

# Investigate the Use of Library ICT (Information and Communication Technology) Facilities by the Engineering Faculty Members: A Study of Selected Engineering Colleges in Tamil Nadu

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**Abstract** - This study is an attempt to investigate the use of Library ICT (Information and Communication Technology) facilities by the faculty members. Presents results of an investigation to study the contemporary use of Information and Communication Technology (ICT) based facilities, resources and services by the faculty members of Selected Engineering Colleges in Tamil Nadu. The study was performed via a questionnaire survey of the Faculty users and confined only to Engineering Colleges libraries with ICT based resources and services. It discusses the purpose of using ICT by the members of engineering faculty. The data collected were analysed and inferences made based on standard statistical methods. Findings shows that the faculty members are heavily dependent on ICT facilities and resources for their required information and to keep themselves upto-date in their subject area.

**Keywords:** Information and Communication Technology (ICT), Education, Teaching, Engineering Colleges, User Study

## I. INTRODUCTION

In recent year's information and communication technologies have been regarded to have a pervasive influence on the economy as well as other part of society. The ICT is widely considered as the most important revolution and the development of moveable type printing techniques. A country's development depends on the extent of use, speed of access, and skilled application of ICT systems. The utilization of information and communication technology has become an indicator of the level a nation's wealth. The libraries are switching over to ICT based resources and services at an accelerated pace. E – Journals, e- Books, CD-ROM databases, online databases, web based resources and a variety of other electronic resources are fast replacing the traditional resources of libraries. IT is generally defined as the technology that deals with the collection, storage, processing, dissemination and use of information. It refers to the way of storing, processing and transmitting information by adapting latest computing and telecommunication devices ICT stands for Information and Communication Technology and is defined, as "diverse a set of technological tools and resource used to communicate, and to create disseminate, store, and manage information."

## II. REVIEW OF RELATED LITERATURE

Demirarslan and Usuel (2006) reported in their study that for an effective information and technology integration into the teaching learning process, teachers are in use of sufficient equipment and software and access to ICT sources as well as are in need of the support of the administrator. Sudharani (2007) conducted a research study on "Internet as an Information source: A survey of engineering students in Nellore district". The findings of the study indicated that most of the female respondents (77.6%) mentioned that they use yahoo search engine followed by Google (16.9%). The study also observed that majority of the male and female respondents have registered their e-mail addresses in yahoo. In study of Ali found that the Internet was the most widely used service and electronic indexes, abstracts and electronic journals were not heavily used. Another study investigated the use of electronic information resources at the health science centre of Kuwait University and found that time constraints, lack of awareness, and low skill levels were among the primary constraints in the use of electronic information resources in libraries.

## III. ICT IN EDUCATION

With the present infrastructure, class size, availability of teachers, quality of teachers, training of teachers, etc., it is difficult to achieve all the objectives. Further, most of the teachers use Lecture Method which does not have potentiality of achieving majority of above mentioned objectives. The objectives are multi-dimensional in nature, so for their achievement multiple methods should be used in an integrated fashion. At present ICT may be of some use. It is a well known fact that not a single teacher is capable of giving up to date and complete information in his own subject. The ICT can fill this gap because it can provide access to different sources of information. It will provide correct information as comprehensive as possible in different formats with different examples. ICT provides online interaction facility. Students and teachers can exchange their ideas and views, and get clarification on any

topic from different experts, practitioners, etc. It helps learners to broaden the information base. ICT provides variety in the presentation of content which helps learners in concentration, better understanding, and long retention of information which is not possible otherwise. The learners can get opportunity to work on any live project with learners and experts from other countries. The super highway and cyber space also help in qualitative improvement of Teaching – Learning Process. ICT provides flexibility to learners which are denied by the traditional process and method. Flexibility is a must for mastery learning and quality learning. On INTERNET many websites like NPTEL, NMEICT by MHRD, etc. are available freely which may be utilized by teachers and students for understanding different concepts, improving vocabulary, developing Reasoning & Thinking, etc.

