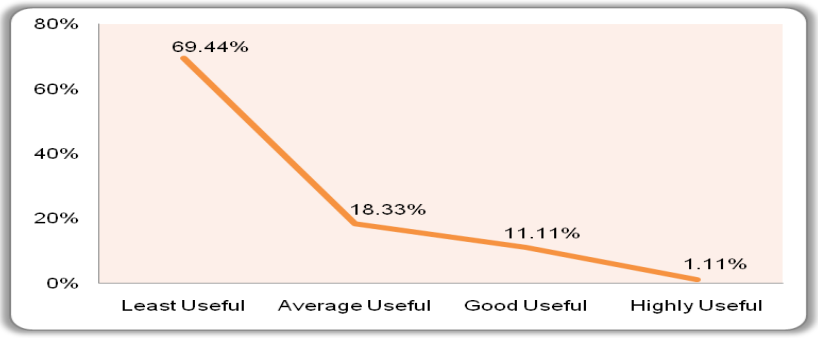

Fig. 9: Usefulness of Awareness Programme

Table 9 shows that 69.44% (125) users are feel that these awareness programmes are least useful. 18.33% (33) responded that awareness programmes are average useful to them. While 11.11% (20) users said that these programmes are *'good useful'* for their work. Only about 1.11% (2) of the respondents replied awareness programmes are highly useful for them.

Difficulties in Accessing the Online Database

Table 10: Difficulties in Accessing the Online Database

	Number of Response	Percentage
Yes	119	66.11
No	61	33.89

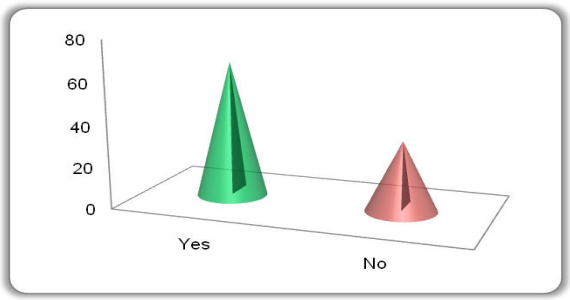

Fig. 10: Difficulties in Accessing the Online Database

Table 10 shows that 66.11% (119) respondents said that they face problems when they accessing the online database in library. 33.89% (61) respondents said they have no problem in accessing the online database.

Reasons for not using the database procured by library

Table 11 shows that 25.56% (46) respondents said that not enough systems are available in the library for research work. 31.11% (56) respondents said that no proper internet connection is available in the university library. 10.56% (19) respondents said they get poor content from online database. 26.11% (47) respondents said that library may charge for internet facility. 3.78% (7) respondents have not enough time to visit the library. 1.11 (2) respondents have their own reasons for not using the database procured by library.

Table 11. Reasons for not using the database procured by library

Reason	Number of Response	Percentage
Non availability of system	46	25.56
No proper Internet connection	56	31.11
Poor contents	19	10.56
Library may charge	47	26.11
Lack of time	7	3.89
Not aware	3	1.66
Any Other	2	1.11

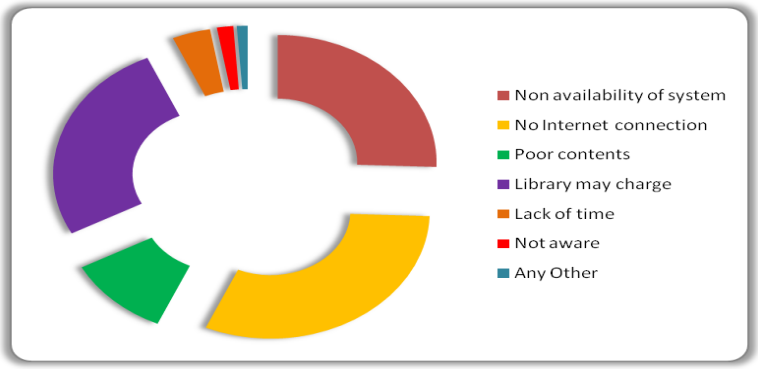

Fig. 11. Reasons for not using the database procured by library

Conclusion and Recommendations

Hereunder are given some of the comments of the respondents for the improvement of the use of e-databases and e-journals facility at the university library:

- **Accessibility**

For all the users of the e-resources of the Library, dissemination of extensive knowledge about e-databases, and their utility should be among departments and the students and researchers by organising seminars, training sessions, workshops and other contact programmes regularly. This step will facilitate the use of e-resources most productively and give better impetus to various research programmes, in formulating better research ideas, keeping the researchers and the concerned faculties update about the current developments in their fields of enquiry. In order to provide speedy and 24x7 access to these databases, there is the requirement of up-gradation of all systems installed in the library, at the campus and the hostels, and replacing the older models and obsolete software by the new ones based on the latest technology. The University Library services should also be upgraded from time to time to allow its users to have access to the latest information on fully commissioned and dedicated internet access Kiosks. All the e-resources such as databases, the full text of journals like ike Springer Link, Nature, JSTOR, Elsevier Science and other items listed under UGC-INFONET should be made available.

