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BANNARI AMMAN INSTITUTE OF TECHNOLOGY
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Learning Resource Centre
BANNARI AMMAN INSTITUTE OF TECHNOLOGY
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ABOUT BANNARI AMMAN INSTITUTE OF TECHNOLOGY

The Bannari Amman Institute of Technology (BIT) is a vibrant institute of higher education promoted by the Bannari Amman Group, a leading corporate house in the Southern part of India, under the aegis of the Bannariamman Educational Trust in 1996 in the town of Sathyamangalam in Erode District of Tamil Nadu.

It is an impressive campus situated in a serene surrounding at the foothills of the Nilgiris Mountains encompassing a sprawling area of 165 acres with a built-up area of more than 14 lakh square feet and presents an exemplary illustration of corporate contribution to society. BIT is a modern campus with up-to-date teaching facilities. It is an ideal, conducive, educational retreat where one can fully focus on studies and attain academic excellence.

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The Learning Resource Centre of Bannari Amman Institute of Technology has a two-storeyed air-conditioned building with rich collection of books, journals, back volumes, and digital library with 40 computers. It has currently developed a spectacular library web portal and institutional repository using Greenstone Digital Library Software and it is also involved in a research project sponsored by DSIR, Govt. of India. It has organized various short-term courses for the benefit of students and also for unemployed youth to get self-employment. It is an institutional member in British Council Library, DELNET, and AICTE-INDEST Consortium, New Delhi.

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From the Editor-in-Chief's Desk

The Bannari Amman Institute of Technology is an institute of higher learning in Engineering and Research. To commemorate the ten years of its completion, the Learning Resource Centre started publishing a refereed research journal entitled Indian Journal of Information Science and Services (IJISS) – a half-yearly publication on Library Science.

One of the objectives of the Indian Journal of Information Science and Services is to disseminate knowledge on various research issues connected with Library Science. In order to motivate the research scholars and to enrich the knowledge of readers, the Indian Journal of Information Science and Services has invited original research articles from library professionals and persons connected with research activities in the information centers as well.

The journal has received an overwhelming response from the Library Science professionals and researchers of various information centers, who have contributed their research papers for publication.

This issue consists of 13 papers covering various topics on Library and Information Science. We plan to reach this issue to various personalities, academicians and researchers connected with Library and Information Science to make this a top-class refereed journal.

The Editorial Board is keen on receiving suggestions for further improvement of the journal and will appreciate any constructive suggestions from the readers.

(S.Sivaraj)
Editor-in-Chief, IJISS

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CONTENTS

USAGE OF DIGITAL RESOURCES BY THE FACULTY OF ENGINEERING IN KALASALINGAM UNIVERSITY: A STUDY

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Abstract

This article presents a study that seeks to examine the usage of digital resources by the Faculty of Engineering at Kalasalingam University (KLU). The survey reveals that majority (85.36%) of the faculty is aware of the utility value of the online resources for the purpose of preparing study materials, class exercises and curriculum plans for the students. From this survey, the investigator is able to find out that most (76.82%) of the faculty members of the engineering departments prefer electronic journals (full text articles) as the first source of information for their teaching and research. However, the study also revealed about the less awareness of the faculty members about the e-mail alert service. The reading preferences of format files (such as PDF as well as HTML) are also discussed.

Index Terms*: Electronic Journals, Engineering Faculty, Digital Resources, E-mail Alert, Search Techniques*

1. INTRODUCTION

The world has changed radically with the emergence of the internet. This emergence has made the process of organizing and searching digital collections a critical international need. With the advent of internet, it has become very easy to access the documents online and there has been a revolutionary shift from print to electronic resources. The internet and online resources are attractive to users because of the convenience and speed. Hence, the success of a library has become dependent on its ability to develop robust infrastructure and sustained support, and also manpower training and development through which the online contents would become amenable to electronic search through the dedicated search engine on their websites.

2. OBJECTIVES OF THE STUDY

The study was conducted with the following objectives.

1. To find out the purpose of the faculty members' using online digital resources
2. To ascertain the factors inducing the faculty members to use online digital resources
3. To find out what type of online resources are preferred by the faculty for teaching and research
4. To find out the search techniques of the faculty members
5. To find out the reading preferences of format files
6. To identify the awareness of the faculty members about e-mail alert service
7. To find out the personal problems faced by the faculty members while using online resources

3. LITERATURE REVIEW

Review of related literature is the key focus of any research. It enables one to be aware of the past and current trends in any particular branch of research. According to Raza and Upadhyay most of the science and technology libraries have changed the contemporary outlook towards functions and services [1]. The environment is rapidly changing to an electronic one. There have been many studies of users of electronic resources in the professional literature in the last few years. In a recent exhaustive review of the literature on the subject, Haneefa analyzed the Information and Communication Technologies and found that though the libraries had hardware, software, and communication facilities to some extent, ICT-based resources and services were not reaching the users to the expected extent[2]. The main conclusion of this review is that the

ICT based resource used by the largest percentage of the users was the e-mail.

The survey of the internet usage of the faculty members by Al-Ansari summarized that the majority has been using the computer and internet for more than five years and give importance to, e-mail, search engines, and WWW resources mainly for communication, research, and publication [3]. The research examines topics such as faculty use, preference of online resources, motivating factors, search techniques, purpose of usage, reading preferences and e-mail alert service by the faculty.

Atilgan and Bayram have conducted a survey about the development of the digital library system in Ankara Universities [4]. As a research tool, this survey was expected to provide information that would help in two directions: first, in making a decision as to how many of these e-databases the library should subscribe; second, in analyzing the level of awareness among the faculty members along with the frequency of their use of the digital library. Vicente et al, have conducted a study about the use and awareness of electronic information services by academic staff at Glasgow Caledonian University and reported that the freely available internet was the most widely used source, which some respondents viewed as a more appropriate source of vocationally orientated information than pass worded databases [5].

The survey of the user preferences in two large research universities in Chicago, USA have been summarized by Johnson [6]. The results show that the librarians must evaluate the user preferences in formats of print and electronic journals through user surveys, usage reports, and educated guessing. Barnett-Ellis and Griffin have conducted a survey of usage of electronic library resources and found that the library needs to increase the faculty awareness about resources beyond the library's online catalog and periodical databases [7]. Faculty members indicated the need for training in the use of resources with which they are less familiar and the need to publicize these resources. To promote the awareness of online resources and their educational values through a systematic training procedure, Moon analyzed that the students' attitude toward the web-based project was positive because of its interactivity, efficiency, flexibility, and economy [8]. Peters concludes with some speculation about the overall value and long-term potential for e-resource usage statistics [9].

Tonta reviewed the state-of-art of Turkish University libraries and summarized the efforts to set up a university library consortium to provide consortia access to electronic information sources and services [10]. Inelmen and Inelmen suggested that educational and language barriers were important in having access to exploit full potential of internet [11]. The results also showed that there were no marked motivational differences between the males and the females in term of employing internet for their personal development, enjoyment, or communication purposes. Weingart and Anderson reported that the responses revealed the need for greater publicity regarding new acquisitions, training opportunities, and methods of remote access [12].

4. NEED FOR THE STUDY

The Kalasalingam University Library provides access to full-text electronic journals under INDEST-AICTE Consortium (i.e. IEEE/IEL, ASCE, ASME, Nature, Nature biotechnology and Management journals) and twenty four hours internet facility to both the faculty and the students to utilize it for education purposes. Hence, it is necessary to conduct a study to determine whether the online resources are used by the faculty for academic activities and how these online resources has influenced the academic efficiency of the target users.

This article focuses on the usage of online resources such as e-books, e-journals, e-databases, e- research reports etc. by the Faculty of Engineering. But there is no existing work to find out the awareness about e-mail alert service to improve the usage of electronic resources. This article tried to find out the faculty awareness of e-mail alert service for better usage of online resources.

5. METHODOLOGY

The faculty of the various Engineering Departments in the Kalasalingam University represented the target population for this study. The questionnaire method has been employed to collect the data for the present study. The questionnaire was constructed based on the following elements; usage purpose, motivating factor, search techniques, e-mail alert service, reading preferences, personal problems and suggestions.

Samples of 120 faculty members were selected randomly. A structured questionnaire was designed for

collecting data. A total of 91 filled-in questionnaires were received back. From these, 82 questionnaires were found to be usable, and 9 questionnaires were rejected as they were incomplete and not properly filled. The response rate was 68.33 percent. The investigator selected the entire set of completed questionnaires for data analysis.

6. DATA ANALYSIS AND INTERPRETATION

Table 1 Purpose of Usage

Purpose	Number of Respondents	Percentage
Prepare study materials, Class exercises and Curriculum plans	70	85.36
Distribute instructional materials electronically	28	34.14
Download software and tools for research project implementation	45	54.87
Research and literature survey	62	75.60
Locate, collect and analyze data using the internet	28	34.14
Prepare manuscripts and research proposals	40	48.78
Paper submission for conferences and journals	55	67.07
Web publishing	7	8.53
Online Test	14	17.07

The respondents were asked to tick the usage purpose of online resources. Frequencies and percentages of usage are presented in table 1. It was found that 70 (85.36%) respondents use the online resources for preparing study materials, class exercises and curriculum plans for students; 28 (34.14%) respondents distribute the instructional materials electronically; 45 (54.87%) respondents download software and tools for research project implementation; 62 (75.60%) respondents use online resources for research and literature survey; 28 (34.14%) respondents locate, collect use and analyze the data using the internet; 40 (48.78%) respondents use to prepare manuscripts and research proposals; 55 (67.07%) respondents use the internet for paper submission to conferences and journals; 7 (8.53%) respondents use the net for web Publishing and 14 (17.07%) respondents use the internet for online test.

Table 2 Motivating Factor

Factors	Number of Respondents	Percentage
Enhance teaching	64	78.04
Enhance research	60	73.17
Enhance professional development and lifelong learning	50	60.97
Enhance communication	33	40.24

Respondents were asked to indicate the motivating factors which led them to use the online resources. Table 2 shows that 64 (78.04%) respondents used online resources to enhance teaching; 60 (73.17%) respondents used them to enhance research; 50 (60.97%) respondents used online resources to professional development and life long learning and 33 (40.24%) respondents used them to enhance communication purposes.

Table 3 Search Techniques

Search Techniques	Number of Respondents	Percentage
A general-purpose search engine (e.g., Google, Yahoo)	58	70.73
A specific journal's website	6	7.32
A multi-journal search website with links to full text	17	20.73
An online citation index (e.g., Web of Science, SciFinder)	0	0
Local library's reference room or stacks	1	1.22
Total	82	100.00

Table 3 clearly shows that 58 (70.73%) respondents begin their searching of online resources through the general search engine (e.g., Google, yahoo); Six (7.32%) respondents begin their searching through a specific journal's website; 17 (20.73%) respondents begin their searching through a multi-journal search website with links to full text; One (1.22%) respondent begin their searching through the local library's reference room or stacks and nobody begin their searching through an online citation index (e.g., web of science, SciFinder). Thus it indicates that a large percentage of faculty members use general search engines (e.g. Google, yahoo) regularly.

Table 4 E-Mail Alert Service

Type of E-mail Alert	Number of Respondents	Percentage
Table of contents alerts	19	23.17
Article citation alerts	14	17.07
Article keyword alerts	11	13.41
Not Applicable	38	46.34

Table 4 clearly indicates that 19 (23.17%) respondents use table of contents alert service; 14 (17.07%) respondents use article citation alert service; 11 (13.41%) respondents use article keyword alert service and that 38 (46.34%) respondents are not using e-mail alert service.

Table 5 shows that 43 (52.44%) respondents prefer to read the online resources in full text on the screen in PDF format first; Six (7.32%) respondents prefer to read it in full text on the screen in HTML format first and 33 (40.24%) respondents prefer to take a print outs and read rather than reading from the screen.

Table 5 Reading Preference

Format	Number of Respondents	Percentage
Read it in full text on the screen in PDF format first	43	52.44
Read it in full text on the screen in HTML format first	6	7.32
Rather than reading from the screen, I prefer to print them	33	40.24
Total	82	100.00

Table 6 Use of Online Resources

Type of Online Resources	Number of Respondents	Percentage
E-Books	44	53.65
Articles full text	63	76.82
Articles abstract	59	71.95
Standards	09	10.97
Patents	16	19.51
Formulae	24	29.26
Models / Designs	32	39.02
Research Report	49	59.75

Table 6 shows that 44 (53.65%) respondents use e-books; 63 (76.82%) respondents use articles full text; 59 (71.95%) respondents use articles abstract; 9 (10.97%) respondents use standards; 16 (19.51%) respondents use patents; 24 (29.26%) respondents use formulae; 32 (39.02%) respondents use models/designs and 49 (59.75%) respondents use research reports.

Table 7 Personal Problems

Problems	Number of Respondents	Percentage
Lack of Time	27	32.92
Non-availability of e - resources	42	51.21
Connectivity Problems / Slowness	39	47.56
Access restrictions	32	39.02
Lack of sufficient information on existence of information	45	54.87
Lack of instructions	47	57.31

Table 7 clearly indicates the problems faced by the respondents. 27 (32.92%) respondents felt lack of time; 42 (51.21%) respondents felt non-availability of e-resources; 39 (47.56%) respondents felt connectivity problems/slowness; 32 (39.02%) respondents felt access restrictions; 45 (54.87%) respondents felt lack of sufficient information on existence of information and 47 (57.31%) respondents felt lack of instructions.

Table 8 Suggestions

Suggestion	Number of Respondents	Percentage
Provide workshops and classes	41	50.00
Provide web-based guided tour	38	46.34
Introduce written instructions for subject specific resources	36	43.90
Inform the faculty frequently of what is available	67	81.70

Respondents are asked to suggest improving the usage of online resources. Table 8 shows that 41 (50.00%) respondents suggest provide workshops and classes; 38 (46.34%) respondents suggest provide web-based guided tour; 36 (43.90%) respondents suggest introduce written instructions for subject specific resources and 67 (81.70%) respondents suggest inform the faculty frequently of what is available in the library.

7. FINDINGS

The major findings of the present survey are:

1. Most of the faculty members 70 (85.36%) use online resources for preparing study materials, class exercises and curriculum plans for students.
2. Most of the faculty members 64 (78.04%) use online resources to enhance teaching, followed by 33 (40.24%) who use it to enhance communication.
3. A majority of the faculty members 58 (70.73%) begin their searching for online resources through Google and yahoo and there is no response through online citation index (e.g. Web of science, SciFinder).
4. It clearly shows that 43 (52.44%) faculty members prefer to read of online resources in PDF format on the screen, followed by 6 (7.32%) faculty members who prefer the HTML format.
5. 63 (76.82%) faculty members use online resources of full text journal articles for their research and teaching, followed by 49 (59.75%) faculty members who use it for research reports.
6. More than half of faculty members reported that they are in lack of instructions as how to use the online resources, followed by 42 (51.21%) faculty members who reported the non availability of e-resources.
7. The suggestions from the majority (81.70%) of the faculty members is that they need to be informed regularly about what is available in the library regarding the new arrival of books and journals information through e-mail, notice and library website. The faculty members feel that this kind of information will help to improve their usage of online resources.

8. CONCLUSION

The results of the present study offer significant information on the usage of online digital resources by the Faculty of Engineering in KLU. The survey reveals that the majority of the faculty members (85.36%) are using the online resources for the purpose of preparing study materials, class exercises and curriculum plans for students. From this survey, the investigator has been able to find out that most of the faculty members (76.82%) use full text articles as the first source of information for research and teaching.

The survey also reveals that most of the faculty members (70.73%) begin their searching of online resources through dedicated search engines (i.e.) Google and Yahoo. A very less number of faculty use the e-mail alert service i.e., table of contents alert service. Nearly half of the faculty members (46.34%) are not aware of the e-mail alert service. This indicates the low awareness about the e-mail alert service by the faculty. Most of the faculty members (52.44%) prefer the type of PDF format for reading on the screen. They have reported about the lack of instructions as how to use the online resources and suggested that they can be informed regularly about what is available in the library regarding the new arrival of books and journal information through e-mail, notice and library website.

REFERENCES

[1] M.M.Raza and A.K.Upadhyay, "Usage of E-journals by Researchers in Aligarh Muslim University: A Study", The International Information & Library Review, vol.38, 2006, pp. 170-179.

[2] Mohamed Haneefa, "Application of Information and Communication technologies in Special Libraries in Kerala (India)", Library Review, Vol. 56, 2007, pp. 603-620.

[3] Husain Al-Ansari, "Internet Use by the Faculty Members of Kuwait University", The Electronic Library, Vol. 24, 2006, pp. 791-803.

[4] Dogan Atilgan and Bayram, "An Evaluation of Faculty Use of the Digital Library at Ankara University, Turkey", The Journal of Academic Librarianship, Vol. 32, 2006, pp. 86-93.

[5] Angel De Vicente, John Crawford and Stuart Clink, "Use and Awareness of Electronic Information Services by Academic Staff at Glasgow Caledonian University", Library Review, Vol. 53, 2004, pp. 401-407.

[6] Qiana Johnson, "User Preferences in Formats of Print and Electronic Journals", Collection Building, Vol. 23, 2004, pp. 73-77.

[7] Paula Barnett-Ellis and Luke Griffin, "Faculty Use of Electronic Library Resources", Academic Exchange Quarterly, Vol. 7, 2003, pp. 152-156.

[8] Gyo Sik Moon, "Web-Based Training System for Evaluating Online Educational Resources", Proceedings of the International Conference on Computers in Education (ICCE'02), IEEE, 2002.

[9] Thomas A. Peters, "What's the Use? The Value of E-resource Usage Statistics", New Library World , Vol.103, 2002, pp. 39-47.

[10] Yasar Tonta, "Collection Development of Electronic Information Resources in Turkish University Libraries", Library Collections, Acquisitions, & Technical Services, Vol. 25, 2001, pp. 291-298.

[11] Erol Inelmen and Kivanc Inelmen, "Suggestions to Further Encourage the Use of Internet in Engineering Education", IECON'01: The 27th Annual Conference of the IEEE Industrial Electronics Society, 2001, pp. 1750-1753.

[12] Sandra J Weingart and Janet A Anderson, "When Questions are Answers: Using a Survey to Achieve Faculty Awareness of the Library's Electronic Resources", College & Research Libraries, 2000, pp. 127-134.

EFFECTIVE UTILISATION OF HYBRID LIBRARY IN ENGINEERING COLLEGES IN BANGALORE: A DESCRIPTIVE STUDY

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Abstract

The use of internet by students, teachers, researchers, journalists, librarians, information scientists, and numerous other professionals have already gathered momentum in our country with the strengthening of information infrastructure day-by-day. The number of internet service providers, personal internet connections, institutional internet connections, cyber cafes, etc are also multiplying at a rapid rate. Engineering college students are also finding that internet based information resources are highly useful as much as it is providing latest information about the technology. At this juncture, a question automatically arises as to what extent this facility is being used by engineering students.

The study aims to find out the use of hybrid libraries by engineering students in Bangalore engineering colleges. The data are gathered through a structured questionnaire that was circulated among selected engineering students. The questionnaire seeks to illicit the information on the extent of the use of open access technological literature; web based information services; preferences of resources, and bibliographic databases.

Based on the findings of the study, suggestions are made as to how the awareness among Engineering students can be increased to optimize the use of engineering information resources. Librarians must be aware of the development of the technologies and usage in the libraries.

Index Terms: *Digital Resources, Hybrid Library, Information Literacy*

1. INTRODUCTION

The developments in the Information and Communication Technology (ICT), Internet and the Web have brought significant changes in information handling, organizing, managing, consolidating, repacking and dissemination. For centuries we have been using printed information sources. Publishers have played a key role in the generation of printed information, while distributors, booksellers and more particularly libraries have played a key role in the distribution of information. With the introduction of computers in Library and Information Centers, major changes have taken place in the process of storage, retrieval and dissemination of information. One of the major important contributions of web technology has been the creation of digital libraries, which allows users to access information resources virtually anywhere in the world. Rapid developments in the field of digital libraries all over the world have given rise to a large number of publications appearing in different digital forms. Added to this electronic publishing, networking and consortia have become the slogan of the present day information society. They have contributed towards the design and development of digital libraries [1].

2. HYBRID LIBRARY

The hybrid library is a term used by librarians to describe libraries containing a mix of traditional print library resources and the growing number of electronic resources. Hybrid libraries are mixes of traditional print material such as books and magazines, as well as electronic based material such as downloadable audio books, electronic journals, e-books, etc [2]. Hybrid libraries are the new norm in most public and academic libraries.

