E-Resources in College Libraries of Guwahati with Reference to NLIST: A Study

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Abstract

In the era of Information explosion e-resources are the only solution in the academic community for dissemination of knowledge in the present context. The paper mainly discusses on the use and application of e-resources in the college libraries of Guwahati, Assam. It highlights the present scenario of NLIST including access facility, user awareness and also discusses the security threats of digital era. The INFLIBNET Centre, Ahmedabad is providing e-resources to Colleges in India in general and NE Region in particular.

Keywords: E-Resources, NLIST, College Library, E-Journals, E-Books, Security

1. Introduction

In this information era, the development of film, video, microfilm, photocopying and computer technologies have all required changes and accommodation in the law, in library practices, in distribution, in patterns of consumption and use. Digital technology has made more easy and comfortable to apply and use of the collected digital information's in the libraries for further research and overall development of the society. Earlier the main task of the librarian was just the material selection but now the same has been extended to the creation and maintenance of web sites, teaching specific references, fund rising and other task. In fact, the collection development is hybrid work incorporating both technical and public services. The emergence of IT & internet the collection development trends has been changed from traditional to internet/ web technology. The primary goal of collection development efforts is to build a collection that supports the need of the users.

Library patrons in today's environment expect access to electronic items as well as physical materials. In fact, publishers are abandoning the traditional print model in favor of electronic formats that can be substantially less expensive for them to deliver. Physical and electronic versions of scholarly resources serve different purposes: the former may be preferred for embedded graphic objects, whereas electronic versions are easier to access, often in varying combinations of portable document format (PDF), hypertext markup language (HTML), MS Word, extensible markup language (XML), and text.3

2. Features of E-Resource

The main features of digital collections in the libraries are:

a)   Easy access to information any where any time to any one without physical existence.

b)   The potential to display materials that are in inaccessible formats, for instance, large volumes or maps.

c)   Comparatively economical and potential for integration into teaching materials.

d) Access to related material though linkage.

e) Enhanced search ability, including full text.

f) Integration of different media (images, sounds, video, etc.)

g) The ability to satisfy requests for surrogates (photocopies, photographic prints, slides, etc.).

3. E-Resource Collections for College Libraries

Today, e-resources have become a major field in the world literature. Electronic publishing are those publications, which are found in electronic or digital media. The electronic documents are made available either on CD-ROMs or on the Internet. The electronic documents, which are available on CD-ROM, are referred as offline documents while those on the Internet are known as online documents. The digital resources in libraries are E-books (electronic version of a printed book) like textbooks, picture books, moving picture books, multimedia books, hypermedia books, intelligent electronic books, telemedia books and cyber books; E-journals; E-thesis (thesis in electronic format); E-newspapers and newsletters; E-magazines; E-reference sources like dictionaries, almanacs, encyclopedias and other reference sources available online in full-text; Statistical sources; Sound recordings and image databases (Arts, Maps etc.); E-indexes; Web OPAC; Databases; Webpage; Library Consortia; etc.

All types of documents are available through internet or network. Publishing industry has been heavily depending on it. In formally we can divide all available resources in two categories i.e. paid resources, open access resources.

4. NLIST: Extending e-resources to Colleges

Due to rapid growth of documents and escalation in the cost of printed as well as electronic resources, it has become very difficult for a library to afford the expenses of all resources they require. As a result several local, regional, national and international resource sharing network have been developed. The INFLIBNET Centre an IUC of UGC has developed a resource sharing network known as UGC-INFONET Digital Library Consortia in order to provide electronic access to scholarly literature in all areas of learning to the universities and R&D institutions in India.

