

Usage of electronic information resources and services at IIT, Kharagpur Library: A survey

Bulu Maharana*

Bipin Bihari Sethi**

Pankaj Kumar Mallick***

ABSTRACT

Beginning with the recent trends of e-resources and services, the article describes electronic information resources, systems and services offered by the central library of IIT, Kharagpur, which has developed a new mission and vision to support a new strategy of library collection and services through electronic media. It has also created varied access routes of information for its potential users to widen the usage of e-resources. The present survey aims to disclose the trend and usage of e-resources of IIT Kharagpur library by the students. The investigation finds that 93.18% of students use e-journals and 90.90% of students use other career or job related e-resources.

Keywords: Electronic Information Resources, Electronic Information Literacy, Information Technology, Multimedia Resources, Digital Library Resources, OPAC, Internet.

INTRODUCTION

We are living in the era of knowledge economy and the present universe is in the midst of information explosion and revolution. Due to developments information and communication technology, knowledge spreads expeditiously. Advances in information technology and speed of communication have made the world a global village with having no space and geographical barriers. This phenomenon has affected all sections of the society and in almost all aspects of life in the present era. The libraries of the contemporary world have also been equally affected by the emergence of information and

communication technology. On the one hand the size of e-information resources in the form of e-books, e-journals, e-databases, e-articles etc. are increasing in the libraries, and on the other hand the information seeking behavior of the users have also been shifted from print sources to electronic sources. With this background, the present survey is aimed to explore the usage of e-resources and services at IIT Kharagpur library by the students.

2. IIT, KHARAGPUR LIBRARY A BRIEF SKETCH

IIT, Kharagpur is one of the premier institutes of national importance in the field of engineering, science and technology. It was the first of the IITs established in the year 1951. The central library of IIT Kharagpur is enriched with a large collection and poses an iconic presence and significance in Asia. The following table gives an over view of the size of collection of learning resources at IIT Kharagpur library.

Author's Affiliations: *Lecturer, P. G. Department of Library & Information Science, Sambalpur University, Jyoti Vihar-768019, Orissa, e-mail: bulu_maharana@yahoo.com; **Professional Assistant, Prof. B. Behera Central Library, Sambalpur University, Jyoti Vihar-768019, Orissa; ***Librarian, Delhi Public School, Surat, <http://www.library.iitkgp.ernet.in/usr/elib/digital.htm/>

Reprints Requests: Bulu Maharana Lecturer, P. G. Department of Library & Information Science, Sambalpur University, Jyoti Vihar-768019, Orissa, e-mail: bulu_maharana@yahoo.com

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Table 1: Collection of print and electronic resources of IIT Kharagpur library (Source: <http://www.library.iitkgp.ernet.in>)

Books, micro forms, video forms, theses, patents and standards	3.5 lakh
Current Periodicals	1178
Gifted Periodicals	50
Bound Journal volumes	1, 00, 000
Open access E-Journals	12
E-databases (Full Text)	11
E-databases (Abstract)	05
E-Journals	21

AIMS AND OBJECTIVES OF THE STUDY

The present investigation aims to accomplish a survey in order to find out the trend of use of electronic resources of IIT Kharagpur library by the students.

The other objectives of the study are enumerated as follows:

- i. To trace electronic information resources which are better used by the students at IIT, Kharagpur;
- ii. To measure the level of computer skills and competencies of the students;
- iii. To find out how information technology & electronic information resources has

immensely affected the educational & research activities.

METHODOLOGY

The present study is based on a survey undertaken among the students community of IIT, Kharagpur. The sample of the study constitutes 250 students identified as the potential users of the library included in this survey. Out of 250 questionnaires distributed, 220 (88%) responded to the questionnaire survey in due time.

