The Role of University Libraries in Assam to Enhance E-learning among the User Community

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Abstract

The aim of this paper is to highlight the role of university libraries for enhancing the mode of e-learning. The paper focuses on the e-resources and services provided to the users. This paper points how these modern university libraries apply appropriate communication technologies in support of e-learning to users. It also discusses about the role played by library consortia for learning, and various problems faced by the university libraries in context of e-learning or access to online resources.

 Keywords: University Library, E-Learning, ICT, E-Resources, Library Services

1.   Introduction

University libraries are actively taking part in the process of e-learning by providing various services like online and in person guides, subject and class based lists, modules, as well as reference services in both synchronous and asynchronous mode. The various courses, classes offered through e-teaching enables students or library users to use scholarly resources relevant to their research work or to plan or develop their study effectively. The assistance, guidance received through e-learning make users more information literate in terms articulating their information needs and to find their appropriate sources and critically assessing online search outputs. The professionals in a university library involved in e-learning support students in learning and facilitate and promote the use of curriculum-specific information resources, provide access to course-specific online materials, develop and deliver learning objects, and also participate in reference.

The LIS professionals today routinely monitor trends in emerging technologies, identify possible uses in library service and provide training to library staff and the campus community on new technologies or resource-related issues, such as fair use and copyright compliance. University libraries act as a good support for the online as well as campus based students. By facilitating e-learning library professionals can successfully establish a relationship between the academic achievement and use of open shelf library books. The supportive role of librarians through unique service models on e-learning can make instructors and administrators realize about its potentiality. The web based modules developed by a university library to support course integrated instruction session, encourage students to actively follow the librarians' presentation for their own topics for selected searches. During such sessions students can receive immediate feedback which they can return at anytime in the subsequent assignments to refresh their skills. The 24x7 access to e-resources, which is the key characteristic of e-learning, may increase student contact with the

librarians and encourage active participation. Now-a-days, many university librarians are working in collaboration with the online course developers as well as instructors in traditional courses to provide online guides and modules that not only helps them to identify resources but also to critically evaluate search output, specific thesis preparation and so on.

1. Objectives of the Study

The main objectives of this study are as follows:

a. To find out the collection of e-resources of the selected university libraries for e-learning.

b. To find out the library services that promote e-learning.

c. To find out the consortium status of the selected university libraries.

d. To find out the ICT components used for e-learning.

e. To find out the problems faced by the university libraries in context of e-learning or access to online resources.

2. Scope of the Study

The study is restricted to the state of Assam. The study covers five university libraries of Assam. Two state universities i.e. Gauhati university(GU) and Cotton College State University (CCSU), one private engineering university i.e. Kaziranga University (KU), one open university i.e. Krishna Kanta Handiqui State Open University (KKHSOU), one law university i.e. National Law University and Judicial Academy (NLU) are selected for the purpose of the study. For convenience abbreviation of the names of the universities has been used.

3. Methodology

Following methodologies have been adopted to collect necessary data.

a. Questionnaire;

b. Observation;

c. Interview; and

d. Telephone.

In order to collect the information a structured questionnaire was designed and distributed to the selected university libraries of Assam.

Role of University Library in Higher Education

The iconographic power of a university library expresses a purpose not just to collect, but also to organize, preserve, and make knowledge accessible. In its placement and prominence, the academic library conveys its integral role in supporting higher education's core mission of research and education.

As higher education in Assam has evolved in recent decades, university libraries also have forged pathways to serve faculty and students more effectively. University libraries have been adopting digital technologies and showing leadership and training.

4. Concept of E-Learning

E-learning is defined as an interactive learning in which the learning content is available on-line and provides automatic feedback to the students learning activities. E-learning covers a wide set of applications and processes, such as, web-based learning, computer based learning, virtual class rooms, and digital collaboration. It includes the delivery of content via internet, intranet, satellite

broadcast, interactive television, CD-ROM, DVD, audio and videotape, etc. E-learning can be defined as instructional content or learning experiences delivered or enabled by electronic technology.

According to UNESCO, e-learning is described as "The tool and the processes to access, retrieve, store, organize, manipulate, produce, present and exchange information by electronic and other automated means. These include hardware, digital cameras, phones, faxes, modems, CD and DVD players and recorders, digitized video / radio and T.V. programs database programs and multimedia programmes".

4.1 Forms of E-learning

Generally there are three forms of e-learning available and are in use in different institutions (Saleem & Shabana Tabusuim, 2013). These are namely: web-based training, supported online training, and informal e-learning.

5. 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.

