Impact of E-Learning Methods Used in University Libraries in Coimbatore, Tamil Nadu: A Study

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Abstract - The term E-Learning covers the wide set of applications and processes such as web based learning; computer based learning and virtual classrooms. It includes the delivery of contents via internet, Intranet, Extranet (LAN/WAN), audio and video tapes, Satellite Broadcast and CD ROM etc. It refers to learning and other supportive resources that are available through computer. E-Learning is developed to apply Information Technology applications in education. This paper describes about a study on e-learning methods that are used in university libraries at Coimbatore.

Keywords: E-learning, E-resources

I. Introduction

When the learners were unable to attend the traditional methods of learning, the distance mode of learning was introduced. In that mode the students had to learn the syllabus with the assistance of libraries or materials sent by the course organiser. Modern Media such as radio and television were also used in the distance mode of learning process. Though the learners were benefitted by the media, they had their own limitations. In order to meet with the limitations, the distance mode of learning strengthened itself by video conference mode. In the video conference mode, the nodal centre has a studio where the experts assemble and deliver the lecture, which reaches the audience through different media. This technique creates the environment of the classroom and enables direct interaction between the teacher and learner.

Now internet has shown new paths to learning. The educational resources are easily accessible to students. Learners' needs are increasingly seen to be continuous throughout the working life. Education is a means to empower their lives and future within workplace, at least in the advanced market led societies. Persons who acquire and apply the knowledge and skills will be sustained in the future. One should require learning to update their knowledge, skills and competencies (Vatnal, Mathapati and Prakash, 2004).

A. E-Learning and Libraries

E-Learning has revolutionized and democratized the delivery and accessibility of education and has also changed how critical support services such as library and information services are provided. Libraries and librarians play a very important in E-Learning. Library professionals need to understand the mechanics and concepts of e-learning in order to provide an effective distance library services. In distance education the learning takes place at the location of student and not at the institution of instruction. Today's learners are located anywhere, of any age and any gender.

II. Review of Literature

Students learned about resource recycling and classification through an instructional website based on the teaching tool of Web Quest. When Web Quest was used in real situations, students could acquire more knowledge and experiences, and in the learning activity of the experiment, the students accomplished different learning tasks and expressed their own opinions and perspectives, which could foster their critical thinking skills (Chang, Chen, and Hsu, 2011).

Moodle communicates extremely well with many web-based resources allowing developers creativity and versatility whilst enabling tailoring of the system to individual needs. One main advantage of these environments is the freedom of teachers to add, change or use them as is, according to their needs; the teachers are equal partners in the development (Shulamit, and Yossi, 2011).

An instructor-led workshop to a self-paced online version within our course management system, Blackboard Vista. Previous attempt at offering asynchronous training

in Blackboard Vista had not been successful (Fletcher, 2010). The study uses web service components developed with Microsoft .NET and XML technologies to construct a teaching platform with standard specifications, allowing system developers to rapidly construct an e-learning system based on web services (Chang, and Hsiao, 2010). The current e-learning implementation trends in developing countries highlight the challenges as well as suggesting strategies for effective adoption and use (Kahiigi, *et al.,* 2009).

The e-learning content is not accessible the metadata can provide equivalent information in an accessible format and improve the comprehension of the user with visual disability. The results and contributions have been obtained working in close contact with the final users with visual disability, using a Web questionnaire, telephone and email contact and user testing (Guenaga, Oliver, and Eguíluz, 2008).

III. OBJECTIVES OF THE STUDY

1. To identify the E-learning methods used by the students in Universities at Coimbatore;

2. To identify the availability and use of E-learning resources in Universities at Coimbatore;

3. To identify the access of E-learning resources from Internet from students in Universities at Coimbatore.

IV. METHODOLOGY

The present study is to find out "Impact of E-learning methods used among the students at the University in Coimbatore". The researcher has selected the seven universities libraries from Coimbatore city. For this purpose review of literature has been collected to find out the contribution in these subjects. Therefore, collection of the required factual data with the following objectives was done in the existing situation and practice in university libraries and the future planning with regard to the E-learning. The data and information collected were examined with special reference to the impact of E-learning. Questionnaire method was used to collect the data. The investigator went directly and collected the data. All the collected data have been used for analysis.

