

Awareness and Use of Electronic Resources by Engineering Faculty Members of Hyderabad Karnataka Region

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Abstract - The study presents the awareness and use of electronic resources by the engineering faculty members of Hyderabad Karnataka region, Karnataka. The main aim of this study is to know the awareness and usage of electronic resources by faculty members who have registered through the recognized university. As a tool, the survey method of a questionnaire was distributed among the respondents of various departments. Out of 300 questionnaires, 250 questionnaires were received from the respondents and 83.33% of respondents have replied to the queries. It is observed that majority of Assistant Professors access the electronic resources for the research work rather than teaching. The study revealed that 95% of the users are depending on electronic resources which are more relevant to their study rather than print resources. The trend expects that electronic resources has overtaken the print resources and expects that the print resources will be phased out in near future.

Keywords: Electronic resources; Engineering faculty; Hyderabad Karnataka Region; E-Resources

INTRODUCTION

The modern technological developments taking place on the ground of information and communication technology (ICT) has amplified the way for new concepts that are the library without walls. Today we are existing in a place where the technology has dominated and it could be possible for libraries to adopt such changes (Ali, 2005). Libraries have integrated all the new techniques that are appropriate and useful for them by enlightening their quality services meaningful to its users. In current years the Internet and web have converted more popular and necessary tool for every individual due to its reasonable cost with maximum benefits. This trend has altered the libraries to go ahead to aim the benefit of building their collections and providing quality services to its academic community (Ansari, 2010). The libraries are the centre of magnetism in the campus to provide e-resources to its users to keep up-to-date on the latest development in their field. The e-media has created numerous opportunities in providing faster access to the information at overall. The electronic resources are today available to the users on the tip of a finger and there are no barriers to access. The wonderful technology trend has made it easy to store the wide range of e-resource products in various forms like e-books, e-databases, e-journals, e-maps, e-reports, e-newspapers, CD/DVD's, Internet and websites, etc. (Carol, 2003). The access to e-resources, not limits to

library alone and has been extended via stylish personal computers, handheld palmtops and laptops.

OBJECTIVES OF THE STUDY

- To identify the awareness and use of e-resources by engineering faculty members of Hyderabad Karnataka Region
- To find out the faculty frequency to access electronic resources
- Find out the main purpose's behind the use of electronic information resources by the faculty members.
- Evaluate the impact of e-resources on teaching and research at higher educational institutions in Hyderabad Karnataka region.
- Find out the hindrances and problems faced by the faculty members while accessing and using electronic information resources.

HYDERABAD KARNATAKA REGION: BRIEF STUDY

The Hyderabad Karnataka Region is situated in the North Eastern part of the Karnataka State and falls within the geographical region of the north maiden. The Hyderabad Karnataka Region wraps the geographical spot of 42506 Sq. Km, which accounts for 22.16% of the overall Karnataka state geographical part. At current it consists of six districts i.e. Bidar, Kalburgi, Raichur, Bellary, Koppal, and Yadgir respectively. The total population of Hyderabad Karnataka Region according to 2011 census report is 1,12,15,224, which is about 18.35% of the total population of Karnataka state. The average percentage of literacy rate is also very low 63.71% when compared to the state average (Census, 2011).

By the amendment to the constitution of India, Article 371 (j) was formed and the HKRDB was set up. By the HKRDB order 2013 on 06-11-2013 by the Karnataka state government under the chief minister Sri. Siddaramaiah. The jurisdiction of the board is spread over 40 assembly constituencies of Bidar, Kalburgi, Bellary, Raichur, Koppal and Yadgir districts (HKRDB, 2017).

There shall be an implementation committee consisting of chairman, secretary of board, CEO's of Zillah Panchayat's, Administrator of CADA's, the Deputy Commissioners of the five districts, heads of department of Collegiate Education, Agriculture, Health and Family Welfare, Animal Husbandry, Social Welfare, Forest, Chief Engineers, Public Instruction having jurisdiction over Hyderabad Karnataka area, Vice-Chancellor of Kalburgi University and such other officers appointed by the State government.

SCOPE AND LIMITATIONS OF THE STUDY

The purpose of the present survey is to assess the awareness and use of electronic resources by the engineering faculty members of Hyderabad Karnataka region. Geographically; this study is confined to the 18 Engineering colleges, which covers Government and Private Aided Colleges in Hyderabad Karnataka Region. It connected with different branches like Electronic, Civil, Mechanics and Computer Science. But, the scope of the study is restricted to randomly selected faculties of engineering colleges in Hyderabad Karnataka region, which comprises the backward districts of Bidar, Kalburgi, Yadgir, Raichur, Koppal, and Bellary.