- **Requirements of Hardware and Software**

Another matter which needs immediate attention is the dearth in the availability of a sufficient number of computer systems, and also the continued use of outdated software. The required numbers of computers need to have high-speed internet, and INFLIBNET facility should also be made available to each department in the college. The issues as mentioned earlier mandate an increase in the number of terminals with at least a functional internet connectivity so also timely up-gradation of the software applications and installation of the latest hardware. In order to solve the operational issues at the departmental level, each department needs a broadband-connected internet laboratory with a dedicated trained staff. Besides improving the infrastructural facility, the faculties, as well as the students and researchers and staff working in the departments, must be imparted with relevant knowledge about the use of the internet, electronic resources/ databases and other online tools.

- **Network and Internet Connectivity**

The recurrent problem faced today in the university is of better network and internet connectivity. There is an urgent need to reform the entire network system in the Central Library and the college campus as well to ensure access to a robust network running high-speed internet connectivity. Fast and reliable internet speed (approx. 1 GBPS) will allow users to access multiple electronic databases easily round the clock, 24x7. Very often, the occurrence of abrupt disturbances in the network connectivity shuts down the entire system for days, and thus the question of making use of any choice of e-resources remains impossible. The issue of poor connectivity is often also due to the client computers on the network not having the latest antivirus software installed. As a result, malicious codes that are run on the infected systems many a time, overload the network system and bring it to a halt. A central computing system, besides proper computerisation of the libraries and the departments in the campus, is required for its proper implementation. Establishing connections with other libraries would widen the reach of users and allow them to access all essential and desired databases, journals such as Elsevier journals, e-books and all sorts of old and new databases and e-resources.

- **Awareness and Training**

There is a pressing need to conduct e-learning programmes and spread awareness regarding computer literacy among the library staff. Also, the library staffs require training about the operationalisation of library software, internet tools and applications deployed at the library systems. The library and the concerned authorities should play a proactive role to popularise the UGC-INFONET programme and other consortiums to enable its proper implementation. Naturally, the staff working at the Central Library or the Computer Centre should keep themselves updated regarding new publications and journals of different domain and also the developments in the features of UGC-INFONET. The Library or Computer Centre staff should also be made aware of the INFLIBNET. This knowledge would enable the library staff to identify and cater to various needs and requirements of the students and the faculty teaching in different departments in the college. The students and researchers should also be regularly informed about the latest additions in journals and electronic resources or databases, and other sources of information in order to help them make the best utilisation of the available resources at the library. There should also be alternative subscriptions in order to address any shortage in print media. Due to the lack of financial assistance, there is a drop in the number of print journals and the researchers unable to access much-required resource; hence, the organisation should bear its costs. In order to manage the issue of financial crunch, the concept of Public-Private Partnership (PPP) can help in managing and arranging the new journals. In short, the Central Library should take a total quality management approach.

References

Dominic, J. & Nirmala, P.J. (2002). Marketing of electronic resources in academic libraries. In Munshi, Usha Mujoo & Kundra, Ramesh (Eds.), *Information Management in the new millennium* (135-142). New Delhi: Allied Publishers.

Gohain, Rashmi Rekha (2009). *Use, evaluation and management of electronic resources at Central Library, Tezpur University: A study. (Unpublished M PhilDissertation). Mizoram University, Aizawl.*
Natarajan, M. (2011). Exploring the e-resources for educational use. *International Journal of Information Dissemination and Technology,* 1(4),193-196.
Srivastava, Manjulika & Pani, Sistla Rama Devi (2012). Quality education through open educational resources: a new direction for Open Universities.*University News,* 50 (16), 8-13.

Web References

About National Science Digital Library (n.d).
Retrieved 6th October, 2012 from http://nsdl-niscair.res.in/aboutNSDL.html.
Acronym. Retrieved 6th October, 2011 from
http://spanish.about.com/od/historyofspanish/g/acronym_gl.htm.
Archive (n.d). Retrieved 13th October, 2011 from
http://en.wikipedia.org/wiki/Archive.
Bachrach, Steven M. (n.d). *Electronic conferences*.
Retrieved 27th September, 2011 from
http://www.amacad.org/publications/trans9.aspx.
Biography (n.d). Retrieved 6th October, 2011 from
http://en.wikipedia.org/wiki/Biography.
Computer software (n.d). Retrieved 27th September, 2011 from
http://en.wikipedia.org/wiki/Computersoftware