

Information Need and Seeking Behavior of Technical Students in Engineering college Libraries: a Survey of Gurukul Institute of Engineering and Technology College, Library Kota

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ABSTRACT

Information is very basis of human existence. Information is the essential elements for the progress of education in every branch in engineering and other field. If you don't have information about your education stream then you can't reach your aim. The paper presents the results of a survey of the Information searching habits of students at Gurukul Institute of Engineering and Technology, Kota (Raj.). The major purpose of the survey was to find out the information searching habits of students from different disciplines in engineering colleges. Data was collected through a well structured pre-tested questionnaire and circulated to students for collect the needed information. This study examines several aspects of Library use including frequency of visiting the library, satisfaction with library hours, book searching habits, types of database search, searching techniques, purpose of using library and all the library facility. The paper suggests certain major for improving information need skills of students to make them more competent information users. The study was conducted through by distributing questionnaires among 240 students and then 205 (85.42%) of students responded.

Keywords: Information searching habits, Engineering college students, Information sources, User study.

I. INTRODUCTION

Information is the knowledge of the human in action. It may ideas, facts data and imaginative works of human mind. Which are communicated formally or informally in any format? A closed analysis of the variety of experiences gained by an individual also reveals the relationship of these units of through with associated ideas. Also different individual may derive different set of experience over the same units of through each ones experience on identical units through would remain isolated and the individual subjective knowledge of each person is transformed into knowledge by individual public expression via speech and writing on being shared. (Chinnasamy, 2016)¹

The essential components of libraries are documents, users and librarian. The main goals of libraries are to provide pin pointed information to users. User studies play a vital role in any type of library. The user is the key person in any information system. All the luxuries of information-revolution and problems of information

explosion are centered on the user and his convenience. Understanding the user's needs is half the battle won in providing information services. These studies are also essential to know the difference in satisfaction among the different categories of user. Necessary measures can be taken up in case the users are dissatisfied with the library collection, services and facilities by finding the reason for their dissatisfaction. (Manjula C.)²

II. NEEDS FOR THE STUDY

The concept of information has proved to be elusive one and difficult to define what initiatives the information need has received more attention from research than definition of itself. Today information technology has developed rapidly and has had a huge impact on access to information and on information gathering habits. The librarian and library staff have to know and examine the more attention from research than definition of itself. Today information technology has developed rapidly and has had a huge impact on access to information and on information gathering habits. The librarian and library staff have to know and examine the criteria of information gathering and information utility by users for providing information services. More and more people deliberately and consciously gather information and it has become an integral part of human activity especially in the area of education research and development. The user of information is finding difficulty in identifying and physically locating the relevant information at the time when it is required. In this context, the libraries, being the reservoirs of knowledge and the centres of learning have a greater responsibility in providing the right information to the right user at the right time, in the right form so that user studies are one of the interdisciplinary areas of research in library and information science.

(Manjula C.)²

III. INFORMATION SEARCHING HABITS

Information gathering habits is the behavior with respected to searching various sources, channels including use of those information. The terms information gathering habits, information seeking behavior, information searching behavior and information using behavior are synonymous terms. The study of information gathering habits can stand on its own as a area of applied research where the motive for investigation is pragmatically related to system design and development according to Wilson information seeking behavior results from the recognition of some needs perceived by the user that behavior may take several forms the user may make demands upon formal systems that are customarily defined as information systems such as libraries online services. Information centers or upon systems which may perform information function in addition to a primary non-information such as estate agents offices or car sales agencies that give current information of their field viz, prices and models etc. (Manjula C.)²

IV. REVIEW OF LITERATURE

A number of studies in the recent past were carried out to find the information seeking behavior of users in different types of libraries all over the world. Some of the surveys in the context of students are reviewed here. (Jaspal Kaur Bhatia and Venkata Rao P, 2011)

S.A. FazlurRahman, and M. Tamizhelvan, 2011⁽⁴⁾ in their study are found that the digital library infrastructure is to be improved along with digital resources, and improve the web OPAC facility overnight issue system, book bank system and photocopy facility have to be improved. Majority of the students are satisfied with the availability of number of newspapers, books and periodicals.

Jogender Singh, 2010^[5] examined that academics have welcomed the automation of library. It may also be motivated by a variety of needs, including personal, professional, entertainments etc. It is recommended that library staff focus on assisting users to develop a better image for the library.