REVIEW OF LITERATURE

Milliari, Korobili, & Zapoudidou, (2011) have survey designed to determine the information-seeking behavior of graduate students at the University of Macedonia (UoM). The survey was a continuation of a previous one undertaken in the faculties of Philosophy and Engineering at the Aristotle University of Thessaloniki (AUoT). Mutually universities parallel information-seeking favourites, with the University of Macedonia students using more refined techniques, such as Boolean search and truncation techniques, more often than the Aristotle University of Thessaloniki students. Alwarammal & Sivaraj (2009), in their research study observed that "Promotion and usage of Electronic Resources by the students and member of faculty in Engineering Colleges in Tamil Nadu, India: An Empirical Study" studied the Engineering college students and faculty members' usage of electronic resources in Tamil Nadu, India and found that the 50% of the faculty and students were aware, and also actively used the electronic resources. Most of the users preferred the printed textbooks for academic curriculum. They preferred electronic journals and e-databases for quick searching and downloading for their project work, presentation of conference/seminar, research work, and continuing professional development. Satpathy, (2010) Studied the Use of e-Resources by the faculty members with special reference to CVRCE, Bhubaneswar" to assessed and evaluated the use of e-resources by the faculty members of C.V.Raman Engineering Colleges, Bhubaneswar, with a view to examining the exposure of faculty members to e-resources. In the survey-based study confirmed that faculty members are aware of the e-resources and various types of e-resources, e-database, and e-journals etc. And also the study suggested that for the improvement of the access facilities with high internet speed and subscription to more e-resources in the institutions. Use of e-services by faculty members of business schools in a state of India: A study has discussed on the quantitative and qualitative use of e-resources by the faculty members of the business school of Orissa. Munissamy and Swaroop Rani in their study, 'Evaluation of usage and usability of electronic journals' have identified the usage and usability of e-journals by the users of the NIT, Tiruchirappalli. Ramesh & Jayaprakash, (2017) have studied on the awareness and utilization of library electronic resources and related issues among students and faculty members in Gnamani College of Technology located at Pachal, Namakkal District. A descriptive method has been used in research. A total number of students and faculty members 500 questionnaires distributed but 450 were returned duly filled in as a sample. The Internet has appeared as the most powerful medium for storage and retrieval of information since free online information sources for electronic books and electronic journals, e-magazines, e-databases have increased considerably. Internet and CD-ROM were the most frequently used IT based sources and facilities. The study aimed at identifying that needs and the level of awareness of students and faculty member's community such as Internet and e-resources and the like. Mulla, (2011) has studied the use of electronic resources by faculty members in HKBK College of Engineering in Bangalore. In this survey, 60 faculty members were conducted through a questionnaire. The resulting analysis of the accumulated data covers the use of e-resources and how the e-resources are improving the academic career of the faculty and also what are the problems that are faced in using the electronic resources. Finally, concludes that the main intention of the usage of electronic resources has been the academic interest of the users. Kumar & Kumbar, (2015) study was carried out at autonomous engineering institutions affiliated to Visvesvaraya Technological University (VTU) in Karnataka to examine the factors that affect the optimum utilization of electronic information resources and search pattern. The study reveals that focused on the use of different types of electronic information resources by the faculty, the source of awareness, learn to use, problems faced, and the purpose of use, choose search engines and search methods for effective retrieval of e-resources. Lewis, (2016) made a survey on "Use and impact of AICTE Electronic Resources and DELNET in the engineering

college libraries of Dakshina Kannada and Udupi districts: Comparative study". He investigated that the responses on awareness and satisfaction level of various electronic resources were gathered using Likert's 5-point scale questionnaires. The responses were analyzed using two-way ANOVA, Tukey HSD, Factor Analysis and Fisher's Exact Test. The analysis showed that research scholars attach more importance to electronic resources than print resources and there exists a significant difference in the reference among the respondents. There is need to evaluate the electronic resources and services regularly to meet the changing needs of the users. The hypothesis formulated in this connection was proved by the study.

METHODOLOGY

A total of 300 respondents participated in the survey. In order to meet objectives of the study; data were collected from 18 engineering colleges of Hyderabad Karnataka Region affiliated with Visvesvaraya Technological University, Belgaum, Karnataka. The sample was collected from the faculty members who are teaching undergraduate and postgraduate courses. Teachers working in engineering colleges of Hyderabad Karnataka region that comprising six districts such as Bidar, Kalburgi, Raichur, Yadgir, Bellary and Koppal were only considered. A structured questionnaire was considered appropriate to collect the relevant data on the importance of electronic resources for teaching and research for the faculty members of engineering colleges of Visvesvaraya Technological University (VTU), Belgaum, Karnataka. Altogether, 300 questionnaires were administered personally to the respondents and 250 duly filled in questionnaires are received with a response rate of 83.33% and considered for the analysis. Using SPSS-16 package, certain statistical results like mean and standard deviation were obtained and chi-square tests were conducted on data.

