UTILIZATION OF E-RESOURCES BY FACULTY AND STUDENTS OF ENGINEERING COLLEGES IN COIMBATORE TAMIL NADU: A CASE STUDY

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ABSTRACT

Electronic resources are the vibrant tool for the higher education and research in all subjects including the Engineering discipline. The Number of e-resources packages are available in all the approved Engineering Colleges for references. This article deals with the utilization of e-resources among the faculty and students of Engineering Colleges in Coimbatore, Tamil Nadu. Survey method questionnaire tool is adopted together with the data for the study. Among the 90 respondents, 55.56 percent of students and 44.46 percent of faculty members are assessing e-resources in the respective colleges. It is included that 22 (55.00%) E-journals are used by faculty and 20 (40.00%) are used by students.

Keywords: e-resources, Faculty and Students

INTRODUCTION

 In academic and non-academic purpose, people use computers, notebook computers, laptops and DVDs for their daily use. Our lives are transformed by information and communication technology. The World Wide Web has created new ways to gain information and communicate with the other world. An online resource has altered the ways in which the academic activities such as research and extension activities are carried out at higher education level. In view of the increasing impact of Information and Communication Technology (ICT) applications on education, all those concerned with higher education today attempt to grasp how ICT could help in modernizing the process of teaching, learning and doing research. Electronic services have made tremendous impact on the academic activities of the faculty, researchers and students. With the introduction of electronic services, significant transition is seen in their approach and the way in which they seek information. Number of publishers are developing e-Resources packages including e-books, e-journals and e-databases for the development of engineering education and research.

Statement of the Problem

The purpose of the study is to find out the scope of utilization of e-resources by faculty and students of Engineering Colleges in Coimbatore, Tamil Nadu: An Analytical Study.

Review of Literature

Hari Prasad Reddy (2013) reveals that the study, analysisofdata collected from asampleof1490students in selectedengineering college libraries of Prakasam district, by using aquestionnairereveals that the studentsareusingelectronicinformationsourcesfor their coursework(20.6%), communication (24.1%), careerdevelopment (33.8%) and other activities (21.5%). The study alsoreveals that the majorityofthe students are using various types ofelectronic information sources namely e-books (60.5%), e-journals(58.1%),e-magazines (55.2%) and e-news(59.8%). ThesearchenginesGoogle(91.1%) is frequently usedbyengineeringstudentscomparedtoYahoo(83.6%), Ask(67%), Bing(47.2%) andAltaVista(42.8%).

Murugan (2015) exposed the study, among the 80 respondents, 62.50 percent of students and 37.50 % of faculty members are assessing e- resources. It is concluded that 14(54.00%) of E-journals are used by faculty, 16(50.00%) are used by students. In addition the study reveals that the academic community in the academic institutions prefers to use most e- resources available in present digital era.

Objectives of the Study

1. To know the awareness of e-resources.

2. To identify the purpose of e-resources.

3. To know the levels of satisfaction of e-resources.

4. To understand the frequency of using e-resources.

5. To know the Time spent for e-resources.

6. To understand the file format popularity of e-resources.

7. To observe the searching strategy option of e-resources.

Methodology

The present study consists of Faculty and Students of Engineering Colleges in Coimbatore, Tamil Nadu state. The data collected through the questionnaire are subjected to descriptive statistical analysis. The responses to the item of the questionnaire are analyzed through descriptive analysis.

DATA ANALYSIS AND INTERPRETATION

Table 1: Awareness about e-resources

Opinion	Faculty Members		Students		Total	
	No	%	No	%	No	%
Yes	27	67.50	32	64.00	59	65.56
No	13	32.50	18	36.00	31	34.44
Total	40	100.00	50	100.00	90	100.00

Note: Figures in Parenthesis denote percentages

Table-1 shows that (67.50%) of faculty members and (64.00%) of students are assessing e -resources. Only smaller percent of faculty members (32.50%) and students (36.00%) are not assessing the e-resources.