Hybrid libraries evolved in the 1990s, when electronic resources became more easily available for libraries to

acquire for public use. Initially these electronic resources were typically access to material distributed on media such as CD-ROM or searches of specialised databases [3]. The OCLC helped to push libraries towards acquiring digital resources by providing a centralized technology resource for participating libraries. Now, with the widespread availability of digital content, it includes internet resources and documents which are online, such as eprints [4].

3. ENGINEERING EDUCATION IN KARNATAKA

Mysore Government started the first engineering college in 1917 at Bangalore. After 1946, three more colleges were started. By the time of integration of the state, there were totally five engineering colleges (two government and three private) in the state. By 1993-94 there were a total of 47 engineering colleges in the state of which four were government institutions, nine were aided and the rest unaided[5].

The large number of professional institutions in Karnataka attracts students not only from the other parts of India but also from foreign countries.

4. OBJECTIVES OF THE STUDY

The major objectives of the study are:

1. To test the awareness of library staff about digital .information resources and facilities.
2. To examine the capability of library staff in imparting information literacy and technical literacy to the users.
3. To study the Information seeking behavior of users in digital library.
4. To derive the guideline for effective utilization of digital library.

5. RESEARCH METHODOLOGY

The study was designed, developed and carried to determine and analyze the utilization of library in digital environment in engineering college libraries in Bangalore. The principal tool for data collection covering the study among the engineering colleges in Bangalore was "survey research", as the method of research through questionnaire. To carry out this study two different questionnaires designed separately for librarians and users of the engineering college libraries.

6. SAMPLE SIZE

Four colleges were taken as samples for the study based on the year of establishment and type of management. One college was established in the year 1988, two colleges in 2001, and one in 2002. Out of four colleges two colleges (College 2 & 4) belongs to self-financing non-minority, one college (College 1) belongs to self-financing minority and one (College 3) belongs to a deemed university.

7. ANALYSIS AND INTERPRETATION

7.1 Preferences of services

In all the sample colleges, most preferred services are reference service and lending service. Inter library loan service is the preferred service. Two colleges (college 1& 2) have preferred selective dissemination of information . Colleges 1,2, & 3 have given preference to current awareness service, whereas college 4 has not preferred it. Online access of e-books, e-journals, and e-resources are the most preferred service by the libraries. College 4 does not prefer this.

7.2 Usage of Web Based Information Services

In all the colleges, most used web based information services are accessing of OPAC, table of content of journals, and news clipping services. Gateway for giving is one of the most used service rendered by Colleges 1 & 2 whereas, colleges 3 & 4 are not used. FAQ's and acquisition list are less used web based service in college 1 & 2. List of current journal/holdings is most used web based services by colleges 1& 2.

Table 1 Preferences of Services

Services	College 1				College 2				College 3				College 4			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Reference	✓					✓			✓				✓			
Lending	✓				✓				✓				✓			
ILL	✓					✓				✓					✓	
Reprographic Services	✓				✓				✓				✓			
SDI		✓				✓					✓				✓	
CAS		✓				✓				✓						✓
On demand literature search	✓					✓					✓					✓
User Education		✓			✓					✓						✓
Online access to e-journals	✓				✓				✓				✓			
Online access to e-books	✓					✓					✓				✓	
Online access to e-resources	✓					✓					✓				✓	
Bibliographic database search		✓				✓						✓				✓

1-Most Preferred, 2-Preferred, 3-Least preferred, 4-Not preferred

Table 2 Usage of Web Based Information Services

Web based information services	College1				College2				College3				College4			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Access to your library OPAC	✓				✓				✓				✓			
Table of content of journals	✓				✓				✓				✓			
News clipping service	✓				✓				✓				✓			
Gateway for giving	✓				✓							✓				✓
ILL		✓			✓					✓				✓		
Documents recommendation for acquisition		✓			✓					✓				✓		
FAQ's		✓			✓							✓				✓
Acquision lists		✓			✓							✓				✓
List of current journal / holdings	✓				✓											
Links to documents selection tools like publishers catalogue / online books shops	✓					✓										
Others Photocopy facility Content page service Question Papers Syllabus																

1-Most used, 2-Less used, 3-Least Used, 4-Not Used

7.3 Preference of Bibliographic Databases

Table 3 Preference of Bibliographic Databases

Bibliographic Databases	Most Preferred		Moderately Preferred		Just Preferred		Less Preferred		Least Preferred	
	1		2		3		4		5	
	N	%	N	%	N	%	N	%	N	%
Compendex	01	02	07	12	08	14	03	05	06	10
Aerospace	17	30	08	14	06	10	02	03	03	05
INSPEC	01	02	04	07	08	14	05	09	06	10
Medline	02	03	05	09	06	10	06	10	07	12
Web of Science	01	02	04	07	04	07	04	07	08	14
Biosis	07	12	07	12	03	05	04	07	07	12
Chemical Abstracts	02	03	06	10	06	10	03	05	08	14
PsycINFO	02	03	06	10	05	09	05	09	06	10
NTIS	03	05	01	02	10	18	05	09	03	05
FA	02	03	02	03	09	16	02	03	07	12
LISA	01	01	04	07	06	10	03	05	05	09
GeoRef	06	10	03	05	06	10	06	10	05	09
ERIC	03	05	04	07	03	05	07	12	06	10
Econlit	-	-	04	07	08	14	04	07	05	09
International Pharmaceuticals abstracts	05	09	06	10	04	07	03	05	05	09
Metadex(Metallurgical Abstracts)	03	05	01	02	04	07	02	03	08	14
Sociological Abstract	03	05	04	07	02	03	03	05	08	14
Civil Engineering abstracts	08	14	06	10	05	09	03	05	06	10

The analysis of data presented above shows that Compendex which is a popular database in engineering, is most preferred only by 2% of users and as many as 56% of students are not even aware of this database.

This demonstrates that user education is a very important service from the library side, so that awareness of resources provided by information technology will be effective.

Further, the above analysis reveals that 'Aerospace', 'Web of science', 'Biosis', 'Civil engineering abstract' were the most preferred database among the users. 42 % of students are not even aware of the database chemica abstract . All remaining databases are single digit percentage which is not more popular in engineering.

7.4 Preference of Library Services

It is observed from the data presented in table 4 that 47% of respondents stated that circulation of documents as one of the most preferred service, whereas 3% of respondents said circulation of documents is least preferred service. 28% and 26% of respondents said reference service and access to e-journals/e-books are the most preferred service respectively. 23% have said table of contents and user education/information literacy are the most preferred service.

Further, the analysis shows that 12% responded that the circulation of documents service is moderately and just preferred.. Over all it is assume that circulation of documents service is the most important function in engineering college libraries.

Table 4 Preferences of Library Services

Library Services	Most Preferred		Moderately Preferred		Just Preferred		Less Preferred		Least Preferred	
	1		2		3		4		5	
	N	%	N	%	N	%	N	%	N	%
Circulation of documents	27	47	07	12	07	12	03	05	02	03
Reprographic services	11	19	09	16	04	07	03	05	03	05
Inter Library Loan	06	10	06	10	05	09	05	09	07	12
Reference Services	16	28	11	19	12	21	01	02	02	03
SDI service	02	03	12	21	06	10	04	07	03	05
On demand literature search service	08	14	06	10	08	14	03	05	04	07
Access to e-journals/e-books	15	26	12	21	06	10	02	03	03	05
CD-ROM/Online database search	10	18	07	12	08	14	07	12	04	07
New clipping service	09	16	08	14	08	14	05	09	06	10
Table of contents	13	23	05	09	09	16	04	07	04	07
User education/ information literacy	13	23	05	09	09	16	04	07	04	07

8. SUGGESTIONS

Based on the findings of the survey-oriented study the following suggestions are derived.

1. All engineering college libraries should concentrate on procuring online databases on journals, books, patents, theses / projects and others to save the precious time of the users.
2. Majority of engineering college libraries should provide need-based value added users services through automated library, campus wide LAN and also with web based services.
3. Engineering libraries need to make rigorous efforts to access various networks like INFLIBNET, ERNET, NICNET, DELNET, I-NET, GIAS SIRNET, INDONET and others in order to provide access to a wide range of information sources and services to users.
4. All engineering libraries should join in consortia on all online databases to save the fund, which can be utilized for other purposes.
5. Library professional should attend training programmes, conferences, short term courses to acquire knowledge on Information Technology inorder to work in automated / digital library environemnt effectively.

9. CONCLUSION

The collection and service infrastructure of the libraries in the sample regions are not up to the mark. Engineering college libraries are struggling in building digital collection and disseminating digital information due to the following factors:

1. Lack of ICT infrastructure
2. Lack of IT trained manpower
3. Lack of awareness of the digital resources
4. Lack of user demand
5. Lack of financial support
6. Lack of knowledge about the digital preservation methods
7. Lack of training for the digital access, etc.

Engineering college librarians have to be serious in developing their own proficiency as well as must find out how to develop the professional competency in general. Since the users are more prone to on-line and electronically delivered services, the growing role of the librarian in engineering colleges would lie in information counseling, training, advising users on services and information products appropriate to their needs and how best to use them. This is a time that necessitates innovative ways of thinking about services, collections, information access and also our roles as academic librarians.

REFERENCES

[1] C.L.Borgman, "What are Digital Libraries? Competing Visions", Information Processing & Management, Vol. 35 No.3, 1999, pp. 227-243.

[2] C.Rusbridge, "Towards the Hybrid Library", D-Lib Magazine,Vol.6 No.7-8,1998.

[3] A.Spink and C.Cool, " Education for Digital Libraries", D-Lib Magazine, vol.5, 1996.

[4] S.Harper, "What is a DigitalLibrary?KOLISS'96, International Conference on Digital Libraries and Information Services for the 21st Century. Seoul, Korea. 1996.

[5] S.K.Palit, "Electronic Engineering Education in India", Proceedings of the First Asia-Pacific Forum on Engineering and Technical Education, Monash University, Melbourne, Australia, 1997, pp.50-54.

USE OF ELECTRONIC RESOURCES BY THE MEMBERS OF FACULTY IN JAYAM COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARMAPURI, TAMIL NADU : A SURVEY

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Abstracts

The paper evaluates the use of Jayam College of Engineering and Technology (JCET) College Library in Dharmapuri (Tamilnadu). A Survey of 73 Faculty members is conducted through a questionnaire. The analysis of the collected data covers the use of electronic resources and how the electronic resources are improving the academic careers of the faculty and also what are the problems that are faced in using the electronic resources. This concludes that the main intention of the use of electronic resources has been the academic interest of the users.

Index Terms: *E-Resources, Faculty Members, Utility Survey*

1. INTRODUCTION

The JCET is one of the prestigious Colleges established during the academic year 1998-99. The initiation and foresight of the Trust of Jayam Educational Health and Charitable Trust was formed on account of the continuous and magnanimous efforts to uplift and promote Telugu minority and higher Education in Tamilnadu. The JCET has completed 9 years of dedicated and excellent service in the field of technical education [1].

The central library was started in the year 1998. Since then it has grown in size and content of services. It stands as a wi-fi Library with enhanced digital resources. It includes Books, Journals, Theses, E-Journals, E-Books, CD-ROM, Audio & Video cassettes and other E-Reference sources to the faculty, students, staff and alumnus under the intranet and internet environment [2].

2. SCOPE AND LIMITATION

The study is confined to the faculty members of JCET college, Dharmapuri regarding the use of electronic resources. Its aim is to fulfill the academic needs of the faculty members and it covers electronic resources, namely CD-ROMs, OPACs, E-books, E-journals and Internet.

3. OBJECTIVES OF THE STUDY

1. To know the availability of different types of electronic resources in JCET Library.
2. To Study the use of different types of electronic resources by the faculty members.
3. To study the purpose and utilization of the electronic resources by the faculty members.
4. To create awareness about the web resources available for the use of faculty members.
5. To understand and assist the end users in the problem faced during the use of web resources.
6. To update and upgrade the level of knowledge and information about more related web resources.
7. To collect the feedback about web resources already availed for access.

4. METHODOLOGY

A questionnaire consisting of nine questions was designed to elicit the opinion of the faculty members. These were distributed among the faculty members and the required data was collected which was further supplemented by informal discussions with the faculty [3]. The analysis and interpretation of the data is presented in the subsequent sections.

5. ANALYSIS AND DISCUSSION

Table 1 Qualification-Wise Distribution of Respondents

Qualification	No. of Responses	Percentage
M.E	37	50.70
M.TECH	3	4.10
B.E	18	24.65
M.Sc., Ph.D	12	16.43
M.Sc	3	4.10
Total	73	100.00

Table 1 indicates that majority (50.70%) of the respondents are postgraduates in technology and 24.65% of the respondents are bachelors degree holders in engineering. At the same time 16.43% of the faculty members are postgraduates with Ph.D. degrees followed by 4.10% of the faculty members are masters degree holders.

Table 2 Sex-Wise Distribution of Faculty Members

Sex	No. of Responses	Percentage
Male	47	64.38
Female	26	35.61
Total	73	100.00

Table 2 reveals that 64.38% of male faculty members work in JCET, whereas only 35.61% of the female faculty members earn their livelihood in this profession. This is a glaring example of sex-ratio imbalance of the working community.

Table 3 Teaching Experience of Faculty Members

Experience In Years	No. of Responses	Percentage
0 -5	31	42.46
5- 10	17	23.28
10 - 15	12	16.43
15 - 20	8	11.00
Above 20	5	6.84
Total	73	100.00

Table 3 shows that only 6.84% of the faculty members have more than 20 years of experience in teaching and at the same time 23.28% of the faculty members have 5-10 years of teaching experience, followed by 42.46% of faculty members who have less than 5 years of teaching experience, whereas 16.43% of respondents have 10-15 and 11.00% faculty member have 15-20 years of teaching experience respectively.

The designation-wise distribution of respondents is shown in table 4. Thirty five (48.00%) of the respondents are lectures, followed by 20 (27.39%) of the respondents who are Senior Lecturers, 12(16.43%) are Assistant Professors and only 8.21% are Professors working in this college.

Table 4 Designation-Wise Distribution of Faculty Members

Designation	No.of Responses	Percentage
Lecturer	35	48.00
Senior Lecturer	20	27.39
Asst Professor	12	16.43
Professor	6	8.21
Total	73	100.00

The following table 5 shows that out of 73 respondents 24 (32.88%) of the faculty members use electronic resources 'One hour', followed by 39 (53.42%) who are using 'two hour', whereas, 13.70% of faculty members use 'More than Two hour' of electronic resources in the library.

Table 5 Frequency of Using Electronic Resources by Faculty Members

Time Spent	Frequency	Percentage
One hour	24	32.88
Two hours	39	53.42
More than Two	10	13.70
Total	73	100.00

Table 6 Purpose of Using Electronic Resources

Purpose	No .of Respandent	Percentage
Research Work	24	16.55
Teaching Purposes	65	44.82
for communication	16	11.03
Finding for relevance information in my Specialization	18	12.41
Up dating Subject knowledge & GK	22	15.17
Total	145	100.00

* It is multiple choice questions so the percentage cannot be rounded after 100*

Table 6 reveals that majority (44.82%) of the faculty members use electronic resources 'for teaching purposes 'followed by 16.55% members who are using for their ' Research work' whereas 15.17% are using to update subject knowledge & general knowledge of information and 11.03% of faculty members are using 'for communication purposes'.

Table 7 Use of Electronic Resources by Faculty Members

Types of Electronic Resources	No .of Responses	Percentage
CD - ROMs	36	25.35
OPAC	4	2.81
E-Journals	19	13.38
E- Books	14	9.85
Online Database	9	6.33
Internet	58	40.84
Any others	2	1.40
Total	142	100.00

It is a multiple choice question so percentage cannot be rounded after 100

Table 7 shows frequency of use of electronic resources by the faculty members. Majority (40.84%) of the faculty members are using 'internet', followed by 36 (25.35%) who are using 'cd-roms' and 13.38% who are using 'e-journals'. However 2.81% of respondents are using the opac system.

Table 8 Problems Faced While Using Electronic Resources

Problems	No. of Response	Percentage
Lack of hardware	11	10.37
Lack of software	15	14.15
Lack of training	22	20.75
Lack of information on electronic resources	19	18.00
Lack of operating funds	8	7.54
Lack of timing	31	29.24
Total	106	100.00

Table 8 shows that 31 (29.24%) respondents have faced problems of 'lack of time', followed by 22 (20.75%) of faculty members who indicate 'lack of training' is the main problem while using electronic resources.

Table 9 Success Rate of Finding Required Information in Electronic Resources

Success Rate	No. of Respondents	Percentage
100%	0	0
75- 99%	34	46.57
50- 74%	20	27.39
24 - 49%	15	20.54
Less than 25%	4	5.47
Total	73	100.00

The respondents were requested to indicate the success rate in finding the required information in electronic resources. Table 9 shows that 34(46.57%) of respondents succeeded in the range of 75-99, followed by 20 (27.39%) respondents who succeeded in the range of 50-74 and least percentage (5.47%) of faculties succeeded in the range of less than 25%.

6. FINDINGS OF THE STUDY

1. Only 6.84% of the faculty members have more than 20 years of experience in teaching.
2. Majority (40.84%) of the respondents use Internet and 36(25.35%) use 'CD-ROMs'.
3. Majority of (29.24%) respondents have faced the problem of 'lack of time', and 22(20.75%) faculty members indicate 'lack of training' is the main problem while using electronic resources.
4. Regarding the success rate of finding the required information in electronic resources, 34 (46.57%) faculties rated that they have succeeded in the range of 75-99.

7. SUGGESTIONS

1. The authority must conduct training programmers for faculty members regarding how to use the electronic resources effectively.
2. Awareness should be created to use E-Journals and E-Books to obtain current information.
3. More computer/terminals should be installed in the library for the benefit of the faculty members.
4. More funds should be given to acquire the electronic resources.

8. CONCLUSION

The electronic resources play a vital role in all the fields of human life. These have rapidly changed the way of seeking and disseminating information. It is clear from the study that the faculty members of JCET College have developed their academic careers. The speed of availability and the ease of accessibility of information make the faculty members use electronic resources more frequently. This study helps the librarian to know the importance of electronic resources in the academic environment.

REFERENCES

[1] JCET College Manual, 2005-06.
[2] Kathryn Ray and Joan Day, "Student Attitudes Towards Electronic Information Resources" , Information Research, Vol.2, 1998.
[3] Mallinath Kumbar and M.S. Lohar, "Use of Library Facilities and Information Resources in Sahyadri Colleges, Shimoga (Karnataka): A study", Annals of Library and Information Studies, Vol.49 No.3, 2002 , pp.73-83.

TOWARDS QUALITY CULTURE IN LIBRARY MANAGEMENT SYSTEM: A COMPARATIVE STUDY OF ENGINEERING COLLEGES IN GOA

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Abstract

Total Quality Management (TQM) is recognised as an important management philosophy which is being used in most of the disciplines and the Library and Information Centre is not an exception of it. In this paper explained about the study carried to understand the existing level of management system towards approach and use of library resources by the users. In order to accomplish the study, three engineering colleges in Goa are selected for the study as the samples of the study. Separate questionnaire for librarian and user's were prepared. Questionnaire base survey study was conducted to collect the data towards approach and use of information resources in engineering colleges. ANOVA test is applied to analyse the data collected from the respondents to carry out the comparison study of three colleges to reveal and determine the quality management systems. The study revealed that the response of all the college users is moreover same towards approach and user of information resources. Libraries are needed to implement more information technology applications to provide quality information services. The paper concludes based on findings, valuable suggestions. There is need for providing guidance on conducting regularly user education and studies to educate the users and to provide a credible source, through powerful extension methods like conducting training programs, presentations, and exhibitions.

***Index Terms*:** *Library Resources, Quality Standards, Quality Management, TQM*

1. INTRODUCTION

Recent developments in Information and Communication Technologies have paved a powerful stimulus for the growth of print and electronic resources. A number of products and prototypes to assist teaching and learning have been produced and educational materials have been extensively published, but it is still unclear to what extent all of this is of use to users when it comes to real teaching and learning. Looking at the user demand and types of electronic information resources available in present knowledge society, created new challenges to the modern librarians more importantly how to improve the quality of the materials and tools available. Donna thought the emphasis of TQM is on successfully messing people and processes, rather than concentrating on the end product alone [1]. A key component of TQM is the quantitative analysis of processes. The use of such tools as flowcharts, affinity diagrams, and control charts enables to see baselines and set benchmarks for process improvement. Muhammad Naveed Kabir said quality is not an absolute term [2]. It involves many of the other characteristics of product or service. Some of these characteristics are cost, size, performance, economy of operation, warranty, appearance and reputation. All these characteristics contribute to the whole picture of quality.