The libraries are playing important role in education for a long time; hence the development of e-libraries is also linked to e-learning. Today's libraries are transforming into digital ones. Modern libraries provide technology based information and services to enable learners to access relevant information and services anywhere anytime, as well as provide empowerment for innovative and life-long learning. It serves mainly as a facilitator in organizing and providing knowledge and resources to its users,

sharing knowledge, and information among library staff, researchers, faculty, students, encourages them to work together, develop their skills, and form strong and trusting relationship.

6. Library Resources and Services in E-Learning Environment

Many libraries are in the process of delivering information services and resources through online chat rooms, e-mail services, list servers, or fee online databases and reference services, teleconferencing and toll free numbers.

❖ **E-resources:** E-resources are available in various forms such as databases, e- journals, e-book, e-thesis, e-newspaper etc. Some of these are priced but many of them are available free of cost on the internet. Libraries identify the resources required for their users and provide access through their website / portal on intranet or internet.

❖ **E-service:** It is a service requested and provided over the internet, usually through e-mail and instant messaging, by the library. This service is provided using e-mail, answering queries over a period of time or through real-time chat messaging services. This enables libraries to meet users' expectations in the web-centric environment saving their valuable time.

❖ **Library Consortium:** It usually refers to co-operation between libraries for the purpose of sharing information, electronically. Few ventures like UGC-INFONET, INDEST, NLIST, DeLCON, FORSA, etc are successfully operating in India.

❖ **Institutional Repository:** IR is used to collect, manage, disseminate, and preserve scholarly works created in digital form by faculty and students in the institutions. IR services are offered to the members of institution's community for the management and dissemination of digital materials. Essentially it is an organizational commitment to the stewardship of these digital materials, including long-term preservation, where appropriate, as well as organization and access or distribution (Lynch, 2003).

❖ **Library Blog:** A blog enables to disseminate and access specific information. Blogs can be used by students as well as by instructors to provide updated information. Blogs are useful to initiate discussions.

❖ **E-Mail:** E-Mail as well as e-mail based discussion forums is useful in delivering contents' as well as communications about e-learning.

❖ **Wikis:** Wiki is a piece of software where individuals under the control of an editorial board, can upload contents or modify existing contents.

❖ **Social networking:** It is the grouping of individuals like experts in a particular field to discuss or exchange views online. Facebook, Whatsapp, etc are some of the best examples of such mushrooming sites on the Internet. These sites can be used as a good tool by libraries to get users' feedback, ranking for services, library notices, etc. Social networking plays critical role in enhancement of library services.

7. Analysis and Interpretation

The analysis and interpretation of the data of present study, has been based on the responses of the librarians of the selected universities as per the components of e-learning enlisted in the questionnaire.

Following is a brief overview of the respondent universities.

Table 8.1 List of University Libraries under Study

Name of the Universities	Year of Estd.	Name of the Library	Year of Library Estd.	Status
CCSU	1901	Surya Kanta Bhuyan Library	1901	Govt.
GU	1948	K.K.Handique Library	1948	Govt
KKHSOU	2005	KKHSOU Library	2005	Govt.
KU	2012	KU Library	2012	Private
NLU	2009	NLU Library	2009	Central

It is revealed that out of selected 5 universities only one university viz. CCSU has its independent website through which user can access resources directly.

Table 8.2 Library Strength

Manpower Strength	Name of the Universities				
	CCSU	GU	KKHSOU	KU	NLU
Professional	3	7	1	2	3
Semi Professional	3	16	1	4	1
Non Professional	6	7	No	3	2
Total	12	30	2	9	6

Table 8.2 presents the different categories of staff available in the University Libraries. GU has the highest number of library staff (30) followed by CCSU (12), KU (9) and NLU (6). KKHSOU has the least staff (2). GU has the highest number of professional staff (7) followed by CCSU (3) and NLU (3). GU has the highest number of semi-professional staff (16) followed by K.U. (4) and CCSU (3). GU has highest number of non-professional staff (7) followed by CCSU (6), KU (3) and NLU (2). KKHSOU doesn't have any non- professional staff.

Table 8.3 Number of Different Library Users

Users	Name of the Universities				
	CCSU	GU	KKHSOU	KU	NLU
Student (UG+PG)	818(UG)+445(PG)	2324(PG)+1073(UG)	-	180(PG)+820(UG)	10(PG)
MPhil	216	316	-	-	-
Research Scholar	116	1442	53	28	10
Faculty	360	353+11	49	120	22
Staff	216	89+327	70	138	34
Others	-	250 (Temporary)	-	-	-
Total	2171	6182	172	286	66

Table 8.3 shows the various category and quantity of users in the universities. It is reflected GU has highest number of users and NLU with least number of users.

