AWARENESS AND USE OF DIGITAL LIBRARY RESOURCES BY FACULTY MEMBERS OF ENGINEERING COLLEGE LIBRARIES IN WARANGAL, TELANGANA: A STUDY

G. Rajeshwar Kumar
Asst. Professor , Dept. of Library and Information Science Chaitanya Postgraduate College (Autonomous) Hanamkonda, Warangal-Telangana.

ABSTRACT

India is one of the largest producers of engineers in the world. In India, there are several engineering colleges imparting undergraduate and graduate courses in engineering, applied engineering and sciences. The growth of engineering colleges in Telangana is quiet significant and ahead of many states of India. Digital resources are considered as important resources of teaching, learning, research and training. Thus, digital resources in a library play a significant role in engineering libraries. This study investigates the awareness and use of digital library resources by the faculty members of engineering college libraries located in Warangal district of Telangana State only.

G. Rajeshwar Kumar

KEYWORDS:*Digital Library, Digital Resources, E-Resources, E-Journals, E-Books.*

INTRODUCTION

Electronic or Digital Resources is one of the emerging environment in libraries in the competitive service. E-Resources usually consist of e-books, e-Journals, articles, newspaper, thesis, dissertation, databases and CDROMs, which are likely to be the alternative to the print media. Emerald, Ebsco, Scopus are some of the examples of online databases. The familiarity and use of electronic information resources in the libraries for rapid development is necessary and important. With advancement of technology the

libraries are moving towards digital resources, which are found to be less expensive and more helpful for easy access. These are helpful especially to distant learners who have limited time to access the libraries from out side by dial up access by the commonly available electronic resources mainly CD-ROMs, OPACs, and Internet etc., which are replacing the print media.

Engineering colleges impart technical education. The state of telangana has emerged as one of the foremost states in establishing a large number of engineering colleges in India. In telangana and Andhra Pradesh nearly 720 engineering colleges out of which there are 22 number of engineering colleges in Warangal district, but a few of them are established digital library in their college libraries. Based on the year of establishment and availability of digital library resources I have selected only 10 Engineering colleges in this study

OBJECTIVES OF THE STUDY

The study was designed and conducted to achieve the following objectives.
(i)To recognize the Engineering colleges providing Digital Library resources and services.
(ii) To study the different types of digital library resources and services.
(iii) To know the awareness and use of digital library resources.
(iv) To find out the problems faced by the faculty members while using digital   library resources

METHODOLOGY

The questionnaire have been prepared and distributed to the faculty members of ten engineering colleges located in warangal district. To collect the primary data survey method is adopted for the study. The data have been collected through structured questionnaire. The collected data were tabulated and analyzed with the applications of simple statistical tools.

LIMITATIONS OF THE STUDY

The study was limited to the faculty members of 10 engineering colleges located in warangal district of Telangana only, as the study is to know the awareness and use of digital library resources by the selected engineering college libraries.

BRIEF PROFILE OF THE ENGINEERING COLLEGES:

Kakatiya Institute of Technology and science, Warangal was started functioning in 1980 with two B.Tech programs (viz., Civil Engineering & Mechanical Engineering) in sprawling lush green campus of 65 acres, It is a self-financing co-education institution affiliated to the Kakatiya University (KU), Warangal and is the first private engineering college in the Telangana region. The institute also has the distinction of being the first institute in the country to offer a B.Tech program in Electronics & Instrumentation Engineering since 1981. Started as an Undergraduate institution, KITSW has recorded an impressive progress and today it is a full fledge Post graduation institution with 7 B.Tech., programs, 7 PG programs. The college is accreditated by the National Board of Accreditation (NBA), New Delhi. It is also rated now as one of the AAA graded engineering colleges in India and placed among the top 50 private engineering colleges in India.

Christu Jyoti Institute of Technology and Science (CJITS) is situated in Yeshwanthapur , Yeshwanthapur is in Warangal District Christu Jyoti Instuite of Technology and Sciences was established under the Chairmanship of Most Rev. Thumma Bala D.D,Former bishop of Warangal and it is owned and managed by Warangal Diocesan Society.It is a self-financing Catholic Christian Minority institution; a premier technical institute run by Catholic Mission in A.P. Fr. Augusto Colombo (1927-2009) was instrumental in building Christu Jyothi Institute of Technology & Science, which is serving more than 1700 rural engineering students to acquire the required technical skills.

