

## Use of E-resources in Universities: A Study with Special Reference to Kannur University, Kerala

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**Abstract.** *E- Resources, especially in higher education and research, are getting a prime place in academic activities. The academic community is slowly switching over from using print resources to e- resources. Changing priority of the academic community for e-resources create a new challenge to library management at Colleges and Universities. Studies are conducted to know about the priority and use of e-resources for academic purposes. This study is aimed at assessing the extend of use of e-resources by postgraduate students, research scholars and the faculty of Kannur University, Kerala State. It is generally observed that the academic community is well aware of e-resources and interested in using it to the maximum, but at the same time feels that the facilities provided are inadequate to promote and strengthen the use of e-resources in academic institutions.*

**Keywords:** Academic Community, E-Resources, Kannur University

### 1. Introduction

Use of information and its management become inevitable in an era of information explosion and widespread use of digital information sources. In the modern world, people are depending more on technology for useful information sources and services than on traditional gadgets. Development in the field of Information Communication Technology (ICT) enabled the use of networking, Internet, mass storage media, interactive video technology, virtual reality, and public and private databases. It opened up new possibilities in dealing with collection, organization, and dissemination of information on a large scale. Today information can not only be stored, retrieved, communicated and broadcasted electronically in enormous quantities at phenomenal speed, but can also be rearranged, selected and transformed into different forms. It is to be noted that the large quantity of useful information products is only available in digital format. Extend of access to information and its use in the country make them information 'rich' or 'poor'. The gap between so-called 'information rich' and 'information poor' countries is widening further and 'information poor' countries are now under the threat of 'information starvation'. To overcome this unfortunate situation, Libraries and Information Centers in developing countries need to review their policies and, instead of heavily depending on traditional sources, should develop adequate e-resources. They also need to give priority to staff training and user education in order to introduce, promote and use e-resources.

E-resources are the materials consisting of data and/or computer programmes encoded for reading and manipulation by a computer and peripheral devices directly connected to the computer, such as a CD ROM Drive or remotely via a

network such as the Internet. These include software applications, electronic texts like e-journals, e-books, e-conference proceedings, bibliographic and textual databases, library catalogues etc. They also include CD ROMs, DVDs, website, emails, chatting, mailing lists, virtual conferencing, e-publishing, digital libraries etc. All these information sources are very much useful to the academic community in colleges and universities and therefore to be exploited to the maximum for the benefit of higher education and research.

## **2. Objectives of the study**

E-resources enable for innovation in teaching, enhance the timeliness in research, and increase in the discovery and creation of new fields of inquiry. E-resources are available on the Internet, databases and CDs / VCDs at a library, knowledge resource centres etc. Higher education institution and its library play a leading role in providing access to its members in promoting and using e-resources. Academic community, especially the faculty and the research scholars often prefer easy access to databases of online-refereed journals and to the web, which provide information that are minute, international in scope and sometimes not available elsewhere. This study aims at assessing the use of e-resources of the academic community at Kannur University, one of the state owned universities in Kerala. The main objectives of the study are:

1. The preference of e-resources to traditional sources of information;
2. The purpose and the extend of use of e-resources by academic community in the university; and
3. The problems and difficulties faced by them in getting access and using e-resources.

## **3. Methodology**

Social survey techniques, such as questionnaire and interview are used for the study to collect research data from the sample population selected by stratified random method. The Questionnaire contained 23 questions of 4 different areas, namely computer literacy, Internet service, E-resources and training.

## **4. Response rate**

185 users were selected for the study from a total population of 485 members of the academic community. Questionnaires were distributed among the sample population, of which 123 were duly filled in and collected back, with an overall response rate of 66.5 percent, 85.7 percent of faculty members, 60 percent of research scholars and 62.3 percent of postgraduate students.

## **5. Background of the study**

Results of many studies have already been reported on the use of e-resources in academic institutions for teaching-learning and research purposes. Maheswarappa and Ebrazer (2003), Waldman (2003), Choukhande and Dongre (2004), Ibrahim (2004), Renwick (2006) Kumbar and Shirur (2003), Lohar and Roopshree (2006), Nikham and Prmodini (2006), Rambgan and Tedd (2007) and others have studied the academic use of Internet / e-resources by students and the faculty. It has been reported that the student communities are very much fond of using e-resources for preparing assignments, seminar papers, and for updating lecture notes. Students are extensible using e-mail service on the Internet for exchanging information among classmates, friends and even with the faculty. And teachers are exploiting resources on open Internet like e-journals, e-reference books, data banks and information services for teaching, research and updating their knowledge.

