1. TITLE OF RESEARCH WORK: “EVALUATION OF LIBRARY SERVICES OF ENGINEERING COLLEGES IN KOTA REGION”

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INTRODUCTION TO RESEARCH WORK

Libraries are said to be the backbone of any institution or the organization to which they are attached. They are supposed to provide relevant information to its users in time. Now a day’s information & communication technology has influenced all the parts of human life. Information & Communication Technology (ICT) is now becoming more prevalent in every type of libraries (Dhimna, 2001; Dhiman, 2003). Hence, the role of information professionals has centered around the understanding and efficient exploitation of technological resources to cater to the increasing information dependence of the society. This requires proper appreciation of the impact of technology on the concept of libraries and their services (Shrivastava, 2007).

The information needs of the users of libraries - whether they are academic college or the engineering colleges have also become complex and problematic due to the tremendous publications and interdisciplinary researches that are being promoted at the level of higher education. The librarians working in these institutions need to pay sincere attention to acquire appropriate and need based literature in these subjects to the utmost satisfaction of their academic staff and students. In this critical situation, librarians should have a clear understanding of their users’ needs and their information seeking behavior so that the libraries could satisfy the user needs as well as improve the existing services accordingly.

Academic libraries in engineering institutions are prominent information organizations and play a crucial role in fulfilling the information needs of users of
professional disciplines. The use of technological information emanating from these libraries contributes not only to national development but also to the technical manpower development in engineering fields. Teachers in engineering subjects need constant updating of latest information in their respective field of interest. Latest information in their subjects enables them to support their teaching needs and myriad research requirements. In order to make the teaching effective, the teachers need right information sources to consult that are only available in the libraries. A good teacher always consults different information sources other than textbooks. Even teachers need textbooks of different authors and publishers, which may not be possible on one’s part to procure at personal level. Engineering disciplines in particular are special branches of professional knowledge, which frequently require updating by a teacher. Here the library acts as the facilitator and provider of need-based information to such highly intellectuals and academicians.

Generally the academic librarians show little interest in having user input for making decisions, but currant drive to adopt total quality management and just –in-time concept there is an emerging imperative for engineering college libraries for both developed and developing countries to build an ability to clearly show responsiveness to decision making. The librarians working in these institutions should pay paramount importance to acquire appropriate and need based literature in those subjects to the utmost satisfaction of their academic staff and students. Unless the needs are precisely determined, it is difficult to satisfy their requirements and develop an appropriate information system. Hence, identifying
information needs and determining information seeking behavior of teachers of engineering institutions is the crux of the problem for the development of library and information system.

**TECHNICAL EDUCATION AND ENGINEERING COLLEGE LIBRARIES**

The history of imparting formal technical education in India can be traced back to mid 19th century, although it got momentum in 20th century with the set up of constitution of technical education committee on the Central University Board of Education (CABE) in 1943, and formation of All India Council of Technical Education (AICTE) which was established in November 1945 first as an advisory body and later on in 1987 given statutory status by an Act of Parliament. Though, the basic thrust of development planning was on growth in first few decades after independence, but the globalization of the education system has led the establishment of various universities and institutes of higher education in the recent years.

The development of technical education in the Rajasthan state shows that there was no dearth of institution for higher professionals and technical education in the state. But in the recent years, the industries have expanded their wings in the land of Rajasthan, and these require huge manpower both - technical and non-technical. Definitely the demand for technical manpower is high to fulfill the void and much stress has given on expansion, modernization and reorientation of technical education. To attain the purpose, new engineering colleges and technical institutes are being opened up and existing once are being upgraded. The establishment of Rajasthan Technical University has also witnessed the new revolution towards this initiative.
Rajasthan technical university (RTU) is located in Kota in the state of Rajasthan. It was established in 2006 by the Government of Rajasthan to enhance the technical education in the state. The university has been established in the campus of University College of Engineering Kota (Previously known as Engineering College, Kota ), which is located on the Rawatbhata Road, about 14 kms from Kota Railway Station and 10 kms from Kota Bus stand. The University currently affiliates about 135 Engineering Colleges, 35 MCA Colleges, 142 MBA Colleges, 08 M.Tech Colleges and 03 Hotel Management and Catering Institutes. More than one lac students study in the various institutes affiliated to the university.

The university aims to provide quality technical education that may help the Rajasthan in its technical development and will boost technical environment in the country. The university offers almost all the disciplines related to technical education including Bachelors of Technology, Master of Technology, Master of Business Administration, Master of Computer Applications, and Bachelors of Hotel Management and Catering Technology etc.

