

Effective use of E-Resources among Engineering Community in Tirunelveli District

P. Shahnaz*, Dr. P. Balasubramanian**

Author's Affiliation:

*Research Scholar, Department of Library and Information Science, Manonmaniam Sundaranar University Abishekapatti, Tirunelveli, Tamil Nadu 627012, India.

E-mail: sharafath.shahnaz@gmail.com

**University Librarian and Head, Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli, Tamil Nadu 627012, India.

E-mail: bala_phd2010@yahoo.com

Corresponding Author: Dr. P. Balasubramanian, University Librarian and Head, Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli, Tamil Nadu 627012, India.

E-mail: bala_phd2010@yahoo.com

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ABSTRACT

This paper discuss about a study on Effective use of E-Resources among Engineering Community in Tirunelveli District. The author distributed 200 questionnaires among the faculty members of self financing engineering college academicians in Tirunelveli Dt. Out of 200 questionnaires, 160 responses (80.00%) were received from faculty members. Online learning resources have made productive impact on the teaching community which can be understood by many studies conducted in this direction including this present study. Out of total 160 faculty members, 110 (68.75%) are using CD-Rom in every day and 25(15.63%) are using 2-3 times in a week, followed by 10 (6.25%) are using once in a week and 12(7.50%) are using once in a month respectively.

KEYWORDS: Self financing Engineering Colleges, Electronic resources, Frequency of library, Barriers of access

INTRODUCTION

The electronic resources available in internet are provided at a much greater speed and any one can have access to them at any time and from any part of the world. The combined power of online electronic resources and the various internet technologies can making learning collaborative, omnipresent and on-demand and thus an able learners to be increasingly mobile, connected and interactive. There are several forms and types of learning resources which are available on the internet, some of the popular ones that are

gaining ground are the electronic journals, standards, technical specifications, reports, book, full text articles, trade reports and hosts of other document sources. Also the printed editions of scholarly journals are available on the web, for example, all journals published by NISCAIR are now available in electronic version over internet with open access. The publishers of journals are themselves providing services like contents, abstracts of articles, full text, before the actual printed edition is put on the stands. Majority of this kind of service providers are those publishers who have several journal publications to their

credit, e.g., Elsevier, Academic press, Springer, Oxford University Press, Taylor and Francis Blackwell Science and others. Their services are available to anyone having access to e-mail and importantly at free of cost. Some of the journals are only available on commercial basis for which library has to pay the required amount, and for these journals, users have to pay for viewing and if needed for the print it's also.

REVIEW OF LITERATURE

Ron Houlihan (2005)¹ has discussed to the critical importance of providing a comfortable and stimulating environment for students and the rewards for doing so are confirmed, with reference to various Canadian and US schools. Some of the almost – universal characteristics of today's academic research and communication.

Haneefa K (2007)² 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 was 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.

Dhanavandan (2011)³ paper highlighted that a large portion of librarians are aware of the internet, but they do not know all of its techniques and applications. Further, the librarians still do not have knowledge about the internet and related applications. For this purpose, there is need for effective user education, to develop awareness and knowledge to the users. More efforts by librarian are needed to educate users to effectively use the internet and its techniques and applications.

Dhanavandan (2012)⁴ describes the Use of Digital Library Resources by the engineering professionals in the engineering colleges at Tirunelveli District, and investigates the current state-of-the art information through the digital library resources. The 33.7% of users feel that lack of information is the

problems with access of digital library resources. The findings of this study would assist the internet browsers to improve their level.

NEED FOR THE STUDY

This study is confined to Effective use of E-Resources among Engineering Community in Tirunelveli District. The main aim of the study is to measure the success and failure of the in the electronic resources and varying interest of the faculty members in their fields, such as general, subject and also it will be guidance to the librarians to procure the required documents.