Sponsored by the Jayamukhi Educational Society, the Jayamukhi Institute of Technological Sciences (JITS) came into being in 2001 to provide quality and contemporary education with social relevance in the engineering faculty with an ultimate vision to maintain global standards in higher learning and research. The Institute has the approval of AICTE and permanently affiliated to Jawaharlal Nehru Technological University

(JNTU), Hyderabad and Recognized under UGC 2(f) & 12(b). Accredited by National Board of Accreditation (NBA) for all the four branches of engineering includes CSE, ECE, EEE, and IT.

S R Engineering College, Warangal was established in 2002 by S R Educational Society. It is located on Warangal-Karimnagar highway at about 15 KM away from Warangal City. The college is affiliated to JNTU, Hyderabad. It is running 5 undergraduate (B.Tech) and 7 postgraduate (M.Tech) engineering programs besides, Master of Business Administration (MBA). Three undergraduate engineering programs are accredited by the National Board of Accreditation (NBA) within a short span of six years of its establishment. The college was recently sanctioned with two new integrated programs; a 5-year dual degree program in Management (BBA+MAM) and a 5½ year dual degree program in engineering (B.Tech+MTM). The college is granted Autonomous Status by University Grants Commission (UGC) in 2014.

Balaji Institute of Technology & Science, popularly known as BITS, was established by Maheshwara Educational Society in 2001 at Laknepally Village near Narsampet beside Warangal-Narsampet Main Road in an area of 35 acres with an in take of 180. The place is well connected by road and train and is only 20 minutes drive from Warangal. Presently the college offers 5 B.Tech courses 6 M.Tech Courses and MBA course. College also offers 3 Diploma level (II Shift) Courses.

Warangal Institute of Technology and Science popularly known as WITS, it was established by Sri Padmanabha Educational Society in 2009 by eminent professionals with two decades of experience in imparting engineering education. It is approved by AICTE and affiliated to Kakatiya University, Warangal. This institution offers 5 B.Tech programs, 5 M.Tech programmes and 5 Polytechnic (Diploma) programmes.

Chaitanya Institute of Technology & Science is launched in 2010 by the Chaitanya Educational Institutions under viswabharathi education society, emerging as an ideal and model colleges unique among affiliated colleges of Kakatiya University, Warangal of Telangana region.

DATA ANALYSIS
Distribution of Questionnaires and Response rate

The distribution of faculty members according to the number of questionnaires distributed and the response received is shown in Table 1. Accordingly, 400 questionnaires were distributed among the faculty members of ten engineering colleges, out of 400 only 330 questionnaires were received back, so the overall response percentage is 82.5 %.

Table-1: Institution-Wise Distribution of Questionnaires and Response rate

SL. NO	Name of the Engineering College	Distribution of Questionnaires	No. of Respondents	Response Percentage
1	KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE (KITS)	40	33	82.5
2	VAAGDEVI COLLEGE OF ENGINEERING (VAGE)	40	32	80
3	CHRISTU JYOTH INSTITUTE OF TECHNOLOGY AND SCIENCE (CJIT)	40	29	72.5
4	BALAJI INSTITUTE OF TECHNOLOGY AND SCIENCE (BITS)	40	36	90
5	JAYAMUKHI INSTITUTE OF TECHNOLOGY AND SCIENCE (JITS)	40	32	80
6	S.R ENGINEERING COLLEGE (SREC)	40	36	90
7	SVS INSTITUTE OF TECHNOLOGY (SVST)	40	35	87.5
8	KU COLLEGE OF ENGINEERING AND TECHNOLOGY (KUCE)	40	28	70
9	WARANGAL INSTITUTE OF TECHNOLOGY AND SCIENCE (WITS)	40	32	80
10	CHAITANYA INSTITUTE OF TECHNOLOGY AND SCIENCE (CITS)	40	37	92.5
	TOTAL:	**400**	**330**	**82.5**

Gender wise Distribution of Faculty Members:

Gender wise distribution of faculty members can be shown in Figure-1.

