

Use of Electronic Resources by the Undergraduate Students in Private Engineering Colleges in Coimbatore, Tamil Nadu

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Abstract - The present study investigates the use of electronic resources by the undergraduate students in the private engineering colleges in Coimbatore. The study followed the questionnaire method for collecting the required information from the undergraduate students. Out of the three hundred questionnaires distributed, two hundred and fifty questionnaires were received. The study found that majority of the respondents were used the Google chrome (72.8%) and Mozilla Firefox (60.8%) web browsers and most preferred search engine is Google (88.4%). The study also found that e-books (72%), e-journals (70%) and e-thesis (64%) are the major e-resources used by respondents.

Keywords: Electronic Resources, Under Graduate Students, Engineering Colleges

I. INTRODUCTION

Education is backbone to industrial and economic development of any country. Education tries to cope up with the needs of the society; it has met the challenges of unpredictable changing civilized population. Higher education helps an individual to lead a better life, develops new technology. Better engineering education produces the quality engineers and it leads to better industrial development in the country.

National Knowledge Commission says that “Engineering education is among the key enablers of growth for transforming India’s economy”. According to the MHRD, India has 6,214 engineering and technology institutions which are enrolling 2.9 million students wherein in 1.5million engineers are released every year for job. Libraries are heart of the any educational institutions and which provides information to its users. The major components of libraries are information sources, users and librarians. Due to the advancement in the field of information communication technology, information is available in variety of printed and non-printed formats. At present, usage of electronic resources is tremendously increased due to the availability of the electronic resources at minimum cost or freely.

The main task of the librarian is to provide pin-pointed, exhaustive and expeditious information to users. In order to achieve this task, identification of information needs of the users is essential and also designs the library and information systems in general and to the provision of effective information services in particular. But it is a difficult task and it is almost an investigative or the

detective work. The library and information professionals should adopt various techniques and methods for identifying the information needs of the user groups. The survey method are one of the best and the power tool for assessing the needs of the users of the library. Therefore, present study adopts the survey method for finding the engineering students usage level of electronic resources in selected private engineering colleges in Coimbatore.

II. REVIEW OF LITERATURE

The studies related to use of electronic resources by users of the higher educational institutions have been conducting every part of the world in the recent years. The result of the two recent studies related to use of e-resources by the engineering students are presented in following paragraphs. Arun Kumar and Anjaiah (2018) conducted a case study on “Use Patterns of e-Resources by the Faculty, Research Scholars and Professional Students of University College of Engineering, Osmania University, Hyderabad Telangana State. Out of 200 questionnaires distributed, 165 (82.50%) filled questionnaires were received with full particulars. The study observed that a majority of the respondents (90.90%) used electronic resources and the purpose for using e-resources were project work (39.40%), research purpose (37.58%) and examination (14.54%). The order of the preference of the usage of different types of e-resources was e-journals (78.18%), e-books (33.93%), e-magazines (29.69%), e-theses (27.87%) and e-newspapers (23.63%) respectively. The study concluded that majority of the respondents (60.60%) were satisfied with the availability of e-resources in library. Maidul Islam and Umme Habiba (2015) examined the use pattern of internet and e-resources by the students and faculty members of a private university in Bangladesh.

The study found that a majority of the respondents (48) used library daily and other significant proportion of users used library on two or three times a week and most of the users used internet from their home (96) and a significant proportion of users (65) accessed to internet from library. A good percentage of the respondents (74) accessed e-resources most days and few of the respondents (30) used few times every week. The respondents’ main purpose of searching e-resources for learning (116), they are also searching for current information (99) and for research work (52).

III. OBJECTIVES OF THE STUDY

The primary objective of the present study is to examine the usage level of the electronic resources of the engineering students studying in the private engineering colleges in Coimbatore. The other objectives are as follows:

1. To know the awareness about the e-resources;
2. To find the purpose for using e-resources;
3. To find out the usage of different types of e-resources;
4. To investigate the effective used online databases and
5. To identify the problems faced by engineering students while accessing e-resources.

IV. METHODOLOGY

The present study adopted a survey method for identifying the usage of electronic resources by the engineering students. A well structured questionnaire was prepared for collecting required information from the respondents.

Each sixty questionnaires were distributed to five private engineering colleges situated in and around Coimbatore. Questionnaires were distributed through the librarians and respondents are selected on the basis of the convent sampling method. Out of the three hundred questionnaires distributed, 250 filled questionnaires were received from the students. The response rate is 83.33 percent. After careful analysis of the filled questionnaires, required data were collected. The collected data are tabulated and analysed with the help of MS Excel.

V. RESULT AND DISCUSSIONS

Analysis of data is an important duty of the researcher, and proper presentation of the result also reflects the quality of the research done. The results of the present study are presented in the following tables with proper interpretations.

A. Gender Wise Distribution of the Engineering Students

Table I shows the gender wise distribution of the respondents. It indicates that majority of the respondents belonged to the male (60%) and remaining 40 percent belonged to female respondents.

TABLE I GENDER WISE DISTRIBUTION OF THE ENGINEERING STUDENTS

S. No.	Gender	No. of Respondents	%
1	Male	150	60.0
2	Female	100	40.0
	Total	250	100.0

B. Use of Web Browsers

It is evident from table II that Google Chrome (72.8%) and Mozilla Firefox (60.8%) web browsers were used by the majority of the respondents; followed by Other Browsers (44.0%), Opera (32.0%), Microsoft Internet Explorer (24.0%) and Microsoft Edge (16.0%).

