Use and Awareness about N-List E-Resources by the Graduate Students of Mariani College, J.B. College and C.K.B. Commerce College of Jorhat District, Assam: A Study

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Abstract

With the emergence of technology, demand for e-resources growing day by day. Advanced ICT infrastructures also encourage users to use e-resources in a wide range. Each user now accessing e-resources over the web. People find it easy to accessing and disseminating e-resources sitting at home. N-List e-resource is a programme where selected collection of e-journals and e-books provided to the colleges after registration. It facilitates access to e-resources to students, researchers and faculty, from colleges through proxy servers. N-List provides scholarly contents in e-form at a lower price. This paper briefly described the use and awareness of N-List Programme, its uses and other issues.

Keywords: e-resources, consortia, N-list, INFLIBNET, graduate students,

INTRODUCTION

With the help of ICT, libraries can fulfil the diverse needs of the users. Libraries are now busy in converting their print resources to e-resources. Gradually traditional library transform into the digital library then to the virtual library. Developing networking technology make it possible to access e-resources in far flung areas. Another advantage of e-resources is that it reduces the storage problems and control over information explosion. Rapid growths in communication technology minimise the cost of communication. E-resource is a recent origin and becomes a popular and widely acceptable tool for the human

being. In this changing environment, it becomes necessary to study the use and awareness of e-resources among the users.

At present, college libraries prefer electronic resource than the print resource for optimum use. It is because the high price of the print resource, e-resource does not require any physical space and its maintenance is also easy, digital literacy and appointment of skilled manpower in the library. Access to e-resources influences the students and scholars to conduct research and it also changes the way of using the traditional library. It means e-resource make traditional library popular among the user community. But in-house e-resource creation is not easy for the traditional library as it requires a huge amount of money. A lot of efforts have been taken in past few years to overcome this problem of financial crunch by resource sharing through consortia for university libraries. UGC-INFONET, INDEST-AICTE Consortium and N-List are three major initiatives for universities and college library users. The National Library and Information Infrastructure for Scholarly Content (N-LIST) were proposed to the Ministry of Human Resource Development (MHRD) under its National Mission on Education through ICT to address two issues, namely:

(i)   cross-subscription to e-resources amongst technical institutions and universities i.e. subscription to INDEST-AICTE resources for universities and UGC-INFONET resources for technical institutions; and

(ii)   Extending access to selected e-resources to more than 6,000 government and government-aided colleges.

Mariani College Library, J.B.College.Library and C.K.B.Commerce College Library of Jorhat District are members of N-LIST and providing access to the electronic resources to its user

WHAT IS N-LIST (NATIONAL LIBRARY AND INFORMATION SERVICES INFRASTRUCTURE FOR SCHOLARLY CONTENT)

The Project entitled "National Library and Information Services Infrastructure for Scholarly Content (N-LIST)", being jointly executed by the UGC-INFONET Digital Library Consortium, INFLIBNET Centre and the INDEST-AICTE Consortium, IIT Delhi provides for i) cross-subscription to e-resources subscribed by the two Consortia, i.e. subscription to INDEST-AICTE resources for universities and UGCINFONET resources for technical institutions; and ii) access to selected e-resources to colleges. The N-LIST project provides access to e-resources to students, researchers and faculty from colleges and other beneficiary institutions through server(s) installed at the INFLIBNET Centre. The authorized users from colleges can now access e-resources and download articles required by them directly from the publisher's website once they are duly

authenticated as authorized users through servers deployed at the INFLIBNET Centre.

FOUR COMPONENTS OF N-LIST
The project has four distinct components, i.e.
i)   To subscribe and provide access to selected UGC-INFONET e-resources to technical institutions (IITs, IISc, IISERs and NITs) and monitor its usage;
ii)   To subscribe and provide access to selected INDEST e-resources to selected universities and monitor its usage;
iii)   To subscribe and provide access to selected e-resources to 6,000 Govt/Govt.-aided colleges and monitor its usage; and
iv)   To act as a Monitoring Agency for colleges and evaluate, promote, impart training and monitor all activities involved in the process of providing effective and efficient access to e-resources to colleges.

