

IMPACT OF ELECTRONIC RESOURCES IN ENGINEERING COLLEGES OF WEST BENGAL, INDIA: A CASE STUDY

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ABSTRACT

The present information and communication technology have forced the library and information centres of all kinds to move towards e-resources for easy access and time effective. The objective of the present study is to analyse the use of electronic resources by the students of engineering college libraries. A total of 401 out of 430 population selected randomly from seven engineering colleges in Hooghly District are taken into consideration under the study through a questionnaire-cum interview based survey method which shows 93 percent of the total population. The results find out that the emergence of internet particularly, the World Wide Web as a new media of information delivery trigger proliferation of web-based full text online resources. The study concludes that the web-based electronic resources have become most popular tools in academic library.

KEYWORDS: *Information and Communication Technology, E-Resources, Engineering College, Online Resources, Academic Library*

INTRODUCTION

The advent of information and communication technologies, the internet and World Wide Web has changed drastically the publishing sector. The number of published documents gradually increases day to day specially in the field of science and technology that has created the situation of information explosion. The internet and the web are constantly influencing the development of new modes of scholarly communication; their potential for delivering goods is quite vast, as they overcome successfully the geographical limitations associated with the print media. The internet can be used for efficient retrieval and meeting information needs. This important fact is convincing many libraries to move towards digital resources, which are found to be less expensive and more useful for easy access. The progress of information technology has changed the attitude and taste of the people in seeking their required information. The increased information available on the web has affected the information seeking behavior of the present users. But any community like students community always seeks current information and discards the earlier data. Students in the field of engineering and technology seek current information from e-resources available in the library. Development of information technology has offered today's information seekers different opportunities to access to the information resources in a variety of formats via print, CD-ROMs, databases, Web OPAC and so on and so fort. Over the last decades a significant transformation has been noticed in collection development policies and practices. Print medium is increasingly giving way to the electronic form of materials. Today, the internet plays a vital role in the teaching-learning process.

OBJECTIVES OF THE STUDY

The objective of the present study was to find out the dependencies of the students of engineering colleges on e-resources. Other objectives of the study were as follow:-

- To examine the utilization of e-resources by students of engineering colleges in Hooghly District, West Bengal.
- To know the different type of e-resources available in the engineering college libraries.
- To study about availability of e-resources in the engineering college libraries.
- To identify the problems faced by the students of the engineering college libraries whenever they seek required information.
- To analyze the budgetary allocation of the engineering college libraries for procuring e-resources.
- To know about the collection development policy maintained for the acquisition of e-resources.

REVIEW OF THE LITERATURE

Chriss Thomas(2014) conducted a study on Use and User Perception of E-Resources by Post Graduate Students of St.Thomas College, Thrissur. The study discusses the awareness of e-resources, user satisfaction, problems that are faced by users while accessing e-resources. The work highlights that e-books are used mainly by the students for academic purpose. The study concludes that the e-resources have a significant role in library collections. **Madhusudan (2010)** conducted a survey under the title Use of electronic resources by research scholars of Kurukshetra University. The work finds out that electronic resources have become an integral part of the information needs of research scholars at Kurukshetra University. This study also shows that sufficiency of increased availability of computer systems and speed of internet enhances the use of e-resources more effectively and efficiently. **M. Doraswamy (2010)** conducted a survey on "Familiarity and use of the available electronic information resources by the students of Engineering College Library. The work concludes that most of the students are familiar with electronic information resources. Students mainly use search engines compared to other electronic information resources. **Dr Shehbaz Husain Naqvi (2014)** worked on The Use of E-Resources by Post-Graduate Engineering Students at Jamia Millia Islamia University. The study shows the use of e-Resources is very common among the postgraduate students of the Faculty of Engineering and Technology, Jamia Millia Islamia. **Dr. Chongtham Beda Devi and Dr. Nil Ratan Roy (2012)** conducted a study on Internet Use Among University Students of Assam University. The study finds out that the younger generation has accepted the Internet as a means for accessing to the relevant information for academic and research work. The present study also found that internet plays a key role in day today life. **Kehinde Fasaie & Fasa Rachael Aladeniyi(2012)** examined the usage of Internet by students of faculty of science in Nigerian Universities. The study reveals that the uses of the internet have positively influence the student's academic efficiency through increased in access to current information, ease research process as well as improved their professional competency. The work revealed that science students prefer to visit cyber-cafe located outside the school campus to access information on the Internet. **Pauline Adeniran (2005)** worked on Usage of Electronic Resources by Undergraduates at Redeemer University, Nigeria. The study reveals that the use of electronic resources has tremendous impact on the academic performances of the undergraduate students of Redeemer University; however, there is need for them to acquire more skills in the use of electronic resources.