V. ANALYSIS

Table I describes about the E-leaning resources that are regularly used. The question Bank category is 200 (18.92%) and it is the highest among all the categories. The any other and audio visual resources are 7 (0.66%) and 15 (1.41%)

which are the lowest among all the categories. The 144 books (13.62%), 150 Journals (14.19%), 55 thesis/dissertations (5.20%), 42 back volumes (3.97%), 122 E-books (11.54%), 132 E-journals (12.48%) are in-between these categories.

TABLE I E-LEARNING RESOURCES REGULARLY USED

S. No.	Name	Total No. of Respondents	Percentage
1	Books	144	13.62
2	Journals	150	14.19
3	Theses/ Dissertations	55	5.20
4	Project Reports	190	17.97
5	Back Volumes	42	3.97
6	Question Bank	200	18.92
7	Audiovisual Resources	15	1.41
8	E-books	122	11.54
9	E-journals	132	12.48
10	Any other	7	0.66
	Total	1057	100

Table II describes about the time spent on reading for E-learning. The 20-25 hours/week is 260 (39.51%) and it is the highest among all the categories. The 6 – 10 hours/week is 96 (14.58%) and it is the second in the categories. The 15 – 20 hours/week is 55 (8.35%) and it is the lowest among all the categories. The 0-5 hours/week 91 (13.82%), 10-15 hours/week 92 (13.98%) and above 25 hours/week is 64 (9.72%) are in between these two categories.

TABLE II TIME SPENT ON READING FOR E-LEARNING

S. No.	Name	Total No. of Respondents	Percentage
1	0-5 hours/Week	91	13.82
2	6-10 hours/week	96	14.58
3	10-15 hours/week	92	13.98
4	15-20 hours/week	55	8.35
5	20-25 hours /week	260	39.51
6	Above 25 hours / week	64	9.72
	Total	658	100

Table III describes about the access to E-learning resources from Internet. The 2-3 times a week is 205 (13.15%) and it is the highest among all the categories. The any other is 39 (5.92%) and it is the lowest among all the categories. The Daily 139 (21.12%), 2-3 times a month, once a month 91 (13.82%) and occasionally is 80 (12.15%).

TABLE III ACCESS TO E-LEARNING RESOURCES FROM INTERNET

S. No.	Name	Total No. of Respondents	Percentage
1	Daily	139	21.12
2	2-3 times a week	205	31.15
3	2-3 times a month	104	15.80
4	Once a month	91	13.82
5	Occasionally	80	12.15
6	Any other	39	5.92
	Total	658	100

Table IV describes about the use of internet for E-learning. At cyber café is 205 (31.15%) and it is the highest among all the categories. At any other places is 129 (19.60%) and it is the lowest. At department is 174 (26.44%) and at home 150 (22.79%) and these are in between the highest and lowest categories.

Table V describes about the purpose to use internet for e-learning. The e-mail is 139 (21.12%) and it is the highest among all the categories. The any other is 26 (3.95%) and it is the lowest among all the categories. To browse 20 (18.23%), remote login 90 (13.68%), FTP 39 (5.92%), list server/Discussion group 40 (6.07%), Bulletin board service (BBS) 27 (4.10%), frequently asked questions (FAQ) 110 (16.71%) and chatting 67 (10.18%) these are in between the highest and lowest categories.

TABLE IV USE OF INTERNET FOR E-LEARNING

S. No.	Place	Total No. of Respondents	Percentage
1	at department	174	26.44
2	at home	150	22.79
3	at cyber café	205	31.15
4	at any other	129	19.60
	Total	658	100

Table VI describes about the type of e-learning resources accessed through internet. The E-Journals are 220 (33.43%) and it is the highest among all the categories. Other categories are 22 (3.34%) and it is the lowest among all the categories. The E-books are 190 (28.87%), conference proceeding are 92 (13.98%), E-databases are 93 (14.13%), Technical reports are 43 (6.53%) and theses & dissertations are 67 (10.18%) and these are in between the highest and lowest categories.