R. Lakshmi Sankari, K. Chinnasamy and A.M. Venkatachalam, 2011^[6] pointed out that users are satisfied with library collections and services, but who want training in the use of online information. Although document delivery service is being provided on demand, the researchers pointed out that it would be worthwhile if the library could provide them with indexing, abstracting and interlibrary loan service as well user education about library using must and should be carried out as a seminar or workshop training.

Rajeev Kumar Gaba and KrishanGopal, 2012^[7] revealed that Internet is the most important method of getting information. Periodicals are the first preference of the engineers' for getting their information and govt. documents is the last preference source of information. Above description shows that library staff is very cooperative and helpful.

Tradasal and Matesheela, 2001^[8] revealed that books, newspaper, popular magazines class notes of senior are the most useful sources of information and conducted that the personal attributes, viz gender, year of study medium of institute, area of habitation, stay at hostel marital, status and frequency of visits of the university library have no bearing on the use of the specific sources of information.

V. INFORMATION ABOUT INSTITUTION

The Gurukul Institute of Engineering and Technology college, Kota is one of the best engineering college in Kota division. The library is fully centrally air-cooled. It is affiliated to Rajasthan Technical University, Kota and approved by the All India Council for Technical Education, New Delhi. This is the only college owned and managed by the Technocrats. The Institute is currently running 4 under graduates (B.Tech.), 3 Diploma (Polytechnic) and 1 Trainee (I.T.I.) program. The engineering college libraries has 30985 volumes, Polytechnic has 6514 volumes and for trainee program there are 485 books. There are 45 International and 63 National Journals. Online access DELNET facility are also available for searching journals. Virtual Information lab is situated in library. CDs, DVDs, Audio/Video cassettes are available in the library.

VI. OBJECTIVES

The major objective of the study are to find out:-

- (i) To know the students knowledge about library in their college.
- (ii) To know the searching habits of Gurukul Institute of engineering college students.
- (iii) To know the understand level of the college students about their respective library facility.
- (iv) To compare the searching habits of different stream courses in engineering college students.
- (v) To offer suggestions if any for improvement the library and information service in the institute.
- (vi) To finding the difficulties of engineering students to finding the information and improve the library facility
- (vii) To find the satisfaction level on the availability of the library resources.

VII. HYPOTHESIS

The following hypothesis are find out based on the above study:

- (i) Students are highly satisfied with the library services.
- (ii) Students who visit regularly to the library , there progress are better than other students.
- (iii) The students improve their general knowledge and reading habits.

VIII. RESEARCH METHODOLOGY

In this study the user satisfaction of the library information services , library facilities and library collection in Gurukul Institute of engineering college library. In this survey 4 year under graduate (B.Tech.), 3 year polytechnic (diploma) and 2 year trainee (I.T.I.) students are selected. The 240 questionnaires were distributed to the students and 205 (85.42%) questionnaires received from them. The well-structured questionnaires distributed them by the researcher and the result and the conclusion analyzed according to the objectives.

IX. DATA ANALYSIS AND INTERPRETATION

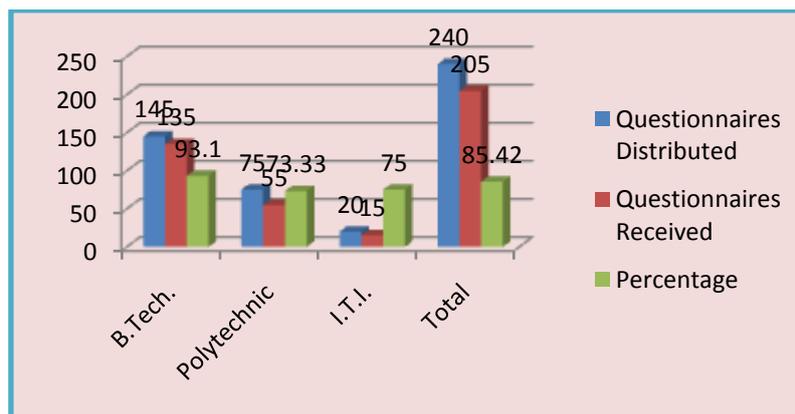
9.1 Questionnaires Responses:

A well-structured questionnaire was distributed to 240 students and 205 of them students are respondents. It is the 85.42% of total questionnaires distributed to the students. In this survey researcher distributed 145 under graduate (B.Tech.), 75 polytechnic (diploma) and 20 trainee students to the questionnaire. All of them 135 under graduate (B.Tech.), 55 polytechnic (diploma) and 15 trainee students are respondents. Questionnaires and their responses are shown in Table 1. This Table shows that their response is 85.42%.

