Information Resources and their Use in the Engineering College Libraries of Dakshina Kannada and Udupi Districts: A Study

By

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ABSTRACT

Engineering students, faculty members, and research scholars function in a constantly changing information environment and they need to keep up to date in their study, research and academic activities. Not only does information facilitate their ability to make valid decisions and statements about academic and research activity, but information also enables engineers to get quality information to fulfill their desired needs. User studies are starting to be recognised as an important part of the information package. Information providers like a library and information centre, need to be aware of their users' information requirements as well as their information-retrieving methods in order to provide better services. A well-established and well-designed information system to facilitate the users of a library is essential for the success of any institution.

The title of the study is “Information Resources and their Use in the Engineering College Libraries of Dakshina Kannada and Udupi Districts: A Study”

The objectives of the study are,

1. To know the information resources, facilities, and services provided by the engineering college libraries in Dakshina Kannada and Udupi districts,
2. To understand the information requirements of the students, faculty members, and research scholars,
3. To know the preference and use of information resources and services in the colleges under study,
4. To identify the problems faced by the respondents in the use of information resources and services,
5. To assess the satisfaction level of the respondents on the available information resources facilities and services of the libraries under study,
6. To suggest measures for improvement in the library and information services in the colleges under study.

The study is predominantly quantitative, with the following hypotheses to establish the information search strategies and seeking behaviour and problems that students face.
1. There is significant difference in the preference attached to the channels of information by students, faculty members, and research scholars.

2. There is significant difference in the preference of information resources among the respondents of various categories.

3. The respondents do experience inadequacy of information resources in the existing engineering college library collection.

4. There is significant difference in the satisfaction level of the facilities and services among the respondents of various categories.

5. Research scholars attach more importance to electronic resources than print resources, and there exists significant difference in the preference among the category of respondents.

The scope of the study is:

1. The study aims to understand the information requirements of the students, faculty members, and research scholars, and how the library meets those information requirements.

2. The study looks into the current status of the information provision, assesses the existing information resources, determines the usage of resources by the respondents and emphasises on the need for improvement in the information resources, facilities, and services of the respondent engineering college libraries.

The limitations of the study are:

1. The study is limited to the students, faculty members, and research scholars, only.

2. The study also does not cover the Post Graduate students, limited to the engineering college libraries in Dakshina Kannada and Udupi districts.

For data collection, the survey method was selected using a questionnaire. The survey collected information on the students, faculty members, and research scholars' information need and information seeking pattern, their awareness, importance and satisfaction level of information resources, facilities and services provided by the engineering college libraries under study. The researcher designed a questionnaire to determine both the information needs and the means of obtaining information among the students, faculty members, and research scholars of Dakshina Kannada and Udupi districts. Variables used in this study are - Students, Faculty Members and Research Scholars, College, ability of the person to identify the need for information, ability to construct strategies for locating information, ability to locate and access the information, ability to compare and evaluate the information obtained from different sources, ability to organise, apply and communicate with others, ability to synthesise and create new knowledge.

The engineering colleges in Dakshina Kannada and Udupi districts which are included in the present study according to their year of establishment are presented in a chronological order as follows:
The distribution of questionnaires among different colleges is shown in the following Table