TABLE V PURPOSE TO USE INTERNET FOR E-LEARNING

S. No.	Name	Total No. of Respondents	Percentage
1	To browse	120	18.23
2	E-mail	139	21.12
3	Remote login	90	13.68
4	FTP	39	5.92
5	List Serv/ Discussion group	40	6.07
6	Bulletin Board Services (BBS)	27	4.10
7	Frequently asked questions (FAQ)	110	16.71
8	Chatting	67	10.18
9	Any other	26	3.95
	Total	658	100

TABLE VI TYPE OF E-LEARNING RESOURCES ACCESS THROUGH INTERNET

S. No.	Name	Total No. of Respondents	Percentage
1	E-Books	190	28.87
2	E-Journals	220	33.43
3	Conference Proceedings	92	13.98
4	E-databases	93	14.13
5	Technical Reports	43	6.53
6	Theses & Dissertations	67	10.18
9	Any other	22	3.34
	Total	727	100

Table VII describes the methods followed to browse e-learning resources from internet. Directly typed web addresses are 197 (29.93%) and it is the highest among all the categories. The subscription database used is 122 (18.54%) and it is the lowest among all the categories. The search engines used are 175 (26.59%) and any other is 164 (24.92%) and these are in between the highest and lowest categories.

TABLE VII METHODS FOLLOWED TO BROWSE E-LEARNING RESOURCES FROM INTERNET

S. No.	Name	Total No. of Respondents	Percentage
1	Type the web address directly	197	29.93
2	Use Search Engines	175	26.59
3	Use Subscription database	122	18.54
4	Any other	164	24.92
	Total	658	100

Table VIII describe about the types of problems occurred while using internet for e-learning. The over load of information on internet are 199 (30.24%) and it is the highest among all the categories. The any other is 142 (21.58%) and it is the lowest among all the categories. The difficulties in finding relevant information 164 (24.92%) and it takes too

long to view down load page 142 (21.58%) and these are in between the highest and lowest categories.

TABLE VIII TYPES OF PROBLEMS OCCURRED WHILE USING INTERNET FOR E-LEARNING

S. No.	Name	Total No. of Respondents	Percentage
1	Difficulties in finding relevant information	164	24.92
2	Over load of Information on Internet	199	30.24
3	It takes too long to view down load page	153	23.25
4	Any other	142	21.58
	Total	658	100

Table IX describes about the types of search engines used for e-learning. The Google is 194 (24.80%) and it is the highest among all the categories. The any other is 11 (1.40%) and it is the lowest among all the categories. The Alta vista 172 (21.99%), yahoo 184 (23.52%), hot bot 55(7.03%), Lycos 43 (5.49%), rediff 101 (12.91%) and khoj is 22 (2.81%) and these are in between the highest and lowest categories.

TABLE IX TYPES OF SEARCH ENGINES USED FOR E-LEARNING

S.No.	Search Engines	Total No. of Respondents	Percentage
1	Google	194	24.8o
2	Alta Vista	172	21.99
3	Yahoo	184	23.52
4	Hot bot	55	7.03
5	Lycos	43	5.49
6	Rediff	101	12.91
7	Khoj	22	2.81
8	Any other	11	1.40
	Total	782	100

Table X describes about the types of e-learning resources that have influenced academics. The dependency on internet increased is 204 (31.00%) and it is the highest among all the categories. The expedited the research process 133 (20.21%) and it is the lowest among all the categories. The use of traditional documents decreased 160 (24.31%) and improved professional competencies are 161 (24.46%) and these are in between the highest and lowest categories.

Table XI describes about the satisfaction with e-learning facilities. The fully satisfied categories are 254 (38.60%) and are the highest among all categories. The no comments category is 55 (8.35%) and is the lowest among all the categories. The partially and least satisfied are 201 (20.54%)

TABLE X TYPES OF E-LEARNING RESOURCES INFLUENCE ACADEMIC

S. No.	E-Learning Resources	Total No. of Respondents	Percentage
1	Use of traditional documents decreased	160	24.31
2	Dependency on Internet increased	204	31.00
3	Expedited the research process	133	20.21
4	Improved professional competencies	161	24.46
	Total	658	100

TABLE XI SATISFACTIONS WITH E-LEARNING FACILITIES

S.No.	Name	Total No. of Respondents	Percentage
1	Fully	254	38.60
2	Partially	201	30.54
3	Least satisfied	148	22.49
4	No comments	55	8.35
	Total	658	100

and 148 (22.49%) and these are in between the highest and lowest categories.

VI. CONCLUSION

The results showed that the students have started to use e-learning methods in the university libraries and the factors such as technology, curriculum content, teaching methods and communications systems readily motivated the learners to experience success in e-learning.

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