METHODOLOGY OF THE STUDY

The study was conducted on the basis of interview cum observation methods. There were 2746 students of seven private engineering colleges in Hooghly District of West Bengal, India. But 430 students were selected randomly for the present study. After selection of population the well structured questionnaires containing both open and closed ended questions were distributed among 430 students and 406 copies were received where as only 5 questionnaires were rejected. So the final sample population was 401 out of 430 selected populations which show 93 percent of the total population. The collected data were classified, analyzed, and tabulated by using simple statistical methods.

DELIMITATION

The study mainly covers private engineering colleges of Hooghly District in the state of West Bengal. So, other Government and Government aided engineering colleges were not incorporated. The library users consist of both students and faculty members. But the present study only deals with perception of the students of private engineering colleges only.

DATA ANALYSIS AND INTERPRETATION

In this section various factors which influence the use of electronic resources by the students of engineering colleges are analysed in a lucid manner.

Demographic Information

Table 1: Distribution of the Respondents by Age

Age Group	No of Respondents	Percentage
18-19	140	35
20-21	156	39
22-23	105	26
	401	100.00

The Table-1 indicates age wise distribution of the respondents. It is clear from the table that out of the total 401 respondents, 156 (39 %) were in the age group of 20-21 years which were followed by 140 respondents (35%) in the age group of 18-19 years and 105 (26 %) in the age group of 22-23 years. This can be depicted by Figure 1 as given bellow.

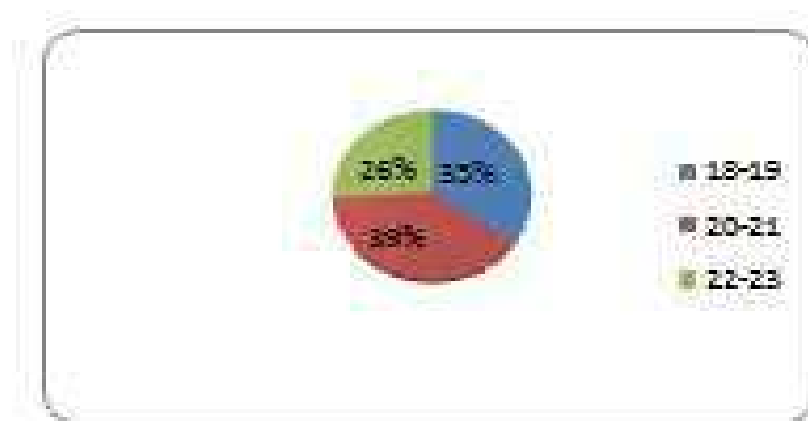
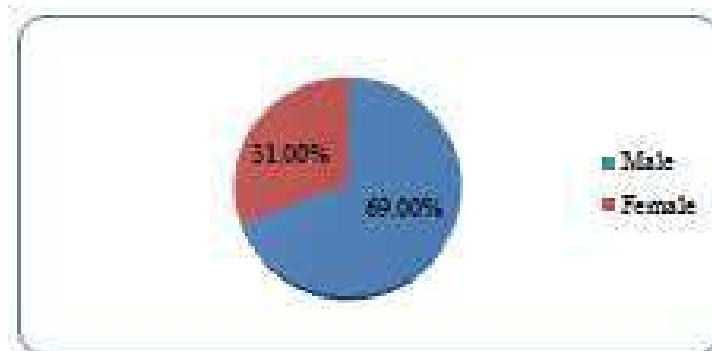


Figure 1: Distribution of the Respondents by Age

Table 2: Distribution of the Respondents by Gender

Serial No.	Gender	No of Respondents	Percenta In this Sectionge
1.	Male	277	69
2.	Female	124	31

The table 2 shows the gender distribution of the respondents. It could be noted that out of the total 401 respondents, majority of the respondents (69%) belonged to the male group and the rest of them (31%) were females. It implies that male respondents constitute more in number than female respondents. The result also can be shown by Figure 2 as given below.

**Figure 2: Distribution of the Respondents by Gender**

Various Formats of E-Resources Used

There were different types of e-resources for the information retrieval. The users of the engineering college libraries used different types of electronic resources for their studies. This is depicted by table 3.

Table 3: Distribution of the Respondents by the Type of E-Resources Used

Serial No.	E-Resources	No of Respondents	Percentage
1.	E-databases	196	49
2.	E-books	191	48
3.	E-Standards & Patents	5	1
4.	E-journals	124	31
5.	E-Technical reports	17	4
6.	E-Thesis & Dissertation	25	6
7.	E- proceedings	7	2

The data in table 3 reveals that majority of the respondents 196(49%) preferred to use engineering databases, followed by e-books with 191(48%) respondents, e-journals with no of respondents124 (31%), technical reports 17 (4%) and use of e-thesis and e-dissertation with 25(6%). Among 401 respondents, seven (2%) preferred to use conference proceedings and five (1%) preferred to use standards and patents.