## **7. Demographic profile**

The study covered a sample population of 185 academic members of Kannur University which comprised of 35 faculty, 20 research scholars, and 130 postgraduate students from the Department of English, Anthropology, Life Science, Management Studies, Applied Economics, Law and Health Sciences.

## 8. The Analysis and The Findings

Responses of the academic community about computer literacy, use of Internet service, e-resources and need for training for access and use of e-resources were collected and analysed. The results are discussed below:

### 8.1 Computer literacy

The ability to use e-resources effectively depends on basic computer skills, knowledge of what is available and how to use it. A computer literate can exploit the e-resources to the maximum possible without any difficulty. Only 14 percent of the respondents are fully literate and 70 percent are moderately literate, whereas 16% does not even know how to use computers. As 20 percent of the faculty members, 17 percent of the research scholars and 15 percent of the postgraduate students are the beginners, computer use could not be universal in the sense that every academic member does not use the computer for one or other purposes. This will definitely influence the use of e-resources. In this context, the university has to make necessary arrangements for making the academic community computer literate. The university should organize computer literacy programs or it should be given as part of the library orientation program. A compulsory course on computer use is to be offered to all postgraduate and research students as well as faculty who are having to use electronic, digital and online information sources for teaching, learning and research purposes. Computer literacy will positively enhance the use of e-resources on the campus.

### 8.2 Internet service

The Use of e-resources usually begin by accessing the Internet and using open resources on the Internet. So, the academic use of the Internet was analyzed and found that 98 per of the academic community uses the Internet. The rest, 2 percent does-not know how to use the Internet. The frequency of use is as follows: 63 percent of the academic community uses the Internet daily for accessing e-resources, 20 percent use it once in a week, and the rest use it twice or thrice in a week.

Access to the Internet is an important factor leading to the use of e-resources. Academic institutions provide facilities for Internet access to the campus. 62 percent of the academic community (80 percent of faculty members, 60 percent of postgraduate students and 33 percent of research scholars) is satisfied with the facilities provided for Internet access to Kannur University campus.

Generally the academic community uses the Internet for getting access to information, communication and exchange of ideas. The highest use of the Internet is for collecting factual information (37 percent) and subject information (34 percent) required for preparing research papers / seminar papers or assignments or lecture \ class notes. Email is apparently the tool of choice for communication, so 27 percent of them use the Internet for E-mail service. Only 4 percent uses Internet for entertainment, which is the lowest priority.

Access to the Internet is found to be one of the main factors leading to the use of e-resources on campus. The faculty, students and research scholars use the Internet facility for getting information for academic works. However, few are not satisfied with the Internet facilities provided on the campus.

The university has to provide enough Internet access points to the postgraduate students, research scholars and the faculty in the department. Internet facilities should also be provided at the library and hostels so that the students and research scholars can have access during free hours and holidays.

### 8.3 Use of E-resources

E-resources are getting prominence over print resources due to its inherent positive features like up-to-date-ness, international in scope, easiness of access, search, retrieval and use. All the respondents have the same feeling that e-resource are very important in universities for quality education and research and should be easily available and accessible to the academic community. And 37 percent of faculty members, 50 percent of research scholars and 37 percent of students prefer e-resources most. However, 94 percent of them like to have information sources both in print and electronic media, which necessitates the collection and development of both print and electronic resources in university libraries.

The entire academic community is aware of e-resources and its availability in various forms such as Internet, websites, databases, CD Rom, etc., 80 percent of the academic community is familiar with Chatting facility, map\ image collections, e-journals and Online Public Access Catalogue (OPAC), databases and book shop and 50 percent are aware of e-dissertations and theses, e-conference proceedings, mailing lists, and Frequently Asked Questions (FAQ's). 35 percent is familiar with virtual desk. Awareness of the academic community about e-resources is found unsatisfactory. It has to be improved further by organizing awareness programs for introducing the different forms of e-resources on the Internet, the info-net of UGC and in the digital library of the university.