E-RESOURCES @IIT, KGP LIBRARY

The central library of IIT Kharagpur got its shape in 1951 as the life-line for the academic activities of the institute. IIT Kharagpur caters to the academic needs of about 5500 under graduate, post graduate students and research scholars, 450 faculty members and about 1500 technical administrative and medical staff⁽¹⁾. IIT Kharagpur library is a fully automated library equipped with high-speed servers and multimedia computers interconnected through a campus wide ATM backbone. The library uses LIBSYS library automation system which takes care of all the routine works. The following e-resources are subscribed and made available to the users:

Table 2: E-Resources @ IIT Kharagpur Library

Electronic Library	CD-ROMs, Floppies, and AV collection
Digital library	EiTch index, Compendex, IEEE/IEE journals, INSPEC, Current contents, Chemical Abstracts, Biological Abstracts, Agricultural Abstracts, Library & Information science Abstracts, ASTM standards, and ABI (on-line access of 150 journals)
Institutional Repository	E-prints of research out puts of faculty, and researchers of IIT kharagpur
INDEST Consortium	E-resources on Engineering sciences and Technology
Full Text Databases	ABI, ACM digital library, ASCE journals, ASME journals, Capitaline, EBSCO databases, Elsevier's science direct, Emerald, IEEE/IEE electronic library, Indian standards, Nature, Proquest, Science, Springer verlag's link, INSIGHT, NATURE, ASTM standards, ASTM journals
Bibliographic Databases & Internet facilities	NUCSSI, IEL electronic library, ITU-T standards, LISA, CAB, Chemical Abstracts in CD, Internet service through ERNET, Ethernet LAN connection over campus.

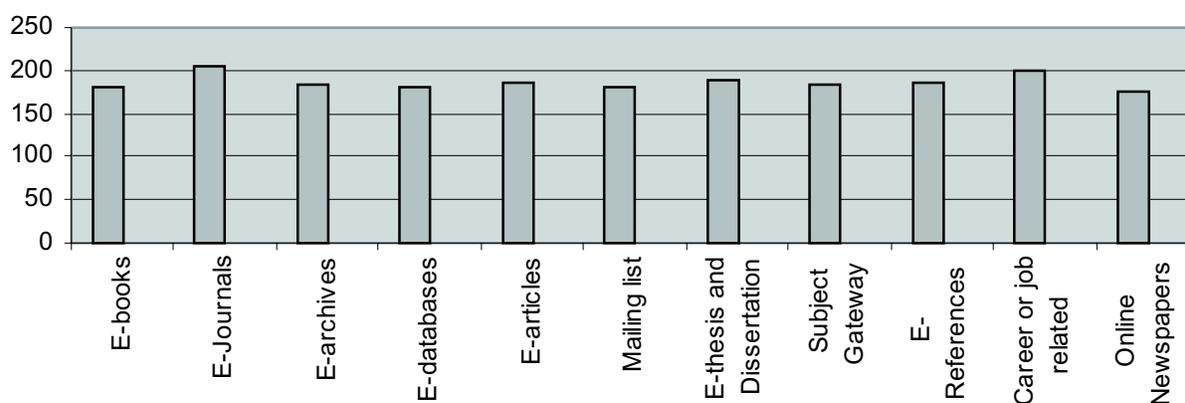
ANALYSIS OF DATA AND DISCUSSION

In the present investigation, the investigators have made an attempt to present the collected data in tables and charts to make the study more clear and understandable. Emphasizing on the respondents view and vision, efforts has been intensified for drawing a successful research on usage of electronic information resources and services at IIT Kharagpur.

Use of E-Resources by IITKGP Students Table 3: E-resources used by the students

Types of E-Resources	Responses	Percentage
E-books	180	81.81%
E-Journals	205	93.18%
E-archives	183	83.18%
E-databases	181	82.27%
E-articles	186	84.54%
Mailing list	182	82.72%
E-thesis and Dissertation	190	86.36%
Subject Gateway	183	83.18%
E-References	185	84.09%
Career or job related	200	90.90%
Online Newspapers	176	80%

