Chapter 5

SUGGESTIONS AND CONCLUSION

5.1 Summing Up

This chapter discusses about the results obtained on the basis of different types of data observed and analyzed in the previous chapter with earlier studies done by researchers in the literature review.

The study aimed to examine the “Use of web based resources in the engineering colleges libraries of Assam: An empirical study”. Seven main research questions (containing many sub questions) were developed based on research objectives which were mainly to find out the pattern of using web based resources in the engineering college libraries of Assam. The following output has been summarized after study.

- Maximum users, using e-resources and printed material simultaneously
- Maximum users are using e-resources either daily or several times a week.
- The library of the colleges is well equipped with e-resources facility. Thus, maximum users are using e-resources in their home or own departments.
- Maximum users are using e-resources for academic and research purpose and keeping up with developments in their own fields.
- Maximum users’ academic and personal activities have been improved by using e-resources.
- The positive aspects of e-resources also considered by the users like time saving, easy to use, more useful etc.
- Most of the users can search their required e-resources easily and they gather information regarding those mostly from their classmates or Colleagues
- Lack of high speed connectivity, inadequate printing facility etc. some problems are also counted.
• Lack of awareness regarding use of e-resources among the users, may be a reason behind improper use of e-resources.
• Maximum users are satisfied with e-resources services using by them in the range of 51%-75%
• Maximum users believe that e-resources are not substitute of printed materials fully. These are extra sources of information and library services cannot be replaced completely by e-resources.

Execution of Objectives

The study is an attempt to evaluate the use of web based engineering college libraries of Assam. Results from the study are encouraging and it is hoped that these findings will provide meaning and useful platform. The analyses of various research questions asked are as follows:

❖ Observation 1: Use of Various Types of Resources

After analyzing the responses regarding use of various types of e-resources, it has been found highest no of respondents 81%, indicated E-journals followed by Online database 65.67%. Whereas the least used is Web OPAC (24.33%)In case of individual category of

The preference of choice regarding use of print or electronic has been analyzed and found that the preference for ‘electronic only’ or ‘print only’ version (21.67% & 10.33% respectively) was low as compared to the choice of using “both” versions by 175 respondents (58.55%) of total users.

Most of the respondents believed in using e-resources due to some benefits over print materials as they answered in positive manner but they also indicated the negative aspects. The advantages/disadvantages of e-resources has been indicated by them as: 174 hits (58%) for time saving, 171 hits (57%) for easy to use, 93 hits (31%) for more informative, 57 hits (19%) for less expensive and 166 hits (55.33%) for more useful. Similarly, 56 (18.67%), 75 (25%), 89 (29.67%), 39 (13%), 45 (15%) hits were also received against negative aspects respectively.
In case of Teachers, 54 hits (60%) for time saving, 61 hits (67.68%) for easy to use, 50 hits (55.56%) for more informative, 25 hits (27.78%) for less expensive and 45 hits (50%) for more useful were recorded. Similarly, 22 (24.44%), 19 (21.11%), 24 (26.67%), 17 (18.89%), 23 (25.56%) hits respectively were also received in reverse.

Again, in the student category 120 hits (57.14%) for time saving, 110 hits (52.38%) for easy to use, 43 hits (20.48%) for more informative, 32 hits (15.24%) for less expensive and 121 hits (57.62%) for more useful were found during the survey. Consequently, 34 (16.19%), 56 (26.67%), 65 (30.95%), 22 (10.48%), 22 (10.48%) users were also found going against them respectively.

❖ Observation 2: Frequency of using e-resources
Altogether 116 users (38.67%) use e-resource almost daily followed by Several times a week by 79 (26.33%) users.

Individually, 27 (30%) of Teachers using e-resources ‘almost daily’ followed by ‘several times a week’ by 25 (27.78%) and least ‘sometimes’ by 5 (5.56%).

Again, 89 (42.38%) Student were using e-resources ‘almost daily’, followed by several times a week as 54 (25.71%). In this category ‘sometimes’ got least hit i.e. 8(3.81%).