Table 8.4 The available e-resources in the Universities

Resources	CCSU	GU	KKHSOU	KU	NLU
E-journal	2013	9000+	27	7636	300+
E-book	48196		97	13016	200+
E-thesis	-	3114	-	-	-
Databases	-	7	3	4	7

Table 8.4 presents the status of e resources in the universities. All the universities (100%) have collection of e-journals. All other universities (80%) other than GU possess e-books collection. Only 20% i.e. GU has collection of e-thesis. All other universities (80%) except CCSU have database collection.
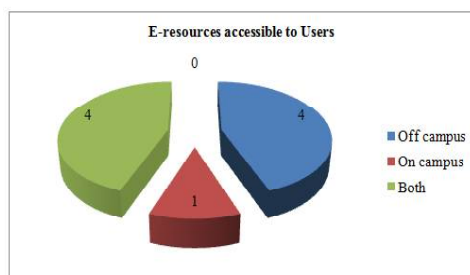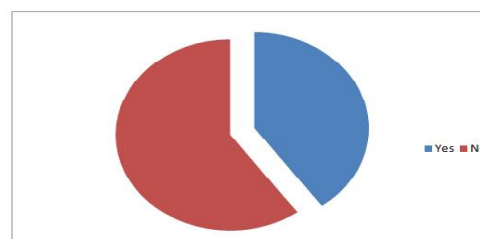

Figure 8.1 E-resources accessible to users

Figure 8.1 shows that other than KU the rest of the universities i.e. 80% made various e-resources accessible to users both on and off campus which highly helps e-learners to get access to information efficiently.

Figure 8.2 Preservation of e resources

The figure 8.2 shows that other than KKHSOU and NLU the rest of the 60% universities i.e. CCSU, GU and KU have preservation system for back volume of e-journals and e-books.

Table 8.5 Membership of Universities to Different Consortia

University	Name of Consortia	Starting Year
CCSU	N-LIST	2008
	DELNET	2014
GU	UCG-INFONET	2004
KKHSOU	UCG-INFONET	2009
NLU	UCG-INFONET	2012

Table 8.5 shows that four (80%) universities are active member of different consortia. KU subscribes e-journals, e-books etc but K.U. is not member of any library consortia.

Table 8.5 Digitization of Different Resources

Digitization (no. of pages)	CCSU	GU	KKHSOU	KU
Manuscript	-	150000	-	-
Rare Book	-	-	-	-
Magazine	8	-	-	-
Newspaper	-	-	-	68
University Newsletter	-	-	200 (approx.)	-
Thesis	15	852524	-	-

Table 8.5 shows the status of digitization in the universities. Only GU has digitized some manuscript collection. Likewise. CCSU has digitized its magazine collection. In case of newspaper, KU has digitized that part of newspaper which has their news published on it. KKHSOU has digitized university Newsletter. CCSU and GU have digitized their thesis collection. It is to be mentioned that GU and CCSU has started digitizing their rare books collection whereas NLU not yet even started digitization of any type of resource.

Table 8.7 Access to Digitized Resources

University	Access for users	Mode of access	
		Offline	Online
CCSU	Yes	Yes	Yes
GU	Yes	Yes	Yes
KKHSOU	Yes	Yes	Yes
KU	No	No	No

Table 8.7 shows that other than NLU & KU the rest of the 60% universities i.e. CCSU, GU, KKHSOU provide access to digitized resources through both online and offline mode.

Table 8.8 Availability of Differente Services

Universities/Services	CCSU	GU	KKHSOU	KU	NLU
OPAC	√	√	√	√	√
Web OPAC	√	√	√	√	√
Internet	√	√	√	√	√
Wi-Fi	√	No	√	√	√
Online CAS/SDI	√	√	√	No	√
SMS/Email alert	√	√	√	√	No
Library Blogs	No	No	√	No	√
Ask a Librarian	No	√	√	√	√
Institutional Repository(IR)	√	√	√	√	√
Social Networking page/group	√	√	√	√	√
Orientation(for using e resources)	√	√	√	√	√

Table 8.8 shows the various services for e-learners. All the universities (100%) provide e-services like OPAC, Web OPAC, Internet, IR, and services through Social Networking page/group, Orientation. Other than GU all other universities (80%) are Wi-Fi enabled. Except NLU all other universities (80%) provides SMS/Email alert. Only KKHSOU and NLU (40%) have library blogs. Except CCSU other universities (80%) provides facility of "Ask a Librarian" service for answering queries.