Engineering college libraries like any other college libraries are affiliated to the institutions, that contribute primarily to the teaching and learning process by providing various information and learning resources to the clientele for their successful persuasion of the course programs offered by the institution. AICTE- the regulatory body for technical education in India has framed elaborate norms for libraries of the engineering colleges
offering different technical courses. For an institution, offering P.G.courses the position of librarian is placed under the technical support staff. It further prescribes that the library should be provided with necessary staff to enable it to be available to the staff and student for at least 12 hours in a day. It also suggests that the library should consist of one librarian, one assistant librarian and four library assistants.

AICTE has also recommended that the central library of the institution for admission of 240 students per year should have a carpet area of 400 sqm. There shall be a seating capacity for 25% the total student admitted in the institute. At the time of the establishing an engineering institute with three branches, there should be a minimum of 4000 volumes in library, i.e. - each branch having 250 titles with four multiple copies. It further requires that in subjects like Mathematics, Humanities, Physics and Chemistry etc., there should be total of 1000 volumes. The library should have facility of at least two computers offering digital contents with networking and multimedia facilities. Apart from this, there should be a minimum of 9 technical journals -6 Indian and 3 international for each branch of engineering.

**REVIEW OF LITERATURE**

The corpus of literature available on evaluation of library services in engineering colleges were carefully comprehended in order to make the base of this research and some of the key and interesting papers on this topic was thoroughly reviewed.

Sanjeev Kumar and Mishra (1993) found that in NIFT library users were visiting library mainly for borrowing books followed by use of reference material and periodicals.
Bajpai (1994-95) study revealed that librarians often found it difficult to deal with teaching and non-teaching staff members regarding return of books. Chopra (1995) has discussed the problems being faced by college libraries in Punjab. These were grouped as problems related to management, principals of colleges and library staff. Raina and Dayal (1997-98) in their study of Indian Institute of Management, Lucknow found that library collection was used satisfactorily. Microfilms’ use were very less use in comparison to other documents. But collection on some subjects needed strengthening.

Singh (1999) has conducted a survey on IIT library Delhi, and she has taken working hours, physical facilities, membership, purpose of visit to the library, use of library catalogue and document collection as the main points for consideration in the study. She has examined various services rendered by the library and also studied different aspect of library administration and management in her survey. She has also discussed different suggestions given by the librarians to improve the services.

Kumbar and Lohar (2002) explored the use of resources, services and physical facilities of two college libraries. Another study by Singh (2002) reveals that faculty members’ main purpose of visiting library was to prepare notes for students. Journals and textbooks were not considered very adequate.

Choukhande and Kumar (2004) conducted a study named as “Analytical Study of Information Needs and Use Pattern of Faculty Members and Research Scholars of Amravati
University.” Authors concluded that the teachers preferred book trade catalogue, bibliographies, indexes, abstracts, addition lists issued by library and periodicals to know current literature in concerned fields. They have also concluded that the purpose of user’s visit to library largely depends up on the free time available to them. Pandita (2004) has brought forward that the policy of content development needs to be worked out and redesigned for collection development.

Koovakki and Jalaja (2005) have ascertained the level of satisfaction of career seekers in the resources and services of university, college and public libraries. Survey revealed that users using university libraries were most satisfied and using public libraries were least satisfied. A difference was also observed between the level of satisfaction of male and female users. Mandal and Panda (2005) have discussed the different dimensions of collection development and suggested for the staff training, provision of adequate staff and funds, appropriate infrastructure in IT and a need based collection. Purnima (2005) study on the “Information Needs in Higher Education: A Study of College Faculties in Manipur.” ascertained the information needs of college and university faculties. The survey reveals that majority of the college faculty members needed information for academic work, whereas university faculty members needed information to update knowledge and for research work. Most of the faculties of colleges and university were unaware of the use of IT, because of lack of infrastructure in libraries.
Juneja (2006) has studied library collection and services of various technical colleges imparting education in Chandigarh. Khaiser and Madhu (2006) study on the “Expectations and Perceptions of the Users of the National Law School of India University Library (NLSIU)”, ascertained the expectations and perceptions of users about the facilities and services offered by National Law School of India University Library. It was found that 88% users visited library daily, but faculty members were not the regular visitors to the library. All the users rated library as an excellent, very good or good. Naushad Ali and Hasan (2006) undertook a survey of teachers to assess the library and information services of Aligarh Muslim University library under title “Library and Information Services in Central Library of Aligarh Muslim University from the Teacher’s Point of View: A Survey”. Survey brought to light that most of the users were visiting library to collect teaching material and borrow books, while approximately 14% teachers visited for research purpose. Majority of the teachers were not satisfied with overall functioning of library. Rajeev Kumar and Kaur (2006) have had examined the Internet use by teachers and students and attempted to find whether the Internet can replace libraries? Survey revealed that 77.5% users felt that the Internet can not replace library services, whereas 22.5% responded otherwise, because they find it easy to locate information on the Internet than in library.