Paul Burden said that in generic the use of TQM have been in the business world; i.e., in manufacturing, professional, or service organizations [3]. Since libraries are not expected to show a profit, or not run as businesses, and are considered "free", why would anyone want to apply TQM principles in a library?. There are two reasons that immediately come to mind—first: libraries are not free. Public libraries are supported by grants of various types, as well as tax amount provided by the city, county, or state; academic libraries are supported by donations and student tuition; research libraries are often supported by contributions and membership subscriptions or the organization which they serve. Second: they provide services—circulation of

works, inter-library loans, literacy programs, loans of materials, reading rooms, research facilities, reference facilities, and more. David Livingstone in his article concluded that TQM programme is more or less being adopted by the libraries or LICs of higher reputation in USA, the Harvard College Library, Oregon State University Libraries, Davis Library of Stanford University, Library of Georgia Institute of Technology, and Defence Regional Library of New South Wales, State Regional Library of Victoria; Library of Melborne University in Australia, etc [4].

2. TQM IN LIBRARY AND INFORMATION SCIENCE

A controversy over the expansion of TQM into service-oriented organizations (such as libraries) has to do with the question of profit making. Businesses are designed to make profit. Libraries, unfortunately, are not profit making ventures and are considered to offer "free" service. Alemna A. A. noted that the libraries, be they public, academic or research are not 'free' [5].

Customers may not be paying directly for the use of the library but are entitled to the service because their taxes, school fees, the contributions and membership subscriptions of the organizations they serve, coupled with grants of various types donated to the libraries, are good enough reasons for them to be managed efficiently. More than ever before, stakeholders are demanding accountability, value for money and precise justification of all resources to improve the competitiveness, effectiveness and flexibility of the whole organization. Accountability is thus crucial both in the business sector in general and in the library in particular. This is yet another justification for the applicability of TQM to businesses and libraries.

Talukder Tridibesh and Ghosh Saptarshi pointed that the tabular structure compares the library science with TQM in respect of different attributes [6].

Table 1 TQM in Library and Information Science

Attribute Comparative	Tqm	Library Science
Definition	Customer oriented	User oriented
Priorities	First among equals of service and cost	User and Service
Decisions	Long Term	Long Term
Emphasis	Prevention	Prevention like anticipation of demand
Errors	System	System/techniques
Responsibility	Everyone's	Library personnel
Problem Solving	Teams	Professionals' teams
Procurement	Life cycle costs, Partnership	User centric (cost is implicit)
Manager's Role	Delegate, Coach, Facilitate	Delegate Assistance Facilitate and mentor

Gokhale Pratibha A.said librarians deal with the information in contexts [7]. In addition to access the information, they are expected to add value to it and create repackaged information. Today private sectors are under pressure to get ISO 9000 certification and accreditation to stand in the global competition. It will not be too long that this will penetrate to library services through ISO 9004 series which essentially are guidelines for services.

Coming generation of information professionals will increasingly work with non-librarians. They will be having a dialogue with specialists in computing, networking, finance, marketing and so on. The services will be more customers based. Waldomiro Vergueiro and Telma De Carvalho briefed that the management of quality in academic libraries, as a management method that allows the improvement of performance, has been the object of interest for the managers of these services [8].

In this context, the identification of indicators that may take into account the social-economical and political context that permeate the reality of the information services is essential to better adequate the quality proposals.

Pao-Nuan Hsieh says effectively implementing quality management in libraries and information services requires an understanding of unique characteristics of library operations, Nature of interaction between librarians and customers, making of recommendations on the application of appropriate quality management concepts and techniques [9]. Retha Snyman conducted study on Standardisation of Names to Improve Quality and Co-operation in the Development of Bibliographic Databases and suggested that standardisation of South African names is essential in order to support the functions of the catalogue, ensure quality interaction between the user and the information, support national and universal bibliographic control and promote cooperation among libraries [10].

The standardisation of names, however, is associated with a considerable number of problems. Variations in the forms of names as they are presented on sources of information occur, identical names exist for different authors and corporate names change for political or economic reasons. Considerable intellectual inputs are required to cope with these problems and much time and money are spent on the authority control of South African names. An authority list containing the authoritative form of South African names with accompanying essential references could, therefore, be a very valuable tool for bibliographic control on local, national and universal levels and for the enhancement of the quality of databases. Large and advanced college and university libraries in the country have their websites on internet which can be accessed remotely overtime. Compared to traditional libraries, the items of quality related to digital libraries and the websites are different. BBC is regularly assessing the quality of its news websites. Similarly the quality of the college and university library websites can also be assessed.

3. QUALITY ASSESSMENT IN INDIAN LIBRARY SERVICES

The University Grants Commission (UGC) and National Assessment and Accreditation Council (NAAC) in India has succeeded in promoting quality as a defining element of higher education institutions in the country through a combination of self and external quality evaluation, promotion and sustenance activities. So far the NAAC has assessed the quality of 122 universities and 2608 colleges in India.

The quality of higher education institutions is multi-dimensional. So NAAC uses many criteria for evaluating the quality of higher education institutions in the country. The seven important criteria used by the NAAC are:

- Curricular Aspects
- Teaching, Learning and Evaluation
- Infrastructure and Learning Resources
- Organization and Governance
- Research, Consultancy and Extension
- Student Support and Progression and
- Other healthy practices

Among these, Learning Resources are the library and information services offered to support the teaching, learning and research activities of the higher education institutions.

4. LIBRARY STAFF IN QUALITY MANAGEMENT

Antonia Ida Fontana and Alessandro Sardelli found in the first stage of "Quality Management System Project" of National Cultural Heritage Ministry, Rome in 1999 that almost 38% of the library staff participated directly in the Project Groups [11]. The final result was the definition of the management procedures and the operational instructions for monitoring the library services. The staff involved in the project were taught through intensive training:

- How to profit from total quality management logic and the 'techniques' used in working in a group?
- To use data in order to improve performance
- To be aware of working with a "process approach", a key element of the ISO 9000 standards.

Susan Jurow and Susan B. Barnard said that TQM is an organizational approach which empowers each individual staff member thoughtfully and appropriately, to contribute to the transformation of the library as an information System [12].

5. METHODOLOGY

The study was conducted using a separate questionnaire for Librarian (part I) and Users (part II). A pretest was done to streamline the questionnaires. To collect the data the researcher personally visited the colleges, distributed the questionnaires to Librarians, students and staff of respective colleges with cover letter as well.

The part I questionnaire for Librarians comprised forty-eight questions in seven sections: (1) General information (2) Library resources (3) Processing of library resources (4) Information technology applications (5) Library services (6) Human resources and training and (7) User study. The four questions on general information sought to know the qualification and other information of the librarian. The second section contained six questions on Books, journals, CD ROMs, Unpublished Thesis and Project Reports, monographs, online resources requested to fill the available resources.

The six questions in the third section examined the librarians approach towards processing of library resources and their competence in acquisition of resources. The eight questions in the fourth section examined the information technology applications offered by the Librarian. In the fifth section thirteen questions comprise about library services offered by the librarians to the users. There are six questions in the sixth section on library personnel management and management approach towards the library staff. Last section had five questions, which were concern to user studies conducted by librarian.

The part II questionnaire designed for users comprised thirty-eight questions in five sections: (1) Demographic information (2) Types of library Resources (3) Approach to library resources (4) Evaluation of library services and (5) Evaluation of library staff. The three questions on demographics sought to create a profile of the users and to identify factors that may affect use of resources. The second section contained seven questions on Books, Journals, CD ROMs, Floppies, Unpublished theses and Project reports, Monographs and Online resources. The eight questions in the third section examined the participants' approach to library resources and their competence in using the resources. The fifteen questions in the fourth section examined the evaluation of library services on opinion about the overall collection, hours of operation, availability of reading materials, ability to obtain materials from other libraries. The last section had five questions, which were to determine evaluation of library staff.

To facilitate quantification and analysis, mainly close ended questions were used along with checklists using five point scales. To capture a response and have fewer missing responses, responses such as ''no opinion,'' ''don't know,'' and ''don't know about it'' were included.

The population surveyed was engineering colleges in Gao viz., Padre Conceicao College of Engineering, Goa Engineering College, and Rayeshwar Institute of Technology. To select about 1/3 of the number of students and staff in each of the colleges, about PCCE (18.51), GEC (33.65), RIT (19.04) percent of the sample size of the students and staff of the respective colleges responded. Thus the total effective sample size turned out to be 24 per cent of the students and staff of all the engineering colleges together. The study was limited to engineering colleges with responsibility for study and research in Goa. The variables included for the purpose of the study are as under:

1. TQM
2. Library Resource Management
3. Engineering Colleges
4. Approaches to Library Resources
5. Library Services

6. ANALYSIS AND DISCUSSION

In view of the electronic library paradigm and with the increased number of formats and resources in the electronic format it is necessary to include formats like e-books, e-journals, online database, and multimedia resources as part of the total resources. It was decided to a point where the term resources has reached a new meaning; the capacity of a library to capture information regardless of its format and of the mechanism necessary to access it. Finally it was concluded to include different types of resources as part of the total resources.

To evaluate the library resources by the staff and students a five point scale was developed with a scale being applied to each of the component items. The results obtained are standardised with a maximum scale of 100, for the purpose of comparison with the works on similar lines being published by others (Table 1).

6.1 Evaluation of Library Resources

Overall, the evaluation scores showed that the maximum utilisation of resources by users according to individual colleges, GEC (563.91) is highest among other colleges. The minimum utilisation is by RIT (543.74) followed by second highest PCCE (557.44). Surprisingly the highest and minimum utilisation of individual resource is by RIT. The highest utilisation of resource found to be the books (69.04) and the minimum utilisation of resource found to be the online database (43.33). In the case of books, the evaluation score of RIT (69.04) is more and moderate in the case of GEC (67.84) and less in the case of PCCE (67.77). Comparing with print resources (857.61) (books, journals, thesis, project reports, and monographs) and electronic resources (CD ROMs, Floppies, e-books, e-journals, and online database) (807.48) print resources utilisation is maximum than electronic resources.

Table 2 Evaluation of Use of Library Resources by the Users

Sl. No.	Resources	PCCE	RIT	GEC
1	Books	67.77	69.04	67.84
2	National Journals	60.00	59.51	58.03
3	International Journals	58.82	58.57	58.46
4	CD ROM's	57.35	55.23	61.17
5	Floppies	46.53	53.80	52.94
6	Unpublished Thesis and Project Reports	54.07	50.47	53.72
7	Monographs	44.34	49.52	47.45
8	E-Books	57.64	53.80	58.43
9	E-Journals	52.15	50.47	53.33
10	Online Database	58.77	43.33	52.54
		557.44	543.74	563.91

The resource-wise comparison of the utilization score for the colleges is presented in figure 1. Books (204.65) are used maximum among all types of resources. In the case of books and e-books, Books (204.65) utilisation is maximum than e-books (196.87). In the case of journals, national journals (177.54) utilisation is maximum than the international journals (175.85) among all the colleges.

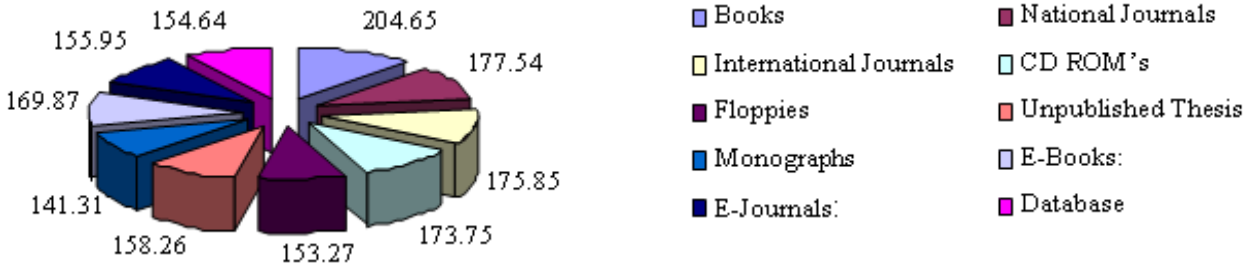

Fig. 1 Resource-Wise Comparison of the Utilization Score for the Colleges

The results of the analysis of variance technique applied to the evaluation score with components and colleges as two factors is presented in the tabular form (Table 3). Number of respondents for each resource in each of the colleges was presented in the form of a contingency table. Thus the tables are prepared below: one by one, by carrying out chi-square test of independents of attributes.

Table 3 Contingency Table for Use of Library Resources by the Users

Sl.No.	Resources	PCCE	RIT	GEC	Total Frequency
1	Books	54	42	51	147
2	National Journals	54	41	51	146
3	International Journals	51	42	52	145
4	CD ROMs	53	42	51	146
5	Floppies	52	42	51	145
6	Unpublished Thesis and Project Reports	54	42	51	147
7	Monographs	46	42	51	139
8	E-Books	51	42	51	144
9	E-Journals	51	42	51	144
10	Database	49	42	51	142
	Total Frequency	515	419	511	1445

Since the calculated value of chi-square (1.053) is less than the table value of chi-square (28.869) for 18 degrees of freedom, there is no reason to reject the hypothesis that the two attributes are independent. This means all the users have equally responded to all the resources.

Table 4 Approach to Library Resources

Sl.No.	Questions	PCCE	RIT	GEC	Total Frequency
1	Searching bibliographic sources before finding the information	48.67	51.42	49.06	149.15
2	Following classification scheme to find the books	66.92	55.71	61.92	184.55
3	Following cataloguing tools like OPAC to find the books	40.39	57.61	52.15	150.15
4	Facing problems while identifying quality information resources	53.84	56.16	40.00	150.00
5	Browsing library website	48.46	45.71	54.23	148.04
6	Knowledge of library software use	61.13	61.42	38.46	161.01
7	Given suggestions and grievances for library	37.25	49.04	39.21	125.05
8	Approach to the Library staff towards suggestions or requests	63.13	61.64	59.06	184.37
		419.79	**438.71**	**394.63**	**1253.13**

Analysis of Variance

Analysis of variance table for carrying out F test for the mean values of the resources and also for colleges are presented below (Table 1.2) along with the results of the test carried out. Wherever a source of variation was found to be significant, t test in the form of CD test was carried out. The results are presented below as analysis of variance table.

Table 5 Analysis of Variance Table for Use of Library Resources by the Users

Source	Degrees of Freedom	Sum of Squares	Mean Sum of Squares	F
Resources	9	952.7	105.85	9.77
Colleges	2	21.21	10.60	0.97
Error	18	195.11	10.83	
Total	29	1169.02		

F Test

For resources, calculated value of F is 9.77. Hence it is compared with table value of F for 9 degrees of freedom in the numerator and 18 degrees of freedom in the denominator, which is 2.46. Since the calculated value of F (9.77) is more than the table of F (2.46) for 9 and 18 degrees of freedom at 5 per cent level significance, there is no reason to accept the hypothesis that the scoring of library resources by the users is the same. Hence the hypothesis is rejected. This means scoring of different resources of a library by the users differs significantly.

For colleges, calculated value of F is 0.97. Hence its reciprocal value (value of 1/F) is to be considered for carrying out F test. Thus in the case of colleges the value of reciprocal of F i.e. -1/F = 1/0.97 = 1.03 is compared with table value of F for error degrees of 18 in the numerator and the degrees of freedom for colleges 2. The table value of F for 18 and 2 degrees of freedom is 19.4. Since the calculated value of reciprocal of the table value of F (1.03) is less than the table value of F (19.4) for 18 and 2 degrees of freedom at 5 per cent level of significance, there is no reason to reject the hypothesis that scoring library resources by the users of different colleges is the same. Hence the hypothesis is accepted. This means there is no difference from college to college with regard to allotment of scores by the users of library resources.

t Test for Library Resources

For the ease of comparison, the mean values are arranged in descending order.
68.21, 59.18, 58.61, 57.91, 56.62, 52.75, 51.98, 51.54, 51.09, 47.10

The C.D. value for the comparison of these mean values is 5.59 Thus, if the mean values differ by 5.59 or more they are significantly different at 5 percent level of significance for 18 degrees of freedom. Thus, in this, the CD table for the comparison of the mean values is as follows.
68.21, 59.18, 58.61, 57.91, 56.62, 52.75, 51.98, 51.54, 51.09, 47.10

6.2 Approach to Library Resources

The evaluation scores showed that the overall maximum approach to library resources by users according to individual colleges, RIT (438.71) is highest among other colleges. The minimum utilisation is by GEC (394.63) followed by second highest PCCE (419.79). To find out the availability of the books by using classification system and approach to the library staff towards suggestions or request are more over same. It was found that very few students would like to give suggestions and grievances for library (125.05) among all the responses.

Table 6 Contingency Table for Approach to Library Resources

Sl.No.	Approach	PCCE	RIT	GEC	Total Frequency
1	Searching bibliographic sources before finding the information	53	42	50	145
2	Following classification scheme to find the books	52	42	52	146
3	Following cataloguing tools like OPAC to find the books	51	42	51	144
4	Facing problems while identifying quality information resources	52	42	51	145
5	Browsing library website	52	42	51	145
6	Knowledge of library software use	53	42	52	147
7	Given suggestions and grievances for library	51	42	51	144
8	Approach to the Library staff towards suggestions or requests	51	41	51	143
	Total Frequency	**415**	**335**	**409**	**1159**

Overall, table 6 indicates that all users are given more over average responses towards the approach to library resources. From the above summary and analysis, it may be stated that there is no significant difference in the frequency of approach to library resources.

Since the calculated value of chi-square (0.377) is less than the table value of chi-square (23.685) for 14 degrees of freedom, there is no reason to reject the hypothesis that the two attributes are independent. This means all the users have equally responded to all the library resources.

Table 7 Analysis of Variance Table for Approach to Library Resources

Source	Degrees of Freedom	Sum of Squares	Mean Sum of Squares	F
Resources	7	915.64	130.80	2.53
Colleges	2	122.25	61.12	1.18
Error	14	723.71	51.69	
Total	**23**	**1761.6**		

F Test

For resources, calculated value of F is 2.53. Since the calculated value of F (2.53) is less than the table of F (2.76) for 7 and 14 degrees of freedom at 5 per cent level of significance, the hypothesis is accepted. Hence there is no difference in the mean values of the scores allotted to the approach to library resources by the respondents.

For colleges, calculated value of F is 1.18. Since the calculated value of F (1.18) is less than the table of F (3.74) for 2 and 14 degrees of freedom at 5 per cent level of significance, the hypothesis is accepted. This means there is no significant difference in the mean values of the scores allotted by the respondents of the different colleges.

8. CONCLUSION

The research was conducted on questionnaire-based randomly among 150 users of engineering colleges in Goa. The aim was to reveal and determine the data on a range of quality related approach and use of library resources. These were seen to cover a broad range of activities, both formal, as in TQM quality assurance procedures, and less formal localised initiatives which nevertheless had the same aim, that of improving quality. It was seen as important to consider these activities at both library and institutional level. In the light of the study and observations, following conclusions are made for effective library resource management by implementing TQM.

- Majority of the users belonged to medium level knowledge category in respect of resources in library.
- In order to improve knowledge and adoption of quality resource management, the information should be provided from a credible source channelised through powerful extension methods like conducting training programs, presentations, and exhibitions.
- There is a need for providing guidance on conducting regularly user education and studies to educate the users.
- This study revealed that the libraries are needed to implement more information technology applications to provide quality information services.
- This study also revealed that the response from all the colleges is the same towards the approach and use of resources. In this, the responses are measured in terms of numbers of users answering the respective college.

REFERENCES

[1] Donna K. Fitch, & Others, "Turning the Library Upside Down: Reorganization Using Total Quality Management Principles", The Journal of Academic Librarianship, Vol.19 No.5, 1993, pp. 294 – 297.

[2] Muhammad Naveed Kabir, "Identifying and Developing a Quality Management System for a Small Organization", The Graduate School, University of Wisconsin-Stout, Menomonie, 2004.

[3] Paul Burden, " Total Quality Management in the Library", 1997. Downloaded on 29th January 2007 from http://www.stfrancis.edu/ba/ghkickul/stuwebs/btopics/works/tqmlibry.htm

[4] N.David Livingstone, "Total Quality Management for Library and Information Centers", SRELS Journal of Information Management, Vol.42 No.1, 2005, pp. 5-80.

[5] A.A.Alemna , " The Need for Marketing and Total Quality Management Strategies in Libraries in Ghana", International Journal of Special Libraries, Vol. 35 No.4, 2001, pp. 265-269.

[6] Talukder Tridibesh and Ghosh Saptarshi, "Total Quality Management and its Implication on Library Laws",SRELS Journal of Information Management, Vol. 41 No.3, 2004, pp. 255-266.