Questionnaires distribution and their responses received are shown: Table – 1

Stream	Questionnaires Distributed	Questionnaires Received	Percentage
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B.Tech.	145	135	93.10
Polytechnic	75	55	73.33
I.T.I.	20	15	75.00
Total	240	205	85.42



Infographics : 1 Questionnaires Responses

The above **Table -1** shows that B.Tech. students responses are 93.10% , polytechnic students responses are 73.33 % and I.T.I. students response are 75%. The highest percentage is B.Tech. students. It shows that when we go for a higher studies, we are more sincere than other courses.

9.2. Frequency of using the Library:

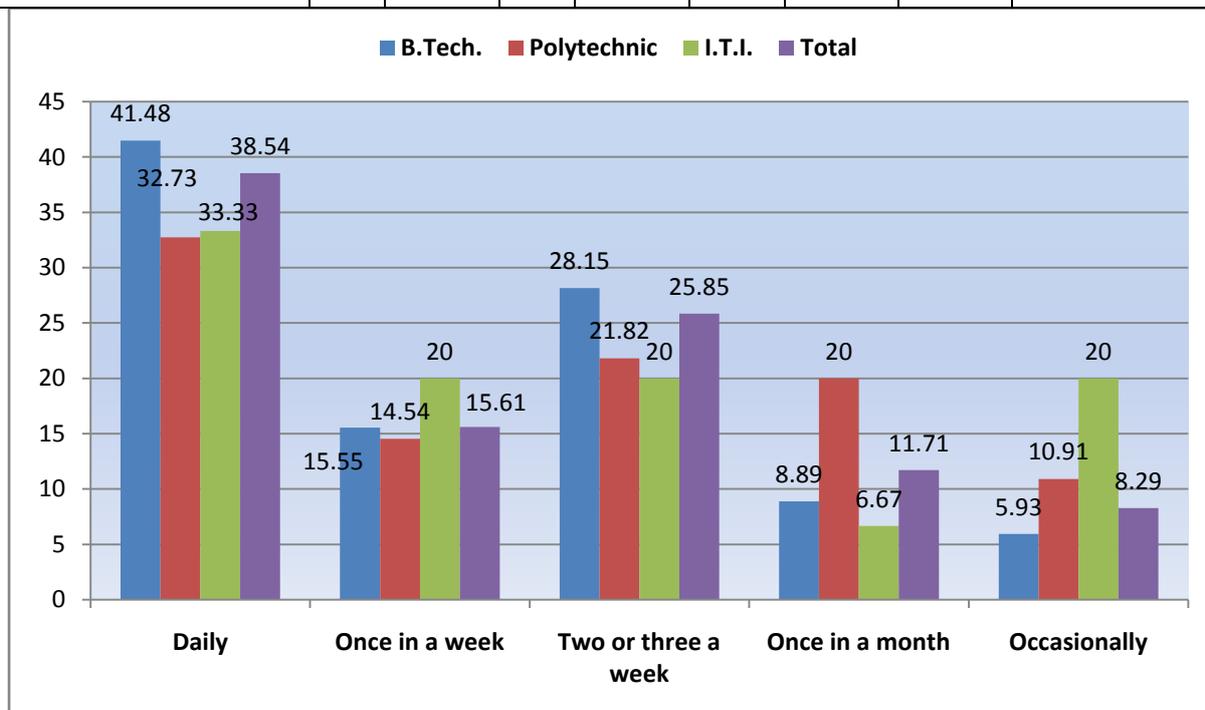
This Table shows the time distribution frequency data of 135 under graduate, 55 diploma, and 15 trainee students of Gurukul Institute of Engineering College, Kota.

Frequency of using the Library: Table – 2

Frequency	B.Tech.		Polytechnic		I.T.I.		Total	Percentage
	No.	%	No.	%	No.	%		
Daily	56	41.48	18	32.73	05	33.33	79	38.54
Once in a week	21	15.55	08	14.54	03	20.00	32	15.61
Two or three a week	38	28.15	12	21.82	03	20.00	53	25.85
Once in a month	12	8.89	11	20.00	01	06.67	24	11.71
Occasionally	08	5.93	06	10.91	03	20.00	17	8.29
Total	135	100	55	100	15	100	205	100



Time Spent	B.Tech.		Polytechnic		I.T.I.		Total	Percentage
	No.	%	No.	%	No.	%		
Half an hour	58	42.96	12	21.82	04	26.67	74	36.09
One hour	46	34.07	32	58.18	08	53.33	86	41.96
Two hour	26	19.26	08	14.55	02	13.33	36	17.56
More than two hour	05	3.71	03	5.45	01	6.67	09	4.39
Total	135	100	55	100	15	100	205	100