OBJECTIVES OF THE STUDY

Based on the study the following objectives were framed;

1. To identify the gender wise distribution faculty members
2. To know the frequency of library visit
3. To study the use of different types of electronic resources
4. To find out the barriers while accessing and using electronic resources

METHODOLOGY

This Study is to access, use and attitude towards e-resources among academics community. The questionnaires were personally distributed to 200 faculty members of among all the self financing engineering colleges in Tirunelveli District. Out of which 200, 160 questionnaires were received (80.00%). The data collected through the questionnaires and it was analyzed and tabulated through the statistical tools like simple percentages. The Engineering community means only the faculty members those who are working in Engineering Colleges and others not consider for this study.

ANALYSIS AND INTERPRETATION

The frequency of 200 questionnaires was distributed to the faculty members to know an exploitation of online learning resources among academicians in engineering community in table 1.

Table 1: Distribution of Questionnaires

Faculties	Distributed Questionnaires	%	Received Questionnaires	%	Not Replied	%
Assistant Professor	130	65.00	105	52.5	25	12.50
Associate Professor	50	25.00	42	21.00	8	4.00
Professor	20	10.00	13	6.50	7	3.50
Total	200	100.00	160	80.00	40	20.00

Table 1 shows the distribution of questionnaires to the faculty members in five self financing engineering Colleges in Tirunelveli district. Out of 200, 130 questionnaires were distributed to the Assistant Professors and they replied 105 and remaining 25 is not replied. 50 questionnaires distributed to Associate Professors level 42

respondents replied and 8nos. are replied. Only 20 questionnaires are issued to professor level and 13 questionnaires received back. It is stated from the table, out of 200, 160(80.00%) questionnaires are received and 40(20.00%) questionnaires are replied by the faculty members.

Table 2: Gender Wise Distribution of Faculty Members

Faculties	Male	%	Female	%	Total	%
Assistant Professor	80	50.00	25	15.62	105	65.62
Associate Professor	30	18.75	12	7.50	42	26.25
Professor	8	5.00	5	3.12	13	8.12
Total	118	73.75	42	26.25	160	100

Table 2 shows that gender wise distribution of faculty members using library of their college. Among the total number of 105 Assistant Professor 80(50.00%) are male and 25 (15.62%) are female. Out of 42 Associate Professors 30(18.75%) are male and 12 7.50% are female.

In the Professor category, 8Nos. (5.00%) are male and 5 Nos.(3.12%) are female out of 13(8.12%). From the above discussion it is inferred that out of 156 faculty members, 118 (73.75%) respondents are male and remaining 42 (26.25%) respondents are female.

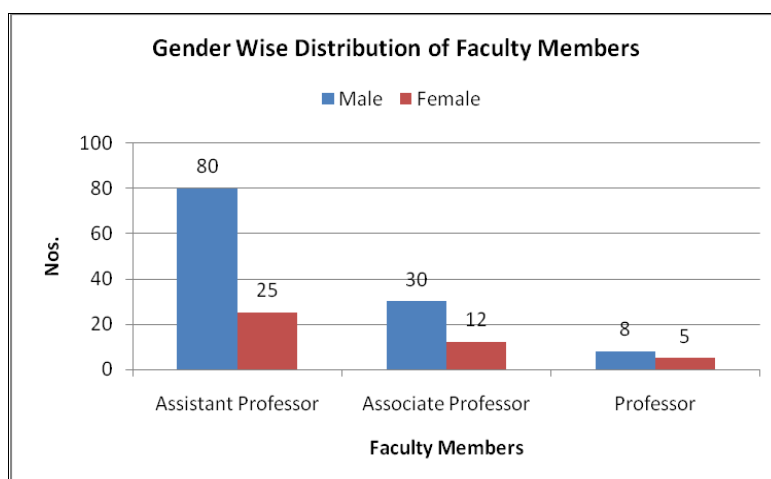


Figure 1: Shows Gender Wise Distribution of Faculty Members

Table 3: Distribution of Faculty Members in Frequency of Library Visit

Faculties	Every day	Once in a week	Once in a fortnight	Once in a month	Rarely	Total
Assistant Professor	60(37.50)	17(10.63)	12(7.50)	8(5.00)	8(5.00)	105(65.63)
Associate Professor	22(13.75)	7(4.38)	5(3.13)	6(3.75)	2(1.25)	42(26.25)
Professor	4(2.50)	3(1.88)	3(1.88)	2(1.25)	1(0.63)	13(8.13)
	86(53.75)	27(16.88)	20(12.50)	16(10.00)	11(6.88)	160(100)