The above two observations execute Objective 1 i.e. to know the extent of searching e-resources in the engineering college libraries of Assam

❖ Observation 3: Importance of E-Resources
Data analysis regarding effect of e-resources in academic activity shows that 180 (60%) users believed that their educational efficiency was improved ‘considerably’ with the use of electronic resources. This category includes 41 (45.46%) teachers and 139 (66.19%) students. A total of 80 (26.67%) users including 35 (38.89%) Teacher and 45 (21.43%) Student were agreed ‘up to some extent’ their educational work improved. Only fewer i.e. 40 (13.33%) users consisting of 14 (15.16%) Teachers and 26 (12.38%) Students indicated that the use of e-resources did not affect their educational work

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It is also clear that maximum 204 hits (68%) were given for Can’t Say in less expensive category including 48 (53.33%) Teachers and 156 (74.29%) Students. It reveals that maximum users are not aware about the price of the resources.

If total hits in this category (including multiple options) are taken into consideration, then the above figure (4.14) shows that 44% of Users Say ‘YES’ i.e. use and availability of E-resources is an advantage for them with 20% users don’t think like that. A total of 36% users are not sure in this regards and they replied ‘Can’t say’.

The above two observations executes the objective 2 i.e. identification of purposes for searching Web based resources in the engineering college libraries of Assam

Observation 4: Problems in Using E-Resources

In terms of difficulties in using e-resources, responses were turbulent i.e lack of high speed connectivity (161 hits, 53.67%), inadequate printing facility (114 hits, 38%), insufficient e-resources in library (69 hits, 23%) and uneasy to read directly from computer screen (64 hits, 16%) while almost 30% respondents said there was no problem in using e-resources (117 hits). This section had multiple hits by a single user.

In this section some diversified data is received. The two category of users i.e. Teachers and students have completely different views in some points regarding problems faced.

In ‘No problem’ category, as high as 101 hit is from Students with as low as 16 by Teachers. Thus it shows that Teachers are not comfortable with e-resources and just opposite are Students.

The above observation executes objective 3 i.e. Detection of the problems faced by the users in accessing e-resources in engineering college libraries

Observation 5: Satisfaction of web based resources

It has been found that in terms of satisfaction level, maximum respondents (141; 47.00%) were satisfied at the level of 50%–75% including 39 (43.33%) Teachers and 102 (48.57%) Student. While 97 (32.33%) users were satisfied at the level of 25% - 50% with 34
Teachers (37.78%) and 63 Students (30%). Some respondents were satisfied at the level of above 75% (30 users; 10%) and dissatisfied at the level of below 25% (32 users; 10.67%). Over all the maximum respondents’ level of satisfaction was 50%-75%.

Regarding replacement of library services by e-resources, study shows the maximum respondents i.e. 127 (42.33%) users including 24 Teachers (26.67%) and 103 Students (49.05%) believed that e-resources may substitute of library services to some extent. Besides, few respondents counting to 25.33% (Teacher 37.78% and Student 20%) believed that library services cannot be replaced by e-resources while a healthy portion respondents counting to 80 (26.67%) including 25.56% of Teacher and 27.14% of Student are with the view that library services can be replaced by e-resources.

It is also revealed that 17 users (5.67%) can’t say anything regarding this matter. This includes 9 teachers and 7 students which count to 10% and 3.8% respectively.

The above observation executes objective 4 i.e. analysing the satisfaction level with the Web based facilities provided by the engineering colleges under study.

Testing of Hypotheses

❖ Observation 6: Purpose of Using E-Resources

Regarding the purpose of using e-resources, it has been found that maximum respondents from Teacher were using e-resources ‘teaching/counseling’ with 76 (84.44%) hits followed by research purpose i.e. 75 (83.33%) hits. The data clearly reveals that the Knowledge Updating factor is the least effecting cause with 62.22% hits.

Similarly, the Students were asked about the usability of electronic information resources as shown in Table 4.11, 78 (37.14%) goes to assignment preparation followed by 66 (31.43%) for Examination. The least popular area is Research work by 7.14% students.

The above two observations clearly tests the Hypothesis 1 to be positive i.e. the users of engineering colleges libraries are extensively using electronic resources for their academic and professional activities.
Observation 7: E-Resources access point

It has been found that e-resources were used more in home as maximum hits 138 (46.00%) marked by the respondents, followed by department with 55 (18.33%) hits. As far as the library as e-resources access point was concern, it was marked lower as compared to and ‘home’ and ‘department’. The results depict that the library was used little more in accessing the e-resources as compared to other places.