For college libraries NLIST is another resource sharing network of INFLIBNET Centre which was formally launched on 4ᵗʰ May, 2010. NLIST stands for National Library and Information Services Infrastructure for Scholarly Content is a project funded by the Ministry of Human Resource Development (MHRD) under its National Mission on Education through ICT. It is extending selected e-resources to the college libraries of India which is under 2F/12B section of UGC Act. This programme is jointly executed by the UGC-INFONET Digital Library Consortium, INFLIBNET Centre and the INDEST-AICTE Consortium, IIT Delhi. It provides:

a) Access to cross subscription of e-resources subscribed by the two consortia i.e. subscription to INDEST-AICTE resources for universities and UGC-INFONET resources for technical institutions and

b) Access to selected e-resources to the colleges covered under 2F/12B section of UGC Act. Within one year of its launch, NLIST has been awarded Best Project Jury Award e-INDIA 2010 in the category Digital Learning through ICT in Higher Education Institute. Again NLIST has been awarded the Manthan South Asia Award 2010 under e-learning category and Skoch Digital

Inclusion Award 2011 in the category Technology in Education for NLIST Project. The resources available under NLIST programme for the college libraries have been listed in the following tables:

Sl. No	E-Resources	No. of Journals
01	American Inst. Physics	18
02	American Physical Society	10
03	Annual Reviews	33
04	Cambridge University Press	224
05	Economic and Political Weekly	1
06	Indian Journals	150
07	Institute of Physics (IoP)	46
08	MathSciNet (database of reviews in Mathematics)	1
09	Oxford University Press	206
10	Royal Society of Chemistry	29
11	H.W. Wilson	1420
	Total	**2138**

Table 1: E-journals accessible for college libraries under NLIST programme

Sl.No	E-Resources	No. of E-books
01	E-brary	70,000
02	Oxford Scholarship Online	902
03	NetLibrary	986
04	McGraw Hill	1,308
05	Cambridge University Press	1000
06	Hindustan Book Agency	65
07	ISEAS Books	382
08	Springer e-books	1500
09	Taylor & Francis	1500
	Total	**77,643**

Table 2: E-books accessible for college libraries under NLIST

Besides these MathSciNet (Bibliographic database), Web of Science (E-Resources for Universities Libraries), Annual Review, Project Muse and Nature (E-Resources for Technical Institutions: IIT, IISc, IISERs & NITs) are also accessed through NLIST.

5. Colleges Libraries of Guwahati

As on 31st December 2011 73 college of Assam are registered for NLIST programme. Only 15 colleges of Guwahati (table-3 (a) are registered under this programme. For the present study, 13 colleges of Guwahati are covered. 12 Govt. provincialised general degree colleges, 1 Govt. college of Guwahati have been arranged chronologically by year of establishment in Table 3 (b). The Cotton College, which is the oldest college in the entire North Eastern Region, has been established in the year 1901. The Cotton College, out of the twelve colleges, is the only college which is re-accredited by the NAAC and graded with 'A' grade and recognized by NAAC as the centre of excellence. Other colleges are yet to be re-accredited by NAAC for the second time. Out of the twelve colleges, seven colleges have introduced online e-resources under NLIST programme in the library. The present study is confined on the use of e-resources in the seven college libraries of Guwahati where online e-resources of NLIST are given access by the INFLIBNET Centre through its proxy server.

Name of the college	Status	Access Enabled	Date of effect
KRB Girls College	2F/12B	Yes	17-3-2010
LCB College	2F/12B	Yes	17-3-2010
Pandu College	2F/12B	Yes	17-3-2010
R.G. Baruah College	2F/12B	Yes	17-3-2010
Cotton College	2F/12B	Yes	6-5-2010
Assam Engineering College	2F/12B	Yes	28-5-2010
Handique Girls' College	2F/12B	Yes	2-7-2010
S B Deorah College	2F/12B	Yes	2-7-2010
K C Das Commerce College	2F/12B	Yes	15-7-2010

Dispur College	2F/12B	Yes	20-8-2010
Gauhati Commerce College	2F/12B	Yes	27-12-2010
Guwahati College	2F/12B	Yes	13-1-2011
Paschim Guwahati Mahavidyalaya	2F/12B	Yes	10-3-2011
Govt. Banikanta College of Teacher Education	Non-aided	Yes	12-10-2011
B Borooah College	2F/12B	Yes	19-10-2011