Table 2: Types of e-resources for their information needs

Respondents	e-Books	e-Journals	e-News Paper	e-Project Thesis	e-Lecture Notes	Total
Faculty	7 (17.50)	22 (55.00)	6 (15.00)	-	5 (12.50)	40 (100.00)
Students	8 (16.00)	20 (40.00)	11 (22.00)	3 (6.00)	8 (16.00)	50 (100.00)
Total	15 (16.67)	42 (46.67)	17 (18.89)	3 (3.33)	13 (14.44)	90 (100.00)

Note: Figures in Parenthesis denote percentages

Table 2 revealsthe types of e-resources for the information needs. Out of 90 respondents, a good number of faculty members (55.00%) and students (40.00%) preferred e-journals for their information needs.

Table 3: Different medium for learning E-resources

Respondents	External Courses	Guidance from Collogues	From Library staff	Self-Taught	Course from Parent Organization	Total
Faculty	8 (20.00)	13 (32.50)	6 (15.00)	7 (17.50)	6 (15.00)	40 (100.00)
Students	14 (28.00)	11 (22.00)	13 (26.00)	8 (16.00)	4 (8.00)	50 (100.00)
Total	22 (24.44)	24 (26.67)	19 (21.11)	15 (16.67)	10 (11.11)	90 (100.00)

Note: Figures in Parenthesis denote percentages

Data in Table 3 reveal that the different medium for learninge-resources. Out of 90 respondents, Faculty members (32.50%) use guidance from collogues and (28.00%) students use external courses for learning e-resources.

Table 4: Purpose of e-resources

Respondents	To update knowledge	To prepare for class work	Self-improvement	Publishing Journal article	Total
Faculty	8 (20.00)	18 (45.00)	3 (7.50)	11 (27.50)	40 (100.00)
Students	28 (56.00)	9 (18.00)	13 (26.00)	-	50 (100.00)
Total	36 (40.00)	27 (30.00)	16 (17.78)	11 (12.22)	90 (100.00)

Note: Figures in Parenthesis denote percentages

Data in Table 4 shows the purpose of e-resources. Out of 90 respondents, Faculty member'suse e-resources to prepare for class work (45.00%) and students usee-resources to update knowledge (56.00%).

Table 5: Ranking of Library services

Respondents	Internet services	Journal Databases	OPAC	Reference Services	Portals	Total
Faculty	10 (25.00)	4 (4.00)	9 (22.50)	11 (27.50)	6 (15.00)	40 (100.00)
Students	27 (54.00)	9 (18.00)	11 (22.00)	2 (4.00)	1 (2.00)	50 (100.00)
Total	38	13	20	12	7	90

Note: Figures in Parenthesis denote percentages

Data in Table 5 shows the ranking of library services. Out of 90 respondents, (27.50%) of Faculty members rank reference services and (54.00%) students rank internet services.

Table 6: Levels of satisfaction using e-resources

Respondents	Satisfied	Not Satisfied	Total
Faculty	29 (72.50)	11 (27.50)	40 (100.00)
Students	38 (76.00)	12 (24.00)	50 (100.00)
Total	67 (74.44)	23 (25.56)	90 (100.00)

Note: Figures in Parenthesis denote percentages

Data in Table 6 reveal that the levels of satisfaction usinge-resources. Out of 90 respondents, (72.50%) of Faculty members aresatisfied using e-resources and (76.00%) students are satisfied using e-resources.

Table 7: Frequently used location to access e-resources

Respondents	Library	Hostel	Computer Lab.	Others	Total
Faculty	18 (45.00)	4 (10.00)	11 (27.50)	7 (17.50)	40 (100.00)
Students	27 (54.00)	7 (14.00)	13 (26.00)	3 (6.00)	50 (100.00)
Total	45 (50.00)	11 (12.22)	24 (24.67)	10 (11.11)	90 (100.00)

Note: Figures in Parenthesis denote percentages

Data in Table 7 reveals that the frequently used location to access e-resources. Out of 90 respondents, Faculty members (45.00%) frequently use library to access E-resources and (54.00%) students also frequently use library to access e-resources.