Graph 3: Use of E-resources by the students



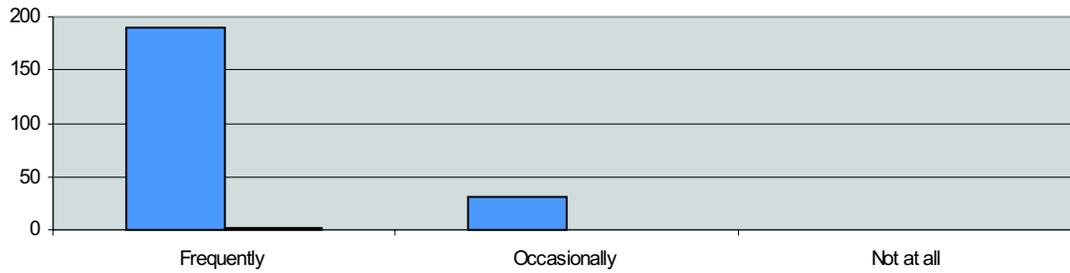
The present table and its graphical representation denote that, the students of IIT Kharagpur often use several e-resources for their academic and research work. The data in the above table depicts that 93.18% of the respondents have indicated that they use electronic journals and 90.90% emphasized on career and job related e-resources. Similarly, 81.81% students like to use e-books, 83.18% use e-archives, 82.27% e-databases, 84.54% e-articles, 82.72% mailing lists and 86.36% students use e-theses and e-dissertations as well as 83.18% use subject gateway, 84.09% use e-references, and 80% of students use online newspapers respectively.

Frequency of use of E-Resources

Table 4: Frequency of using e-resources

Frequency of use of e-resources	Responses	
Frequently	190	86.36%
Occasionally	30	13.63%
Not at all	0	0

Graph 4: Frequency of using e-resources



In the above table, it is clear that 190 (86.36%) respondents have been using e-resources frequently. However, only 30 (13.69%) respondents indicated that they are occasional users of e-resources and there is not a single student who does not use e-resources at all.

7 Places of Access to E-Resources

Table-5: Place to access e-resources

Place for accessing e-resources	Responses	
	Count	Percentage
Library	120	54.55%
Department	160	72.73%
Hostel	60	27.27%
Other Places	20	9.09%

Graph 5: Place to access e-resources

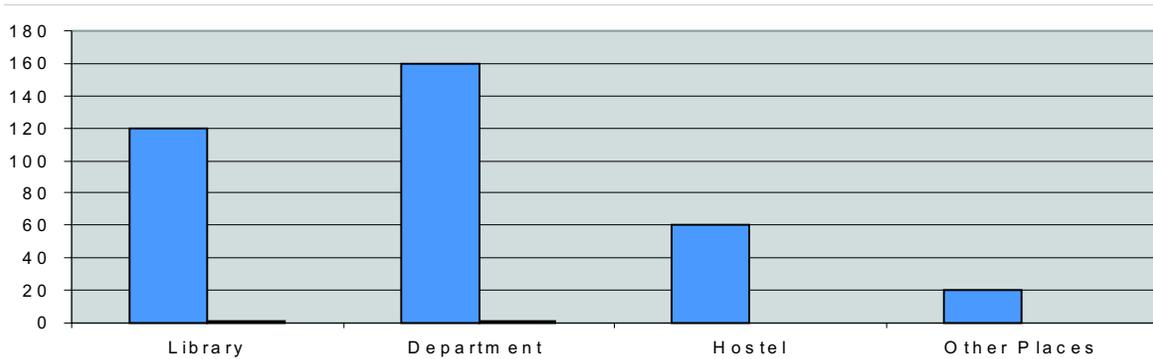


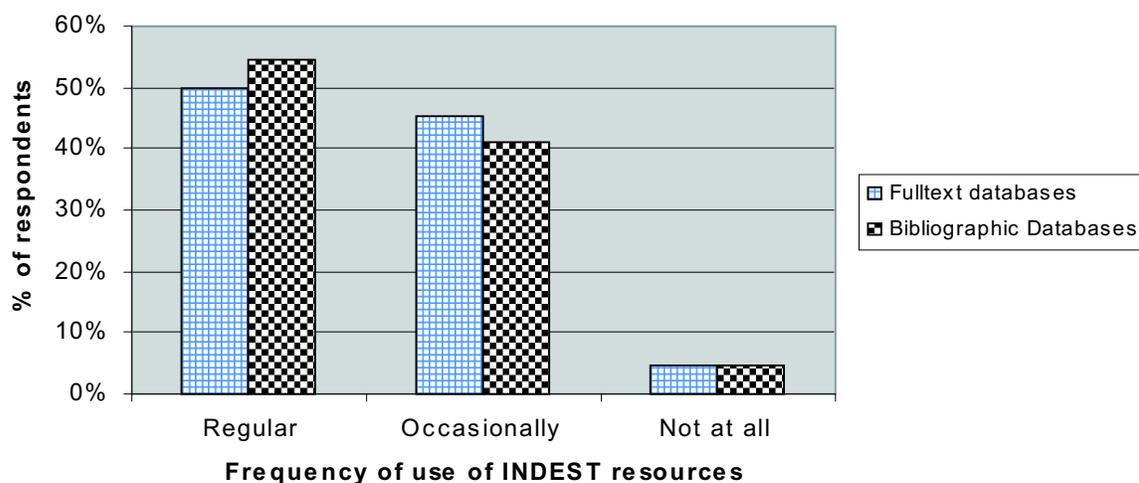
Table-6 reveals that more than 72.73% of the students access the e-resources from their respective departments followed by 120 (72.73%)