Table 8.9 ICT infrastructure of the Universities

University ➔ ICT Components ↓	CCSU	GU	KKHSOU	KU	NLU
Computers	25	20	10	62	10
Printer	5	5	2	2	2
Scanner	1	3	1	1	1
Barcode printer	5	-	-	1	1
Barcode reader	5	3	-	3	3
Photocopy machine	2	2	1	1	1
Power backup	UPS/ Generator	UPS/ Invertor	UPS/ Generator/ Invertor	UPS/ Generator	UPS/ Generator/ Invertor
Others	-	-	RFID		Binding Machine

Table 8.9 reveals the various types ICT tools and equipments available in the universities that make e-learning operate. The numbers of computer are highest among all other tools followed by printer, scanner, etc. The facility of barcode reader and barcode printer is not available in KKHSOU, since KKHSOU have RFID technology for circulation. Binding Machine is used in NLU.

Table 8.10 Problems Faced by Universities in Providing Access to e-learning

Sl. no.	Problems	Agree	Slightly agree	Disagree	Neutral
1	Lack of instruction & training on part of staff	-	-	100%(5)	-
2	lack of interaction with user	20%(1)	-	80%(4)	-
3	Lower speed of Network	-	20%(1)	80%(4)	-
4	Budgetary Support	-	-	100%(5)	-
5	Copyright	40%(2)	-	60%(3)	-
6	Lack of availability of mechanism to establish standards for e learning materials	-	-	80%(4)	20%(1)
7	Lack of interest on part of user	20%(1)	-	80%(4)	-

The table 8.10 shows different problems on part of the universities in providing access to e-learning. 40% universities agree that they face problems of copyright which is followed by the problems like lack of interaction with user and lack of interest on part of user. Whereas all the universities (100%) have denied the problem of lack of training and budgetary support. 20% university has remained neutral about the Lack of availability of mechanism to establish standards for e-learning materials.

8. Findings of the Study

The findings of the study are lined up as below:

❖ Out of selected five universities only one university viz. CCSU has its independent website thorough which user can access resources directly.

❖ GU has highest number of professionals actively involved in providing e-learning and highest number of users at same time.

❖ All the universities have plenty collection of e-journals. All universities other than GU possess e-books collection. GU has collection of e-thesis. All other universities (80%) CCSU has database collection.

❖ 80% universities made various e-resources accessible to users both on and off campus.

❖ Only GU has digitized some manuscript collection. Likewise CCSU has digitized its magazine collection.

❖ Only KU has digitized those newspaper articles which have news publication of its University. KKHSOU has digitized university Newsletter CCSU and GU have digitized their thesis collection.

❖ GU and CCSU has started digitizing their rare books collection

❖ NLU not yet even started digitization of any type of resource.

❖ Other than NLU & KU the rest of the univerties i.e. CCSU, GU, KKHSOU provides access to digitized resources both online and offline.

❖ All the universities (100%) provide e services like OPAC, Web OPAC, Internet, IR, Services though Social Networking page/group, Orientation.

❖ Other than GU all other universities are Wi-Fi enabled.

❖ Except NLU all other universities provides SMS/ Email alert. Only KKHSOU and NLU have library blogs. Except CCSU others provides facility of Ask a Librarian.

❖ Among all the other universities KU has the most sound ICT Infrastructure.

❖ All the universities have denied the problem of Lack of training and budgetary support.

9. Suggestion

Some of the suggestions for the university libraries to promote e-learning effectively and efficiently are as follows:

❖ University library should have separate library website.

❖ University library should subscribe to e-resources respective in all disciplines / subjects.

❖ To satisfy users' needs online resources should be updated regularly.

❖ Users should be provided with online access to institutional repository to make e-learning process more effective.

❖ The user orientation programme should include the training on feasible usage of online resources and practical session at individual level so that they become comfortable in using online resources and independent e –learner.

❖ It is recommended that facilities for accessing e-resources should be strengthened by way of enhancing internet connectivity including increased bandwidth, increased number of computers, required software, etc. in order to accommodate more users at a time.

❖ University libraries should conduct regular evaluation and assessment to determine the effectiveness of the online resources meant for e-learning to meet information needs of the users.

10. Conclusion

The e-learning environment has ushered new avenues for libraries to blend their traditional resources and services with electronic ones to meet the information needs of wider clientele. LIS professionals have to develop their skills to design and develop new mechanisms such as library portals, IR, Social media, etc. in order to provide access to resources and effective services to users. The strength of libraries and the library collections depends on the relationships libraries develop and maintain with the creators, publishers and aggregators of e-resources as well as with the users, who access and evaluate these resources. Libraries have to redefine their values and services,

collaborate with their users and design their tasks creatively to provide reference and instructional support to e-learners.

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