Table 8: Ways to browse e-resources

Respondents	Using the URL	Use the Search Engine	Use Subscription Database	Others	Total
Faculty	18 (45.00)	10 (25.00)	8 (20.00)	4 (10.00)	40 (100.00)
Students	33 (66.00)	7 (14.00)	7 (14.00)	3 (6.00)	50 (100.00)
Total	51 (56.67)	17 (18.89)	15 (16.67)	7 (7.77)	90 (100.00)

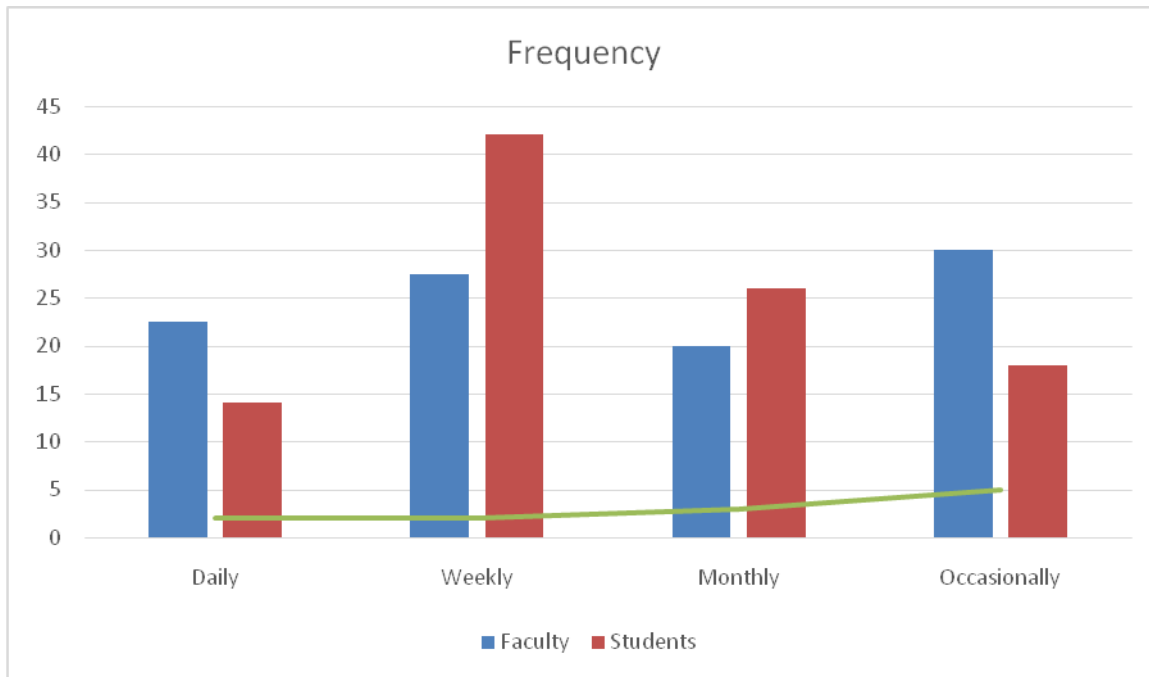*Note: Figures in Parenthesis denote percentages*

Data in Table 8 projects the ways to browse e-resources. Out of 90 respondents, (45.00%) of Faculty members use the URL to browse and (66.00%) students use the URL to browse e-resources.