<table>
<thead>
<tr>
<th>SI No</th>
<th>Colleges</th>
<th>Total Population</th>
<th>Questionnaire Distributed</th>
<th>Responses Received</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NITK</td>
<td>2884</td>
<td>258</td>
<td>221</td>
<td>85.6</td>
</tr>
<tr>
<td>2</td>
<td>KVGCE</td>
<td>1335</td>
<td>88</td>
<td>78</td>
<td>86.6</td>
</tr>
<tr>
<td>3</td>
<td>VCET</td>
<td>960</td>
<td>64</td>
<td>56</td>
<td>87.5</td>
</tr>
<tr>
<td>4</td>
<td>CEC</td>
<td>1146</td>
<td>76</td>
<td>67</td>
<td>88.1</td>
</tr>
<tr>
<td>5</td>
<td>PACE</td>
<td>1342</td>
<td>92</td>
<td>81</td>
<td>88.0</td>
</tr>
<tr>
<td>6</td>
<td>SJEC</td>
<td>1336</td>
<td>90</td>
<td>79</td>
<td>87.8</td>
</tr>
<tr>
<td>7</td>
<td>SDIT</td>
<td>765</td>
<td>51</td>
<td>46</td>
<td>90.1</td>
</tr>
<tr>
<td>8</td>
<td>SIT</td>
<td>1145</td>
<td>75</td>
<td>66</td>
<td>88.0</td>
</tr>
<tr>
<td>9</td>
<td>MIT</td>
<td>3182</td>
<td>247</td>
<td>239</td>
<td>96.7</td>
</tr>
<tr>
<td>10</td>
<td>NMAMIT</td>
<td>2022</td>
<td>141</td>
<td>118</td>
<td>83.7</td>
</tr>
<tr>
<td>11</td>
<td>MIET</td>
<td>766</td>
<td>51</td>
<td>47</td>
<td>92.1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>16883</td>
<td>1233</td>
<td>1098</td>
<td>89.0</td>
</tr>
</tbody>
</table>

After the survey, the collected data was analysed by using software packages like SPSS and MS EXCEL. Further, Chi square test, ANOVA, Factor Analysis and Standard Deviation, Mean and Mean Percentage have been used to study the association between the different variables – students,
faculty members, and research scholars as well as the and specialities of the respondents that influence the use of information resources. P value less than 0.05 is considered as statistically significant.

- It has been found that a greater part of the respondents (91.2%) prefer friends/colleagues and the Internet (79.8%) as their main channel of information seeking. Students and faculty members prefer friends/colleague as their main channel whereas research scholars prefer the internet as their main channel for seeking information.

- It has been revealed that the respondent’s main reason to use the library is to borrow books (94.1%), read newspapers and magazines (62.7%), and subject journals (printed) (48.8%).

- It is interesting to note that students (92.6%) and faculty members’ (89.8%) purpose for seeking information is for academic work, whereas research scholars seek information for research work (93.9%).

- It has been revealed that majority of the respondents (73.9%) prefer the catalogue/OPAC to search the information resources from the library, followed by assistance of library staff (73.6%). Research scholars and faculty members seek the catalogue/OPAC for locating information resources, whereas students seek the help of library staff.

- It has been revealed that most of the students and faculty members prefer the notice/circulars as their mode of communication, whereas research scholars prefer the library website/web pages as their mode of communication.

- It has been found that, majority of the respondents prefer the print resources (62.9%) over the electronic resources (37.1%). Students prefer the print resources more as compared to research scholars and faculty members.

- It is found that textbooks (86.33%) are the most important information resources among the respondents, followed by newspapers and magazines (71.98%), and online journals (61.54%). The least important information resources are CD/DVD ROMS, conference/seminar proceedings and project reports.

- It is noteworthy that majority of the respondents are moderately satisfied (61.60%) with the existing information resources available in their library. Text books are the great cause of concern in the colleges under study.

- It is evident that the respondents are not much satisfied with the drinking water, toilets, and equipments facility of their libraries.

- Majority (77.6%) of the respondents use the internet to search specific information required for academic activity, e-mail communication (59.6%), and to browse online journals (56.8%). Majority of the faculty members (79.2%) and research scholars (77%) are satisfied with the internet facility compared to the students (62.4%).

- It is noteworthy that majority (62.6%) of the respondents are not aware of the INDEST-AICTE consortium. Those who are aware use the IEL (44%), Springer Link (40.9%), and Science Direct (38.9%) electronic resources.

- Majority of respondents (61.9%) are not aware of DELNET facility at their library. Those who are aware (48.1%) make use of this facility.
• Majority of the respondents are not much aware of the current awareness service (44.6%) and inter-library-loan service (39.3%) offered by their libraries

• It is noteworthy that majority (69.6%) of the respondents are satisfied with the library services offered by their libraries. Students are less satisfied compared to research scholars and faculty members.