GENDER WISE DISTRIBUTION OF FACULTY MEMBERS

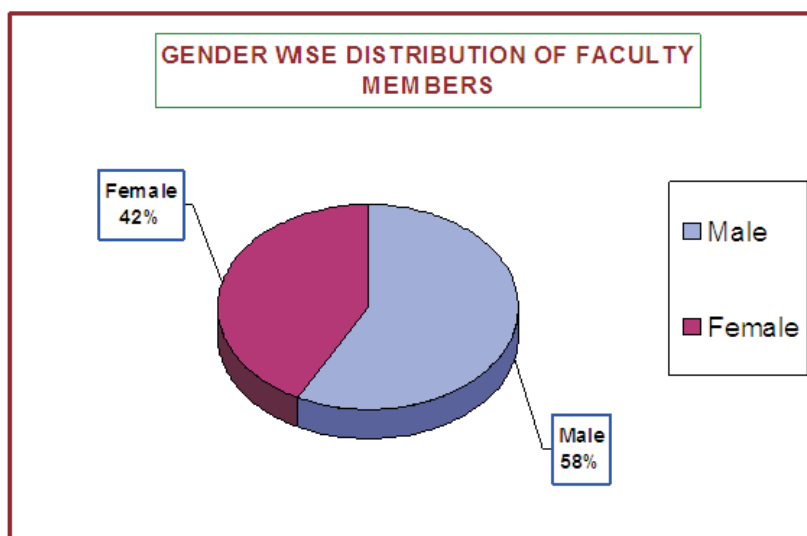Female 42%

Male 58%

☐ Male

☐ Female

Figure-1 shows the gender wise distribution of the respondents. Out of 330 faculty members 191(58%) were male respondents and 139 (42%) were female respondents. It is clear that the study got more respondents from male faculty (58%).

PURPOSE OF USING DIGITAL RESOURCES

The purpose of using digital resources by the faculty members is given in Table-2. It is varying from user to user based on their general and specific information needs.

Purpose of using Digital Resources	No. of Respondents	Percentage (%)
For communication	145	43.94
To update knowledge	131	39.70
Teaching and research work	172	52.12
To collect subject information	285	86.36
For career development	28	8.48

(Multiple Responses were permitted)
Table-2: Purpose of using Digital Resources

It is clearly shows form Table-2 that 86.36% of the faulty members are using digital resources for collect the subject information purpose, 52.12 % are using teaching and research work purpose, 43.94 % are used for communication purpose only 8.48 % of the faculty members are using digital resources for their career development.

Location of Browsing Digital Resources

Figure-2 clearly shows that maximum of 85.45% respondents are browsing digital resources from their digital library, 58.18% of respondents are browsing digital resources from the computer center and 26.16% of respondents are browsing digital resources from their homes. Very few faculty members (10%) were browsing digital resources at their departments.
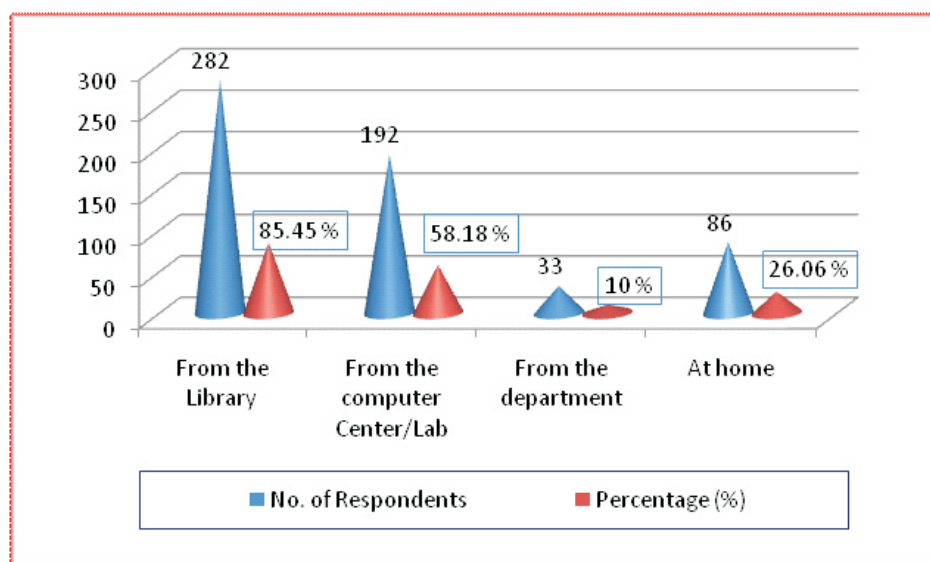
Figure-2: Location of Browsing Digital Resources

Awareness of Different types of Digital Resources

Sl. No	Awareness of Digital Resource	Response	Percentage
1	IEEE	152	46.06
2	Springer link	45	13.64
3	INDEST-AICTE	132	40.00
4	DELNET	285	86.36
5	NPTEL	189	57.27
6	Proquest	30	9.09
7	J-Gate	98	29.70
8	EBESCO	85	25.76
9	Open Access Journals	233	70.61
10	ASME/ASCE	103	32.12

(Multiple Responses were permitted)
Table-3: Awareness of Different types of Digital Resources