[7] A.Gokhale Pratibha, " Quality Management Through Library and Information Science Education", DRTC Workshop on Information Management, 1999. Downloaded on 25th January 2007 from http://drtc.isibang.ac.in/bitstream/1849/98/2/Pap-ca.pdf.

[8] Waldomiro Vergueiro and Telma De Carvalho "Quality in Brazilian Academic Libraries: Proposal of Indicators from the Customers' Point of View", Canadian Association for Information Science 2000: Dimensions of a Global Information Science, Proceedings of the 28th Annual Conference, 2000.

[9] Pao-Nuan Hsieh, "Quality Management Approaches in Libraries and Information Services", Libri, Vol. 50, 2000, pp.191–201.

[10] Retha Snyman, "Standardisation of Names to Improve Quality and Co-operation in the Development of Bibliographic Databases", Libri, Vol. 50, 2000, pp. 269–279.

[11] Antonia Ida Fontana and Alessandro Sardelli, " Managing Quality in a National Library: The Case of the National Central Library of Florence, Italy", Libraries - A voyage of Discovery, World Library and Information Congress: 71st IFLA General Conference and Council, Norway, 2005.

[12] Susan Jurow and Susan B. Barnard, "Integrating TQM in a Library Setting, USA: Haworth Press, Inc, 1993.

ROLE OF CD-ROM DATABASE SERVICES IN INFORMATION SERVICES DEVISION, WIPRO TECHNOLOGIES LIBRARY : AN EVALUATIVE STUDY

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Abstract

The main aim of the study is to evaluate the usage of CD-ROM Databases by the users of Information Services Division, Wipro Technologies Library to provide valuable input to the library for better utility. Data collected from a sample of 50 software engineers and analysis of the data reveals that most of the users are using CD-ROM database services. Most of them prefer database for quick access using search methods namely "key words", subject and title of the article. The main specific problems faced by them are unfamiliarity in using CD-ROM database and downloading on to the disk. Most of the users are satisfied with availability database. Most of them feel that users awareness programme is essential and they are willing to attend the programmes in case. A number of suggestions are made to improve the CD-ROM database service provided by the library.

Index Terms: *Booleans Search, CD-ROM Services,Databases, Online Searching*

1. INTRODUCTION

The massive impact of ICT on the librarianship profession has changed the way librarians and support staff do their jobs and interact with users and colleagues. Balaraman (1991) investigated the use of CD-ROM databases by novice undergraduates and studied factors such as sex, age, native languages, personality traits, learning style, visual ability and perceived usefulness of the system [1].

Belbenoit-Avich (1991), of the University of Lyon in France, analyzed searches conducted by students on the CD-ROM database and found that students missed 40-80 per cent of references due to their lack of knowledge of controlled language and Boolean logic [2].

While writing on the challenges of CD-ROMs for libraries, Bolin (1994) noted that CD-ROM technology has allowed libraries to acquire a large number and variety of databases in that format [3]. Easy-to-use workstations with appropriate search software should be provided which would help users in finding and loading the appropriate CD-ROM discs and in using the search software.

He also recommended that conventional library layouts and routines should be rethought to provide reference services to the CD-ROM user.

CD-ROM database retrieval is becoming a major factor in information activities. It is exerting immense influence on the information world on present information services, on formulation of national and international polices. It is enabling information centers and libraries to add a major new dimension of services to their users in many subjects [4].

2. OBJECTIVES OF THE STUDY

1 To study the use of CD-ROM services by the users selected in ISD, Wipro Technologies Library.

2 To determine the impact of CD-ROM searcher on search and development.

3 To know how the users are affected through CD-ROM information searching.

4 To highlight the problems coming in online searching of information.

3. METHODOLOGY

To conduct this study survey method through questionnaire tool was used. In order to know the use of CD-Rom databases by the library users like software engineers, administrative staffs and training departments of Wipro Technologies Library, a structured questionnaire is designed in keeping in view of the objectives. The questionnaires were distributed among 75 users during October 2007. However, 50 of them responded and the same were used for this study.

4. ANALYSIS OF DATA AND DISCUSSION OF RESULTS

The data collected from the researchers is analyzed and presented in the following sections.

Table 1 Frequency of Visit to the Library

Time	Frequency of Researchers	Percentage
Daily	15	30%
Every alternate	20	40%
Twice a week	10	20%
Once month	5	10%
Total	50	100%

It is evident from the table 1 that majority of the users out of 50 software engineers, administrative staff and training departments of Wipro Technologies library about 30% visited daily, 40% visited every alternative day, 20% visited twice a week and 10% visited once in a month.

Table 2 Time Spent by the Library Users in Information Retrieval

Time spent on CD-ROM searching	Frequency	Percentage
One hour	25	50%
Two hours	15	30%
More then 2	10	20%
Total	50	100%

The information browsed on their desktop, out of 50 software engineers spent about one hour in CD-Laboratory for information retrieval, 30% about two hours and 20% of users are spent more than two hours in libraries to access the database.

Table 3 Types of Search Made by ISD Users

Types of approaches	Frequency	Percentage
Author	12	24%
Subject	20	40%
Title	15	30%
Others	3	6%
Total	50	100%

The software engineers generally search required information through subject, author and others the approaches in that orders. While 40% of researchers search required subject through subject approach, 30% use the titles approach and 24% of respondents search through author. Other approaches used are series and cross reference who account for 6% of the total searches.

Table 4 Search Techniques Used by the Users

Search Techniques	Frequency	Percentage
Boolean Logic Search	40	80%
Key word search	8	16%
Others	2	4%
Total	50	100%

Boolean logic search is the most helpful techniques for information retrieval from the store of databases. Key word search helps in finding the related information in the desired subject or topic. 80% of the researchers use Boolean searches whereas remaining 16% of the researhcers access information through keyword searching.

Table 5 Satisfaction Level of Users

Satisfaction Level	Frequency	Percentage
Highly Satisfied	35	70%
Satisfied	10	20%
Dissatisfied	5	10%
Total	50	100%

From the above analysis it is quite clear that most of the Information Services Division users highly satisfied (70%) with the online services. The percentage of satisfied users is (20%) percent. There are remaining (10%) users who expressed their dissatisfaction regarding the use of online searching of information.

5. EVALUATION AND SUGGESTIONS

As noted from the results, it is found that the CD-ROM databases available in the ISD, Wipro Technologies Library is of high value and significance to support the project requirements and upgrades their timely needs of the software engineers as noted from table 5, in which majority of them have indicated high satisfaction. While on the other hand, it is also noted that, there is a need for orientation program to train the new software engineers in search skills for optimization of information resources. Although, the Library have been organizing user orientation program, it needs specific orientation to the specific users group at regular intervals.

Based on the Findings the suggestions for libraries are:

- More database facilities on CD-ROM and online database.
- More proper guidance and training to the software engineers and given the facility of proper practice for retrieving information through online search.
- Arranging orientation in every institution for the awareness of the users of this facility.
- To organize seminars, training programmes and orientation courses at regular intervals for the benefit of online users.
- Technical assistance to the users and library staff.
- Online connectivity in every project heads.
- Enhance the Internet and Intranet facilities in the libraries.
- To guide the users regarding recent developments in databases and how to retrieve most relevant and appropriate information from online search with concerned experts.
- More enhanced hardware and software facilities.
- To provide online availability of database.
- User-friendly and interactive search engines.

6. CONCLUSION

As the study was under taken in order to understand the behavior and impact of CD-ROM database searching for information retrieval by the software engineers, it may be concluded that the majority of engineers use the databases for information retrieval and they preferred both printed and electronic from of information. It has been found that most information services division library users are satisfied with the way of retrieving information from CD-ROM database search. It has been found that the library provides proper guidance to the scientists while retrieving information.

REFERENCES

[1] K. Balaraman, “End-user Studies in CD-ROM Environment: Work in Progress”, Proceedings of the American Society for Information Science Annual Meeting, Vol. 28, 1991, pp.89-94.

[2] P.M. Belbenoit-Avich, “The End-users of a Medline CD-ROM in a University Library – What Percentage of References do they Miss When Searching by Themselves”, Health Information and Libraries, Vol. 2 No.3, 1991, pp.58-61.

[3] R.L. Bolin, “The Challenge of CD-ROMS for Libraries”, Reference Librarian, Vol. 43, 1994, pp.25-30.

[4] A.S. Ravi, R.Mishra “Bibliographic Database Access Through World Wide Web Using Common Gateway Interface”, NCSI. Information-Studies. 24 October 1996, pp.20-22.

INTELLECTUAL ASSETS OF ANNAMALAI UNIVERSITY RESEARCHERS: A SCIENTOMETRIC MAPPING USING WEB OF SCIENCE DATABASE

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Abstract

This study analyzes citation frequencies of Annamalai University Researchers on Web of Science Database in the field of Science over 36 years. Integrating and cleaning data from Web of Science obtain the citation data. This analysis considers different comparative metrics per publication venue, in particular the Global Citation Score and Local Citation Score etc. It also determine the most cited papers, authors, author institution with department etc.,

Index Terms: *Scientometric Mapping, Web of Science Database, Annamalai University Researchers*

1. INTRODUCTION

Citation analysis is the examination of the frequency and pattern of citations in articles and books. It uses citations in scholarly works to establish links to other works or other researchers. It is the most common method of bibliometrics. Web of Science (SCI) was first promulgated in Science in 1955, as an up-to-date tool to facilitate the dissemination and retrieval of scientific literature [1]. Its practical realization was possible, thanks to the already-existing information service. Citation frequency reveals the impact of a particular publication of scientists [2]. The Researchers of Annamalai University have published novel and important results in science.

2. SCOPE AND METHODOLOGY

The present study attempts to find out the publication pattern of researchers of Annamalai University. The study is based on the references and aims to analyse quantitatively the growth and development of science in terms of publication output as reflected in Web of Science database during the year 1972-2007. The Global Citation Score (GCS) and Local Citation Score (LCS) are examined to identify the pattern of research contribution of researchers on Science [3]. The area-wise research performance is analysed to identify hot area of research. The study is mainly exploratory in nature in identifying research output of Annamalai University.

3. OBJECTIVES OF THE STUDY

The main objective of the study is to present the growth of literature and make the quantitative assessment of status of Annamalai University researchers on Science by analyzing the various features. The specific objectives are:

1. To measure the year-wise growth of publications in terms of input of records
2. To measure the document type-wise contributions with GCS and LCS
3. To measure the authorship pattern with GCS and LCS in the publications
4. To measure the source of publications with GCS and LCS
5. To measure the Institution with subdivision of GCS and LCS

4. ANALYSES AND DISCUSSION

The below table 1 and 2 provide a view of the opening page showing how the information is displayed in HistCite. This database, which it will call for brevity includes 2287 of Annamalai University papers and 30765 additional papers that had cited references. From these data, one can obtain a global view of Annamalai University authors work and its impact over a 36 years period.

For each published paper, it can hotlink to both local and global frequencies of citation (GCS and LCS). Note that there were 1843 authors involved in articles, which appeared in Web of Science Database and one sees the most-cited papers in the collection.

Table 1Global Citation Score of AU Authors

Sl.No	Node	Author, Year, Journal	LCS	GCS
1.	1	Kanakamb.P, 1972, Experientia, V28, P1225	0	21
2.	150	Baliah V, 1978, Indian J Chem Sect A, V16, P966	6	26
3.	180	Baliah V, 1978, Tetrahedron, V34, P3611	13	26
4.	352	Jeyaraman R, 1982, J Heterocycl Chem, V19, P449	0	37
5.	531	Ramesh A, 1989, Environ Pollut, V62, P213	12	51
6.	567	Ramesh A, 1990, Environ Pollut, V67, P289	10	29
7.	575	Tanabe S, 1990, J Agr Food Chem, V38, P899	12	54
8.	594	Ramesh A, 1990, Mar Pollut Bull, V21, P587	9	27
9.	597	Ramesh A, 1991, Environ Pollut, V74, P293	11	43
10.	606	Mangalam G, 1991, J Indian Chem Soc, V68, P77	25	32

Table 2 Local Citation Score of AU Authors

Sl.No	Node	Author, Year, Journal	LCS	GCS
1.	174	Ganapathy K, 1978, J Indian Chem Soc, V55, P957	13	19
2.	180	Baliah V, 1978, Tetrahedron, V34, P3611	13	26
3.	430	Hasan Mu, 1985, Magn Reson Chem, V23, P292	12	16
4.	445	Pandiarajan K, 1986, Magn Reson Chem, V24, P312	15	20
5.	531	Ramesh A, 1989, Environ Pollut, V62, P213	12	51
6.	553	Ganapathy K, 1989, Int J Chem Kinet, V21, P423	11	11
7.	575	Tanabe S, 1990, J Agr Food Chem, V38, P899	12	54
8.	597	Ramesh A, 1991, Environ Pollut, V74, P293	11	43
9.	606	Mangalam G, 1991, J Indian Chem Soc, V68, P77	25	32
10.	609	Pandiarajan K, 1991, Indian J Chem Sect B, V30, P490	17	29

Table 3 provide a chronological histogram of citations, demonstrating that citation frequency grew steadily from 1972, when it reached a maximum GCS of 698 in 2004 and LCS of 207 in 2004.

Table 3 Year-Wise Distribution of Citation Score

Sl.No	Year	Recs	%	TLCS	TGCS	Sl.No	Year	Recs	%	TLCS	TGCS
1	1972	7	0.3	3	35	19	1990	29	1.3	60	178
2	1973	19	0.8	18	61	20	1991	28	1.2	93	258
3	1974	19	0.8	9	52	21	1992	41	1.8	41	259
4	1975	19	0.8	13	51	22	1993	30	1.3	67	206
5	1976	24	1.0	18	57	23	1994	43	1.9	87	169
6	1977	43	1.9	77	201	24	1995	40	1.7	113	187
7	1978	51	2.2	109	239	25	1996	53	2.3	147	216
8	1979	51	2.2	32	114	26	1997	71	3.1	182	428
9	1980	51	2.2	27	75	27	1998	79	3.5	147	353
10	1981	44	1.9	34	93	28	1999	84	3.7	188	433
11	1982	36	1.6	37	140	29	2000	56	2.4	165	441
12	1983	24	1.0	19	86	30	2001	56	2.4	92	412
13	1984	16	0.7	1	17	31	2002	95	4.2	195	510
14	1985	34	1.5	34	103	32	2003	128	5.6	174	557
15	1986	35	1.5	39	102	33	2004	189	8.3	207	698
16	1987	25	1.1	16	44	34	2005	177	7.7	197	405
17	1988	31	1.4	20	72	35	2006	222	9.7	153	311
18	1989	37	1.6	39	140	36	2007	299	13.1	63	123

During the 36 years period (1972–2007) university authors have produced a total of 2287 publications. The highest numbers of publications were 1953(85.4%) Journal articles, Notes 224(9.8%), Letters 49(2.1%) and others less than one percent.

Table 4 Document-Type Wise Distribution

S.No	Document Type	Recs	%	TLCS	TGCS	S.No	Document Type	Recs	%	TLCS	TGCS
1	Article	1953	85.4	2633	7065	5	Review	13	0.6	26	178
2	Note	224	9.8	242	530	6	Editorial	8	0.3	0	3
3	Letter	49	2.1	15	50	7	Correction	4	0.2	0	0
4	Meeting Abstract	35	1.5	0	0	8	Biographical-Item	1	0.0	0	0

Table 5 indicates institution with department-wise research productivity. It is noted that Department of Chemistry ranks first in order by contributing 593(25.9%) of total research output. The second place in order is recorded by Centre for Advance study Marine Biology. The other department details are given in below table

Table 5 Institutions with Department-Wise Distribution

Sl.No	**Institution with Subdivision**	**Recs**	%	**TLCS**	**TGCS**
1	Annamalai University, Dept Chemistry	593	25.9	998	2063
2	Annamalai University, Ctr Adv Study Marine Biology	278	12.2	264	1295
3	Annamalai University, Fac Science	255	11.1	529	1196
4	Annamalai University, Dept Physics	206	9.0	221	429
5	Annamalai University, Dept Biochemistry	175	7.7	324	972
6	Annamalai University, Dept Zoology	84	3.7	47	200
7	Annamalai University, Dept Bot	82	3.6	92	207
8	Annamalai University, Dept Mfg Engineering	52	2.3	17	44
9	Annamalai University, Dept Technology	50	2.2	107	174
10	Annamalai University, Dept Mathematics	44	1.9	14	66
11	Annamalai University, Fac Agriculture	38	1.7	6	40
12	Annamalai University, Dept Biochem & Biotechnol	35	1.5	15	32
13	Annamalai University, CAS Marine Biology	34	1.5	39	208
14	Annamalai University, Fac Engn & Technology	31	1.4	67	105
15	Annamalai University, Dept Prod Engineering	26	1.1	15	65
16	Annamalai University, Rajah Muthiah Med Coll	26	1.1	18	59
17	Annamalai University, Rajah Muthiah Med Coll & Hosp	25	1.1	23	79
18	Annamalai University, Dept Geol	21	0.9	15	107
19	Annamalai University, Dept Chem Engineering	18	0.8	4	9
20	Annamalai University, Ctr Micronutrient Res	17	0.7	25	126

Table 6 indicates all-author hotlink, it is found that the most-published author on science Hotlinks also permit display of the authors by Global or Local Citation Score. Thus the most-cited authors are distinguished from the most-published ones. The individual citation frequencies for these papers are calculated.

Table 6 Author Ranked by Number of Publications

Sl.No.	**Author**	**Recs**	**TLCS**	**TGCS**	**Sl.No**	**Author**	**Recs**	**TLCS**	**TGCS**
1	Menon VP	105	253	588	11	Ramaswamy K	48	32	105
2	Nagini S	91	352	659	12	Ramalingam K	43	92	228
3	Baliah V	90	193	448	13	Kabilan S	42	103	126
4	Karunakaran C	73	170	291	14	Manimekalai A	42	33	67
5	Pari L	71	126	359	15	Subramanian P	41	67	111
6	Kathiresan K	60	139	324	16	Pugalendi KV	40	24	84
7	Swaminathan M	55	226	402	17	Natarajan R	38	16	83
8	Ganapathy K	54	124	246	18	Pandiarajan K	37	99	166
9	Nalini N	53	47	198	19	Prince PSM	34	72	165
10	Anuradha CV	49	60	253	20	Raghukandan K	34	18	68

During the 36 years period (1972–2007), Annamali University has produced a total of 2287 publications in Web of Science database. More than 1953 (85.4%) Science research was published in journals and the rest was in others.

The highest number of publications was 122(5.3%) in Current Science and 94(4.1%) followed by Indian Journal of Chemistry, Section B-Organic Chemistry Including Medicinal Chemistry and other journals having less than 4 percent.

Table 7 Source-Wise Distribution of Research Output

Sl.No	Journal	Recs	%	TLCS	TGCS
1	Current Science	122	5.3	74	155
2	Indian Journal Of Chemistry Section B-Organic Chemistry Including Medicinal Chemistry	94	4.1	245	482
3	Indian Journal Of Marine Sciences	86	3.8	55	204
4	Indian Journal Of Chemistry Section A-Inorganic Bio-Inorganic Physical Theoretical & Analytical Chemistry	58	2.5	112	184
5	Journal Of The Indian Chemical Society	54	2.4	85	147
6	Oxidation Communications	49	2.1	18	50
7	Indian Journal Of Pure & Applied Physics	48	2.1	35	78
8	Spectrochimica Acta Part A-Molecular And Biomolecular Spectroscopy	41	1.8	63	99
9	Asian Journal Of Chemistry	38	1.7	7	18
10	Journal Of Environmental Biology	37	1.6	6	16
11	Journal Of Medicinal Food	29	1.3	18	54
12	Medical Science Research	26	1.1	114	130
13	Phytotherapy Research	24	1.0	65	212
14	Pharmazie	23	1.0	29	62
15	Clinica Chimica Acta	22	1.0	31	173
16	Indian Journal Of Experimental Biology	21	0.9	2	18
17	Toxicology Mechanisms And Methods	21	0.9	16	19
18	Acta Crystallographica Section E-Structure Reports Online	20	0.9	0	14
19	Journal Of Ethnopharmacology	20	0.9	69	251
20	Cytologia	19	0.8	2	38

5. CONCLUSION

This paper has highlighted quantitatively the contributions made by Annamalai University Authors during 1972-2007 as reflected in Web of Science database. During 36 years period (1972–2007) University contributions in terms of number of publications is not significant. A comparison of Annamalai University output in relation to the world output may help in understanding the contribution in a better angle. Though the records available in the Web of Science database reveal a small number, it is important that the Web of Science covers only the peer-reviewed journals. If a broader coverage database is available, it may provide a reasonable number of papers. It is suggested for tracking citation record of papers so that the impact of publications in knowledge management may be visible.