from the library. There are a few students who access e-resources in hostels (27.27%) and other places (9.09%).

Use of E-Resources through INDEST

Table 6: Using of INDEST consortia e-resources

Frequency of use	Type of e-consortia resources used			
	Full text databases		Bibliographic databases	
Regular	110	50%	120	54.55%
Occasionally	100	45.45%	90	40.90%
Not at all	10	4.54%	10	4.54%

Graph 6: Using of INDEST consortia e-resources

It is evident from table-7 and its graphical representation that 50% or more students have been regularly using both full text databases (50%) and bibliographic databases (54.55%). However,

100 (45.45%) and 90 (40.90%) students are occasional users of full text and bibliographic databases respectively.

Frequency of use of Digital Library Services

Table 7: Frequency of using digital library Services

Frequency of using digital library	Responses	
Regularly used	193	87.70%
Occasionally used	20	9.09%
Not at all used	7	3.18%

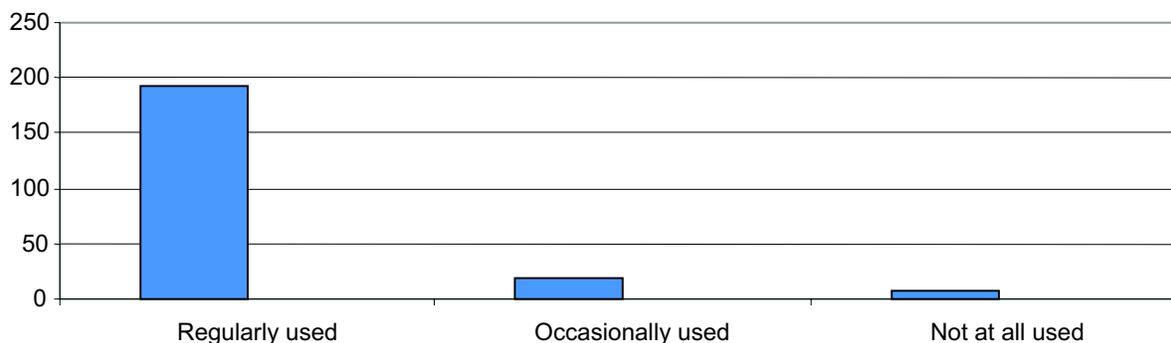
Graph 7: Frequency of using digital library Services

Table-8 discloses that the digital library service of IIT Kharagpur library is very popularly used by the students and found that 193 (87.70%) students

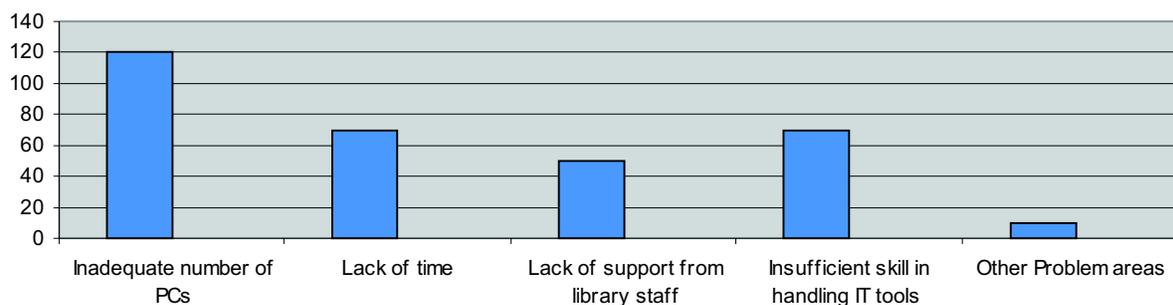
are regularly using digital library service followed by 20 (9.09%) who are occasionally using the service. A mere 7 (3.18%) students indicated that they are not using digital library service.