Table-3 and Figure-3 clearly shows that the awareness of digital resources by the faculty members of engineering colleges. It is found that majority of the respondents i.e. 86.36% are aware about the DELNET resources. 70.61% of respondents are aware about the open access journals, 57.27% aware about the NPTEL resources. 40% of respondents aware about the INDEST-AICTE resources. Only few members are aware about the EBESCO (25.76%) and Proquest (9.09%).
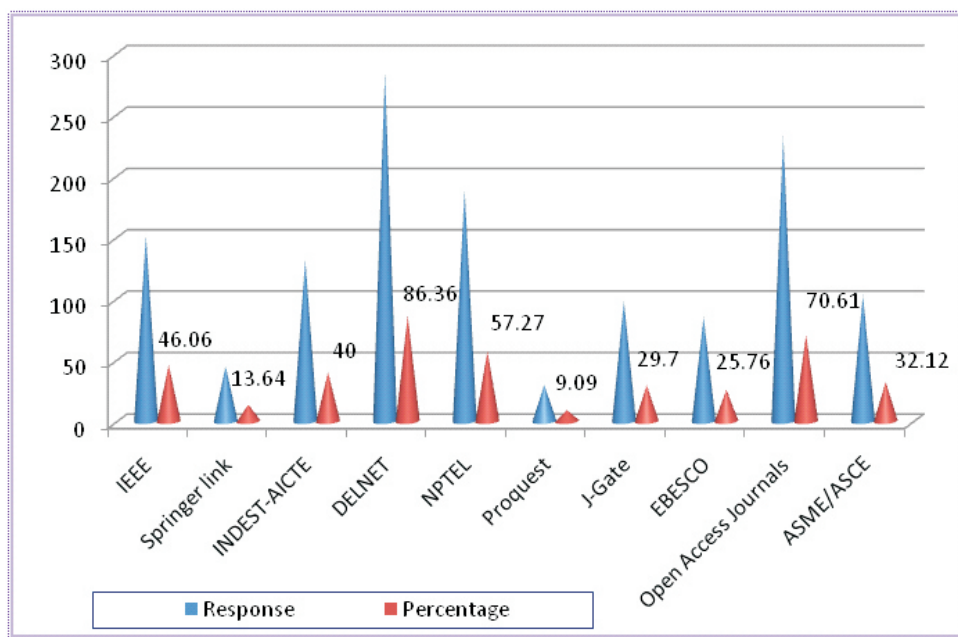
Figure-3: Awareness of Different types of Digital Resources

USE OF DIGITAL RESOURCES

Use of digital resources by the faculty members can be show in below Figure-4. it shows the use of digital resources by the faculty members in engineering colleges.. It is revealed that there is maximum i.e. 82.42% respondents use E-journals followed by Internet 76.06%, library OPAC 50 %, IEEE is 46.06%, INDEST-AICTE is 40%, and E-books are 39.70%. very few members are use springer link 13.64% and Proquest is 9.09%.
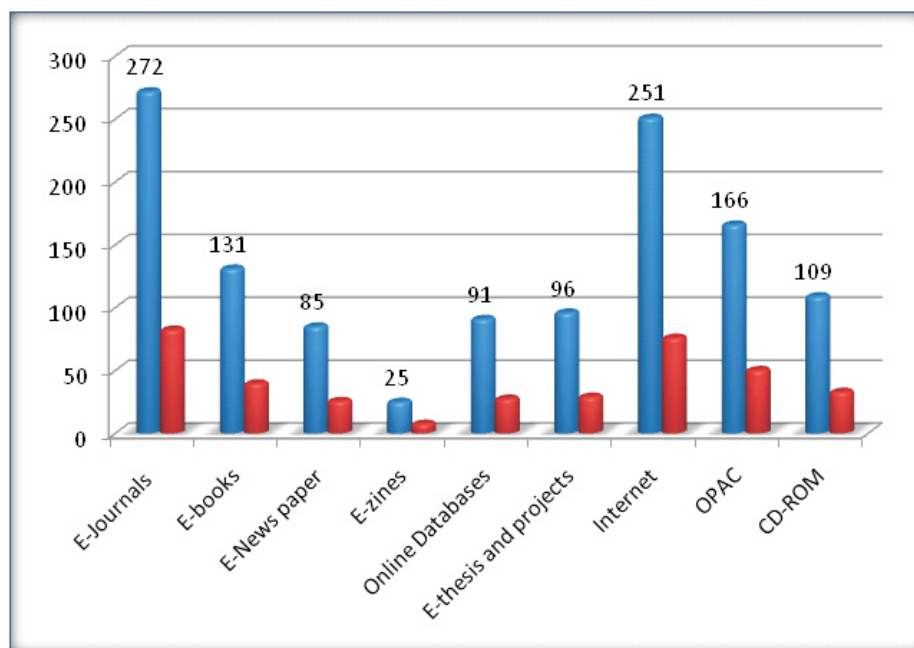