DATA ANALYSIS AND INTERPRETATION

From the study, it is clear that the Hyderabad Karnataka region having the 18 Engineering colleges in respective, 4 (11%) Bidar District, 6 (17%) Kalburgi District, 3 (8%) Raichur District, 1 (3%) Yadgir District, 4 (11%) Bellary District, and 0 (0%) Koppel district. In the data, there are 18 Engineering colleges have been covered.

Table-1 AWARENESS OF E-RESOURCES					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	E-Books	75	30.0	30.0	30.0
	E-Journals	113	45.2	45.2	75.2
	E-Databases	13	5.2	5.2	80.4
	Online Resources	38	15.2	15.2	95.6
	Others	11	4.4	4.4	100.0
	Total	250	100.0	100.0	

Table 1 shows that awareness of E-resources of the sample subgroups. The awareness of E-journals among respondents is in 113 (45.2%), whereas awareness of E-Books 75(30%), E-Databases 13 (5.2%) and other e-resources 11(4.4). So, most of the respondents were in awareness of E-journals.

Table-2 USE OF E-RESOURCES					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	E-Books	68	27.2	27.2	27.2
	E-Journals	43	17.2	17.2	44.4
	E-Databases	60	24.0	24.0	68.4
	Online Resources	38	15.2	15.2	83.6
	Others	41	16.4	16.4	100.0
	Total	250	100.0	100.0	

Table 2 shows that Use of E-resources of the sample subgroups. The use of E-Books among respondents is in 68 (27.2%), whereas use of E-Databases 60 (24%), E-Journals 41 (16.4%), Online resources 38 (15.2%) and Other E-resources 41(16.4%). So, most of the respondents were in use of e-Books.

Table-3 FREQUENCY OF USE E-RESOURCES					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	74	29.6	29.6	29.6
	Weekly Once	37	14.8	14.8	44.4
	Monthly Twice	14	5.6	5.6	50.0
	Occasionally	4	1.6	1.6	51.6
	As and when required	121	48.4	48.4	100.0
	Total	250	100.0	100.0	

Table 3 shows that frequency of use E-resources of the sample subgroups. The frequency of use 'As and when required' among respondents is in 121 (48.4%), whereas frequency of use Daily 74 (29.6%), Weekly once 37 (14.8%) and Occasionally 4 (1.6%). So, most of the respondents were in frequency of use 'As and when required'.

Table-4 PURPOSE OF ACCESS					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For Research	48	19.2	19.2	19.2
	For Teaching Materials	104	41.6	41.6	60.8
	For Innovative Practice	23	9.2	9.2	70.0
	For Up-to-date	53	21.2	21.2	91.2
	For Future	22	8.8	8.8	100.0
	Total	250	100.0	100.0	

Table 4 shows that purpose of access E-resources of the sample subgroups. The purpose of access use of E-resources for Teaching materials among respondents is in 104 (41.6%), whereas purpose of use for up-to-date 53(21.2%), for innovative practice 23 (9.2%), and for future 22(8.8%). So, majority of the respondents were in purpose of use for teaching materials.

Table-5 LEVEL OF SATISFACTION					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	23	9.2	9.2	9.2
	Not bad	75	30.0	30.0	57.2
	Average	19	7.6	7.6	64.8
	Good	65	26.0	26.0	90.8
	Very Good	68	27.2	27.2	100.0
	Total	250	100.0	100.0	

Table-5 shows that most of the respondents are used the e-resources at ‘Very Good satisfaction level’ 68(27.2%). In other hands, some of the respondents are use e-resources are ‘Good satisfaction level’65(26), whereas level of satisfaction E-resources ‘Not bad’75(30%), ‘Poor’ 23 (9.2%). Further few of the respondent’s satisfaction level is ‘Average’ 19(7.6%).

Table-6 PROBLEM FACED WHILE ACCESSING					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unfamiliarity	14	5.6	5.6	5.6
	Getting Unwanted	39	15.6	15.6	21.2
	Difficulty to Read from Screen	51	20.4	20.4	41.6
	Lack of Training	11	4.4	4.4	46.0
	Lack of Electricity	11	4.4	4.4	50.4
	Lack of Sufficient System	14	5.6	5.6	56.0
	Internet Connectivity	88	35.2	35.2	91.2
	Lack of Infrastructure	5	2.0	2.0	93.2
	Library Timing	8	3.2	3.2	96.4
	Staff Non-Cooperative	9	3.6	3.6	100.0
	Total	250	100.0	100.0	

Table-6 reveals that the Problems of using e-resources by the respondents. Most of the respondents are faced problem in ‘lack of internet connectivity’ 88(35.2%) and difficulty to read from screen 51 (20.4%). Whereas some of the respondents are felt problem in using e-resources like Getting unwanted information 39(15.6%), Unfamiliarity 14(5.6%), Lack of sufficient system 14(5.6%), Lack of training 11(4.4%), Lack of electricity 11(4.4%), staff non-cooperative 9(3.6%) and Library timing 8(3.2%).