REFERENCES

[1] E.Garfield and I.H.Sher, “Genetics Citation Index: Experimental Citation Indexes to Genetics with Special Emphasis on Human Genetics”, Philadelphia Institute for Scientific information, 1963, pp. 1-18.

[2] E.Garfield, “Citation Frequency as a Measure of Research Activity and Performance”, Essays of an Information Scientist, Vol. 1, 1973, pp. 406-408.

[3] E.Garfield, “Citation Indexes for Science: A New Dimension in Documentation Through Association of Ideas”, Science, 1955, pp. 108-111.

READING HABITS AMONG THE UNDERGRADUATE STUDENTS OF LEKSHMIPURAM COLLEGE OF ARTS AND SCIENCE: A CASE STUDY

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Abstract

Reading is the art of interpreting printed or written words. The present study on reading habits of undergraduate students is based on user survey carried out at Lekshmipuram College of Arts and Science. Factors affecting the reading habits of the students, purpose of reading, most preferred source material for reading, opinion about the library service and the reason for not visiting the library were studied.

Index Terms: *Reading Habits, Undergraduate Students, User survey*

1. INTRODUCTION

Information explosion is a common phenomenon in any dynamic society. Information has its value or power only when it is used in apt time and loses its significant while in delay of time. Traditionally, knowledge is acquired through reading either the print or electronic media. Reading is important for everybody in order to cope with new knowledge, which are emerging and reaching more frequently in a complex society.

Reading is the art of interpreting printed or written words. S.H. Kabir stressed the importance of reading as regular and systematic reading sharpen one's own intellect, refines his/her emotions, elevates taste and provide perspective thereby prepares him for an effective participation in the social and political life [1].

Even though, Information Communication Technology (ICT) is the order of the day, traditional print media still occupies prominent place among the people to increase their knowledge, common sense and imaginative power. K. Isaac also expresses the same view that reading is the chief means for acquiring knowledge, values, ideas and everything else that contribute to the all round development of vocational and professional skills and competence of people [2].

2. UNDERGRADUATE STUDENTS AND THEIR READING HABIT

As far as students are concerned reading may be classified in to three. They are curricular reading, co-curricular reading and extra-curricular reading. Curricular reading is confined to the reading of the textbooks prescribed for the various courses. In co-curricular reading students go beyond textbooks and read other books also on the subjects of their study and on related subjects. Extra curricular reading involves reading of general books like fiction, biographies and also books of similar. Reading habit is best formed at earlier stage of their cognitive development but it will be goal oriented and purposeful only when they reach their adolescent stage.

3. SIGNIFICANCE OF THE STUDY

Reading is primarily an intellectual activity and reading habit is a sort of attribute of a human being. It is important for the library professional to know about the reading habits and information needs of the users to connect right reader to the right books at the right time and to provide value added service to the user. Reading habit has been an area of active interest among the librarians and information scientists. It results from the recognition of some need perceived by the user, who as a consequence makes demand upon formal system such as libraries, information centers in order to satisfy the perceived need.

In higher education, academic libraries and librarians play key role in realizing the objectives of higher education. Very few studies were conducted on reading habits of students among high school students by S.H. Kabir [3]; factors affecting reading habits of secondary school students of S.A. Ogunrombi [4]; a case study on reading habit of faculty members in natural science of A.K. Sharma and S.P. Singh [5]; and P. Saravanan and A. Lawrence Mary [6]. But a closer analysis of available studies shows that the reading habits among undergraduate students are scanty.

4. STATEMENT OF THE PROBLEM

The present study intends to study the reading habits of undergraduate students and hence the problem is entitled as "Reading Habits among the Undergraduate Students of Lekshmipuram College of Arts and Science: A Case Study".

5. OBJECTIVES OF THE STUDY

The following were the objectives of the study specific to undergraduate students.

1. To study the frequency and extent of the use of the college library.
2. To study the purpose of visiting the college library.
3. To identify the kind of literature used by the students for general reading.
4. To study the purpose of reading as perceived.
5. To identify the most preferred news dailies used.
6. To find out whether the manpower is well equipped to provide various services to the users.
7. To identify the barriers, which keep away the students from reading and using the library resources.

6. HYPOTHESES

The following were the hypotheses for the present study.

1. Undergraduate students are using the college library very rarely.
2. Manpower requirements are only minimum to provide various services.
3. External barriers, which keep away the students from using the library.

7. LIMITATIONS

1. This study is based on a sample of 270 respondents who visit the library.
2. Study is confined only to Lekshmipuram College of Arts and Science.
3. Sample for the study consists of undergraduate students of various disciplines.

8. METHODOLOGY

The present study intends to study the general reading habits of undergraduate students. Hence, survey method was adopted to collect data from the students.

A questionnaire was designed and administered among the 180 students who visit the college library. Enough care was taken to include the respondents from the various disciplines covering from the first, second , and third year.

9. DATA ANALYSIS AND INTERPRETATION

Year-wise and Subject-wise distribution of respondents are given in the following table. Out of 270 respondents, 135 respectively were from arts and science faculty and 45 each from the first, second, and third year of their undergraduate program.

Table 1 Year-Wise and Subject-Wise Distribution of Respondents

No	Faculty	I	II	III	Total
1	Arts	45	45	45	135
2	Science	45	45	45	135

Table 2 Frequency of Library Visit

No	Frequency of visit	I Year	II Year	III Year	Total	%
1	More than once in a day	19	14	12	45	16.7
2	Almost daily	33	34	25	92	34.1
3	Weekly Once	23	27	29	79	29.2
4	Fortnightly	11	8	14	33	12.3
5	Rarely	4	7	10	21	7.7
	Total	90	90	90	270	100

Only 17% of the undergraduate students used to visit the college library for more than once in a day. However, 34 and 29 % of students visit the college library respectively in almost daily and weekly once.

Furthermore, 12.7% of the students were visiting the library in fortnightly and only 7.7 % visit the library rarely.

Table 3 Purpose of Visiting the Library

S.no	Purpose	I Year	II Year	III Year	Total	%
1	For general reading	26	34	28	88	32.6
2	Supplement the class room	18	16	16	50	18.5
3	Learning	16	10	14	40	14.8
4	For time engagement	17	14	14	45	16.7
5.	For lending books	13	16	18	47	17.4
	Preparation for Competitive Exam					

Table 3 reveals that majority (32.6%) of the students were using the college library for general reading. Further, 18.5% of the respondents were visiting the library for supplementing the classroom learning. Nearly 15% of the students were visiting the library for time engagement in the college such as free hour and leisure time activity. Only 17% of students are visiting the college library to supplement the classroom learning. However, 17.4% of the respondents visit the college library exclusively for preparing competitive examination.

From table 3 it is clear that majority of the students were visiting the college library for general reading. Hence, it is necessary to study the purpose of their reading and the same is given in table 4.

Maximum number of student (36%) opinioned that the purpose of reading is to get knowledge, 27% for seeking career information. Further it was found that 21.5 % for knowing day-to-day events and 17.4 % were for the sake of recreation.

Table 4 Purpose of Reading

S. No	Purpose	No. of Students	%
1	To Be Knowledgeable	96	35.5
2	For Career Information	69	25.6
3	To Know Day-To-Day Events	58	21.5
4	For Recreation	47	17.4

Various materials used by the students for general reading are given in table 5.

Table 5 Materials for General Reading

S No	Materials	Total	%
1	Newspapers	148	54.8
2	Magazines	65	24
3	Short Stories	45	16.7
4	Others	12	5.5

Most of the undergraduate students (55%) were using newspapers for general reading, it is followed by Magazines, 16.7 % of students were for Short Stories and the remaining 5.5 % for other sources. Most of the students preferred newspapers for general reading

Based on the choices expressed by the undergraduate students towards news papers, preference were given in table 6.

Table 6 Most Preferred News Dailies

S.No	News Dailies	No of Students	%
1	The Hindu	16	6.0
2	New Indian Express	18	6.7
3	Dinaharan	60	22.2
4	Dinamoni	62	23
5	Dinamalar	52	19.3
6	Dinathanthi	58	21.5
7	Malayala Manorama	4	1.5

Table 6 discloses that 23 %, 22.2 %, 19.3 % and 21.5 % of the students use tamil news dailies like Dinamani, Dinakaran, Dinamalar, and Dinathanthi respectively. Unfortunately, english news papers such as The Hindu and Indian Express which were used by the students is only to 6 % and 7 % respectively.

Table 7 Reasons for not Using English Newspapers

S. No	Reasons	No. of Students	%
1	Difficulties to understand	167	61.8
2	English is a second Language	68	25.2
3	No one to Motivate	35	13

Majority (61.8 %) of the students expressed that difficult to understand is the major reason for not using english newspaper.

Table 8 Opinion about Library Services and Collection

Sl. No	Opinion	No of Students	%
1	Excellent	32	11.8
2	Good	98	36.3
3	Average	102	37.8
4	Not Satisfactory	38	14.1

Majority of the students graded the services and collection as average (37.8 %) and 36.3 % rated the services as good. Only 12% rated as excellent and the remaining 14.1 % rated as not satisfactory.

Reasons for not visiting the library very frequently are given in the table 9.

Table 9 Reasons for not Visiting the Library Very Frequently

S.No	Reasons for not visiting Library	No. of Students	%
1	Shortage of Time	86	31.9
2	Non-Availability of Material	36	13.3
3	Poor Services of Library	44	16.3
4	Spoon Feeding System of	75	27.8
5	Instruction Departmental Library	29	10.7

Most of the students (32%) are not able to visit the library frequently due to lack of time. 13.3 % of students mentioned that non-availability of material and 16.3 % of the opinion was that poor services of library. Departmental library too influences the users, for not visiting the cenral library (10.7 %).

10. FINDINGS AND CONCLUSION

Major findings of the study are

1. Only 34 % of the students visit the college library daily.
2. Majority of the students (32.6%) visit the college library only for general reading.
3. Most important purpose of reading by the undergraduate students are to be knowledgeable and for career seeking information.
4. Majority of the students are using newspapers as the source materials for general reading.
5. Most preferred newspaper is Dinamani (23%) and it is followed by Dinakaran(22.2%), Dinathanthi (21.5%) and Dinamalar (19.3%).
6. Reasons for not using english newspaper is their difficulty in understanding.
7. Perception of majority of the students towards library services and collection is average (37.8 %).

8. Reasons for not visiting the library very frequently is shortage of time (32 %) and spoon-feeding system of instruction (27.8 %).

For self reliant of information, one must develop the habit of reading. Reading is cheapest way of acquiring informaion in the technological world.

REFERENCES

[1] S. Human Kabir, "Reading Habits of Goverenment High School Students in Tiruvananthapuram District." Kelpro Bulletin, Vol.7 No.1&2, 2003, pp. 39-43.

[2] K. A. Issac, "Declines in Reading", Kelpro Souviner. 2003, pp.1-3.

[3] S. Human Kabir, "Reading Habits of Goverenment High School Students in Tiruvananthapuram District." Kelpro Bulletin, Vol.7 No.1&2, 2003, pp. 39-43.

[4] S. A. Ogunrombi, " Factors Affecting the Reading Habits of Secondary School Students", Library Review, Vol.44 No.4, 1995, pp. 50-57.

[5] K.A Sharma and S.P. Singh, "Reading Habits of Faculty Members In Natural Science : A Case Study of University of Delhi", Annals of Library Science, Vol.52 No.4, 2005, pp. 119-123.

[6] P.Saravanan and A. Lawrence Mary, "Reading Habits of Undergraduate Students : A Case Study of Lekshmipuram College of Arts and Science", Third All India Conference of KAAS, pp. 9-13.

UTILITY OF E-JOURNALS BY THE MEMBERS OF FACULTY OF UDAYA SCHOOL OF ENGINEERING: A CASE STUDY

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Abstract

The present study is an attempt to know the utility of E-journals by the faculty members of Udaya School of Engineering. The main aim of the study is to study the awareness of the E-journal collection and services of the library and using electronic sources available in the library. A few suggestions are made, which would facilitate to avail the quality of information to the beneficiaries.

Index Terms: *E-journals, E-journal Archiving, Internet, Online Journal*

1. INTRODUCTION

Udaya school of engineering library has built up an excellent collection of literature in the field of engineering and related areas. As library plays a vital role in satisfying the information needs of the users, the library is focusing mainly on e-journal subscription. This wealth of information must be made available to users for an effective utilization.

Journals that are published exclusively in electronic format present an innovation in the way that scientific information is communicated to the research community. Significant concerns remain regarding the impermanence of materials in electronic formats and the use of innovative features of electrically formatted material.

2. E-JOURNALS

In the context of a library, the terms - journal, periodical, serial - refer to any regularly published item. Monthly publication is the most typical scenario; however, this may vary widely, for example yearbooks and annuals. Journals and periodicals generally consist of a group of research papers or scholarly articles and are very important as they often contain the most recent research material.

In the context of the library, this refers to a periodical, serial, journal or regularly published group of research papers or scholarly articles, which is available to the reader via a computer. The journal may also exist in printed format or may only be available electronically. Access may be variously referred to as 'online', 'electronic', 'via computer', 'on the internet', and 'on the web'.

2.1 E-journal Archiving

In the past two or three years, e-journals have become the largest and fastest growing segment of the digital collections for most libraries. Collections that a few years ago numbered in the few hundreds of titles now number in the thousands, and the rate of growth continues to increase [1].

In many ways, archiving and preserving e-journals will be dramatically different from what has been done for paper-based journals in the paper era, there was large-scale redundancy in the storage of journals. Many different institutions collected the same titles. The copies of journals being saved for future generations were the same copies being read by the current generation of users [2].

2.2 History of E-journals

Postmodern culture which started publication in 1990, is considered as the first peer reviewed journal distributed on the internet. It was an ASCII text format and made available by e-mail as well as in diskette. In 1992, OCLC published On-line Journal of Current Clinical Trials (OJCCT) and it is the first electronic journal which includes graphics [3]. It was networked, referred, electronic journal i.e., with full text and graphics available by subscription.

2.3 Advantages of E-journals

Electronic journals are less concerned about page limits because of the possibility of hypertext links to other sources of information and the ability for interaction and imagery. In future, scientific papers may be very long, with click of the mouse button, the real data behind the tables could appear and readers will be able to critically appraise a paper on the basis of more complete information.

3. OBJECTIVES OF THE STUDY

1. To know the preference and availability of journals by the user community.
2. To know the frequency of using e-journals.
3. To know the purpose of using e-journals.

4. METHODOLOGY

For the purpose of accomplishing above stated objectives, a questionnaire has been structured to collect primary data from the faculty members of the Udaya School of Engineering. The data collected through the questionnaire were coded and tabulated. For the purpose of analyzing the primary data the statistical tools such as simple percentage method, correlation analysis, t-test are used. To test the hypothesis the following formulae were used.

$$\text{Correlation} = \gamma = \frac{\sum xy}{\sqrt{\sum x^2 X \sum y^2}},$$

$$\text{t-test} = t = \frac{\bar{x} - \mu}{S/\sqrt{n}}.$$

5. DATA ANALYSIS AND DISCUSSION

Table 1 Age and Sex-wise Distribution of Respondents

Age	No. of Respondents	%	Male	%	Female	%
20 – 29	50	50	25	46.30	25	54.35
30 – 39	18	18	10	18.52	8	17.39
40 - 49	29	29	16	29.63	13	28.26
above	3	3	3	5.55	-	-
Total	**100**	**100**	**54**	**100**	**46**	**100**

Table 1 discloses the age and sex-wise distribution of respondents. 50 % of users are under the age group of 20-29. Among them 46.30 % are male and 54.35 % are female. The age category 30-39 is 18 %. Among them 18.52 % are male and 17.39 % are female. The age bracket 40-49 are 29 %. Among which 29.63 % are male and 28.26 % are female. The age bracket above 50 is only 3 %. Among them male are 5.55 % and no female user. Therefore the majority of the respondents are between the age group of 20 – 29.

Table 2 Frequency of Using E-journal

Frequency	No. of Respondents	%
Daily	47	47
Twice a week	22	22
Three times a week	23	23
Once in a week	8	8
Total	**100**	**100**

Table 2 elicits that the frequency of using e-journals by the faculty members daily is 47 %, 22 % of users are using the e-journals twice a week and 23 % of users are using the e-journals three times a week and 8 % of users are using the e-journals once in a week.

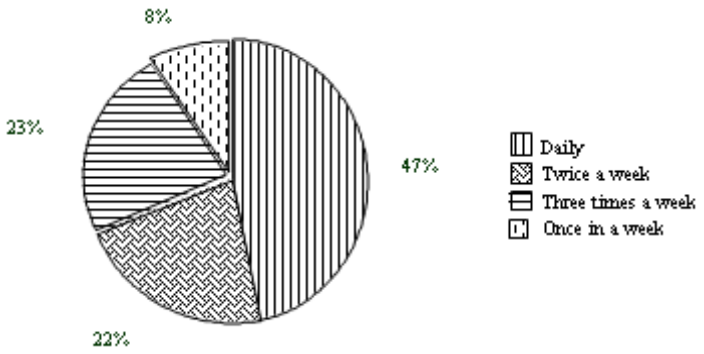

Fig.1 Frequency of using e-journals

Table 3 Purpose of Using the Journal

Category	No. of Respondents	%
Research work	10	10
Class lecture	20	20
Update Information	53	53
Examination oriented	17	17
Total	**100**	**100**

From the above table it is learnt that 10 % of the faculty members are using journals for research work, 20 % of the lecturers are using journals for class lecture, 53 % of the faculty members are using journals to update information and 17 % of faculty members are using journals for examinations. Therefore most of the lecturers are using e-journals to update information.

Table 4 Frequency of Using E-journals

Category	No. of Respondents	%
Daily	17	17
Atleast once a week	48	48
Atleast once a fortnight	6	6
Rarely	29	29
Total	**100**	**100**

It is evident from the above table 4 that 17 % of the faculty members are using e-journals daily, 48 % of the faculty memebers are using e-journals atleast once a week, 6 % of the faculty members are using e-journals atleast once a fortnight and 29 % use rarely. Thus most of the lecturers are using e-journals atleast once in a week.

6. CONCLUSION

On the basis of findings, the researcher wishes to give few suggestions which will help for effective use of e-journals. The management should take immediate steps to increase the e-library area with more computers. Service minded people should be appointed as library staff in the library.

The modern society is dynamic and complex. At present, everybody wants to access maximum resources of a library through a common interface. So, it is a challenge to every library for providing all services through a flexible and easy interface.

REFERENCES

[1] S.C. Kumaresan, S. Swaminathan and S.Sivakumar, "Library Science Unleashed", Rock city publications, Trichy, 2003, pp.60.

[2] Joy vithayathil, "Electronic Journals and Their Availability in the Internet", Kelpro Bulletin, Vol.3 No.1, June 1999.

[3] http://www.inf.aber.ac.uk/elecinfo/ejournalfaq.asp

Biography

INFORMATION TECHNOLOGY AWARENESS AMONG DENTISTS: A CASE STUDY OF DR. ZIAUDDIN AHMAD DENTAL COLLEGE, ALIGARH

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Abstract

This study is aimed at examining the Information Technology (IT) awareness among faculty members of Dr. Ziauddin Ahmad Dental College of India. Information is sought for the purpose of ascertaining the level of IT among the doctors. The results of the study revealed that majority of the doctors, though, own computer but don't spend much time on it. Also, most of them have not received any formal training in computer. As a result, the high majority lack the basic understanding in information technology with respect to software as well as hardware. This state of affairs prevails primarily because of lack of formal training. The study recommends that formal training in India as well as abroad should be imparted periodically to all faculty members of Dr.Ziauddin Ahmad Dental College to make them well equipped in IT. This will enrich the faculty members of the college. Moreover, outdoor patients will also be benefited from IT expertise of doctors. Ultimately; increased level of awareness among the doctors will play a significant role in enhancing the prestige of the college.

Index Terms: *Dentists, Information Technology Awareness,*

1. INTRODUCTION

The period since the Second World War is often described as 'the age of technology'. Most of the social, economic and cultural changes introduced in contemporary society have been generated by technology with computers and telecommunications in the vanguard [1]. It was Norbert Wiener who took the lead when announced about the revolution being introduced by computers and other technologies of communication and control in early fifties [2]. The origins of this revolution have been traced back to 1956 by Daniel Bell [3]. The Japanese writer Yoneji Masuda sees technological developments as the essential driver of social change, and identifies the information society with an economy transformed by information technology. Masuda was centrally involved in the development of the Japanese computer industry in the 1970s and 1980s.The essence of his view was that computers changed everything and opened up new ways of working and living [4].