Problem of Accessing E-Resources

Table 8: Problems in access to e-resources

Problems of E-resources	Responses	
Inadequate number of PCs	120	54.55%
Lack of time	70	31.81%
Lack of support from library staff	50	22.72%
Insufficient skill in handling IT tools	70	31.81%
Other Problem areas	10	4.54%

Graph 8: Problems in access to e-resources



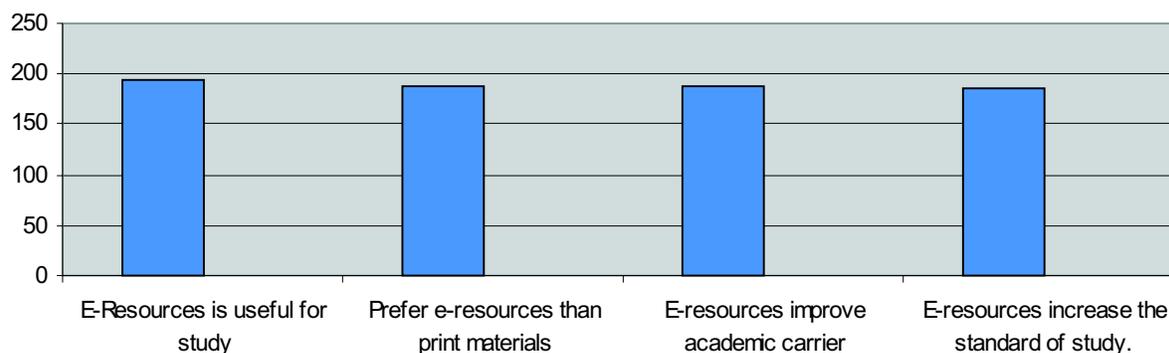
The present table elucidates that 54.55% of students found inadequacy in number of PCs, 31.81% felt lack of time, and 22.72% claimed lack of support from library staff, 31.81% experienced insufficiency in

skill of handling IT tools and 45.4% indicated other problems in accessing e-resources. This non-availability of sufficient number of PC is one of the main hindrances from the use of e-resources.

Students opinion on e-resources

Table 9: Students view on e-resources

Students view on e-resources	Responses	
E-Resources is useful for study	193	87.72%
Prefer e-resources than print materials	188	84.45%
E-resources improve academic carrier	187	85%
E-resources increase the standard of study.	186	84.54%

Graph-9: Students view on e-resources

This table discloses that, 87.72% of respondents opined that e-resources are useful for their study, 84.45% prefer e-resources to printed materials, 85% felt e-resources improve academic career and 84.54% affirmed e-resources develop their standard of study. Hence, it can be concluded that the students have very strong opinions towards usage and efficiency of electronic resources.

RESEARCH FINDINGS

As a result of keen investigation, study and analysis of data collected and discussed in depth and extent the investigator came to withstand following facts on the use of e-resources by the student community of IIT Kharagpur. Some notable observations are as follows:

- It is found that, most of the students at IITKGP use several IT tools and they possess required competency in accessing e-resources.
- E-journals are found to be most popular and highly used among all the e-resources.
- Maximum number of respondents viewed accessing e-resources in their respective departments is better than other places.
- Most of the students are efficient in using electronic library catalogue and OPAC.
- A majority of students prefer to use both full text and bibliographic databases of INDEST consortia e-resources regularly.
- It is encouraging to note that digital library services are highly used by the majority of students.

- Maximum numbers of students pointed out that, they lack adequate number of PCs in their institute.

CONCLUSION

Information Literacy is a challenging and crucial issue in library & information profession in 21st century, so library professional should be always up to date to cope up with this steadily increasing information resources & services. It is also equally essential for the library users to transform themselves with adequate skill and efficiency to case e-resources for their academic and research purposes. To this end, it will be fact to say that the libraries and library professionals can play a vital role in providing the necessary skills to make self sufficient and inventing them as a smart user.

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