Table 3 (a): Registered Colleges of Guwahati

Name of the college	Year of estt.	NLIST Introduced	Stream(s)	Website http://www.
Cotton College	1901	Yes	Arts, Sc.	www.cottoncollege.org.in
Handique Girls' College	1939	Yes	Arts, Sc.	www.hgcollege.org
B.Barooah College	1943	No	Arts, Sc., Comm.	N/A
Gauhati Commerce College	1962	No	Commerce	www.commercecollege.com
Pandu College	1962	Yes	Arts, Sc., Com	www.panducollege.org
Guwahati College	1964	Yes	Arts, Comm	www.guwahaticollege.org
KRB Girls College	1966	No	Arts.	N/A
LCB College, Maligoan	1971	Yes	Arts, Sc.	www.lcbcollege.org.in
Dispur College	1978	No	Arts, Comm.	www.dispurcollege.org
RG Baruah College	1978	No	Arts, Comm	N/A
KC Das Commerce College	1983	Yes	Commerce	www.kcdascollege.com
SB Deorah College	1984	Yes	Arts, Comm	www.sbdeorahcollege.org
Paschim Guwahati Mahavidyalaya	1978	No	Arts, Sc.	www.paschimguwahatimahavidyalaya.com

Table 3 (b): List of the colleges of Guwahati

6. Users Covered

E-resources of NLIST can be accessed by the users with the help of a valid user Id and password. The colleges registered under NLIST have to prepare a list of authorized users of the college such as teachers, students, staffs in the prescribed format for the purpose of getting User Id and Password

from the INFLIBNET centre, Ahmedabad. After obtaining User Id and Password from the INFLIBNET centre, user can access e-resources by login at NLIST site i.e. http://nlist.inflibnet.ac.in. The college libraries of Guwahati registered under NLIST programme had already obtained user Id and password of authorized users from the INFLIBNET Centre. Table 4 below shows the number of users of the registered colleges of Guwahati who were given User Id and Password to access e-resources under NLIST. The table shows that most of the colleges, except K C Das Commerce College, have not created Id and Password for the students for accessing NLIST e-resources. However, some colleges viz. Cotton College, S. B. Deorah College and Pandu College are providing access to e-resources to the interested students also in the college library by using the Librarians' Id and Password.

Among the faculty members, 91% faculties of Cotton College are having Id and Password followed by Gauhati College with 88%, S. B. Deorah College with 84%. It is interesting to note that the LCB College is providing access neither to the faculty members nor to the students because of lack of internet connectivity in the college library.

Name of the College	User Population			
	Faculty		Student	
	Access given	TotalNo.	Access Given	Total No.
Cotton College	250(91%)	275	Yes (Limited)	4000
Handique Girls'	50(54%)	93	No	3000
Pandu College	70(64%)	110	No	1500
Gauhati College	57(88%)	65	No	2100
LCB College	Nil(0%)	39	No	1200
K.C.Das Commerce	28(53%)	53	148	2200
S.B.Deorah College	27(84%)	32	Yes (Limited)	1200

Table 4: Users Covered under NLIST

7. User's Awareness

User's awareness is very much essential as many users do not know how to access. Table 5 shows that only three college libraries of Guwahati conducted users' orientation on how to access and use e-resources.

Sl No.	Name of the College	Whether demonstration given to users		No. of user attended demonstration	
		Faculty	Student	Faculty	Student
1	Cotton College	Yes	No	250	--
2	Handique Girls'	No	No	Nil	--
3	Pandu College	No	No	Nil	--
4	Gauhati College	No	No	Nil	--
5	LCB College	No	No	Nil	--
6	K C Das Commerce	Yes	Yes	28	148
7	S B Deorah College	Yes	No	19	--

Table 5: Users Demonstration on How to use e-Resources

8. Internet Connectivity

With regard to internet connectivity, Table 6 shows that only cotton college library has leased line connectivity with more than five mbps bandwidth. Five libraries have broadband connectivity of which four colleges have 556 kbps bandwidth and one college has five mbps bandwidth connectivity of BSNL. LCB College does not have any Internet connectivity though it has already registered under NLIST programme.