2. BACKGROUND INFORMATION

Dr. Ziauddin Ahmad Dental College, established in 1996, is affiliated to Aligarh Muslim University (A.M.U.). The University is located in Aligarh, a small town of India. Dental college has seven departments such as Oral & Maxillofacial surgery, Oral diagnosis & Oral medicine, Prosthodontics, Pedodontics, Orthodontics, Periodontics and Conservative dentistry. Total strength of the faculty members is twenty five with seven Professors, four Readers and sixteen Lecturers. Though the college established only a decade back but is considered one of the best dental colleges of India. It is duly recognized by Dental Council of India (DCI). Admission to Bachelor in Dental Surgery (BDS) is done on the basis of a competition conducted by the University. This is a joint entrance examination for both M.B.B.S. and B.D.S. aspirants. Due to large number of aspiring candidates; the competition is rated pretty tough. This college is also having hospital and patients are being treated for various ailments related to tooth. The present study aims to know the IT awareness of faculty members of Dr.Ziauddin Ahmad Dental College.

3. STATEMENT OF THE PROBLEM

Awareness of Information Technology (IT) is crucial for the dentists. Many devices such as digital camera, web camera etc. is in use in the developed countries for capturing the image of impacted tooth of the patients. Zooming and nesting of these images is done to find out the nature of problem in ailing tooth. Unfortunately, these devices are not commonly used in the developing nation such as India. Due to lack of IT awareness, among the dentists in India, the dental science as a profession is lagging far behind in comparison to the developed nations. This study is undertaken as a response to the above concern. It sets out to identify the ability in the use of software as well as hardware, identify the consequences due to lack of their understanding about IT, and make recommendations on how the existing level of understanding can be improved. The main purpose of this study was to present the current IT awareness among the doctors of Dr. Ziauddin Ahmad Dental College, AMU, Aligarh, a prestigious dental college of India, and also to identify factors responsible for the state of awareness.

4. OBJECTIVES OF THE STUDY

The objectives of this study are: to find out the software and hardware commonly used by dentists and ability in using these hardware and software; to establish the training needs in IT required by dentists to match their counterparts in developed nations.

5. SCOPE AND LIMITATIONS

This study was conducted in Dr. Ziauddin Ahmad Dental College, AMU. The study is concerned with the IT awareness of doctors engaged in teaching and clinical works. A very representative sample has been collected with the help of one Lecturer-cum-Consultant of the dental college. The findings of the study may be applicable to other dental colleges of the country. Moreover, this dental college is affiliated to a Central University and hence the results cannot be compared to any private dental colleges equipped with the state-of-the art-infrastructure. Noteworthy, students in Dr.Ziauddin Ahmad Dental College are charged very nominal fee towards admission and tuition in comparison to private dental colleges.

6. METHODOLOGY

The survey method was chosen and questionnaires were distributed. This technique had been preferred as one of the contributors of this paper is a lecturer in Dr. Ziauddin Dental College. A very high response rate was possible because of the researcher and the difficult question has been clarified. In order to achieve a good degree of representation, the respondents have been selected from each department. Also care has been taken to give due representation to all the three categories of faculty members i.e. Professors, Readers and Lecturers.

7. DATA ANALYSIS

The questionnaires were checked for accuracy and completeness. The questionnaires were analyzed and processed on the computer using the Statistical Package for Social Science (SPSS). Data from the study was analyzed using simple frequencies (tables and percentages).

8. BACKGROUND INFORMATION ON RESPONDENTS

Twelve faculty members have been selected for the study. This sample contains two Professors, four Readers and six Lecturers. The ages of respondents range from 25 to 50 years. Qualification of all respondents is same and everyone is having MDS degree.

9. DATA ANALYSIS AND DISCUSSION

Table 1 Availability of Computer at Home

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
P3	2	16.7	16.7	16.7
P4	6	50.0	50.0	66.7
Not Available	4	33.3	33.3	100.0
Total	12	100.0	100.0	

The present study found that majority of the respondents own a computer. Most of these are having P4 system. This shows that they have purchased these computers not long back. Nevertheless, few of them might have purchased a decade back as they are still continuing with P3 machines.

Table 2 Time Spent on Computer at Home

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0	5	41.7	41.7	41.7
1	1	8.3	8.3	50.0
7	4	33.3	33.3	83.3
10	2	16.7	16.7	100.0
Total	12	100.0	100.0	

However, some of them have never used computers at all. Followed are those who use it for 7 hours per week, and a few, are using the computer for 10 hours per week. One respondent spend as little time as 1 hour per week.

Table 3 Time Spent by Others on Computer at Home

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
0.00	6	50.0	50.0	50.0
4.00	2	16.7	16.7	66.7
7.00	3	25.0	25.0	91.7
10.00	1	8.3	8.3	100.0
Total	12	100.0	100.0	

The result of the study shows that only a thin population of the respondents are spending more than one hour per day. Spouse and children are the other users of computer at home.

This study found that among half of the respondent' family members (spouse and children) are not spending anytime on computer, followed by those who spend 7 hours per week, some of them also spend 4 hours per week. Overall not much time is being spent on computer neither from the respondents nor from other members of their family.

Table 4 Internet availability at home

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	6	50.0	50.0	50.0
No	6	50.0	50.0	100.0
Total	12	100.0	100.0	

As far as internet is concerned, 50% are using internet at their home since there is no internet availability in the office.

Table 5 Ability in MS-WORD

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Fair	6	50.0	50.0	50.0
Good	3	25.0	25.0	75.0
No	3	25.0	25.0	100.0
Total	12	100.0	100.0	

This study has also revealed that only one respondent has received formal training in computer. Among the surveyed population some respondents find no difficulty in preparation of power point slides.

Table 6 Ability in Power Point

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Fair	4	33.3	33.3	33.3
Good	4	33.3	33.3	66.7
No	4	33.3	33.3	100.0
Total	12	100.0	100.0	

However, no respondent is having ability in PageMaker, CorelDraw, Pearl, and Access. In case of Excel, Photoshop, and Paint only one respondent is familiar and use these utilities while rest have no knowledge about these programmes.

Table 7 Ability in Using Scanner

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Fair	3	25.0	25.0	25.0
Good	5	41.7	41.7	66.7
Excellent	1	8.3	8.3	75.0
No	3	25.0	25.0	100.0
Total	12	100.0	100.0	

Results of the study also showed only 1 respondent is excellent, while 5 respondents are good and 3 respondents have been rated fair in using scanner. On the other hand, 3 respondents do not know the use of scanner.

Table 8 Ability in Using Web Camera

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Fair	4	33.3	33.3	33.3
Good	2	16.7	16.7	50.0
No	6	50.0	50.0	100.0
Total	12	100.0	100.0	

It was also found four respondents and two respondents as fair and good respectively while half of the respondents have no knowledge of using Web Camera.

Table 9 Ability to Replace a Hard Drive

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	1	8.3	8.3	8.3
No	11	91.7	91.7	100.0
Total	12	100.0	100.0	

It was also observed that a couple of respondents were using pen drive for storage of data while some more using the CD-ROM for the same purpose.

Table 10 Installation of a Printer

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	7	58.3	58.3	58.3
No	5	41.7	41.7	100.0
Total	12	100.0	100.0	

Interestingly more than half of the respondents are familiar with the procedure of installation of a printer. Nine respondents use their computers only for typing work while none for programming purpose. Some of them have used for the purpose of surfing the net.

10. CONCLUSION

The present study aimed to find out the level of IT awareness among the faculty members of Dr.Ziauddin Dental College, AMU, Aligarh. The findings of the present study does not confirm the previous study of Masuda which stated that computers changed everything and opened up new ways of working and living.

This study, however, showed that merely having computers does not change the way of working. Unless computers or any other component of IT is used, any change is not possible. The study shows that doctors are not using IT equipments for better results. Though, majority of the respondents own personal computer at home they are not spending much time on it. Most of the respondents are proficient only in MS Word and Power Point and have no technical know-how with respect to CorelDraw, PageMaker, Access, and Pearl. Only a couple of respondents know programme such as Excel, Photoshop etc.

As far as hardware handling is concerned, data indicates almost same IT level of the respondents. Not all respondents are comfortable in using Web camera and Digital camera, the equipments which are commonly used in dental colleges & hospitals of advanced nations. This state of affairs apparently prevails due to lack of computer training. The study revealed that only one respondent has received formal training in computer. It is, therefore, strongly recommended to arrange on-sight periodical training programmes in IT for all the faculty members of Dr.Ziauddin Medical College to make them proficient in software as well as hardware.

However, the components of these training programmes can be decided applying utility factor. Furthermore, some faculty members may also be sent to developed nations such as U.S., U.K., Australia, Germany etc. to receive specialized training. It will increase the technical knowledge of the faculty members and subsequently patients will also be benefited.

REFERENCES

[1] Ziauddin Sardar, "Information and the Muslim World: A Strategy for the Twenty First Century", Mansel Publishing,, London,1988.

[2] Norbert Wiener, "The Human Use of Human Beings: Cybernetics and Society", MIT Press. Massachusetts, 1948.

[3] Daniel Bell, "The Coming of the Post-Industrial Society", Basic Books, New York, 1973.

[4] Yoneji Masuda, "Managing in the Information Society: Releasing Synergy Japanese Style", Basil Blackwell, Oxford, 1990.

WEB BASED LIBRARY SERVICES AT BANNARI AMMAN INSTITUTE OF TECHNOLOGY: A CASE STUDY

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Abstract

Teaching information literacy skills is a major initiative for today's instruction librarians. The advent of web portals on the college campus provides a unique teaching opportunity. Libraries are undergoing rapid changes due to the developments in Information Communication Technology (ICT). Paper based resources are giving way to electronic resources. The dynamic linking capability of web has provided users unrestricted access to information. Internet, more specifically World Wide Web has become the world's largest source of information.

This paper describes how the library web portal of Bannari Amman Institute of Technology(BIT) provides a new opportunity for instruction that addresses the needs, expectations, and changing learning styles of today's technology savvy students.

Index Terms: *Teaching Opportunity, Web Portal, Web Based Services*

1. INTRODUCTION

Academic libraries continue to evolve from their former, somewhat passive presence on campus to be more active participants in the educational process. This change is primarily driven by two decades of rapid advances in information technologies, and the recognition that libraries must adapt to a new paradigm of student needs and expectations and a new model of providing relevant and meaningful services. As a result, teaching information literacy skills, and outreach activities to promote the educational role of the library have become major initiatives for librarians.

Advances in information technologies have resulted in something of an information glut. Although the width and breadth of information has expanded exponentially, the depth of it is decidedly lacking. This poses a significant challenge for libraries. Despite having an abundance of information at their fingertips, students lack the basic information literacy skills to find, critically evaluate, synthesize, and apply good information in a meaningful way. The challenge for libraries is to continue to push information literacy as a major initiative, and to find new ways of teaching information literacy skills.

Advances in information technologies also provide unique teaching opportunities for librarians. The Bannari Amman Institute of Technology web portal initiated in the year 2004 as a simple web site for engineering students and it provides customized and personalized online services and the portal displays fine-grained content that corresponds to their academic status, area of study, and research and development.

2. WEB PORTAL – DEFINITION

A Web Portal can be defined as a website for a specific audience that aggregates an array of content and provides an array of services [1]. They are the sites on the World Wide Web that typically provide personalized capabilities to their visitors. They are designed to use distributed applications, different numbers and types of middleware, and hardware to provide services from a number of different sources. Content linked in library portal is superior to the open access content available on the Web [2].

Authentication software, commonly known as Web Access Management (WAM) are available that allow

the library to govern the access to licensed electronic content [3]. Commonly referred to as simply a portal, it is a website that offers access to a broad array of resources and services of libraries such as e-journals, online databases, Web OPAC, new additions and any other static information about library services.

3. NEED FOR LIBRARY WEB PORTAL

Web is a very large hypertext information space where different types of users can search and find information in different domains. With the help of general directories and search engines, users may be able to locate and access needed information to some extent. Search engines provide a convenient way for information searching but users often find themselves facing the information overload problem. So quantity and as well as quality dazzles the user and the user most often inadvertently looses his / her track. A carefully designed web portal avoids this pit fall by weaving together e-resources to provide coherent view of the discipline. This also assists them in knowledge sharing activities.

Librarians have realized that multiplication of e-resources is a serious problem for end users. Users find it difficult to decide which is the most appropriate database or resource to search for information relevant to their need. Web portals are the websites which solve this problem by providing access to all relevant e-resources at one point, thus relieving the user from the hassles of accessing different sources from different websites.

4. ELEMENTS OF AN IDEAL LIBRARY WEB PORTAL

The seven C's that any web portal must have are the seven attributes that help in building an ideal portal for any library [4].

***Context*:** Portal should have an aesthetical, functional look and feel. The colours chosen, the layout, etc should be refreshing and inviting the users.

Contents: Portal should provide link to another source only after its authenticity and credentials are verified. Users tend to view the references provided by institution portals as the authoritative and genuine ones. So the content on the portal must adhere to certain strict evaluation policy.

Community: The community or group of users for whom the portal is dedicated is the third important attribute to be considered before deciding the content and layout of the portal. The specific needs of the users should be kept in view while designing the portal.

Customization: It is the portal ability to suit every individual in the organization. Though it is little difficult considering the multitude of areas and needs of people in the organization, some extent of personalization can be achieved in providing different interfaces An ideal portal must allow the users to customize their interface; select databases of interest; and create current awareness profiles.

Communication: It's the way the user communicates his needs to the portal and how the portal responds and satisfies the users' queries. Portal must have options for searching the portal content. Easy navigation is one of the hall marks of an ideal portal.

Connection: This is the extent of linkages between the portal and other sites mentioned in the portal. It's the networking within the portal site. The links provided must be checked on a regular basis, and any broken link must be corrected immediately.

Commerce: This refers to the actual sale of products and services. This is meant for commercial organizations and this attribute may also have relevance to academic institutions but for libraries, its relevance is very limited.

5.NEED FOR WEB BASED LIBRARY SERVICES

A modern library can make its own web site because of following reasons.

1. Facilities and promote library use
2. To provide the basic information about the library and its services
3. To permit online access to local services
4. To make gateway to networked information services
5. To introduce integrated push based services

6. BASIC ADVANTAGES OF WEB BASED SERVICES

- To save the precious time of the scientist
- Availability of less number of library staff to carry out the library works and services
- Less dependence upon the library staff for getting the required information
- Location of laboratories/ departments in different places in the campus
- Instant and elaborate information requirements for R&D activities
- Information for decision making in MIS
- Multifold increase of the cost of books and journals
- Availability of information in different places and also in different formats
- Cut in library budget.

7. FUTURE OF WEB BASED LIBRARY SERVICES

Library Web services will continue to expand, offering:

- More full-text electronic journals. Eventually, indexes that do not now include full text will begin to do so, or link to external resources. OCLC's Electronic Collections Online may mature as such a service.
- Better bibliographic access to full-text periodicals either through cataloging, databases, or vendors that "aggregate" access. Savings on Inter library loan and user convenience are incentives.
- Electronic reserves, either locally or through vendors who simplify copyright issues. More web forms for user feedback, and perhaps a virtual librarian who interacts in real time chat or video conferencing. While there's nothing like a simple phone call, the virtual librarian wouldn't have to be in the library.
- Well-developed user education modules or tutorials, especially to support independent exploration of library and web resources. Library web authors are getting more sophisticated and able to take advantage of appropriate technologies and software.
- More document delivery services to distance education or commuter students. This will not be cheap, but it's the type of thing that users want. Meltdown or solutions to the "printing problem" when "everything" is on the Web and nobody is using microfiche or printed periodicals.
- More resources through creative consortia purchasing. Statewide cooperation will become more common. SOLINET has also been a leader in coordinating contracts for its members.
- Experiments with customized interfaces that organize resources for individual library users. People seem to either like or dislike a portal-style interface, finding them comfortingly personal or restrictive.
- Somebody will have to figure out how to keep Word users from saving print documents as XML, without thinking in terms of Web, not print, space. XML will be embraced as a way to control page appearance and behavior, but it will take a while for people to figure out how to use it well.

8. LIBRARY WEB PORTAL OF BANNARI AMMAN INSTITUTE OF TECHNOLOGY

The web offers libraries the possibility to become disseminators of information through creating Web Sites. Recognizing that the Web site often serves as the "face" of the library and the first access point, the Bannari Amman Institute of Technology Library began the process in early 2004 to ensure that the Web Site content not only remains current but adds value and showcases the Library's resources.

The Web-based resources are the most commonly used resources which are considered to be the quickest and simplest way to retrieve information.

The library website http://www.lib.bitsathy.ac.in was launched during the year 2004. This web site provides information on Government, Education, Universities, Scholarships, Competition Exams, Examination results. Employment, Other Library Links, etc.,

The goal is not only to build digital content into the site but also to ensure that information on the site is updated in a timely fashion.

Fig.1 Library web portal of Bannari Amman Institute of Technology

9. WEB BASED LIBRARY SERVICES AT BIT

Considering the growing impact of Information and Communication Technologies (ICT), Web technologies and Database technologies, the Bannari Amman Institute of Technology has set up a Digital Library in early 2005 to disseminate web based library services to the right reader at the right time

Fig.2 Web Based Library Services of Bannari Amman Institute of Technology

Greenstone is a suite of software for building and distributing Digital Library collections. It provides a new way of organizing information and publishing it over the internet or on CD-ROM. The BIT uses Greenstone Digital Library Software and it provides the following information online.

- A large number of E-books and E-journals on all branches of Engineering, Technology, Science and Humanities.
- Archives – More than 15000 photos and videos taken at BIT in various functions from 1996 to till date are scanned and made available in digital format.
- Theses – The abstract of the project reports of all UG and PG students of BIT are made available in digital format.
- Free open source course materials for most of the engineering courses offered at Bannari Amman Institute of Technology.

It is evident that the potential of this institutional repository to help foster change within the academy will be significant.

10. CONCLUSION

Library portal reflects the strengths and weaknesses of the libraries very effectively. They are also the tool through which libraries are trying to reach out to the tech-savvy user. Libraries should make consistent efforts to provide web-based services to their users.

Library resources on the net are plentiful, and it requires some effort to organize them, since the services and information are often interrelated and get mixed up. Thus portals are very instrumental in enhancing access to e-resources that a library holds. Since the last five years, INFONET is providing access to e-resources for all Indian universities through UGC INFONET portal. The portal trend is fast catching for accessing e-resources and information services. The needlepoint for any library is to engage in the development of customized portals and provide web based library services for enhancing access to library resources and services.

REFERENCES

[1] H. Pienaar, "Design and Development of an Academic Portal", Libri, Vol.53 No.2, 2004, pp. 118-129.

[2] N. Joint, "Evaluating the Quality of Web Portals", Library Review, Vol. 54 No.6, 2005, pp. 337-341.

[3] M. Myhill, "A MAP for the Library Portal: Through the Labyrinth of Online Information Sources", Online Information Review, Vol. 29 No.1, 2004, pp. 5-17.

[4] Mankad, Manish, "Web Portal Elements", Proceedings of BOSLA Workshop on ICT for Librarians, Tata Institute of Social Sciences, Mumbai, 2004, pp. 6-12.

USE AND IMPACT OF E-RESOURCES IN AN ACADEMIC AND RESEARCH ENVIRONMENT: A CASE STUDY

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Abstract

This article describes briefly a survey conducted at Anna University Library, Chennai, Tamil Nadu to find out the use of different types of electronic resources, services, and impact of these resources on the academic development of faculty members. Also described the problems faced in using the electronic resources and success rate of satisfaction in getting the required information on electronic resource services.

Index Terms: *E-Journals, E–Resources, Evaluation of E-Journals, Internet,User Study.*

1. INTRODUCTION

In the digital era, technical and other professional educational institutions are plaing a significant role in shaping the future of tomorrow's societies and these electronics resources have distinct advantages over the print media [1]. In the present situation, higher education is bound to opt for the unavoidable shift form the culture of print to a culture of digital technology. This affects teaching, learning, and research but also the whole of higher education [2].

The engineering college libraries are currently heavily committed to the use of electronic resources, because they are required to provide high quality services to large numbers of studensts, faculty, and researchers who must have access to information services which, in practical terms, can now only be provided with the aid of electronic resources [3] .

2. ANNA UNIVERSITY LIBRARY

Anna University was established on 4th September 1978 as a unitary type of University. It offers higher education in Engineering, Technology and Allied Sciences relevant to the current and projected needs of the society.