Figure-4: Use of Digital Resources by Faculty Members

Method of learning to browse the e-resources in digital library

The distribution of faculty members according to the method of learning to browse the e-resource in

digital library as shown in Table-4

Method of Learning	No. of Respondents	Percentage (%)
By self study	132	40
Guidance from the faculty	59	17.88
Guidance from the friends	61	18.48
Guidance from the library staff	78	23.64
TOTAL:	**330**	**100**

Table-4: Method of learning to browse the e-resources in digital library

It is evident from Table-4 that most of the faculty members (40%) are browse the digital resources by self study followed by 23.64 percent learned through the guidance from the library staff, 18.48 percent guidance from the friends, and 17.88 percent through guidance from the faculty.

Problems faced while Using Digital Library Resources

Problems	No. of Respondents	Percentage (%)
Limited Computers	85	25.76
Lack of adequate knowledge	28	8.48
Slow internet speed	69	20.91
Lack of sufficient e-resources	54	16.36
Lack of assistance by library staff	26	7.88
Lack of time	68	20.61
TOTAL:	**330**	**100**

Table-5: Problems faced while Using Digital Library Resources

Table-5 shows the problems faced while using the digital resources by faculty members of engineering colleges. Majority of the respondents 85 (25.76%) have faced the common problem is limited number of computers. 20.91% of the faculty members faced slow internet speed and 20.61% faculty members are having lack of time. 7.88% faculty members faced problem is lack of assistants from the library staff.

Satisfaction Level
Majority of the faculty members i.e. 57.27 percent are satisfied with the availability of digital resources in their libraries. Only 20 percent of the faculty members are not satisfied with the available digital resources.

FINDINGS OF THE STUDY:
1)Majority (92.42%) of faculty members are aware about the digital resources.
2)Regarding use of digital resources, Majority 86.36% of faculty members are using for collecting subject information, 52.12% of faculty members for their teaching and research work and 39.70% used for update their knowledge.
3)Majority of the faculty members 85.45% are browsing the digital resources from their libraries and computer centers (58.18%).
4)Regarding awareness about digital resources, there are 86.36% of the faculty members are aware about DELNET resources and 70.61% are aware about the open access journals. 57% of faculty members are aware about NPTEL resources.

5)Regarding problems for accessing digital resources, there are 25.76% respondents were faced the problem of "limited number of computers", and 20.91% faculty members expressed slow internet speed and 20.61% indicate lack of time, 7.88% as lack of assistance from library staff is the main problem while using electronic resources;

6) Regarding satisfaction level, Majority of the faculty members 57.27 percent are satisfied with the availability of digital resources in their libraries.

SUGGESTIONS:

More number of computer terminals should be installed in the library for the benefit of the maximum faculty members, and sufficient funds should be given to acquire electronic resources. However, all libraries have reasonable electronic resource facilities at their end. The college libraries must conduct training and awareness programmes to faculty members regarding maximum use of electronic resources effectively.

REFERENCES:

1)Bharathi K and Sujatha H.R, 2014. Digital Resources and Services in SCEM, Mangalore: A Survey. Scholarly Communication and Knowledge Management in Higher Educational Institutions, pp. 273-277.

2)Dhanavandan, S, and Tamizhchelvan M., (2012). Use Pattern of Digital Resources Among Engineering Colleges in Tamil Nadu, India", International Journal of Library Science, 5 (1) 30-40

3)Haneefa, K. (2007). Use of ICT based resources and services in special libraries in Kerala" Annals of Library and Information Studies 54(1), 23-31

4)Keller, M.A (1998). "Libraries in the Digital Future", Science, pp.1461-1462

5)Kumbar, M. Vasantha R, N., & Praveen, J. K. (2005). Use of electronic resources by research scholars in CFTRI, Mysore: A study. ILA Bulletin, 41(3), 16 - 20.

6)Prabakaran T, (2013), Use of E-Resources among Faculty Members of Engineering Colleges in Cuddalore District: A Study, Journal of Advances in Library and Information Science, Vol.2, No.2, pp.71-75.

7)Ron Houlihan (2005), The academic library ads congenial space: more on the Saint Mary's Experience, New Library World, 106(1208/1209), 43-57.