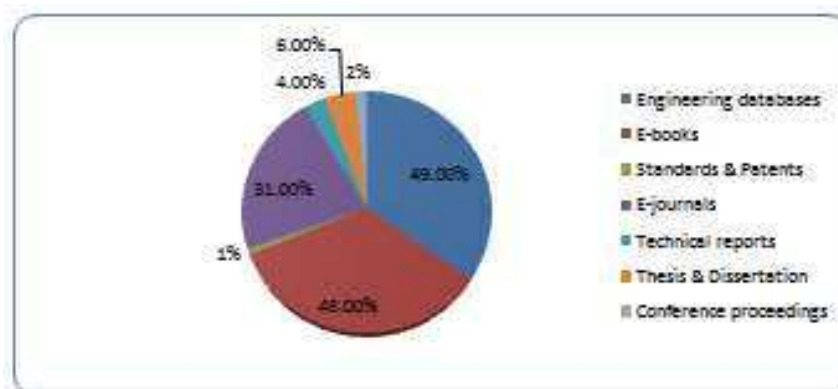


Figure 3: Type of E-Resources Frequently Used

Reasons for the Use of E-Resources

When the respondents were asked to give reasons for using e-resources, 207 (52%) respondents told that they use e-resources to prepare for their study note, 119 (30%) respondents used to prepare assignment or projects, 83 (21%) respondents used to gather general knowledge, 73 (18%) respondents used to prepare for seminars or conferences, 25 (6%) respondents used to write articles and 19 (5%) respondents used e-resources to write book review. This is shown by the table 4 and Figure 4.

Table 4: Distribution of the Respondents by the Reason of the Use of E-Resources

Serial No.	Reason	No of Respondents	Percentage
2.	Preparing class notes	207	52
1.	Writing articles	25	6
3.	To prepare assignment/projects	119	30
4.	To prepare seminars or conferences	73	18
5.	Writing book reviews	19	5
6.	Gathering general knowledge	83	21

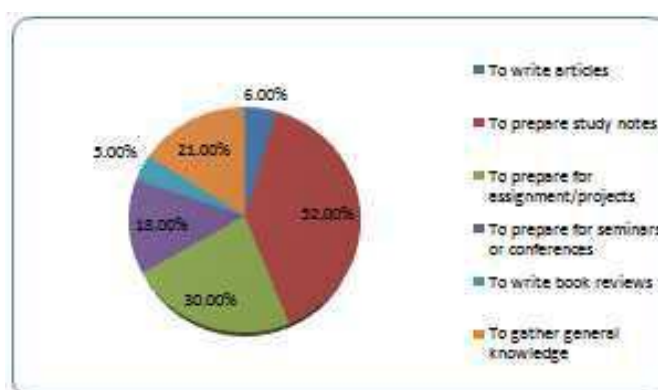


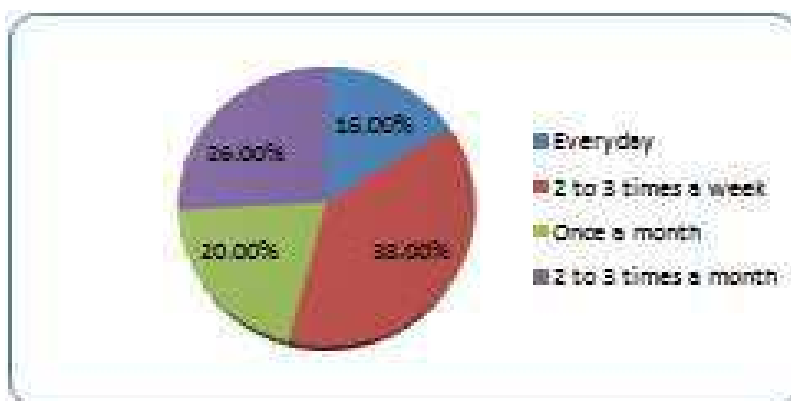
Figure 4: Reason of the Use of E-Resources

Frequency of the Use of E-Resources

The table 5 indicates the distribution of the respondents by the frequency of the use of e-resources. It could be noted that out of the total 401 respondents, one hundred and fifty two (38%) used e-resources 2 to 3 times/week, 104 (26%) respondents used e-resources 2 to 3 times in a month, 79 (20%) respondents used e-resources once a month and 66 (16%) respondents used e-resources every day.