The University Library, which has been established in the year 1978 gained autonomy from December 2000. It is housed in a three storeyed building located at the eastern side in the main campus [4]. The total area of the library building is about 4122 sq.m. 30 video cameras are placed at strategic points in the library for surveillance. The library has a collection of about 1,50,000 books, 350 periodicals and the following four E- journal resources are extended tothe users from 1st January 2003 onwards. 1. IEL Online 2. ASCE 3. ASME 4. Ingenta E-journals.

3. OBJECTIVES OF THE STUDY

The following were selected as the specific objectives of the study.

1. To find out the information needs of the faculty members of Engineering and Technology.
2. To identify the various channels through which information is accessed by faculty members.
3. To identify level of users satisfaction with electronic resources and services.
4. To find out the problems of users trying to use electronic resources.
5. To study the impact of E-resources over traditional resources.

4. METHODOLOGY

In this study, 180 questionnaires were distributed among the faculty members in the disciplines of Engineering and Technology in Anna University. Out of 180 questionnaires distributed, 153 were received back, making the response rate of 85%. Three questionnaires were not taken into consideration because they did not include complete answers and all 150 questionnaires were analysed for the present study.

5. APPLICATION OF STATISTICAL TOOLS

In order to test the objectives and the formulated hypotheses the researcher used some standard tools such as Percentage Analysis and Chi-square test.

6. DATA ANALYSIS

Table1 Distribution of respondents according to category

S.No	Category	Number of Respondents	%	Cumulative percentage
1.	Professor	9	6.00	6.00
2.	Assistant Professor	21	14.00	20.00
3.	Senior Lecturer	48	32.00	52.00
4.	Lecturer	72	48.00	100.00
	Total	150	100.00	-

It is seen form the above table 1, that 6% of the respondents belong to Professor cadre, 14% of them working as Assistant Professors, 32% of them working as a Senior Lecturers and 48% of them working as Lecturers. So majority of them belong to Senior Lecturers and Lecturers.

Table 2 Distribution of Respondents According to Age

S.No.	Age	Respondents on the Basis of Designation				Total	Cumulative percentage
		Professor	Assistant Professor	S. Lecturer	Lecturer		
1.	22-25	-	-	-	6 (4.00)	6 (4.00)	4.00
2.	26-30	-	-	3 (2.00)	33 (22.00)	36 (24.00)	28.00
3.	31-35	-	2 (1.33)	12 (8.00)	27 (18.00)	41 (27.33)	55.33
4.	36-40	-	7 (4.66)	21 (14.00)	6 (4.00)	34 (22.67)	78.00
5.	41 and above	9 (6.00)	12 (8.00)	12 (8.00)	-	33 (22.00)	100.00
	Total	9 (6.00)	21(14.00)	48 (32.00)	72 (48.00)	150 (100.00)	-

Chi-square value = 113.8
Degrees of freedom = 12
Level of significance = 1%
Note: Figures in parentheses indicate percentage.

From the above table 2, it is inferred that only 4% of the respondents are in the age group of 22-25 years, 22% of the faculty members are in the age group of 26-30 years, 18% of them in the age group of 31-35 years, 4% of them in the age group of 36-40 years.

In the case of Senior Lecturers, 2% in the age group of 26-30 years, 8% in the age group of 31-35 years, 14% in the age group of 36-40 years, and 8% of them in the age group of 41 and above. In the cadre of Assistant Professor, 1.33% of them in the age group of 31-35 years, 4.66% of them in the age group of 36-40 years, and 8% of them in the age group of 41 and above and all the Professors are in the age group of 41 and above.

Table 3 Distribution of Respondents Use Library Web Service

S.No	Library / University computer use	Yes	No	Total
1	Computer and online service	150 (100.00)	-	150 (100.00)

Note: Figures in parentheses indicate percentage.

Table 3 shows the level of use of library web services. From the research survey, it is noticed that all the respondents use web services in the library/ university. Therefore it is suggested that the organisation has to improve the ICT facilaities in the Library

Table 4 Level of Satisfaction about the Electronic Information Service

S.No	Electronic Information Service	Level of satisfaction			Total
		Fully satisfied	Partially satisfied	Not satisfied	
1	E-mail (University host mail)	91 (60.67)	51 (34.00)	8 (5.33)	150
2	Internet	85 (56.67)	56 (37.33)	9 (6.00)	150
3	OPAC System	87 (58.00)	41 (27.33)	22 (14.67)	150
4	Online journal	85 (56.67)	37 (24.67)	28 (18.66)	150
5	CD- ROM	53 (35.33)	67 (44.67)	30 (20.00)	150
Total		401 (53.47)	252 (33.60)	97 (12.93)	750 (100.00)

Note: Figures in parentheses indicate percentage

Chi-square value = 45.47, Degrees of freedom = 8,
Level of significant = 1%

It is seen from the table 4 that regarding the electronic information service 60.67% of them are fully satisfied about E-mail and 34% of them are partially satisfied. 56.67% of them satisfied on Internet, 37.33% of them partially satisfied. Regarding OPAC system 58% of them are satisfied, 27.33% of them are partially satisfied. In the case of On-line journal, 56.67% of them are satisfied and 24.67% of them are partially satisfied, 35.33% of them are satisfied about CD-ROM and 44.67% of them are partially satisfied.

The table 5 shows the users opinion about the usefulness of internet for study/research/teaching or professional purpose. Regarding the various sites available in the internet, 36.66% of them commented very useful, 38.13% of them felt quite useful, 17.33% of them said occasionally useful 2.53% of them said not useful.

This difference of opinion is statistically proved by the obtained chi-square value, which is significant at 1% level.

Table 5 Respondent's Opinion about the Internet Usefulness for Study/Research/Teaching or Professional Purpose

S. No.	Internet usefulness	Level of Internet Usefulness					Total
		Very useful	Quite useful	Occasionally useful	Useless	No Opinion	
1	Online electronic journals	73 (48.66)	63 (42.00)	8 (5.33)	-	6 (4.00)	150
2	Research project sites	58 (38.67)	54 (36.00)	27(18.00)	-	11 (7.33)	150
3	Scholarly paper and abstracts on the Internet	42 (28.00)	77 (51.33)	24 (16.00)	2 (1.33)	5 (3.33)	150
4	University Library site	60 (40.00)	43 (28.67)	28 (18.67)	11(7.33)	8 (5.33)	150
5	Academic department/ on the Internet	42 (28.00)	49 (32.66)	43 (28.67)	6 (4.00)	10 (6.66)	150
Total (over all)		275 (36.66)	286 (38.13)	130 (17.33)	19(2.53)	40 (5.33)	750 (100.00)

Note: Figures in parentheses indicate percentage

Table 6 Type of Sources Used by the Respondents for Research Activities

S.No	Sources of Information	Designation				Total
		Professor	Assistant Professor	Senior Lecturer	Lecturer	
1.	E -Journal	6 (4.00)	11 (7.33)	28 (18.67)	35 (23.33)	80 (53.33)
2.	Internet/ World Wide Web	3 (2.00)	7 (4.67)	14 (9.33)	29 (19.33)	53 (35.33)
3.	Books	-	3 (2.00)	4 (2.67)	5 (3.33)	12 (8.00)
4.	Electronic Database	-	-	2 (1.33)	3 (2.00)	5 (3.33)
Total		9 (6.00)	21 (14.000)	48 (32.00)	72 (48.00)	150 (100.00)

Chi-square value = 4.992, Degrees of freedom = 9, Level of significance = NS (Non Significant)

The table 6 shows the various information used by the faculty members for their research study. Among the faculty members 4% of the Professors, 7.33% of the Assistant Professor, 18.67% of the Senior Lecturers and 23.33% of the Lecturers used journals for research actvities, 2% of the Professors, 4.67% of Assistant Professor, 9.33% of Senior Lecturers and 19.33% of Lecturers used internet / World Wide Web.

None of the Professors used books and electronic date base for research/study. 3.33% of Lecturers, 2.67% of Senior Lecturers and 2% of Assistant Professor used books. 2% of Lecturers and 1.33% of Senior Lecturers used electronic database for their research/study. Therefore it is concluded that irrespective of their designation majority of them used formal (53.33%) and internet / World Wide Web (35.33%) for their research study. The above result also confirmed that all the users used journals, Internet, web site for their research study.

Table 7 Distribution of Respondents Based Upon the Amount of Time Spent on Internet and Library Reading.

Time spent	No. of. Respondents	Percentage
Usage of Internet More than the Library Reading	87	58.00
Usage of Internet and the Library Reading Same Level	41	27.33
Usage of Internet Less than Library Reading	22	14.66
Total	150	100.00

From the table 7, it can be concluded that majority of respondents (58%) used internet, when compared to library reading, 27.33% of the respondents used the internet and library reading equally. Whereas rest of the respondents 14.66% used the library reading than the internet.

Table 8 Distribution of Respondents Based Upon the Type of Sources Used

Types of Material used	No. of. Respondents	Percentage
Usage of E-journal more than printed journal.	79	52.66
Usage of E-journal and printed journal are used equally	48	32.00
Usage of E-journal less than the printed journal	23	15.33
Total	150	100.00

Form the above table 8, it is inferred that majority of the respondents (52.66%) used E-journals than the printed journal and 32% of the respondents used both E-journal and printed journals equally. Whereas less percentage (15.33%) of the respondents used printed journal than the E-journal.

Table 9 Respondent's Opinion about the Favour of Printed Journal

S.No	Statement	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
1	PDF Technology Is Trouble Some or Slow to Download Read or Print.	7 (4.66)	19(12.66)	43(28.66)	81(54.00)	150(100.00)
2	Access Online is Very Limited	14(9.33)	33(22.00)	69(46.00)	34(22.66)	150(100.00)
3	Print Versions of Journals are Very Portability	23(15.33)	44(29.33)	56(37.33)	27(18.00)	150(100.00)
4	Print Versions of Journals are Browse Ability.	27(18.00)	52(34.66)	56(37.33)	15(10.00)	150(100.00)

From the above table 9, it is inferred from the first statement that 17.32% (strongly agree 4.66% and agree 12.66%) of the respondents does agree with the statement that PDF technology is troublesome or slow to download the contents. Whereas the rest of the remaining respondent 82.66 %(disagree 28.66% and strongly disagree 54%) do not agree the statement. The statement second shows that a total of 31.33% (strongly agree 9.33% and agree 22.00%) of the respondents do agree that their access to online is very limited. Whereas the majority of the respondents 68.66% (disagree 46% and strongly disagree 22.66%) do not agree the statement and enable to get more information available from the online journals.

The third statement shows that 44.66% (strongly agree 15.33% and agree 29.33%) of the respondents preferred print version of journals because of their portability. Whereas 55.33% (disagree 37.33% and strongly disagree 18%) of the respondents do not agree that the printed journal preferred because of their portability. The last statement (fourth) the total of 52.66%

(strongly agree 18% and agree 34.66%) of the respondents agree that print versions of journal are preferred because of their browse ability, whereas least of the respondents 47.33% (disagree 37.33% and strongly disagree 10%) do not preferred print journal.

Table 10 Main Problems When Using Electronic Resource by the Respondents

S.No.	Problem	Yes	Not Resplendent	Total
1	Problem With Accessing Suitable Personal Computers	55 (36.67)	95 (63.33)	150 (100.00)
2	Problems with Accessing Suitable Software	65 (43.33)	85 (56.67)	150 (100.00)
3	Problems With Accessing External Networks for E-Mail or Internet	77 (51.33)	73 (48.67)	150 (100.00)
4	Lack of Information about How to Use Digital Resources	81 (54.00)	69 (46.00)	150 (100.00)
5	Lack of Time Acquire Skills Needed to Use Digital Resources	66 (44.00)	84 (56.00)	150 (100.00)
6	Lack of High Quality Information Available From Digital Resources.	59 (39.33)	91 (60.67)	150 (100.00)
7	Feeling that Electronic Resources are Not Relevant to Your Needs	41 (27.33)	109 (72.67)	150 (100.00)

Note: Figures in parentheses indicate percentage.

As per the obtained data, 36.67% of the users face problem with accessing suitable personal computers, 43.33% of them facing problems with accessing suitable software, 51.33% of the respondents face problems with accessing external networks for e-mail or internet, 54% of the users face problems due to lack of information about how to use digital resources, 39.33% of the respondents lack knowledge in accessing high quality information available from digital resources, and 27.33% of them felt that electronic resources are not relevant to their needs. Therefore it is concluded that most of the respondents face problems because most of the respondent do not get a proper training to use the electronic resources in the library

Table 11 Respondents Opinion about the Library Activities and Changes for the Past Two Years

S.No.	Library activities	Improved	Not improved	No opinion	Total
1	Opinion Library activity for the Past Two Years	107	24	19	150
	Total	107 (71.33)	24 (16.00)	19 (12.67)	150 (100.00)

Note: Figures in parentheses indicate percentage.

The table 11 shows users opinion about the library activity changes for the past two years. As per the research survey 71.33% of the users agreed that the library activity changed for the past two years and 16% commented that the service is not improved. Only 12.67% of them gavex no-opinion. Therefore majority of them have given their opinion that the library activity has been changed for the past two years.

7. SUGGESTIONS

- The university should make an arrangement for 18 hours library service. So that engineering faculty members and students can use library efficently.
- On-line service is also to be improved and individual computer terminals with internet connection is to be provided for staff and students.
- The library should subscribe more number of CD-ROM discs in engineering subject area. The authorities should make an arrangement to purchase

the latest Information Technology. This will motivate the faculty members to involve in research activities effectively.

- Most of the engineering faculty members have demanded for video display on recent development.
- The University should introduce user education programme to all the student and staff of Engineering and Technology.

8. CONCLUSION

Internet is an inseparable part of today's engineering educational system. The dependency on internet and its services is increasing every day and users of engineering colleges too are depending more and more on the internet for their various educational purposes. The present study has highlighted the existing situation of internet services provided by Anna University library, Chennai.

The study showed that the reading behaviour of faculty members is changed; they are giving more importance to electronic version. The library has to evolve more scientific methods to develop a standard collection of E-resources along with print documents considering the requirements of the academic community.

REFERENCES

[1] Kumar and A. Kaur "Internet Use by Teachers and Students in Engineering College of Punjab, Haryana and Himachal Pradesh State of India: An Analysis", Electronic Journal of Academic and Special Librarianship, Vol 7 No.1, 2006, pp.1-12.

[2] O.P. Mashra, N. Yadav and K. Bisht "Internet Utilization Pattern of Undergraduate Students", University News, Vol. 43, No.13, 2005, pp.8-12.

[3] M.Papastergious and C. Solomonidous "Gender Issue in Internet Access and Favourite Activities among Greek High School Pupils Inside School", Computers and Education, Vol.44, No.4, 2005, pp. 377-393

[4] J.W. Robinson, "Internet Use Among African-american College Students: An Exploratory Study", Retrieved 12 May 2006, from Pro Quest database 2005.

ATTITUDE TOWARDS ACCESS TO E-RESOURCES BY MANAGEMENT INSTITUTE STUDENTS: A SURVEY

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Abstract

The format of document has changed from paper to E-form. The E-resources have become the important part of today's life. This article describes in brief, a survey conducted at Jansons School of Business, Coimbatore to find the use of E-resources and services. This study also covers the impact of these resources on the student academic work and study. Also describes the orientation given by the library staff to the students. In this study, it was found that students use E-resources effectively for their academic success.

Index Terms: *E-resources, User survey*

1. INTRODUCTION

Today libraries face significant challenges in responding to change while sustaining their traditional functions. E-resources play a vital role in creation and dissemination of knowledge. Jansons School of Business was established in 2002. It is a leading B-School in South India. Now this institute is running with student's strength of 240, 20 full time faculty members and about 15 visiting faculty. The library is established with 300 sq.m. area. The library is providing databases like EBSCO Business Source Elite, EBSCO Computer Source, CMIE Prowess, Business Beacon, Capitaline plus, etc.

2. E-RESOURCE - DEFINITION

Any electronic product that delivers a collection of data, it may be text referring to full text databases, electronic journals, image collection and other multimedia collections. These may be delivered through CD-ROM, on tape, via the internet and so on [1].

The University of Glasgow defines the term E-resource as any resource that is available over the internet.

The advantages of having library material available in electronic form [3]:

- Data occupies less space and can be replicated easily and made secure electronically
- Data can be made available immediately through communication networks like internet to anyone, anywhere and
- Provides enormous search speed and facility

3. SCOPE AND LIMITATION

The scope of the study is confined to the students of JSB. The study is limited to available and use of E-resources and services. The survey reports the impact on the student's academic work.

4. OBJECTIVES

1. To find the frequency of using library for accessing e-resources
2. To find the purpose for which e-resources are used
3. To find a suitable way to provide orientation programme on use of e-resources
4. To find the impact of e-resources

5. METHODOLOGY

In this study, survey method through detailed questionnaire tool was used. In order to know the usage of E-resources among the students of Janson School of Business, Coimbatore, a structured questionnaire was desinged in view of the objective by random sampling method. The questionnaire were distributed among the 140 students to collect primary data and out of which 108 usable responses were taken into account.

6. STATISTICAL TOOL USED

The researcher applied Chi-square test to analyze the data collected. Chi-square test is an important test among the non – parametric tests specifically when qualitative type data are used.

7. ANALYSIS AND DISCUSSION

7.1 Testing of Observed and Expected Values

Library should be effectively utilized by the students for their academic achievements .Achievement is possible only by visiting the library frequently, getting the assistance from the library staff members, using books, journals and magazines available and especially the E-resources available in the library. Information collected from the respondents have given the following results.

7.1.1 Frequency of Visit to the Library

Null hypothesis: The time points (every day, once in a week, etc) are equally considered by the respondents.

Level of Significance: Let á = 0.05

Table 1 Frequency of Visit to the Library

	Every day	Twice in a Week	Once in a Week
Oi	60	30	18
Ei	36	36	36

$\chi_o^2 = 26$

Expected value

$\chi_e^2 = 5.991$ for 2 d.f at 5% level.

$\because \chi_o^2 > \chi_e^2$ the null hypothesis is rejected.

Inference: It is concluded that majority of the students visit library every day

7.1.2 Frequency of Use of E – Resources

Null hypothesis: Responents often use E-Resources.

Level of Significance: Let á = 0.05

Table 2 Frequency of Use of E-Resources

	Very Often	Often	Sometime	Rarely
Oi	25	60	13	10
Ei	8	46	46	8

$\chi_o^2 = 64.5$

Expected value

$\chi_e^2 = 7.815$ for 3 d.f at 5% level.

$\because \chi_o^2 > \chi_e^2$ the null hypothesis is rejected.

Inference: It is concluded that majority of the students use E-resource very often

7.1.3 Orientation for Using E-Resources by Library Staff

Null hypothesis: The orientation given by library staff is good.

Level of Significance: Let á = 0.05

Table 3 Orientation for Using E-Resources

	Very Good	Good	Fair	Average
Oi	32	12	36	16
Ei	08	46	46	08

χ_o^2 = 119.69

Expected value

χ_e^2 = 7.815 for 3 d.f at 5% level.

$\because \chi_o^2 > \chi_e^2$ the null hypothesis is rejected.

Inference: It is concluded that majority of the students agree that orientation given by library staff is Very good

7.1.4 Help Extended by Library Staff

Null hypothesis: Library staff members extend their help in utilizing E-Resource.

Level of Significance: Let á = 0.05

Table 4 Help Extended by Library Staff

	Strongly Agree	Agree	Neutral	Dis Agree
Oi	24	56	14	14
Ei	08	46	46	08

χ_o^2 = 60.9

Expected value

χ_e^2 = 7.815 for 3 d.f at 5% level.

$\because \chi_o^2 > \chi_e^2$ the null hypothesis is rejected.

Inference: It is concluded that majority of the students agree that library staff members extend their help in utilizing E-Resource

7.1.5 Impact of E-Resources on Academic Work

List of Impacts

- Time consuming
- Too much information is retrieved
- Limited computers
- Using CDROMS and internet often distracts work

Null hypothesis: All the impacts considered are equally considered by the respondents

Level of Significance: Let á = 0.05

Table 5 Impact of E-Resources on Academic Work

	1	2	3	4
Oi	54	18	12	24
Ei	27	27	27	27

χ_o^2 = 38.6

Expected value

χ_e^2 = 7.815 for 3 d.f at 5% level.

$\because \chi_o^2 > \chi_e^2$ the null hypothesis is rejected.

Inference: It is concluded that majority of the students feel that e-resource impart time consuming impact on day-to day work.

Null hypothesis: Respondents could not give correct opinion that E-Resource usage affects the daily work.