TABLE II USE OF WEB BROWSERS

S. No.	Web Browsers	No. of Respondents	%
1	Google Chrome	182	72.8
2	Mozilla Firefox	152	60.8
3	Other Browsers	110	44.0
4	Opera	80	32.0
5	Microsoft Internet Explorer	60	24.0
6	Microsoft Edge	40	16.0

C. Use of Search Engines

TABLE III USE OF SEARCH ENGINES

S. No.	Search Engines	No. of Respondents	%
1	Google	221	88.4
2	Yahoo	115	46.0
3	Rediff	78	31.2
4	Bing	63	25.2
5	Ask.com	52	20.8
6	Alta Visa	46	18.4
7	Other Search Engines	35	14.0

It is clear from the table III that Google (88.4%) is the most preferred search engine among the respondents. Yahoo (46%) and Rediff (31.2%) search engines usage levels are second and third among the respondents. The usage level of Bing (25.2%), Ask.com (20.8 %), Alta Visa (18.4%) and other search engines (14. %) are fourth, fifth, sixth and seventh levels respectively.

D. Usage of Electronic Resources

Engineering Student's preferences among the different types of e-resources are presented in the table IV. The result shows that the majority of the respondents used e-books (72%), e-journals (70%), and e-thesis (64%). 49.6 percent of the respondents were used e-newspapers and 33.6 percent used e-dictionaries.

TABLE IV TYPE OF ELECTRONIC RESOURCES USED

S. No.	e-Resources	No. of Respondents	%
1	e-Books	180	72.0
2	e-Journal	175	70.0
3	e-Thesis	160	64.0
4	e-News paper	124	49.6
5	e-Dictionaries	84	33.6

E. Use of Online Databases

Table V explains the use of different types of online databases by the engineering students studying in the private engineering colleges in Coimbatore. It is evident from table V that the majority of the respondents used Google Scholars (88.0%) and Open Source Databases

(76.0%). Below fifty percent of the respondents used the Elsevier (44.0%), Delnet (38.0%), ACM Digital Library (28.8%) and IEEE Explore databases (26.0%) respectively.

TABLE V USE OF ONLINE DATABASES

S. No.	Online Databases	No. of Respondents	%
1	Google Scholar	220	88.0
2	Open Source Databases	190	76.0
3	Elsevier	110	44.0
4	Delnet	95	38.0
5	ACM Digital Library	72	28.8
6	IEEE Xplore	65	26.0

F. Purpose of Using Electronic Resources

TABLE VI PURPOSE OF USING ELECTRONIC RESOURCES

S. No.	Purpose	No. of Respondents	%
1	Academic Activities	235	94.0
2	Research work	152	60.8
3	Updating Knowledge	147	58.8
4	Preparing articles	132	52.8

It is clear from the table VI that the majority of the engineering student used the e-resources for the purpose of academic activities (94.0), research work (60.8%), updating knowledge (58.8%) and preparing articles (52.8%) respectively.

G. Problems Faced While Using the E-Resources

TABLE VII PROBLEMS FACED WHILE USING THE E-RESOURCES

S. No.	Problems	No. of Respondents	%
1	Slow Access Speed	221	88.4
2	Lack of Subject Coverage	154	61.6
3	Difficulty in finding relevant information	146	58.4
4	More Expensive	83	33.2
5	Lack of Training	54	21.6

Table VII indicates the problems faced by respondents while using the e-resources. The study found that the slow access speed (88.4 %), lack of subject coverage (61.6%) and difficulty in finding relevant information (58.4%) is the major problems faced by the majority of the engineering students at the time of using e-resources. Below thirty five percent of the respondents were faced the problem such as more expensive (33.2%) and lack of training (21.6%).

VI. FINDINGS OF THE STUDY

The major findings of the study are as follows:

1. The majority of the respondents (60%) belonged to the male and remaining 40 percent belonged to female respondents.

2. Google Chrome (72.8%) and Mozilla Firefox (60.8%) web browsers were used by the majority of the respondents; followed by Other Browsers (44.0%), Opera (32.0%), Microsoft Internet Explorer (24.0%) and Microsoft Edge (16.0%).
3. Google (88.4%) is the most preferred search engine among the respondents. Yahoo (46%) and Rediff (31.2%) search engines usage levels are second and third among the respondents.
4. The majority of the respondents used e-books (72%), e-journals (70%), and e-thesis (64%). 49.6 percent of the respondents were used e-newspapers and 33.6 percent used e-dictionaries.
5. It is evident from table V that the majority of the respondents used Google Scholars (88.0%), and Open Source Databases (76.0%).
6. The majority of the engineering student used the e-resources for the purpose of academic activities (94.0), research work (60.8%), updating knowledge (58.8%) and preparing articles (52.8%) respectively.
7. The slow access speed (88.4 %), lack of subject coverage (61.6%) and difficulty in finding relevant information (58.4%) are the major problems faced by the majority of the engineering students at the time of using e-resources.

VII. CONCLUSION

The present study examines the use of electronic resources by the engineering students studying in the private engineering colleges in Coimbatore. The result of the study clearly shows that majority of the engineering students are aware about the availability of the e-resources and major using e-resources are e-books, e-journals and e-thesis. The slow access speed and lack of subject coverage are the major problems faced while using electronic resources. The authorities should take steps to conduct regular awareness programme about available electronic resources and ICT based services will help to more utilize the electronic resources and IT related services.

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