College Name	Type of connectivity			Bandwidth		
	Broadband	Leased Line	other	556 kbps	1mbps	above 5 mbps
Cotton College	--	Yes	--	--	--	Yes
Handique Girls College	Yes	-	--	Yes	-	--
Pandu College	Yes	--	--	--	--	Yes
Gauhati College	Yes	--	--	Yes	--	--
LCB College	No	No	No	No	No	No
KC Das Commerce	Yes	--	V-Sat	Yes	--	--
S B Deorah College	Yes	--	--	Yes	--	--

Table 6: Internet Connectivity

9. E-resources Access Facility

Almost all the college libraries, except LCB college library, are having internet facility for accessing e-resources in the college campus. Table 7 reflects that three colleges are also having Internet facility in the departments from where the faculties can also access e-resources. Three college libraries (viz. Cotton College, K C Das Commerce College, and S B Deorah College) are also providing e-resources access facility to the interested students in the library under the supervision of the Librarian. Since INFLIBNET Centre is providing access to the NLIST e-resources through the proxy server and does not require any IP address, the faculties of the colleges having valid Id and Password can access e-resources in their personal computers from outside the college campus.

Name of the college	No. of computers with Internet connectivity		No. of computer used for NLIST e-resources in library		
	Library	Departments/ Campus	Faculty	Student	Total
Cotton College	4	50	4	2	54
Handique Girls'	12	30	10	0	42
Pandu College	2	30	2	0	32
Gauhati College	5	0	2	0	5
LCB College	0		0	0	0
KC Das Commerce	7	0	2	2	6
SB Deorah College	5	0	2	1	5

Table 7: E-resources Access Facility in the College

A good power backup facility is very much essential as frequent power failure takes place in the Guwahati city. Table 8 shows that Cotton College, Pandu College & KC Das Commerce College libraries have Generator for long hour power back up. The SB Deorah College library and KC Das Commerce College are having inverter while rest of the colleges are having UPS which provide very less power back up facility in comparison to generator and inverter.

Name of the college	Type of Power back-up Facility Available		
	UPS	Inverter	Generator
Cotton College	—	—	Yes
Handique Girls'	Yes	—	—
Pandu College	Yes	—	Yes
Gauhati College	Yes	—	—
LCB College	Yes	—	—
K.C.Das Commerce	—	Yes	Yes
S.B.Deorah College	—	Yes	—

Table 8: Type of Power back-up Facility Available in the Library

10. Suggestions

a) All registered must provide access to e-resources of NLIST to the students of college libraries of Guwahati.

b) User orientation on how to search, retrieve, and use e-resources should be arranged for the teachers and students of the college regularly.

c) Infrastructure facility should be improved for accessing e-resources in the college libraries of Guwahati.

d) Colleges should possess higher bandwidth internet connectivity.

e) A dedicated power back-up facility should be set up in the colleges for long hour electricity failure.

f) Jstor e-journals should be added in NLIST for the benefit of the users of the college libraries.

g) Students Syllabus/Course oriented e-resources including e-books should also be included under NLIST.

h) Training on e-resources retrieval skills for the teachers and students of the college should be made compulsory.

i) The updated version of antivirus software should install on the server to avoid the threat of virus

11. Conclusion

With the advantages of the information age the libraries have brought new opportunities to enhance their services. Using new technologies to achieve the highest degree of security possible if new technologies are ensured and need another layer of action for the effective use of the resources. Some of the common and most damaging forms of

security threats are viruses, worms, Trojan Horse, Hacking and cracking**,** Spoofing, Denial of service attacks**,** etc.

In today's electronic environment, librarian must act as a knowledge manager, applying the skills of collection planning, selection, analysis and cooperation in order to manage the intersection of print and digital resources. They need to think about the availability and accessibility of multiple electronic formats in order to deliver the best information to all users in the least possible time. The web has introduced new resources to collection managers throughout the world. Digital resources are affecting collection development and management policies and are drawing attention to two areas that have been neglected namely how the libraries change to meet the new searching habits of users on the Internet and how do collection managers react to changing information needs of users. With more and more resources available in the digital format, the collection development has to include these resources, thus making them easily accessible to users.

The INFLIBNET Centre Ahmedabad is providing NLIST subscriptions free of cost to all the college libraries of N E India which are under 2F/12B section of UGC. Even though only 73 colleges of Assam has registered for this service and the numbers are also not encouraging for other college libraries of the region. So it the need of the hour that all college libraries of the region must avail these facilities put forwarded by INFLIBNET.

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