Infographics : 2 Frequency of using the Library

The Table – 2 shows that in B.Tech. students 41.48% visit daily, 15.55% students visit once in a week, 28.15% students visit two or three a week, 8.89% students visit once in a month and 5.93% students visit occasionally. In Polytechnic students 32.73% visit library daily, 14.54 students visit once in a month, 21.82% students visit two or three a week, 20% students visit once in a month and 10.91% students visit occasionally in the Library. In I.T.I. students 33.33% students visit daily, 20% students visit once in a month, 20% students visit two or three a week, 6.67% students visit once in a month and 20% students visit occasionally in the Library. The total number of students in engineering 38.54% students visit daily, 15.61% students visit once in a week, 25.85%

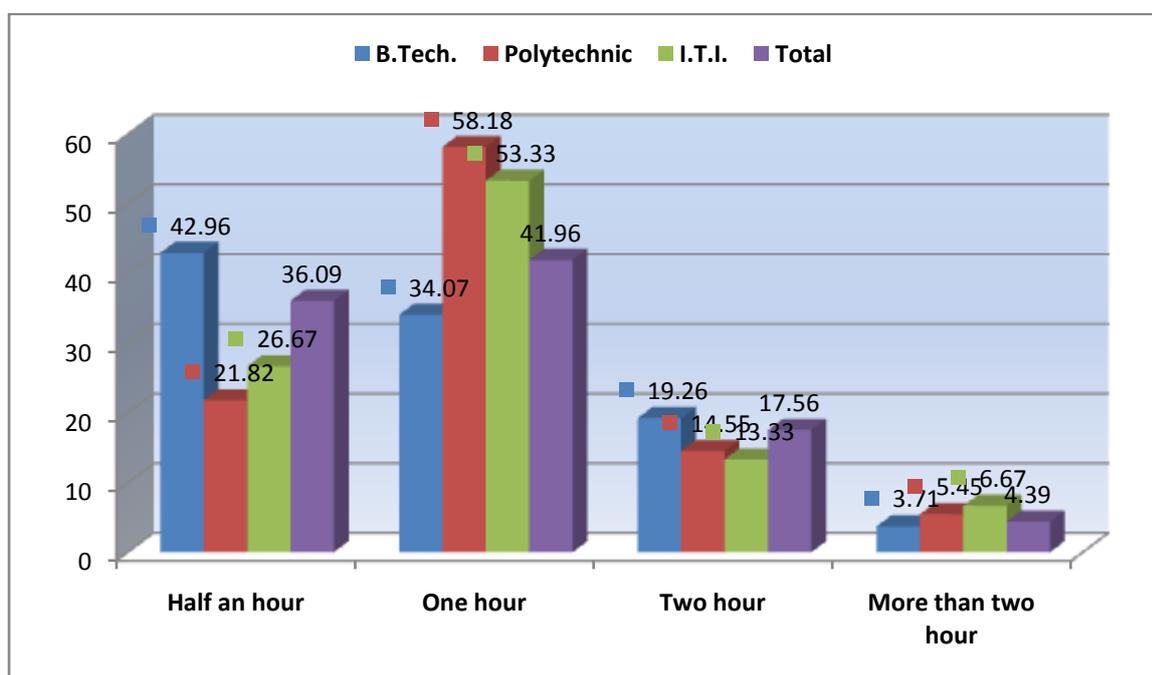


students visit two or three a week and 8.29% students visit occasionally in the Library. Hence, it can be concluded that most of the students in engineering use the library daily.

9.3. Time Spent in Library:

This Table – 3 shows the time spent in the Library by the engineering students of Gurukul Institute of Engineering and Technology, Kota. It shows the relation between time and Information searching habits.

Time Spent in the Library by the Engineering Students : Table – 3



Infographics : 3 Time Spent in Library

The Table – 3 is evidence that in B.Tech. students 42.96% students spent half an hour, 34.07% students spent one hour, 19.26% students spent two hour and 3.71% students spent more than two hour in the Library. In polytechnic students 21.82% spent half an hour, 58.18% students spent one hour, 14.55% students two hour and 5.45% students spent more than two hour in the Library. In I.T.I students 26.67% students spent half an hour, 53.33% students spent one hour, 13.33% students spent two hour and 6.67 students spent more than two hour in the Library. The total students of engineering spent - 36.09% half an hour, 41.96% spent one hour, 17.56% spent two hour and only 4.39% students more than two hour for searching their Information in Library. Hence, the conclusion is that most of the engineering students spent one hour for retrieving their information.