A study by Kumbar et al. (2007) on the extent of use of periodical literature by agriculture scientists reveals that that most of the users considered print journals as better version than electronic journals, as 74.36% chosen print journals and 25.64% opted for electronic version. Lohar and Kumbar (2007) have found that 52.25% users spent less than
an hour and more than half an hour only in libraries per week. Only a small fraction of users was found familiar with inter library loan service. Nikam and Chandershekra (2007) have examined the expectations and perceptions of users including children, young adults, women and old towards public libraries. Opinions of 200 users were collected through a structured questionnaire. About 90.50% users considered public libraries either as more important or extremely important. Users were not satisfied with the helpfulness of library staff, as they did not find it easy to locate the needed reading material from libraries.

Partap (2007) study revealed that in the libraries of colleges of education the collection size varied considerably and comparatively older colleges had large collections. He suggested the introduction of user education programme and need to increase the range and depth of collection and services. Shahida (2007) has ascertained that the need to use information technology facilities was high for users irrespective of their gender. Users’ preference to use computers and related technologies depended upon the cultural, family and the educational background of the users. Bansode and Pujar (2008) have conducted a study to ascertain the use of the Internet by research scholars in science, social sciences and humanities under title “Use of Internet by Research Scholars at Shivaji University, Kohlapur.” It is found that users were using the Internet mainly for communication purpose that is for the e-mail as compared to information retrieval.

Fatima and Ahmad (2008) study revealed that 51.67% users were visiting libraries daily. Newspapers were the most used documents followed by use of books and journals.
Carrier development was the most preferred response for seeking information. Ninety percent students agreed that they needed instruction on how to use information source in their subject area. Harinarayana et al. (2008) ascertained that majority of the users were visiting libraries to study in library and for borrowing books and textbook service was the most highly sought service. Authors concluded that libraries were lacking behind to provide specific information.

Gopalakrishnan et al. (2008) have conducted a survey on “Information Use Pattern by the Academicians: A Case Study of NIFT Centers in India”. This survey was conducted to examine the information needs and information use pattern of the academicians of seven institutes of fashion technology in India. Authors suggested having functional and effective collection development program to meet information needs of users and need to popularize the less used services to ensure their optimum utilization, conduct regular user education program, acquire both print and non-print material, move towards digitalization, etc.

Manhas (2008) has studied use of Internet and electronic resources used by Dentists for information. Later Rao and Babu (2008) have carried out a study that shows more than three fourth respondents were visiting libraries for research studies and to write research papers, while a few users used e-resources. Authors suggested for right choice between print and electronic sources of information for collection development, Internet based services, and resource sharing.
Sharma and Singh (2008) have concluded in their study that growing dissatisfaction of the users arising from no availability of needed documents and lack of provision of services could be boiled down to some extent, by rendering at least CAS or current contents or information about latest addition to them. Singh and Satija (2008) have conducted a survey to find the information seeking behaviour of agricultural scientists and they concluded that the working culture of those who need information, facilities available for seeking information and knowledge about them, chances of getting the required information etc. affect the information seeking behaviour of the users. Sujatha and Mudhol (2008) discussed the challenges the libraries and information centers face. Varghese (2008) has summarized the results of various user studies conducted in the electronic environment.

Biradar et al. (2009) have conducted a survey of the agriculture science college libraries and they found that 72.27% users were using lending service and among them 54.79% were satisfied. The services like SDI, ILL, CD-ROM search etc. were fairly used, while non documentary sources were less used. The need was felt to establish e-consortia model among agriculture libraries in India. Chowdappa et al. (2009) in their study entitled “Impact of Electronic Information sources on the academic users in Mysore: An analytical study” disclosed the extent to which the users of educational and research institutions of Mysore city depended upon the electronic/ digital media.

Gowda and Shivalingaiah (2009a) concluded that the preferences of users depended upon the nature of resources available in libraries, while usage of electronic resources
depended upon the type of IT infrastructure available in libraries. Gowda and Shivalingaiah (2009b) in another study on the use of library facilities and services of a university library disclosed the significant differences in the satisfaction level of research scholars of different disciplines with facilities and services of libraries.