• Majority (60.4%) of the respondents opined that current journals are not available in time in their respective libraries.

• Above 95% of the respondents opined that the electronic resources have helped them to improve the quality of their study, teaching, and research.

• Majority (69.7%) of the respondents expressed that they are satisfied with the attitude of their library staff.

• It is evident that the two main problems they faced while seeking information materials are lack of time (49.8%) and limited access to computers with IT infrastructure (48.4%).

• Majority (56.6%) of the respondents solve their problems independently while searching information.

• 34.8% of the respondents expressed that their problems are moderately considered by the librarian/library staff.

• It is found that majority (70.7%) of the respondents expressed that they need training in the area of awareness to library resources and services and in the use of library catalogue/OPAC (59.7%).

The entire hypothesis formulated in the present study is tested and the results are:

• Hypotheses (1) - There is significant difference in the preference attached to the channels of information by the students, faculty members, and research scholars, is proved to be correct.

• Hypotheses (2) - There is significant difference in the preference of information resources among the respondents of various categories, is partially proved.

• Hypotheses (3) - Respondents do experience inadequacy of information resources in the existing engineering college libraries, is proved to be factual.

• Hypotheses (4a) - There is significant difference in the satisfaction level of facilities among the respondents of various categories, is rejected.

• Hypotheses (4b) - There is significant difference in the satisfaction level of library services by the respondents of various categories, is accepted.

• Hypotheses (5) - Research scholars attach more importance to electronic resources than print resources and there exists significant difference in the preference among the category of respondents, is proved.
Based on the findings of this study the following suggestions have been given to engineering college librarians:

- Deliver current information through books and journals (Print/Online)
- Provide value added library services through latest technology
- Provide access to every document in the library through library Web-OPAC
- Provide essential facilities and enhance the IT infrastructure of the libraries
- Promote and optimize the use of the Internet
- Boost the use of electronic resources with Web 2.0 technology
- Extend the working hours of the library on Sundays and Public Holidays
- Embed information literacy course in the curriculum
- Provide user education and training
- Conduct training program for the library staff
- Provide desktop access for information
- Initiate digitization of important information resources
- Create Institutional Repository
- Promote the use of information resources and services
- Evaluate the library resources, facilities, and services regularly to meet the changing needs of the users
- Provide multi-user access to important IEL online resource to use it effectively

The findings of this study indicate that information seeking may be motivated by a wide variety of needs including, personal and professional needs. The successful operation of a library depends to a large extent on the type of library collection. The collection should meet the needs and requirements of the users. Consequently, librarians must be aware of how students seek information. Knowledge of user information needs and information-seeking behaviour is imperative to develop a valuable collection, and to improve the facilities and services.

The entire study is divided into 7 chapters as follows:

Chapter I – Introduction - The introductory chapter elaborates the research theme and explains its need and significance.

Chapter II - Review of literature - This chapter attempts to present a review of the literature relating to earlier studies.

Chapter III – Research Methodology - This chapter describes the research process including, hypotheses and population of the study and also the instruments used for data collection, response pattern, techniques used for data analysis, and the scope and limitations of this study.

Chapter IV - Profile of engineering college libraries - This chapter will give physiological and demographical features of the engineering colleges of Dakshina Kannada and Udupi districts.
Chapter V - Data analysis- This Chapter is distributed into two parts Part I and Part 2
Part I contains the data related to information resources, facilities, and services of the engineering college libraries under study, while in the Part 2 the data collected is structured, analysed, and presented with interpretations in light of the objectives of this study

Chapter VI - Research Findings- It provides an opinion survey of the user's information needs, use pattern of information resources, facilities, and services

Chapter VII- Suggestions and Conclusion- On the basis of the data analysis and research findings, pa final conclusion is drawn along with recommendations