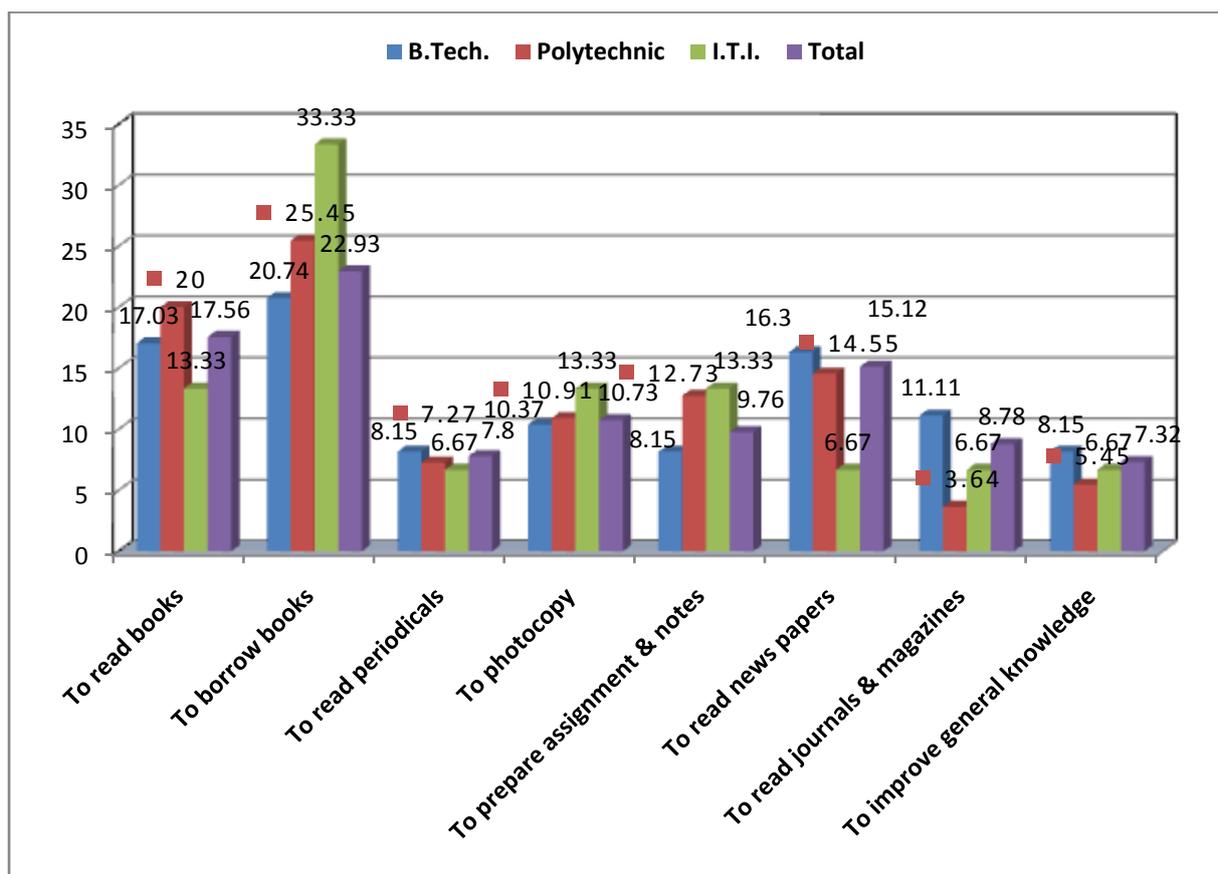
9.4.Purpose of using the Library:

The Table – 4 shows the purpose of engineering students to visit the Library.



Purpose	B.Tech.		Polytechnic		I.T.I.		Total	Percentage
	No.	%	No.	%	No.	%		
To read books	23	17.03	11	20.00	02	13.33	36	17.56
To borrow books	28	20.74	14	25.45	05	33.33	47	22.93
To read periodicals	11	8.15	04	7.27	01	6.67	16	7.80
To photocopy	14	10.37	06	10.91	02	13.33	22	10.73
To prepare assignment & notes	11	8.15	07	12.73	02	13.33	20	9.76
To read news papers	22	16.30	08	14.55	01	6.67	31	15.12
To read journals & magazines	15	11.11	02	3.64	01	6.67	18	8.78
To improve general knowledge	11	8.15	03	5.45	01	6.67	15	7.32
Total	135	100	55	100	15	100	205	100