Singh et al. (2009) executed a study under the title “Use of Internet Based E-Resources at Manipur University: A Survey” to examine the use of electronic information focusing on the Internet services by post graduate students, research scholars, teachers and non-teaching staff members. Users were using the Internet mainly to download the information from web-based resources and web sites. The lack of power supply and the low speed Internet access were general problems faced by users in accessing information from web based resources. Sujatha and Mudhol (2009) depicted that in the college of fisheries, 88.9% users used electronic information sources for thesis/project work and 87.6% were using for ongoing research work. Majority of the respondents comprising 79.0% browsed the Internet for subject specific information websites and 75.3% for international/regional institution websites. E-mail was the most frequently used electronic information source followed by web resources.

A recent study by Trivedi and Joshi (2009) concludes that there is a growing use of e-journals over print journals but which is preferable over the other is a debatable issue, as study did not show a significant decrease in use of print journals as compared to e-journals for research.
Thus, it is seen from the above discussion that library services have been evaluated from various angles to ascertain their efficiency and working, but no comprehensive work has been done so far in the Rajasthan. Hence the present study on the “Evaluation of Library Services of Engineering Colleges in Kota Region” has been choose for research purpose.

### HYPOTHESIS

There are 135 engineering colleges attached to Rajasthan Technical University, Kota that are catering well to the needs of local population. It is supposed that all of them are possessing well infrastructured library facilities for the students and the faculty members. It is also supposed that users of the libraries are satisfied with the existing services rendered by the respective library in the region but as the ICT is intervening all the times, there are still the chances of improving and adopting new technology time to time. So the users may give some suggestions to improve the existing collections and the services in a particular library.

Thus this study will evaluate the present services from various angels in the engineering colleges attached to Rajasthan Technical University, Kota in Kota region.

### OBJECTIVES OF THE PRESENT WORK

In the changing scenario of information technology, the study will reveal the existing position of the library. The major objectives of the present research work will be as under.
• To assess the actual state of engineering college libraries with respect to administrative set up, method of book selection and acquisition, technical process, reference and circulation services, physical facilities and personnel management.

• To ascertain the variety of the sources and study materials available in libraries to cater the various study requirements.

• To assess the quality and service efficiency of the libraries in context with availability of electronic sources with the help of Internet.

• To assess and determine that how effectively and efficiently libraries are serving the need of its users.

• To identify the limitations and failure of services and to recommend ways to improve such services.

• To know the information requirements of the user.

• To know the behavior and attitude of the users towards library, and

• To know the weaknesses of the library and to suggest the ways to improve the lacunas.

**RESEARCH METHODOLOGY**

There is available various research methods to study the problem (Goode & Hatt, 1956; Dhiman & Sinha, 2002; and Sinha & Dhiman, 2002). But *survey research methods* are said to be the most suitable techniques presently available to assess the prevalent situations.
Therefore, the questionnaire method will be used to evaluate the library service of engineering colleges of the Kota region. For this, two questionnaires will be prepared – one to collect information on the prescribed format from the librarians and the other on the views to be collected from the users whether they are faculty members or the students. The students can also be taken as the sample because they are ultimate judge for the services. Suggestions from them will be included to improve the services in existing libraries.

For example, students can give their views on the opening timings of the libraries, availability of the nodes for accessing Internet, on developing particular collection for the use or may give emphasis on the e-resource collection. Thus two types of questionnaire namely – Library survey and User survey will be used to collect the data. The data will be collected on the questionnaire by the researcher through the personal visits in all the engineering colleges. It will be supplemented by the observation. The data for the study will be of two types –

- Primary Data
- Secondary Data

Primary data will be collected through questionnaires containing various question related to the evaluation of the library services such information need and behavior of the users, opening hours of library, attitude of library staff, total budget, staff and human resource development, and application of information technology etc. In addition to this primary data will also be collected on critical points through observation such as attitude of library staff, and physical condition of library etc.
Secondary data in certain places is collected through various sources of publication such as Magazines of the College, College Hand Book, Dictionaries, Encyclopedia, Reports, and Records etc. After collecting the data will be analyzed and interpreted by the various angles for Evaluation of Library Services of the Engineering Colleges affiliated to the Rajasthan Technical University. A comparison will also be made with national and international norms of user needs and library studies.

At the end of the study attempt shall be made by the researcher to overcome the weaknesses and drawbacks of the libraries by the way of the recommendations and suggestions. The conclusion and suggestions will not only be helpful in strengthening engineering college libraries of Rajasthan but also at various other places as well in the country.