Individually, 11 (12.22%) Teachers and 32 (15.24%) Students access from Library leading to a total of 43 (14.33%).

The above observation tests Hypothesis to be positive 2 i.e. the engineering college libraries of Assam are lacking in providing web based resources to the students sufficiently in infrastructure & subscription point of view

Observation 8: Awareness for E-Resources

In response to the question about “availability of e-resources in the library”, 45 (50%) Teacher and 115 (54.76%) Student answered that they could find e-resources ‘easily’, leading to a total of 160 (53.33%); similarly, 16 (17.78%) Teacher and 32 (15.24%) Student answered ‘very easily’ which together counts to 48 (16%).

Again, out of all the respondents 12 (13.33%) teachers and 20 (9.52%) students leading to a total of 32 (10.67%) replied that they find some difficulties in finding their required documents.

The survey shows that regarding source of information regarding e-resources maximum respondents (170 hits; 56.67%) got the information from Colleagues/Classmates, followed by personal efforts (169 hits; 56.33%). Through students/seniors, the respondents were also receiving information about e-resources. Surprisingly, few hits also received for library staff (85 hits; 28.33%) and few others also receiving information from library bulletin also (88 hits; 29.33%).
This may also be noted that “Library staff” is the least popular category, maximum recipients are teachers i.e. 59 in comparison to 26 students. That means students are not very much served by the library staff.

In response to the question about legal aspects of e-resources access by the engineering institutions, unpredictably, maximum respondents i.e. 245 (81.67%) including 64 (71.11%) Teachers and 181 (86.19%) of Students did not have any idea about any legal provision in which the institute has to acquire some e-resources.

Few respondents 55 (18.33%) (28.89% of Teacher and 13.81% of Student) said ‘yes’ but they could not specify the provisions.

_The above observation tests the Hypothesis 3 to be positive i.e. there is major setback in awareness on the part of the academic community regarding the availability and access technique of the electronic resources._

5.2 Suggestions

An overall finding from this study suggests the following approaches to give more benefits to teachers as well as the students of engineering colleges of Assam:

1. Dedicated Internet Access Section should be made available in Library with minimum 50 computers with latest configuration and multi-media kit for effectively use of e-resources
2. The libraries should procure back volume of e-journals and make available in CD-ROM server for campus access.
3. The Bandwidth should be increased to facilitate fast access
4. Orientation programs program for e-resources should be organized at least once in a year.
5. The Library staffs should be skilled with retrieval technologies to help users to ensure maximum access to e-resources
6. The library must have printing facility in the internet section where the users may print their important documents.
7. Library webpage should be created separately for better utilization of library services and navigation to web based resources should be given.

8. Library must design a portal for one point access to all subscribed e-resources.

9. There should be promotion for using Blogs, RSS feeds, virtual conference etc. for information communication.

10. Specialized training should be given by library to the users for effective searching.

11. The library must have feedback system to analyse the users’ experience and problems regularly.

12. The library should have institutional repository pertaining to books and research articles of their respective college staff, and project reports/thesis/dissertation submitted by their under-graduates, postgraduate students and the research scholars.

5.3 Conclusion

The Internet has emerged as the single most powerful vehicle for providing access to unlimited information. The e-resources are an inseparable part of today’s engineering educational system. The dependency on the web based resources and its services is increasing day by day and the users of engineering colleges too are depending more and more on the Internet for their various educational purposes. The online facility has enabled the teachers and the students to enhance their academic excellence by providing them the latest information and access to the worldwide information. The information on the Internet is not usually available in an organized way and the users are unable to get pinpointed information from the Internet. In order to make the e-resources more beneficial, the library staff who have acquired a good deal of efficiency in the collection, organization and retrieval of information should feel duty-bound to see that the users are able to obtain right information at the right time. For this, they should organize and classify the information on a Website in such a way that the users are able to find easily the information they need for their studies and research purposes. The library services supplemented by web based services can prove a great boon to the users in getting the right information at the right time.
5.4 Scope for Further Research

The present study evaluates the use of web based resources in the engineering college libraries of Assam. There is a massive scope for future research. The study can be done as: comparison among Government and Private Institutes or among two or more states. Further it can be confined up to particular e-resources or it can be between two different area like engineering v/s medical; engineering v/s management and so on. The study can also incorporate the all engineering institutes also.