Purpose of using the Library by the Engineering students: Table – 4



Infographics : 4 Purpose of using the Library

The Table – 4 is the evidence that in Under graduate student 17.03% come to read books, 20.74% students come to borrow books, 8.15% students to read periodicals, 10.37% come to prepare assignment & notes, 16.30% come to read news papers, 11.11% come to read journals & magazines and 8.15% students come to the

library for improve their general knowledge. In Diploma student 20% come to read books, 25.45% come to borrow books, 7.27% come to read periodicals, 10.91% come to photocopy, 12.73% come to prepare assignment & notes, 14.55% come to read news papers, 3.64% come to read journals & magazines and 5.45% come to improve their general knowledge. In trainee program 13.33% come to read books, 33.33% come to borrow books, 6.67% come to read periodicals, 13.33% come to photocopy, 13.33% come to prepare assignment & notes, 6.67% come to read news papers, 6.67% come to read journals & magazines and 6.67% come to improve their general knowledge. The mostly students are using the Library for borrow the books. Hence, the conclusion is the most of the engineering students come to the library for borrow books and after that they come for read books.

9.5. Satisfaction of Library Facility:

The Table – 5 shows about the Satisfaction of Library facility. Through this table the Librarian can improve the library facility provided to the engineering students.

Satisfaction of Library facility : Table - 5

Facilities	Level of Satisfaction													Percentage	
	B.Tech.				Polytechnic				I.T.I.				Total		
	Satisfied		Not satisfied		Satisfied		Not satisfied		Satisfied		Not satisfied		Satisfied		Not satisfied
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.		%
Seating for reading	112	82.96	234	17.04	426	76.36	1304	23.64	137	86.67	20	13.33	8146	18.54	100
Drinking water	889	65.19	471	34.81	342	61.82	210	38.18	090	60.00	060	40.00	6390	36.10	100
Lighting	122	90.37	139	9.63	464	83.64	090	16.36	143	93.33	010	6.67	8878	11.22	100
Ventilation	961	71.11	399	28.89	389	69.09	170	30.91	120	80.00	030	20.00	7120	28.78	100
Total	135				55				15				205		

The Table – 5 is the evidence that in B.Tech. students 82.96% are satisfy & 17.04% are unsatisfied to seating for reading facility, 65.19% students are satisfy and 34.81% students are unsatisfied of Drinking facility,



90.37% students are satisfy and 9.63% are unsatisfied of Lighting facility, 71.11% students are satisfy and 28.89% students are unsatisfied of ventilation facility. In polytechnic there are 76.36% students are satisfy of seating for reading facility and 23.64% of students are unsatisfied of seating for reading facility, 61.82% students are satisfy of drinking facility and 38.18% of students are unsatisfied of drinking facility, 83.64% are satisfy of lighting facility and 16.36% are unsatisfied of lighting facility, 69.09% are satisfy of ventilation facility and 30.91% are unsatisfied of ventilation facility. In I.T.I. 86.67% students are satisfy of seating for reading facility and 13.33% students unsatisfied of seating for reading facility, 60% of students satisfy of drinking facility and 40% students unsatisfied of drinking facility, 93.33% students satisfy of Lighting facility and 6.67% students unsatisfied of Lighting facility, 80% students satisfy of ventilation facility and 20% students unsatisfied of ventilation facility. Hence, the conclusion is that most of the students are satisfy from all the facility provided to the students by the Library.