(Figures in parentheses denote percentage)

Table 3 shows the frequency of library visited by the faculty members among the total number of 160 respondents. From Assistant Professor, 60 (37.50%) Associate Professor 22(13.75%) and Professor 4(2.50%) faculty members are visited the library daily. Out of 160, very minimum respondents 11 (6.88%) are

rarely using the library. It is concluded from the discussion among 160 faculty member, 86 (53.75%) are using the library daily, 27(16.88%) are using once in week, 20(12.50%) are using once in a fortnight and 16(6.88) are using the library once in a month.

Table 4: Distribution of Faculty Members Quantum of Time Spent in Library

Faculties	30 minutes to 1 hour	1 to 2 hours	2 to 3 hours	More than 3 hours	Total
Assistant Professor	70(43.75)	17(10.63)	13(8.13)	5(3.13)	105(65.63)
Associate Professor	22(13.75)	8(5.00)	7(4.38)	5(3.13)	42(26.25)
Professor	6(3.75)	4(2.50)	2(1.25)	1(0.63)	13(8.13)
Total	98(61.25)	29(18.13)	22(13.75)	11(6.88)	160(100)

(Figures in parentheses denote percentage)

The data presented in table 4 stated that the quantum of time spent by the faculty members in the library. Out of 160 faculty members, 70 (43.75%) Assistant Professor spent half an hour to one hour; 17(10.63%) are spent 1 to 2 hours, 13 (8.13%) respondent spent 2 to 3 hours and 5(3.13%) spent more than three

hours in library. It is seen from the table that irrespective of self financing colleges, 70(43.75%) of the Assistant Professor, 22(13.75%) Associate Professor and 6(3.75%) Professor are spend 30 minutes to 1 hour, in their library

Table 5: Distribution of Faculty Members Reasons for Using the Library

Sl. No.	Reasons for using Library	Assistant Professor		Associate Professor		Professor		Total
		Yes	No	Yes	No	Yes	No	
1	Enjoy all the required sources	90 (56.25)	15 (9.38)	40 (25.00)	2 (1.25)	12 (7.50)	1 (0.63)	160 (100)
2	Librarian/Staff is helpful and friendly	85 (53.13)	20 (12.50)	39 (24.38)	3 (1.88)	11 (6.88)	2 (1.25)	160 (100)
3	Internet and other communication	97 (60.63)	8 (5.00)	37 (23.13)	5 (3.13)	13 (8.13)	0	160 (100)
4	Provides conducive Environment	100 (62.50)	5 (3.13)	38 (23.75)	4 (2.50)	12 (7.50)	1 (0.63)	160 (100)
5	Alert service to new arrivals	92 (57.50)	13 (8.13)	41 (25.63)	1 (0.63)	10 (6.25)	3 (1.88)	160 (100)
6	Journals are properly displayed	98 (61.25)	7 (4.38)	36 (22.50)	6 (3.75)	9 (5.63)	4 (2.50)	160 (100)

7	Guide to access the e-resources	94 (58.75)	11 (6.88)	33 (20.63)	9 (5.63)	11 (6.88)	2 (1.25)	160 (100)
8	Back volumes are maintained	88 (55.00)	17 (10.63)	35 (21.88)	7 (4.38)	8 (5.00)	5 (3.13)	160 (100)

(Figures in parentheses denote percentage)

The table 5 reveals that the reasons for using the library by faculty members in self financing engineering colleges in Tirunelveli District. Out of 105 Assistant Professor, 90(56.25%) stated to enjoy all the required sources, 85 (53.13%) stated the Librarian is helpful and friendly, 97(60.63) stated for

Internet and other communication and 98(61.25%) stated the journals are properly displayed reasons for using their libraries. It is evident from the table that out of 160 faculty members, over all more than 90% of the faculty members are mentioned feasible reasons while using the library.