Table 9: Frequency of using e-resources

Respondents	Daily	Weekly	Monthly	Occasionally	Total
Faculty	9 (22.50)	11 (27.50)	8 (20.00)	12 (30.00)	40 (100.00)
Students	7 (14.00)	21 (42.00)	13 (26.00)	9 (18.00)	50 (100.00)
Total	16 (17.78)	32 (35.56)	21 (23.33)	21 (23.33)	90 (100.00)

Note: Figures in Parenthesis denote percentages

Data in Table 9 depicts the frequency of using e-resources. Out of 90 respondents, Faculty members frequency of using e-resources occasionally is 30.00% and 42.00% students use e-resources weekly.
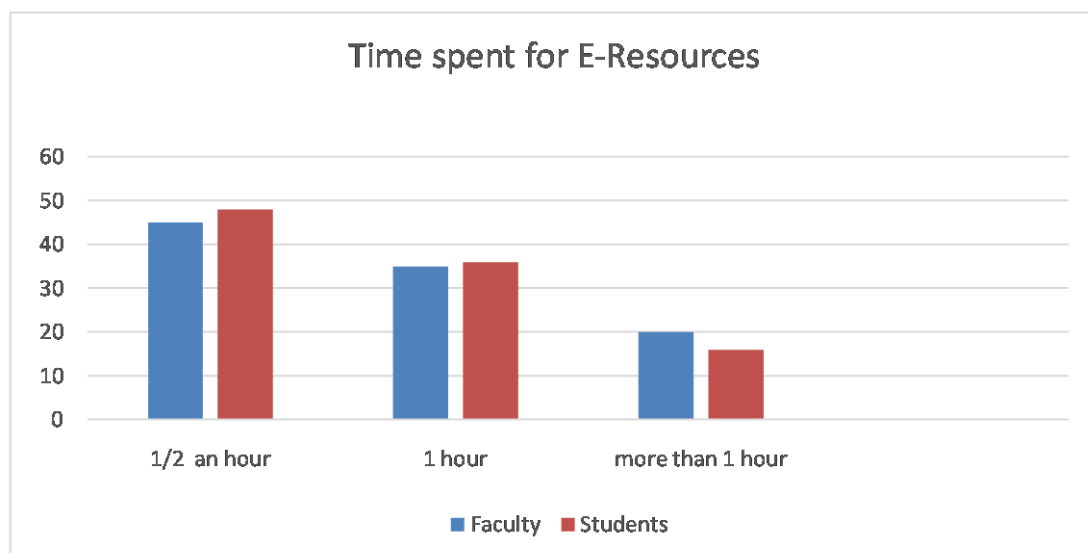
Table 10: Time spent for e-resources

Respondents	½ an hour	1 hour	More than 1 hour	Total
Faculty	18 (45.00)	14 (35.00)	8 (20.00)	40 (100.00)
Students	24 (48.00)	18 (36.00)	8 (16.00)	50 (100.00)
Total	42 (46.67)	32 (35.56)	16 (17.77)	90 (100.00)

Note: Figures in Parenthesis denote percentages

Data in Table 10 reveals that the time spent for e-resources. Out of 90 respondents, Faculty members' spend time for e-resources is ½ an hour (45.00%) and student's spend time for e-resourcesis 48.00%.

Table 11: Gender wise distribution of Respondents

Respondents	Male	Female	Total
Faculty	22 (55.00)	18 (45.00)	40 (100.00)
Students	19 (38.00)	31 (62.00)	50 (100.00)
Total	41 (45.55)	49 (54.45)	90 (100.00)

Note: Figures in Parenthesis denote percentages

Data in Table 11 shows the Gender wise distribution of respondents. Out of 90 respondents, (55.00%) of male faculty members and (62.00%) of female students are responding the gender wise distribution of using e-resources.