Most of the faculty knows much about e-resources, however, some of the members of the faculty are unaware of e-resources like OPAC, e-theses and dissertations, e-conference proceedings and mailing lists, virtual conferences, and virtual help desks. Though virtual help desk and virtual conference proceedings are an important source of current information some of the research scholars are not aware of them. The postgraduate students are not much aware of OPAC, databases, e-theses and dissertations, e-conference proceedings, virtual conferences, FAQs, and virtual help desk. The faculty must be in touch with all types of e-resources and they should deliver it to the research scholars and students regularly.

Among the different types of e-resources, websites (46 percent) and CD ROM (23 percent) are used daily. OPAC (31 percent), Website (29 percent) and Chat (31.7 percent) are used only once in a week. Virtual help desk (85 percent), FAQ (61 percent) and e-dissertations and theses (55 percent) are rarely used. The frequency of use of various e-resources by the academic community is shown in table 1.

The academic community has to use current information sources to update their knowledge. Promotion of the use of current information resources is necessary for study, research and publication works in the university. Non-use of current information sources like e-theses/ dissertations, e-conference proceedings, virtual help desks, etc. may adversely affect the quality of academic work done.

Use of e-resources depends on the competency of the academic community to access, download and use e-resources. Though the use of the Internet is common among the academic community, use of other kinds of e-resources are found to be less common due to many factors. Many (51 percent) of the academic community (70 percent of faculty members, 50 percent of research scholars and 44 percent of postgraduate students) are having more than two years experience, but 11 percent is fresh in using e-resources. Moreover, the experience in the use of different e-resources varies from one to the other. 43.1 percent are expert in using CD ROMs and Chat service, 15 percent in the OPAC, 26 percent in Databases, 46 percent in the Websites, and 23 percent in E-Journals, maps and image collections. Many of the faculty are good in using websites, databases, e-journals, CD-ROMs, and Chat service. A good number of Research scholars are expert in using e-journals, CD-ROMs, and websites. And a fair number of postgraduate students are well versed in using chat service, CD-ROMs, websites and databases. The Competency of the academic community can be improved by way of regular training in accessing and using e-resources.

Proper skills are necessary to access and use e-resources. It can be developed through many ways like trial and error method, expert guidance, instruction and training, assistance of friends and staff, etc. It is found that 57 percent of the users acquired necessary skills through trial and error method, and 60 percent got guidance from various sources in accessing and using e-resources. The majority of the members of the faculty (67 percent) and research scholars (94 percent) acquired the necessary skills by trial and error method. However, 33 percent of the faculty, 17 percent of research scholars and 11 percent of postgraduate students have undergone some short term courses on accessing and using e-resources. There is no doubt that properly organized orientation programmes are necessary to develop different skills for the effective use of the e-resources.

With regard to the purpose of using e-resources, the highest use is for teaching and learning activities (weighted score 591). Other main purposes are for communication (weighted score 517), and for collecting general information (weighted score 482). The least use was for recreation (weighted score 299). The faculty and research scholars use

them for getting specialized information, whereas postgraduate students use them for getting general information for study purposes. So, the university has to offer maximum facilities to the faculty, research scholars and students to access and use e-resources for academic purposes.

<b>E-resources</b>	<b>Daily %</b>	<b>Weekly %</b>	<b>Rarely %</b>	<b>Never %</b>	<b>No Answer %</b>
OPAC	9	38	37	39	0
CD-ROM	28	31	46	18	0
Internet	78	33	11	1	0
Website/Homepages	56	36	20	11	0
Online databases	14	30	39	37	3
E-journals	15	32	38	38	0
E-theses/E-dissertation	0	16	26	68	13
E-conference proceeding	0	4	35	67	17
List serves/ mailing list	7	18	25	66	7
Virtual Conference	0	0	10	96	17
FAQs	6	12	28	75	2
Chat	22	39	29	33	0
Map/Sound/Image collections	16	20	58	29	0
Virtual help desk	0	4	15	104	0
Online book shops	1	7	45	70	0

Table 1. The frequency of the use of e-resources by the academic community

Location of the facility is an important factor influencing the use of e-resources. Computers with Internet connectivity are now common at home, in offices, libraries etc. . . . Generally the faculty and research scholars use them at home (73 percent) and at departments (80 percent), whereas postgraduate students use it at department (51 percent) and at the library (54 percent). The locations of accessing e-resources by the academic community are given in table 2.