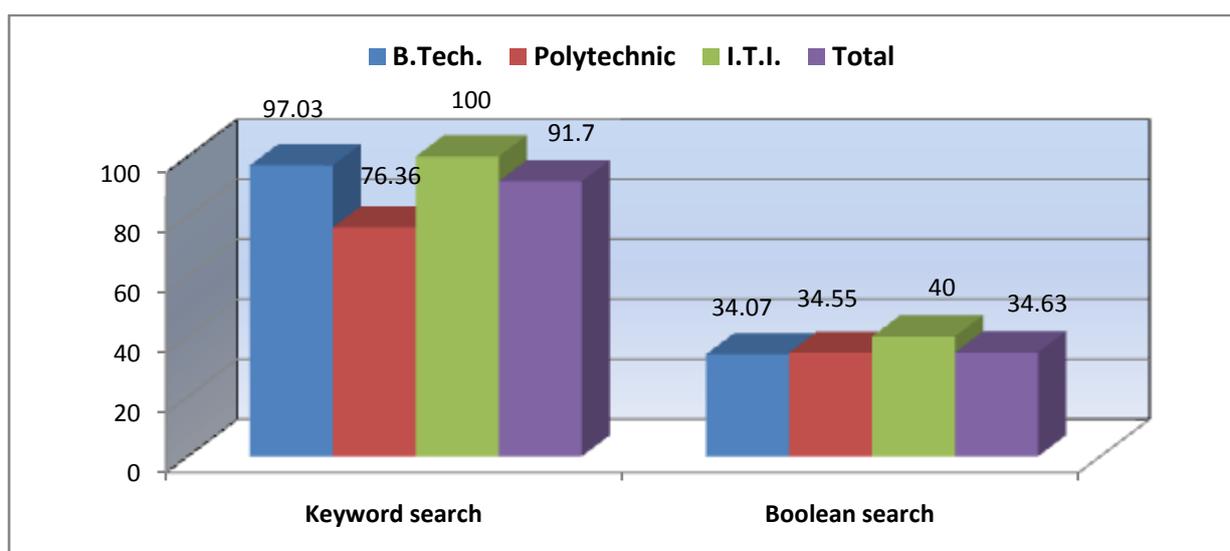
9.6. Search Techniques:

The Table – 6 shows the search techniques of the student in Gurukul Institute of Engineering and Technology college library to search their related information.

Search Techniques of Engineering Students in Library : Table – 6

Search Techniques	B.Tech.		Polytechnic		I.T.I.		Total	Percentage
	No.	%	No.	%	No.	%		
Keyword search	131	97.03	42	76.36	15	100	188	91.70
Boolean search	46	34.07	19	34.55	6	40	71	34.63

Note: Respondents were permitted to tick more than one answer



Infographics : 6 Search Techniques



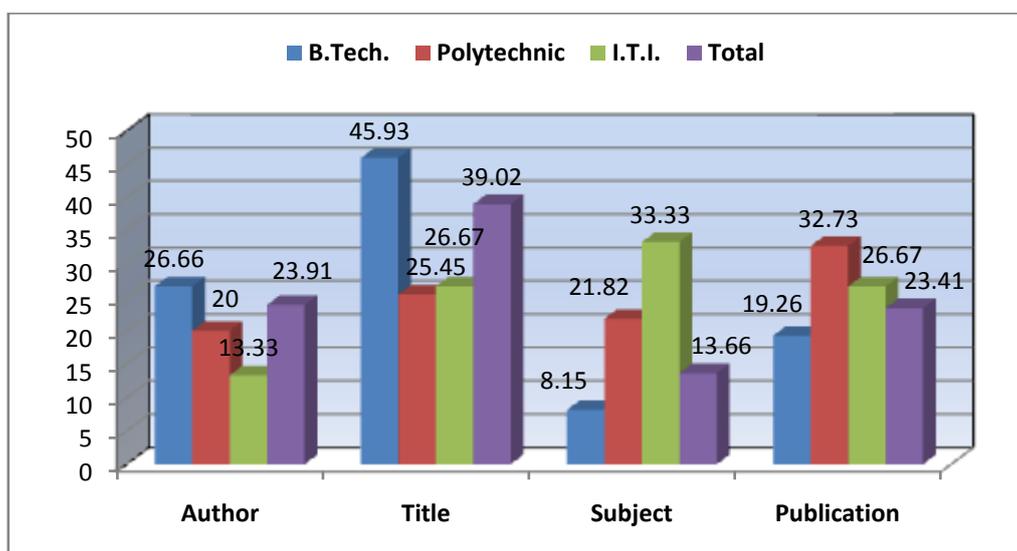
The **Table – 6** is the evidence that in B.Tech. students 97.03% students use keyword search techniques and 34.07% students use Boolean search techniques. In Polytechnic 76.36% students use keyword search techniques and 34.55% students use Boolean search techniques. In I.T.I. 100% students use keyword search and 40% students use Boolean search techniques. Hence, the conclusion is that most of the students use the keyword search techniques for their required information.

9.7. Types of Search Patterns:

The **Table – 7** shows the search patterns for the Engineering students that how they fulfill their required information.