Table 12: File format Popularity

Respondents	PDF	HTML	MS-Word	PPT	Rich Text Format	Total
Faculty	15 (37.50)	5 (12.50)	13 (32.50)	5 (12.50)	2 (5.00)	40 (100.00)
Students	26 (52.00)	12 (24.00)	6 (12.00)	4 (8.00)	2 (4.00)	50 (100.00)
Total	41 (45.56)	17 (18.89)	19 (21.11)	9 (10.00)	4 (4.44)	90 (100.00)

Note: Figures in Parenthesis denote percentages

Data in Table 12 reveals that the File format popularity using e-resources. Out of 90 respondents, faculty members using PDF file format is (37.50%) and (52.00%) students are using PDF file format.

Table 13: Storage Media Preference

Respondents	Pen Drive	CD	DVD	Portable Hard Disk	Memory Card	Total
Faculty	19 (47.50)	9 (22.50)	4 (10.00)	2 (5.00)	6 (15.00)	40 (100.00)
Students	23 (46.00)	11 (22.00)	5 (10.00)	4 (8.00)	7 (14.00)	50 (100.00)
Total	42 (46.67)	20 (22.22)	9 (10.00)	6 (6.67)	13 (14.44)	90 (100.00)

Note: Figures in Parenthesis denote percentages

Data in Table 13 projects the storage media preference using e-resources. Out of 90 respondents, (47.50%) Faculty members usePen drive storage media and (46.00%) students prefer Pen drive storage media.

Table 14: Search Strategy Option

Respondents	Basic/Simple Search	Advance Search	Both	Total
Faculty	20 (50.00)	11 (27.50)	9 (22.50)	40 (100.00)
Students	28 (56.00)	12 (24.00)	10 (20.00)	50 (100.00)
Total	48 (53.33)	23 (25.56)	19 (21.11)	90 (100.00)

Note: Figures in Parenthesis denote percentages

Data in Table 14 depicts that the search strategy option using e-resources. Out of 90 respondents, (50.00%) Faculty members opt basic search strategy and (56.00%) students opt basic search strategy.

Table 15: Bibliographic Search

Respondents	Author	Title	Subject	Keyword	Publisher	Total
Faculty	12 (30.00)	19 (47.50)	3 (7.50)	4 (10.00)	2 (5.00)	40 (100.00)
Students	17 (34.00)	26 (52.00)	2 (4.00)	5 (10.00)	-	50 (100.00)
Total	29 (32.22)	45 (50.00)	5 (5.56)	9 (10.00)	2 (2.22)	90 (100.00)

Note: Figures in Parenthesis denote percentages

Data in Table 15 reveals the bibliographic search using e-resources. Out of 90 respondents, (47.50%) Faculty members usetitle search and (52.00%) students usetitle search.

Major Findings of the Study

1. 27 (67.50%) of faculties and 32 (64.00%) of students are having awareness about e-resources.

2. 22 (55.00%) of faculties use e-journals for their information needs.

3. 28 (56.00%) of students usee-resources for update their knowledge.

4. 18 (56.00%) of faculties and 27 (54.00%) of students frequently use library to access e-resources.

5. 33 (66.00%) of students and 18 (45.00%) of faculty use URL ways to browse e-resources.

6. 55 (22.00%) of male faculty and 31 (62.00%) of female students are using e-resources.

7. 19 (47.50%) of faculties and 23 (46.00%) of students prefer pen drive for storage medium.

SUGGESSTIONS

College libraries should exhaust available option in order to ensure that current and relevant (especially, textbooks and periodicals) are acquired, processed and made available for the use of their disparate clientele. Additionally, routine arrangement of catalogues and shelf-reading would make for easy accessibility of materials. This is against the backdrop that information offerings in college libraries are largely in textual formats.

CONCLUSION

It is interesting to state that users of this study are not totally dissatisfied with the library information resources and services rendered to them. It is also seen from this study that there are lots of deficienciesin library information resources in engineering colleges in Coimbatore. This indicates that there are lot of work to be done in order to improve on the engineering college library resources and services rendered to library users.e-resources are the good platform to access all the subject information for the staff and students of the institution at anytime and at anywhere.

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