<b>Location</b>	<b>Faculty (%)</b>	<b>Research Scholars (%)</b>	<b>Postgraduate students (%)</b>
Home	73.3	66.7	14.6
Department	80.0	58.3	41.5
Library	16.7	16.7	43.9
Internet Café	26.7	50.0	17.9

Table 2. The locations of accessing e-resources by the academic community

The departments and the library are found to be the main place of accessing e-resources by the academic community, so enough facilities are to be provided there.

Adequacy of e-resources available in the library and on the Internet is a serious matter that influences the promotion of use of e-resources among academic community. Only 5 percent of the academic community is satisfied with the e-resources available in Kannur University campus libraries. Therefore there is a strong demand for immediate steps for developing a good collection of e-resources in the campus libraries. The academic community also feels that factors like accessibility, accuracy, availability, consistency, ease of use, flexibility, timeliness, and uniqueness are having expected quality and they are to be improved further. And the relevance and usefulness of e-resources available on the campus are to be evaluated and measures should be taken to improve their quality.

#### **8.4 Training**

The study finds that the faculty and students have certain difficulties in accessing and using e-resources. Lack of facility (48 percent) and lack of training (36 percent) are found to be the two major hurdles in accessing and using e-resources

at Kannur University. Therefore, 76 percent of the academic community demands proper training in accessing and using of e-resources. The faculty (60 percent), research scholars (75 percent) and postgraduate students (74 percent) are of the same view in this regard. Identifying the problems and difficulties of the academic community in accessing and using e-resources will be useful for taking corrective measures and improving the use of e-resources on the campus. The difficulties of the faculty, research scholars and postgraduate students in accessing and using e-resource are given in table 3.

<b>Difficulties</b>	<b>Faculty</b>	<b>Research Scholars</b>	<b>Postgraduate Students</b>
Lack of facility	15	9	35
Lack of training	9	10	25
Lack of knowledge about e-resource	13	6	33
Lack of time	10	2	13
Other difficulties	1	0	0

Table 3. The difficulties of the academic community in accessing and using e - resources

It can be seen that a large majority of the academic community does face problems in accessing and using e-resource Hence there is a need for providing proper training in Internet browsing, using e-journals, databases, OPAC, and CD ROMs. They feel that the university has to organize regular workshop on the access and use of e-resources and the library should provide technical assistance for this.

### **9. Recommendations**

Based on the study, the following recommendations are made for improving the efficient and effective use of e-resources on university campuses. The universities in the country have to take the responsibility to:

- Organize regular computer orientation programmes;
- Organize training programmes on Internet search and retrieval of electronic information
- Organize digital library orientation programmes.
- Develop an adequate collection of e-resources in the library.
- Provide enough access points and other facilities for accessing e-resources on the campus.
- Motivate the faculty, research scholars and the students use e-resources for academic purposes.
- Publish regular bulletin on open e-resources on the Internet and in the library.

### **10. Conclusion**

The Faculty, due to their nature of work i.e., teaching, research and publication, should have ready access to information. Many of them have Internet access at home. The research scholars and the students totally depend on the facilities on the campus for accessing e-resources. The university has to provide them adequate facilities and ensure free access at the departments, the library and hostels. Moreover, they have to be motivated for accessing and using e-resources. Provision of references about e-resources on the Internet and in the library in classrooms is an ideal way of taking students to the e-resources. Similarly directing the students to use e-resources for preparing assignments, seminars, projects and research reports will also make them use e-resources.

UGC info-net program is now available at all campuses. The library has to play its own role in making the students and faculty use this programme. A listing of the sources of UGC info-net program, on the Internet and in the library for academic work is found useful for attracting the academic community to e-resources. Similarly the library can organize awareness and training programmes focusing on e-resources and its use for various academic works. Also the library has to develop a digital library and should participate in library consortia for having increased access to e-resources on the campus. The university, the departments and the library should work hand-in-hand for promoting effective use of computer and the Internet facilities and e-resources on the campus for study, research and publication activities.

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