Types of Search Patterns for Engineering Students

Approaches	B.Tech.		Polytechnic		I.T.I.		Total	Percentage
	No.	%	No.	%	No.	%		
Author	36	26.66	11	20.00	2	13.33	49	23.91
Title	62	45.93	14	25.45	4	26.67	80	39.02
Subject	11	8.15	12	21.82	5	33.33	28	13.66
Publication	26	19.26	18	32.73	4	26.67	48	23.41
Total	135	100	55	100	15	100	205	100



Infographics : 7 Types of Search Patterns



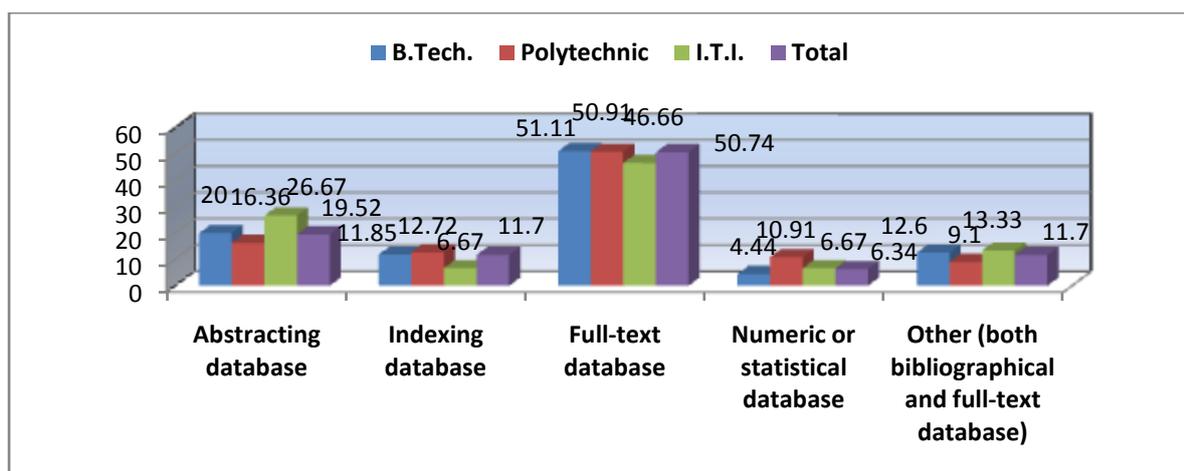
The **Table – 7** shows that in B.Tech. 26.66% students search their books by Author, 45.93% students search by Title, 8.15% students search by Subject and 19.26% students search by Publication. In polytechnic 20% students search their need by Author, 25.45% students search by Title, 21.82% students search by Subject and 32.73% students search by publication. In I.T.I. 13.33% students search by author, 26.67% students search by title, 33.33% students search by subject and 26.67% students search by publication. Hence, the conclusion is that most of the Engineering students use Title search patterns (39.02%) for required information.

9.8. Types of Database:

The Table – 8 shows distribution of engineering students search different types of data

Types of Database search by engineering students

Types of Database	B.Tech.		Polytechnic		I.T.I.		Total	Percentage
	No.	%	No.	%	No.	%		
Abstracting database	27	20.00	09	16.36	4	26.67	40	19.52
Indexing database	16	11.85	07	12.72	1	6.67	24	11.70
Full-text database	69	51.11	28	50.91	7	46.66	104	50.74
Numeric or statistical database	06	4.44	06	10.91	1	6.67	13	6.34
Other (both bibliographical and full-text database)	17	12.60	05	9.10	2	13.33	24	11.70
Total	135	100	55	100	15	100	205	100



Infographics : 8 Types of Database

The **Table – 8** shows that in B.Tech. students 20% of students use abstracting database, 11.85% students indexing database, 51.11% students use full-text database, 4.44% students use numeric or statistical database and 12.60% students use both bibliographical and full-text database. In polytechnic 16.36% of students use

abstracting database, 12.72% students use indexing database, 50.91% students use full-text database, 10.91% students use numeric or statistical database and 9.10% students use both bibliographical and full-text database. In I.T.I. students 26.67% of students use abstracting database, 6.67% students use indexing database, 46.66% students use full-text database, 6.67% students use numeric or statistical database, 13.33% students use both bibliographical and full-text database. Hence, the conclusion is that most of the engineering students use full-text database (50.74%).

X. SUGGESTIONS

- (i) Library should focus to maintain more online resources.
- (ii) Library should provide an user education program to teach the students how they can identify their required information.
- (iii) Library should take more International and National Journals in the Library.
- (iv) Photocopy and computer printout facility should be provided to the students with nominal charges.

XI. CONCLUSION

Librarian must help the students to provide their required information and understand information seeking behaviour of user. After this survey the result is that user is highly satisfied with the library collection, library physical facility, library resources. Librarian must educate the students which can help the students for their required information. Librarian must be carried out a seminar or workshop program in the college.

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