Table 6: Frequency of Using Online Learning Electronic Resources

E-Resources	Every day	2-3 times in a week	Once in a week	Once in a month	Never	Total
CD ROM	110(68.75)	25(15.63)	10(6.25)	12(7.50)	3(1.88)	160(100)
Internet	105(65.63)	27(16.88)	18(11.25)	9(5.63)	1(0.63)	160(100)
OPAC	97(60.63)	36(22.50)	19(11.88)	8(5.00)	0	160(100)
Online Databases	100(62.50)	22(13.75)	24(15.00)	11(6.88)	3(1.88)	160(100)
E-Journals	94(58.75)	41(25.63)	15(9.38)	8(5.00)	2(1.25)	160(100)
E-Books	98(61.25)	27(16.88)	26(16.25)	6(3.75)	3(1.88)	160(100)
E-Periodicals	94(58.75)	21(13.13)	33(20.63)	9(5.63)	3(1.88)	160(100)
E-Project Report	88(55.00)	27(16.88)	35(21.88)	7(4.38)	3(1.88)	160(100)

(Figures in parentheses denote percentage)

The using of online learning and electronic resources is shown in the table 6. Out of total 160 faculty members, 110 (68.75%) are using CD-Rom in every day and 25(15.63%) are using 2-3 times in a week, followed by 10 (6.25%) are using once in a week and 12(7.50%) are using once in a month respectively. 105 (65.63%) faculty members are using Internet almost every day and 27

(16.88%) faculty members using 2-3 times in a week. 100(62.50%) faculty members are using online databases facility in the library every day. 94 (58.75%) faculty members are using E-Journals every day and 41 (25.63%) faculty members are using 2-3 times in a week. It is the evident from the table, out of 160 faculty members more than 96% are using the online electronic resources in their library every day.

Table 7: Level of Satisfaction of use of Electronic Resources

E-Resources	Highly Satisfied	Satisfied	Good	Dis-satisfied	Poor	Total
CD ROM	97(60.63)	35(21.88)	20(12.50)	6(3.75)	2(1.25)	160(100)
Internet	105(65.63)	32(20.00)	17(10.63)	3(1.88)	3(1.88)	160(100)
OPAC	85(53.13)	35(21.88)	31(19.38)	6(3.75)	3(1.88)	160(100)
Online Databases	84(52.50)	39(24.38)	29(18.13)	7(4.38)	1(0.63)	160(100)
E-Journals	110(68.75)	26(16.25)	20(12.50)	3(1.88)	1(0.63)	160(100)
E-Books	82(51.25)	35(21.88)	29(18.13)	12(7.50)	2(1.25)	160(100)
E-Periodicals	67(41.88)	45(28.13)	40(25.00)	6(3.75)	2(1.25)	160(100)
E-Project Report	90(56.25)	39(24.38)	24(15.00)	3(1.88)	4(2.50)	160(100)

(Figures in parentheses denote percentage)

Table 7 shows the Level of Satisfaction of use of Electronic Resources by the faculty members in the library. The maximum

number of 110 (68.75%) faculty members are using E-Journals followed by 105 (65.63%) are using Internet, 97 (60.63%) are using CD-ROM

and 90 (56.25%) are using E-Project reports highly satisfied. It is concluded from the discussion of the table 88% of the faculty

members are satisfied their library by providing electronic resources.

Table 8: Purpose of Using Electronic Resource

Sl. No.	Purpose	No. of Faculty Members	Percentage
1	For Research purpose (Thesis/Dissertations/Project works)	145	90.63
2	For communication	122	76.25
3	To find relevant information in the area of your specialization	132	82.50
4	For career development	145	90.63
5	To keep yourself up-to-date on the subject	132	82.50
6	For Routine study	122	76.25

Note: Because of multiple choice options the percentage is exceeded to more than 100%.

From the table 8, it is clear that 145 (90.63%) faculty members are using electronic resources for the purpose of their research (Thesis/Dissertations/Project works) and for their Career development. While 132 (82.50%) faculty members are using to find relevant

information in the area of your specialization and to keep yourself up-to-date on the subject. And, 122(76.25%) faculty members are using electronic resources for communication and Routine study.