Level of Significance: Let á = 0.05

7.1.6 Impact on Day-to Day Work

Table 6 Impact on day-to day work

	Strongly Agree	Agree	Neutral	Dis Agree
Oi	28	10	52	50
Ei	08	46	46	08

χ_o^2 = 299.5

Expected value

χ_e^2 = 7.815 for 2 d.f at 5% level.

$\because \chi_o^2 > \chi_e^2$ the null hypothesis is rejected.

Inference: Majority of the students disagree that using e-resource affects the day-to day work.

7.2 INDEPENDENCE OF ATTRIBUTES:

Opinion given may be influenced by personal profile, whether personal profile influences opinion is discussed below

7.2.1 Whether Gender and class influence the frequency of visit

Null hypothesis: Gender and frequency of visit are independent

Table 7 Influencing the Frequenty of Visit by Gender and Class

	Every day	Twice in a Week	Once in a Week	Total
Male	42	28	8	78
Female	20	6	4	30
Total	62	34	12	108

$\chi_o^2 = 3.6010$

Expected value

$\chi_e^2 = 5.991$ for 2 d.f at 5% level.

$\because \chi_o^2 < \chi_e^2$ the null hypothesis is accepted.

Gender does not influence the frequency of visit. Majority of male and female respondents visit library every day.

7.2.2 Influencing Frequency of Visit by Year of Study

Null hypothesis: Year of study and frequency of visit are independent.

Table 8 Influencing Frequency of Visit by Year of Study

	Every day	Twice in a Week	Once in a Week	Total
I Year	20	32	13	78
II Year	29	9	5	30
Total	49	41	14	108

$\chi_o^2 = 4.98$

Expected value

$\chi_e^2 = 7.815$ for 3 d.f at 5% level.

$\because \chi_o^2 < \chi_e^2$ The null hypothesis is accepted

Hence, year of study does not influence the frequency of visit. Both first year and second year students visit library every day.

7.2.3 Gender and Class Influencing the Opinion on Orientation by Gender and Class

Null hypothesis: Gender and opinion on orientation are independent.

Table 9 Gender and Class Influencing the Opinion on Orientation by Gender and Class

	Very good	Good	Fair	Average	Total
Male	31	23	14	10	78
Female	7	19	7	2	30
Total	38	42	21	12	108

$\chi_o^2 = 4.8503$

Expected value

$\chi_e^2 = 7.815$ for 3 d.f at 5% level.

$\because \chi_o^2 < \chi_e^2$ Null Hypothesis is accepted

Hence, Gender does not influence the opinion on "Orientation". Their common opinion was good.

7.2.4 Year of Study and Opinion on Orientation

Null hypothesis: Year of study and opinion on orientation are independent

Table 10 Year of Study and Opinion on Orientation

	Very good	Good	Fair	Average	Total
I Year	28	18	12	7	78
II Year	10	24	6	3	30
Total	38	42	18	10	108

$\chi_o^2 = 20.1625$

Expected value

$\chi_e^2 = 7.815$ for 3 d.f at 5% level.

$\because \chi_o^2 > \chi_e^2$ the null hypothesis is rejected.

It is concluded that both first and second year students have different opinion on orientation.

7.2.5 Gender and Class Influence the Opinion on Help Extended By Library Staff

Null hypothesis: Gender and opinion on help extended by library staff members are independent

Table 11 Influencing the Opinion on Help Extended by Library Staff

	Strongly Agree	Agree	Neutral	Disagree	Total
Male	18	43	7	10	78
Female	6	13	7	4	30
Total	24	56	14	14	108

$\chi_o^2 = 3.8106$

Expected value

$\chi_e^2 = 7.815$ for 3 d.f at 5% level.

$\because \chi_o^2 < \chi_e^2$ Null Hypothesis accepted

Gender does not influence the opinion on help extended by the library staff members

7.2.6 Purpose of Using E-Resources

Table 12 Purpose of Using E-Resources

	PURPOSE					
Rank By	PW	AP	BR	LI	CD	GI
Male	1	5	6	4	3	2
Female	4	6	5	1	2	3

E - resources help the students in many ways .it is used for various purposes. The Following are the certain purposes taken for the study.

1 Article Presentation(AP)
2 Book Review(BR)
3 Project Works(PW)
4 Latest Information (LI)
5 Career Development (CD)
6 General Information (GI)

To find out which is the primary purpose and whether male and female have the same attitude towards using E-resources, the Garrett's Ranking and Rank Correlation technique were applied.

Applying the Garrett's ranking the puprose of male and female students were ranked as follows:

Male ranked project work as the primary purpose and female ranked latest information as the primary purpose.

However to find whether they have the common attitude towards using E-resources, the rank Correlation Co-Efficient between their ranks were obtained and it was found that

R=1-6 Ó D2

N (N2-1)

R: Rank Correlation
D: Difference in Rank
N: Number of Pairs
R=0.3714

This indicates both male and female have same attitude towards the purpose of using E-resources. The significance value from the table of critical values of R for Spearman's rank correlation is 0.7714.

Therefore: R < sig the Null Hypothesis that þ(Correlation in Population) =0 is accepted. It is concluded that male and female have the same attitude towards the purpose of using the E-resources but the attitude is not significant.

8. FINDINGS

The following findings were observed in this study.

1. Majority of the students visit library every day.
2. Majority of the students use E-resources very often.
3. Majority of the students agree that orientation given by library staff is good.
4. Majority of the students agree that library staff members extend their help in utilizing E-resources.
5. Majority of the students feel that E-resource impact on time consuming.
6. Majority of the students disagree that using E-resource affects the day-to day work.

9. CONCLUSION

The study reveals that students visited the library almost all the days and often used the E-resources for "Article review" and "Project work". They are very much helped by the library staff by giving an orientation on E-resource usage and extending their help whenever required by the students. The first and second year students have the different opinion that the time spent on access to E-resources have significant impact on their project preparation, but both disagree that it is a time consuming process. Through this study, it is concluded that E-resources slowly catch up the attention among the user community and in the near future it will become an important way of learning.

REFERENCES

[1] S.Lawyed Stephen, "CDROM Technology in Academic Libraries", N.I.College of Engg.

[2] Dr.B.Ramesh Babu, "E-resources : Development, Management and Evaluation", Lecture given in a workshop at University of Madras.

[3] M.S. Lohar and T.N. Roopashree, "Use of Electronic Resources by the Faculty Members in BIET : A Survey", paper presented at NACLIN, University of Pune.

USE OF ELECTRONIC RESOURCES IN GULBARGA UNIVERSITY LIBRARY: A CASE STUDY

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Abstract

The present paper explains about the electronic resources and their use by the faculty members and research scholars in the Gulbarga University, Karnataka. The data is collected through a questionnaire to study the information needs of the Faculty Members and Researchers in various PG Departments in Gulbarga University. The paper revealed that the electronic resources available in the Gulbarga University Library are much helpful in fulfilling their information needs. There is need to train the faculty members and research scholars in using the electronic resources. Further, there is need to include more number of journals in the UGC-INFONET Consortium.

Index Terms: *CD-ROM, Electronic Resources, Internet, Search Engines, UGC-INFONET Consortium*

1. INTRODUCTION

In library science, consortium is a group of libraries or other such like organizations that form a partnership to achieve a goal, such as shared cataloguing or resource sharing, which cannot be achieved by the individuals alone. A consortium is helpful in getting co-operation from various libraries in acquiring electronic databases, communication of information and inter library loan. Now-a-days, many of the special and university libraries formed a group for getting online journals. In India, UGC-INFONET is the biggest consortium of university and research libraries [1].

The UGC-INFONET is a boon to higher education in several ways. It is a major electronic information source for research scholars to get pin-pointed and latest information in their subject area. 'The Electronic journal programme is corner stone of the UGC-INFONET effort which aims at addressing the teaching, learning the universities. It would facilitate free access to scholarly journals and databases in all areas of learning to the research and academic community [2].

Gulbarga University is also a member of UGC-INFONET Consortium and provides access to e-journals to the users [3]. The present paper attempts to find the use of electronic resources including electronic journals subscribed through this consortium, internet utilities, databases, portals etc., by the faculty members and research scholars in Gulbarga University, Gulbarga.

2. GULBARGA UNIVERSITY LIBRARY

Gulbarga University was started as Post-Graduate Centre of Karnataka University, Dharwad in 1970. Later in 1980 it was taken status of the University, vide Karnataka State Universities Act 1976 as amended by the Act of 1980. At present, the university has 34 post-graduate and research departments in Social Sciences, Humanities and Science and Technology. The university serves educational requirements of the Hyderabad-Karnataka region. The University has Post-graduate Centres at Raichur, Bellary, Bidar and Sandur.

The library has a large collection of printed books, periodicals apart from the electronic resources. At present the library subscribed 18 electronic databases in different subject disciplines. About 50 computer systems facilitate the internet and online services to the faculty members, research scholars and the post-graduate students [4]. The library provides access to the full text journals and databases through UGC-INFONET consortium. A new building of Learning Resource Centre is under progress, to accommodate about 120 computer

systems with LAN facilities to access electronic books, electronic journals, internet and consortium.

3. OBJECTIVES OF THE STUDY

1 To identify the information needs of the research scholars and faculty members in Gulbarga University

2 To know the knowledge about electronic resources among the faculty members and research scholars

3 To ascertain whether an orientation programme/ training/workshop is necessary to educate the users in searching databases and e-journals

4 To know the extent of the use of electronic resources

5 To know about satisfaction of the information needs of the research scholars and faculty members by e-resources such as electronic journals, UGC-INFONET consortium, internet & its utilities, databases, etc. subscribed by the Gulbarga University Library.

6 To find out the problems in respect of access the e-resources and their use

7 To get the valuable suggestions for the improvement of the library

4. METHODOLOGY

Questionnaires were circulated among the faculty members and research scholars of different PG Departments in different disciplines of Gulbarga University. In addition, the information is collected through personal interaction with the researchers. Out of 212 faculty members about 151 faculty members have responded to the study, and out of 412 research scholars, only 268 were responded to the present study. The collected data is analyzed, tabulated, interpreted and presented as under.

5. SCOPE AND LIMITATIONS

Gulbarga University consists of 34 Post-Graduate and Research Departments which are broadly divided into three disciplines i.e. 1.Science and Technology Faculty (Physics, Botany, Mathematics, Computer Science, Chemistry, Material Science, Industrial Chemistry, Biochemistry, Organic Chemistry, Inorganic Chemistry etc), 2.Social Science (Sociology, Social Work, Education, Psychology, Commerce, Management, Women's Studies, History, Political Science, Economics, Library and Information Science, etc) and 3.Humanities (Linguistics, Kannada Literature, Kannada Folklore, Marathi, Hindi, English, Sanskrit, Urdu etc). However, the Post-Graduate departments located in various Post-Graduate Centres of the University are excluded from the survey.

6. ANALYSIS AND INTERPRETATION

Table 1 Searching of Information from Different Sources

Information Sources	Respondents		Percentage	
	Research Scholars	Faculty Members	Research Scholars	Faculty Members
Electronic Books	15	18	5.59	11.92
Printed Journals	214	129	79.85	85.43
Electronic Journals	193	114	72.01	75.50
General Web Sources	145	83	54.10	54.97
Open Archives/e-prints	82	54	30.60	35.76
Others	28	33	10.45	21.85

It is observed from the above table that 79.85% of the research scholars refer printed journals, followed by 72.01% researchers refer electronic journals, 54.10% of the research scholars search general web sites, 30.60% of the research scholars search open archives/ e-prints, only 10.45% of the research scholars covered under the study refer other kinds of information sources for their information needs (search engines, FTP, institutional web sites, etc) and only 5.59% of the research scholars refer e-books.

It is also observed from the above table that about 85.43% of the faculty members refer printed journals, followed by 75.50% of the faculty members refer electronic journals, 54.97% of the faculty members search general web sites, 35.76% of the faculty members search open archives/e-prints, only 21.85% of the faculty members covered under the study refer other kinds of information sources (search engines, FTP, institutional web sites, etc) for their information needs and 11.92% faculty members refer e-books.

Table 2 Knowledge about the UGC-INFONET Consortium

Particulars	Response		Percentage	
	Research Scholars	Faculty Members	Research Scholars	Faculty Members
Know about UGC-Infonet Consortium	167	99	86.53	86.84
Do not know about UGC Infonet Consortium	26	15	13.47	13.16
Total	193	114	100	100

Among the research scholars, 86.53% (167) responded that they know about the UGC-INFONET Consortium and the remaining 13.47% (26) researchers do not know about the same. Among the faculty members covered under the study, 86.84% (99) of the faculty members have responded that they know about the UGC-INFONET Consortium and remaining 13.16% (15) of the faculty members responded that they do not about the Consortium.

Table 3 Source through which Consortium is known

Source	Respondents		Percentage	
	Research Scholars	Faculty Members	Research Scholars	Faculty Member
Library professionals	99	60	59.28	60.61
Teacher/Research Guide	39	--	23.35	--
Advertisement	7	8	4.19	8.08
Co-Research Scholar/ Colleagues	11	12	6.59	12.12
Web	11	19	6.59	19.19
Total	167	99	100	100

It is interesting to note that among the research scholars, 59.28% (99) responded that they know the consortium through the library professionals, followed by 23.35% (39) of the researchers know the same by their teacher and research guide, about 6.59% (11) of the research scholars know the consortium by their co-researchers and the remaining 6.59% (11) research scholars responded that they know the consortium by searching general web.

It is also clear that 60.61% (60) of the faculty members know about the consortium through library professionals, followed by 12.12% (12) of the faculty members know the same through their colleagues, about 8.08% (8) of the faculty members know the consortium through advertisement and remaining 19.19% (19) know about the consortium through web searching.

Table 4 Need and Importance of Databases and Portals

Database/Portal	Essential				Not Essential			
	Research Scholars		Faculty Members		Research Scholars		Faculty Members	
	No's	%	No's	%	No's	%	No's	%
Bibliographic Database	171	63.81	89	58.94	97	36.19	62	41.06
Portal Service	122	45.52	78	51.66	146	54.48	73	48.34

Table 4 reveals that 63.81% (171) of the respondents are stated that bibliographic database is essential and the remaining 36.19% (97) researchers stated that it is not essential. Regarding portal service, only 45.52% (122) research scholars stated that portals are essential and the remaining 54.48% (146) research scholars stated that portals are not essential.

It is noted that of the faculty members covered under the study, about 58.94% (89) of the faculty members expressed that databases are essential and the remaining 41.06% (62) are stated that databases are not essential. About portals, 51.66% (78) of the faculty members agreed that they are essential and the remaining 48.34% (73) are stated that the portals are not essential.

Table 5 Need for Training/Orientation Programme

Particulars	Response		Percentage	
	Research Scholars	Faculty Members	Research Scholars	Faculty Members
Needed Training/Orientation for Searching electronic resources	161	87	60.07	57.62
No Need for any Training/ Orientation for searching electronic resources	107	64	39.93	42.38
Total	268	151	100	100

It is observed from the above table that 60.07% (161) of the research scholars responded that there is need for training or orientation programme to know searching of the e-resources and the remaining 39.93% (107) of the research scholars responded that they are not in need such training/orientation programme.

It is noted that 57.62% (87) of the faculty members agreed that there is a need of training for searching e-resources and the remaining 42.38% (64) faculty members stated that they do not need any training for the use of the e-resources.

Table 6 Need of Print Journals in addition to Electronic Journals

Particulars	Response		Percentage	
	Research Scholars	Faculty Members	Research Scholars	Faculty Members
Print format Journals are Needed in addition to E-journals	197	83	73.51	54.97
Print format Journals Not-needed	71	68	26.49	45.03
Total	268	151	100	100

It is surprising to note that print journals are also needed in addition to electronic journals as expressed by a majority (73.51%) of the research scholars and only 26.49% (71) of the research scholars stated that print format of journals is not needed.

About 54.97% (83) of the faculty members covered under the study stated that there is need for printed journals along with the electronic copies of the same and the remaining 45.03% (68) of the faculty members responded that there is no need for printed journals.

Table 7 Need for More Number of Journals in the UGC INFONET Consortium

Particulars	Response		Percentage	
	Research Scholar	Faculty Members	Faculty Members	Research Scholar
More Number of Journals are Needed	174	95	64.93	62.91
More Number of Journals are Not-Needed	94	56	35.07	37.09
Total	268	151	100	100

It is emphasized by all the research scholars and faculty members that there is need for more number of journals to be added in the consortium

Table 8 Need for Other Services

Services	Respondents		Percentage	
	Research Scholars	Faculty Members	Research Scholars	Faculty Members
Current Article Alert Service	82	61	30.60	40.40
Electronic Document Supply	175	122	65.30	80.79
Other Services	47	24	17.54	15.89

From the above table it is clear that the faculty members and research scholars need special services such as Current article alert service, Electronic document supply, Browsing and such other services. Among the research scholars covered under the study, 30.60% (82) are in need of Current article alert service, 65.30% (175) are stated that they need Electronic document supply service and 17.54% (47) research scholars responded that they need other kinds of services also.

About 40.40% (61) of the faculty members responded that they need the Current article alert service, 80.79% (122) of the faculty members stated the need for the Electronic document supply service and 15.89% (24) of the faculty members stated that there is need for such other services.

Table 9 Satisfaction with the Existing Internet Facility in the Library

Particulars	Respondents		Percentage	
	Research Scholars	Faculty Members	Research Scholars	Faculty Members
Satisfied with existing Internet Facility	91	93	33.96	61.59
Not Satisfied with the existing Internet Facility	177	58	66.04	38.41
Total	268	151	100	100

It is surprising to note that 66.04% (177) of the research scholars are not satisfied with the existing internet facility and the remaining 33.96% (91) research scholars responded that the internet facility is satisfactory.

Regarding the satisfaction with the internet facility in the library, 61.59% (93) of the faculty members responded that they are satisfied with the existing internet facility in the library and the remaining 38.41% (58) of the faculty members stated that they are not satisfied with the existing internet facility.

Table 10Evaluation of the UGC-INFONET Consortium

Rate/Grade	Respondents		Percentage	
	Research Scholars	Faculty Members	Research Scholars	Faculty Members
Excellent	38	32	14.18	21.19
Good	84	39	31.34	25.83
Satisfactory	104	67	38.81	44.37
Unsatisfactory (Poor)	42	13	15.67	8.61
Total	268	151	100	100

The above table revealed that, 14.18% (38) of the research scholars covered under the study stated that the service of the consortium is excellent, followed by 31.34% (84) research scholars rated that it is good, 38.81% (104) rated that it is satisfactory and the remaining 15.67% (42) research scholars stated that the service of the consortium is poor. About 21.19% (32) of the faculty members covered under the study expressed that the service of UGC-INFONET cConsortium is excellent followed by 25.83% (39) rated the same as good, about 44.37% (67) of the faculty members expressed that it is satisfactory and the remaining 8.61% (13) of the faculty members rated as unsatisfactory (poor).

7. CONCLUSION

From the above study, it is revealed that all the faculty members and research scholars use the books as a major source of information and majority of the faculty members and research scholars search printed journals and electronic resources. UGC-INFONET consortium is one of the popular sources through these users are getting information for fulfilling their information needs. There is need to train the faculty members and research scholars in using the electronic resources. Further, there is need to include more number of journals in the consortium. Users also expected other kinds of services from the Gulbarga University library with UGC-INFONET consortium. Majority of the users rated the consortium as excellent, good and satisfactory. Also, as expressed by the respondents, there is needed to improve internet facility in Gulbarga University.

REFERENCES

[1] TAV.Murthy, "Creating Prosperity in the Higher Education Institutes through UGC-INFONET E-Journal Consortium", Proceedings of the National Seminar on Electronic Publications. Hyderabad, MGNIRSA, 23-24 March 2006, pp.1-10.

[2] B.D.Kumbar and Others, "Use of UGC-INFONET Consortium by the Faculty Members and Research Scholars of Department of Chemistry, Karnataka University, Dharwad", 4th International Convention CALIBER 2006, Gulbarga University, 2-4 February 2006, pp. 257-264.

[3] INFLIBNET Home page http://www.inflibnet.ac.in (Accessed on 26th August 2007)

[4] Kumbargoudar, Praveenkumar, D.B.Patil and S.Parameshwar, "Use of UGC-INFONET Consortium by the Faculty Members and Research Scholars in Department of Chemistry of Gulbarga University: a survey", 5th International CALIBER 2007, Punjab University, 8-10 February 2007, PP.. 756-766.

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[2] S.Mohamed Esmail, G.Vetrikondan and M.Raja, "Information Access Pattern of Teaching Staff and Research Scholars of Natural Science in Annamalai Univiersity", Indian Journal of Information, Library and Society, Vol. 17 No. 1-2, 2004, pp.17-26.

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