Abstract

The present research study is a snapshot of use of e-Resources by the users of Engineering and Medical Colleges in Goa State. e-Resources are increasingly important to all aspects of education from teaching and learning. In this study main focus is on assessing the use and needs of the users and also availability of e-Resources in libraries of medical and engineering colleges in Goa. Thus data collected from students and faculty members of Engineering and Medical colleges is assessed to find out use of e-Resources by them as well as need. The data about availability of e-Resources from libraries is also analyzed from these professional academic colleges. The data is provided by all the librarians who helped in analyzing awareness of status of present library collection, services and acquisition of e- Resources, use of Internet etc. In the present research study e- Resources are defined and term used in broadest sense that includes, e-books, e- Journals, databases, web 2.0 technologies, Internet resources, e-thesis , reports, patents etc. The researcher has used mixed and different methods of research like surveys, interviews (Student, Faculty, Libraries) documentary analysis and even case studies of institutes of Engineering and Medical.

The data collected for this study to analyze use of e-Resources from 960 users consist of students and faculty and a separate library data from 12 Librarians (12 Institutes in which 7 Engineering, and 5 Medical) is also collected to understand the status. The findings are deduced from the data received and observations from survey. The findings confirmed that importance of e- Resources in these fields are increasing. It is also found that there are many areas of good practices and innovative use of e-Resources for teaching and learning. It is also found that there is considerable amount of research based on use of e-Resources in different sectors of higher education are conducted but Medical and Engineering education sector in Goa is not yet considered so far.

There are different areas in e-Resources which are well developed, used and hence need to analyze e-publishing, Internet resources, use of Social Networking sites, Web / Internet resources etc. E-Resources are growing in S & T field and also used more and there is a need to assess the use, which helps to enhance its use. One of the most important finding of this study is that e-Resources within institution of medical and engineering is extremely useful and most of innovative uses of e-Resources are
interested among users, but there is a need to assess awareness of availability and use of e-Resources available in libraries as well as in subjects available as well as how to access them properly. It is also clear from findings that e-Resources use is not disseminated widely enough throughout individual institutes.

Though it is true that use of e-Resources have higher priority in medical and engineering institutes, but wide use of technologies, skill sets of personals in primary and secondary information, of e-Resources need and training/orientation to enhance the use.

The present study is completed in seven chapters. A brief content of all of chapters are:

**Chapter 1:** Introduction - This chapter highlights the design of the research work in brief and narrated role of e-Resources, role of libraries in digital era, background for research study, need of the study, reasons for selecting the research problems etc. The researcher elaborated aim of the research, objectives, hypothesis, limitations of study, research methods used for conducting research (descriptive, survey, questionnaire, interviews, literature analysis etc), previous studies reported and structure of the research study in brief.

**Chapter 2:** Review of Literature - In this chapter presented reviews on related literature published, and analyzed in this chapter suitably and used to build the concepts in different chapters. The literature is collected on the theme of the research topic covering e-Resources and use of e-Resources etc. The facets selected for review are e-Resources and use of e-Resources, e-Resources in engineering sciences, e-Resources in medical sciences, importance of use, user and ISB studies, use of libraries by academics and related studies on the topic in different subjects etc.

**Chapter 3:** Profile of Medical and Engineering Colleges in Goa - This Chapter gives information about different medical and engineering colleges in North and South Goa. The information presented in this chapter is collected from the colleges as well as using information disclosed on the web sites of colleges. Researcher visited all the institutes and under survey and presented the information of professional medical and engineering institutes in Goa.
Chapter 4: Use and User Study: Brief Review - This chapter focused on importance of use and user studies in libraries. The role of use and user study is discussed in development of libraries and building collection development practices etc.

Chapter 5: Resources in Engineering and Medicine – Highlights the availability of the e-Resources in medical and engineering science with their brief information for use of academic/research workers. In this chapter prominent and most useful information resources in both the streams are discussed. This is useful information to users for using best resources in the field.

Chapter 6 A and B: Data Analysis and Interpretation - analyzed and interprets the data collected from the librarians, faculties and students through structured questionnaire. The analyzed data is presented systematically deducing observations in this chapter.

Chapter 7: Findings, Suggestions and Conclusion – In this chapter researcher concluded the study with findings, and suggestions for the successful utilization e-Resources and explore the scope for further research. A tentative model for the e-Resource sharing and networking is presented in this chapter to develop a local resource sharing activity.

Major Findings are divided in different heads. Few notable findings are:

- In both medical and engineering branches use of library is prominent and almost all students visiting to library regularly for study purpose and preparing for seminar assignment and project work.
- The library collection is focused mainly on curriculum based and comprised of text book, reference book, Indian and foreign Journals. 77% users have satisfaction using library collection whereas 23% users have suggested some advanced reading literature.
- 67% users pointed out that libraries are best source for gathering required information for various purpose where as 33% users needs some additional resources to fulfill their needs.
- It is noticed that around 60-65% users are using e-Resources regularly. It is also observed that 52% users are self sufficient in consulting resources of their own, 32% user need guidance of library staff, 29% users, uses e-Resources as
per teacher’s instructions, etc. The main sources used by users are reference books and journals for qualitative reading. Only 33% users referring to resources for curriculum reading.

- E-Resources training are required by users for enhancing the use and getting awareness of e-Resources in the field.
- Users of professional education systems mostly depends on internet resources and free resources (58%), 40% users are also relying on library collection. 82% users have indicated that they can search information on their own, but (17%) users have pointed out that they need some help from library staff.
- In professional education systems, users are fully aware use of ICT applications for various purpose and all are technology savvy.
- 61% to 71% users are using internet for searching databases, e-journals and OPAC’s. 92% users are using internet mainly for education purpose. 95% users are aware of search engines commonly used such as Google and Yahoo. 35% users have shown interest in getting orientation for searching information through specialized search engines. etc

**Major Suggestions are:**

- Librarian has to take more efforts for developing awareness and availability of both print and e-Resources in their field through library. There is need to develop awareness among users about the utility of e-Resources in comparison with the print.

- There is a need to improve ICT infra for effective management of resources in the medical and engineering libraries. Many facilities are available in computer centers and not in libraries but Internet access is provided and manpower is trained to sustain in ICT era.

- Librarians have to conduct information literacy programs for users at regular intervals to develop searching capabilities among users. There is also a need to develop training program for users for searching information using appropriate tools. Library tour for new entrants in the library is also essential

- Develop skills for searching information among users by orientation to improve use of e-Resources libraries/librarians have to take steps like user
training for using e-Resources, databases, advanced search strategies for information searching online database, use of thesaurus and controlled vocabulary to make electronic resources searching process easier and accurate

- The funds to procure e-Resources may be enhanced or group subscription needs to be accepted through (R/S) consortium tool. A model for networking of libraries in Goa is suggested at the end of the study.

The study is concluded giving scope for future study and satisfying objectives and proving hypothesis positive. Libraries of all types, all sizes are now marching towards digital collections due to its many fold uses. At present many libraries continue to subscribe both print and digital or e-collection for another few years definitely, a time is going to come soon that more subscriptions in e-journals will increase. The e-Resources have made impact on users of libraries. The use of e-Resources are analyzed by libraries conducting surveys, transaction logs analysis, observation, interviews etc. and develop efforts in enhancing use of e-Resources.