#### IV. OBJECTIVES

1. To study gender wise distribution of the respondents
2. To identify the frequency of library visit
3. To evaluate the frequency of Using ICT facilities and resources
4. To examine the purpose of using ICT facilities and resources
5. To find out the obstacles faced by users

#### V. METHODOLOGY

A study is mainly based on the primary data collected from the faculty members of selected engineering colleges in Tamilnadu through a well-designed questionnaire. Totally 50 questionnaires distributed to the faculty members of from that, 40 questionnaire received back with response rate is 80 percent.

#### VI. ANALYSIS AND INTERPRETATION

TABLE I GENDER WISE DISTRIBUTION OF RESPONDENTS

S.No	Gender	No. of respondents	Percentage
1.	Male	23	57.5
2.	Female	17	42.5
	Total	40	100

TABLE II FREQUENCY OF LIBRARY VISIT

S.No	Frequency	No. of respondents	Percentage
1.	Every day	15	37.5
2.	Once in a week	12	30.0
3.	Once in a fortnight	07	17.5
4.	Once in a month	05	12.5
5.	Rarely	01	02.5
	Total	40	100

Table 1 shows that gender wise distribution of the respondents. Among the total number 40 respondents the majority of the respondents are male 57.5 percent and 42.5 percent are female.

Table: 2 frequency of library visit by the respondents. The majorities of the respondents are visit the library every day i.e. 37.5 percent followed by once in a week 30 percent, once in a fortnight 17.5 percent, and once in a month are 12.5 percent.

Table 3 indicates that frequency of using ICT facilities. The majority of the respondents are using internet 22.5 percent followed by CD-ROM and On-line databases are 20 percent, OPAC 15 percent, E-journals are 12.5 percent and

finally E-book are 4 percent. From the table 4 reveals that purpose of using ICT facilities. Majorities of the respondents are using ICT for their research and study 30 percent followed by finding relevant information 22.5 percent, for career development 20 percent and for communication are 17.5 percent.

Table 5 shows that Obstacles faced during access to ICT Resources and services by the users. The majority of the 37.5 percent respondents stated that too much of technical devices the main barrier to access ICT facilities is followed by time consuming 25 percent, limited access to a computer terminal 20 percent, lack of IT knowledge to effectively utilize the services 12.5 percent.

TABLE III FREQUENCY OF USING ICT FACILITIES AND SERVICES

S.No	E-Resources	No. of respondents	Percentage
1.	CD-ROM	8	20.0
2.	Internet	9	22.5
3.	OPAC	6	15.0
4.	Online database	8	20.0
5.	E-Journals	5	12.5
6.	E-Books	4	10.0
	Total	40	100

TABLE IV PURPOSE OF USING ICT FACILITIES AND SERVICES

S.No	Purpose	No. of respondents	Percentage
1.	For research/ study	12	30.0
2.	For communication	07	17.5
3.	Finding relevant information	09	22.5
4.	For career development	08	20.0
5.	Other activities	04	10.0
	Total	40	100

TABLE V OBSTACLE OF ACCESS ICT FACILITIES AND SERVICES

S. No	Description	No. of respondents	Percentage
1.	Too much of technical devices	15	37.5
2.	Time consuming	10	25.0
3.	Limited access to a computer terminal	08	20.0
4.	Lack of IT knowledge to effectively utilize the services	05	12.5
5.	Using ICT facilities often detracts from doing work	02	05.0
	Total	40	100

## VII. CONCLUSION

ICT usage will facilitate development since there will be free flow of information. Faculty members are heavily dependent on ICT facilities and resources for their required information and to keep themselves upto-date in their subject area. Many colleges now understand the importance of ICT and mastering the basic skills and concepts of it as part of the core education. In this study, an attempt has been made to determine the extent of the purpose of using ICT, advantages and disadvantages, and using of search engines for teaching, research, and communication in engineering

colleges.. The above study concludes that the most of the respondents use ICT facilities for their research and study. The too much of information retrieved are the main barrier to access electronic resources. Faculty members who are participated in this survey suggested that formal training and user orientation programs are the crucial steps that can facilitate effective use of ICT based resources and services in libraries. The findings of this study have provided useful insights for Engineering college libraries in Tamilnadu to take appropriate strategies in a rational and systematic manner to increase the use of ICT based resources and services.

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