Table 9: Preference of Using Search Engines

Sl. No	Search engines	No. of respondents	Percentage
1	Google	85	53.13
2	Yahoo	35	21.88
3	AltaVista	19	19.38
4	MSN	6	3.75
5	Ask.com	3	1.88
	Total	160	100.00

Table 9 indicates that preference of using search engines by the faculty members in self financing engineering colleges in Tirunelveli district. It could be noted that 85 (53.13%) faculty members are using Google, followed by 35 (21.88%) faculty members using yahoo,

19 (19.38%) faculty members using AltaVista, 6 (3.75%) faculty members using MSN and 3 (1.88%) faculty members using Ask.com to access the information through this search engines to the internet.

Table 10: Impact of Electronic Resources on Academic Development

Impact of E-Resources	respondents	tage
Access to current information		
Easier access to information		
Faster access to information		
Access to wider range of Information		
Total		

Table 10 shows the impact of electronic resources on academic development by the faculty members in self financing engineering colleges in Tirunelveli district. The 70(43.75%) faculty members stated that access to current information as a benefit of using electronic resources, followed by 50 (31.25%)

and 25 (15.63%) respondents stated that electronic resources helps easier access to information and faster access to information respectively and 15(9.38%) faculty members found that access to a wider range of information an advantage of using electronic resources from their library.

Table 11: Barrier of Access Electronic Resources by faculty members

Barriers	No. of faculty members	Percentage
Too much information retrieved	27	16.88
Access difficulties (Slow speed and Non availability of connectivity)	33	20.63
Difficulty in finding relevant Information	32	20.00
Lack of IT knowledge to effectively utilize the service	39	24.38
Using electronic resources often detracts from doing work	29	18.13
Total	160	100.00

The table 11 reveals that stated by the faculty members in self financing engineering colleges in Tirunelveli district what are barriers while accessing the e-resources from their library. The 27 (16.88%) faculty members stated that too much information retrieved is the main barrier to access electronic resources, 33(20.63%) opined that Access difficulties

(Slow speed and Non availability of connectivity), 32 (20.00%) stated that it is Difficulty in finding relevant Information, 39 (24.38%) stated Lack of IT knowledge to effectively utilize the service and 29 (18.13%) are stated that Using electronic resources often detracts from doing work.

Table 12: Distribution of Expected Features in Online resources

Sl. No.	Expected Features	YES	%	NO	%	Total
1	Searching capability across a wide range of e-journals	142	88.75	18	11.25	160
2	Direct link to Glossaries/definition	151	94.38	9	5.63	160
3	Filtering of information in display	149	93.13	11	6.88	160
4	Ability to trace one's search and browse history	133	83.13	27	16.88	160
5	Display of relationships between a wide range of works	139	86.88	21	13.13	160

(Figures in parentheses denote percentage)

Table 12 shows that expected features by faculty members in self financing engineering colleges in Tirunelveli district. Among the total number of 160, 142 (88.75%) faculty members are expected Searching capability across a wide range of e-journals, 151(94.38%) faculty members are expected direct link to Glossaries/definition. And, 149(93.13%) are expected filtering of information in display, 133(83.13) are expected Ability to trace one's search and browse history and 139(86.88%) are

expected to display of relationships between a wide range of works.

CONCLUSION

The faculty members are visited the library daily and maximum number of reveals spent half an hour to one hour. Out of 160, out of 156 faculty members, 118 (73.75%) respondents are male and remaining 42 (26.25%) respondents are female. 110 (68.75%) faculty members are using E-Journals followed by 105 (65.63%) are

using Internet, 97 (60.63%) are using CD-ROM and 90 (56.25%) are using E-Project reports highly satisfied. The respondents stated that too much information retrieved is the main barrier to access electronic resources and they preferred text books. The faculty members are visited to the library for the purpose of collecting material for their subject. The respondents stated that the arrangement of reading material in the library is easy to access and satisfied.

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