RESULTS OF THE STUDY

The overall study exposes that, majority 54% of the respondents are Male than the 46% are female faculty members. The majority of users are Assistant Professors and middle-level Associate Professors use more e-Resources rather than Professors. The reason behind the dependency on e-Resources was found that the majority of them are pursuing their research in addition to teaching. The study reveals that awareness of e-journals, e-books, e-databases and online resources are aware of high level as well as usage. The study findings that, most of the engineering institution libraries have the collection reached with satisfactory level. The

study also reveals that there is a major problem faced while accessing e-resources like Internet connectivity, difficulty read from the screen, getting unwanted information, lack of sufficient system and unfamiliarity of the respondents.

CONCLUSION

The present study has been taken up with the aim of promoting an effective access to e-resources at a large. This also exposes that the engineering educational institutions faculty members of Hyderabad Karnataka Region are using the available electronic resources are very good for satisfaction. At the same time, the PDA College of Engineering, Appa Institute of Engineering & Technology and Guru Nanak Dev Engineering College Library are playing an important role in promotion, assistance and guidance in accessing the electronic resources. Still, there is enough scope for the digital library to develop its infrastructural facilities for accessing electronic resources, procurement of more electronic information resources as per requirement, inspiring users for evaluating open source electronic resources. These resources enable the faculty and research scholars to achieve in teaching and to discover new fields of areas in line with emerging trends with the help of both printed and electronic media which are ever increasing.

REFERENCE

1. Ali, N. (2005). The Use of electronic resources at IIT Delhi Library: A Study of Search Behaviours. *The Economic Library*, 23(6), 691-700.
2. Alwammal, R., & Sivaraj, S. a. (2009). Promotion and usage of Electronic Resources by the students and member of faculty in Engineering Colleges in Tamil Nadu, India: An Empirical Study. *Knowledge Networking in ICT era*, 676-679.
3. Ansari, M. N. (2010). Use of Electronic Resources among Academics at The University of Karachi. *Library Philosophy and Practice*. Retrieved January 7, 2017, from <http://digitalcommons.unl.edu/libphilprac/385/>
4. Carol, T. (2003). *Use and user of Electronic Library Resources: An Overview and Analysis of Recent Research Studies*. Retrieved November Manday, 2016, from Council on Library and Information Resources: <http://www.clir.org/pubs/reports/pub120.pdf>
- 5.
6. Census of India 2011, Government of Karnataka . (2011). Census of India 2011 Report. Bangalore: Directorate of Economics and Statistics
7. HKRDB. (2017, March 15). *Hyderabad Karnataka Region Development Board*. Retrieved from http://www.hkadb.kar.nic.in/EN_Introduction.html
8. Kumar, G. K., & Kumbar, M. (2015). Use of Electronic Information Resources and Search Pattern by the Faculty of Autonomous Engineering Colleges in Karnataka: A Survey. *SRELS Journal of Information Management*, 52(4), 259-266.
9. Lewis, F. (2016). Use and Impact of AICTE Electronic Resources and DELNET in the Engineering College Libraries of Dakshina Kannada and Udupi districts: A Comparative Study. *SRELS Journal of Information Management*, 53(3), 209-216.

10. Mary, A. Isabella and Dhanavandan, S (2016) Opinion about e-Resources by the Faculty Members in Arts and Science Colleges: A study. *International Journal of Library and Information Studies*, 6(1), 130-138.
11. Milliari, A., Korobili, S., & Zapoudidou, S. (2011). Exploring the Information Seeking Behavior of Greek Graduate Students: A Case Study Set in the University of Macedonia. *International Information & Library Review*, 43(2), 79-91.
12. Mulla, K. (2011). Use of Electronic Resources by Faculty members in HKBK College of Engineering: A Survey. *Library Philosophy and Practice*, 7. Retrieved from <http://digitalcommons.unl.edu/libphilprac/593/>
13. Ramesh, K., & Jayaprakash, M. (2017). Awareness of E-Resources by Students and Faculty members with special Reference to Gnanamani College of Technology: A Case Study. *ZENITH International Journal of Multidisciplinary Research*, 7(5), 115-126.
14. Satpathy, S. K. (2010). Use of E-Resources by the Faculty Members with special Reference to CVRCE, Bhubaneswar. *DESIDOC Journal of Library & Information Technology*, 30(4), 11-16.
15. Umesha and Chandrashekara, M. (2016) Extent of Usage of Internet Resources and Services by Dental Science Professionals in Karnataka. *International Journal of Library and Information Studies*, 6(1), 77-87.