Table 5: Distribution of the Respondents by the Frequency of Use of E-Resources

Serial No.	Frequency	No of Respondents	Percentage
1.	Everyday	66	16
2.	2 to 3 times in a week	152	38
3.	Once a month	79	20
4.	2 to 3 times in a month	104	26

**Figure 5: Distribution of the Respondents by the Use of E-Resources**

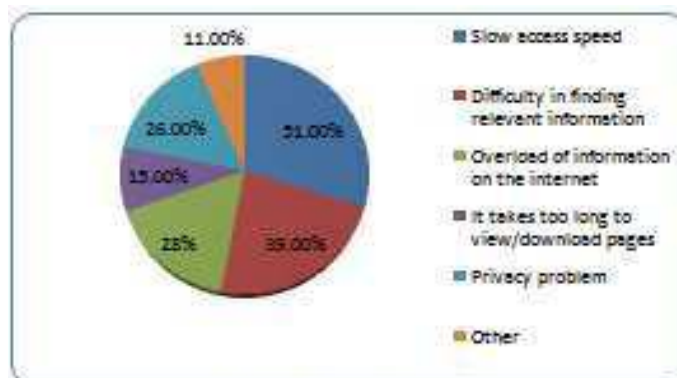
Problems Faced by the Users in Using E-Resources

There are various problems faced by the users of the engineering college libraries to access e-resources available in the libraries. The various problems are analysed in table 6 and Figure 6.

Table 6: Distribution of the Respondents by the Problems Faced By the Users

Serial No.	Problem	No of Respondents	Percentage
1.	Slow access speed	205	51
2.	Difficulty in finding relevant information	158	39
3.	Overload of information on the internet	112	28
4.	It takes too long to view/download pages	59	15
5.	Privacy problem	103	26
6.	Others	45	11

The study shows that 51% of the respondents faced problem of slow access speed, difficulty in finding relevant information 39%, overload of information on the internet 28%, It takes too long to view/download pages 15%, Privacy problem 26%. Other problems 11% are encountered while accessing electronic resources.

**Figure 6: Problems Faced by the User**

Methods to Browse Information from E-Resource Section

A study of data in the table 7 and Figure 7 shows that 28% out of 401 respondents typed the web address directly for browsing e-resources, 39% out of 401 respondents used the search engines for browsing e-resources, 25% out of 401 respondents used subscribed e-resources and 8% respondents used any other method.

Table 7: Distribution of the Respondents by the Method of Browsing Information from E-Resource Section

Serial No.	Method	No of Respondents	Percentage
1.	Type the web address directly	112	28
2.	Use search engines	158	39
3.	Use subscribed e-resources	98	25
4.	Any other	33	8

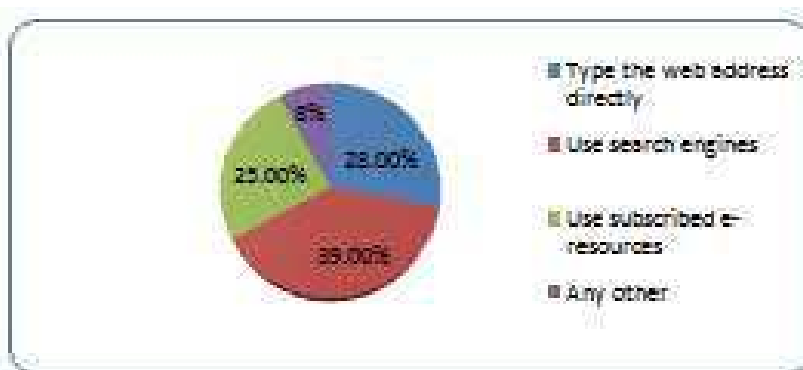


Figure 7: Methods to Browse Information from E-Resource Section

CONCLUSIONS AND SUGGESTIONS

At the present age of globalization, e-Resources are of vital importance, especially in the field of technology, where they provide up-to-date information within a very short time. The emergence of internet particularly the World Wide Web as a new media of information delivery, trigger proliferation of web-based full text online resources. The technology provides an unparalleled media for delivery of information with greater speed and economy. A Large number of students use e-resources for their academic work. This emphasis stands for that the e-resources have a significant role in library collections. It is also determined that most of the students faced problem of slow downloading problem. At the same time the level of satisfaction of the students with the usage of e-resources is a mixed result. Most of the users were accessing e-recourses from the library itself. So it is proved that the college libraries providing maximum level of services to the users. The results from the study revealed that e-resources were preferred by respondents because they were more useful, time saving, easy to use, more informative and less expensive. The usage of e-resources in India is rapidly increasing and traditional libraries are now on their way to digitization in a phased manner. The financial constraint of different academic colleges creates a problem to acquire necessary IT equipment and infrastructure. Also the library and information professionals have to keep watch for fewer technological changes in the use of e-resources. The study witnesses that the web-based electronic resources have become most popular tools in academic library now. Library needs skilled and sufficient staff and sufficient fund to fulfill all the necessities of the users and to competent in the world.

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