The INDEST and UGC-INFONET are jointly responsible for activity listed at i) and ii) above. The INFLIBNET Centre, Ahmadabad is responsible for activities listed at iii) and iv) above. The INFLIBNET Centre is also responsible for developing and deploying appropriate software tools and techniques for authenticating authorized users.

NOTE:
From Year 2014, N-LIST Programme is subsumed under UGC-INFONET Digital Library Consortium as college Component. The colleges (except Agriculture, Engineering, Management, Medical, Pharmacy, Dentistry and Nursing) in India are eligible to get access e-resources under N-LIST Programme

CURRENT STATUS
As on **Jul 1 2017**, a total number of 2952 Govt. / Govt.-aided colleges covered under the section 12B of UGC Act as well as Non-Aided colleges. Log-in ID and password for accessing e-resources has been sent to the authorized users from these 2952 colleges. All e-resources subscribed for colleges under the N-LIST Project are now accessible to these 2952 colleges through the N-LIST website (http://nlist.inflibnet.ac.in)

CONSORTIA
Consortia mean alliance of institutions having common interests. Library consortia in today's digital age are quite different from that of library networks in yester years. The main reason is that the resources that are shared in today's

consortia environment are predominantly in electronic form such as e-journals, e-books and databases (TalmaleandHumbre, 2012).

HOW TO ACCESS N-LIST E-RESOURCES?
Access to N-LIST resources are through Proxy servers of INFLIBNET. The URL address of NLIST site is: http://iproxy.inflibnet.ac.in:2048/login once you visit the site, enter the login and password. The members can obtain user ID and Password from their Libraries

LITERATURE REVIEW
Suseela (2014) surveyed UGC-INFONET digital library consortium resources: An analytical study of usage pattern in University of Hyderabad. The study stated that availability of electronic information resources in the form of full text collections/databases and usage is two different factors, however the credibility of the collection lies in their utility. The above findings indicate that 92% of usage of titles (e-resources) from the UGC-INFONET Digital Library Consortium databases wherein 9 databases were utilized 100% during 2010-2012. These observations are remarkable and highlighting the efforts of the consortium, member institutions and also to the academic fraternity
Bal Ram & Bhaskar Karn (2014) carried a Study of U.G.C. Infonet E-Resource Consortia in Universities of Eastern India. In figure:3 they show that the streams of respondents. Here13% respondents are belongs to Social Science stream, 6% respondents are belongs are Humanities and 81% respondents belongs Science and Engineering streams, so it is clear that the number of respondents are much more than others streams respondents. Also they show in figure: 6, the frequency of users to visit central library in a week. 14% users visits only once in a week, 16% users 2-3 times in a week, 11% users 4-5 times in a week 35% users daily visits and 24% users occasionally visit in central library for fulfilment their needs. In figure: 11 they show the awareness of users about Library & Information services. The blue line graph indicates the awareness about services and red line of graph indicates not aware about services.

OBJECTIVE OF THE STUDY
✓   To acquire knowledge about the use of N-List e-resources.
✓   To acquire knowledge about awareness about N-List e-resources.
✓   To know how frequently user uses N-List e-resources.
✓   To know why user uses N-List e resources.
✓   To find out the source from where user access N-List e-resources.
✓   To discover the opinions about N-List e-resources.

METHODOLOGY

To examine the "Use and Awareness about N-List E-Resources by the Graduate Students of Mariani College, J.B. College and C.K.B. Commerce College Of Jorhat District, Assam : A Study", A survey was conducted through questionnaire method. The researcher distributed 90 questionnaires each college. Total 360 questionnaires were distributed. Simple random sampling technique was used for this study. The completed questionnaire was personally collected from respondents. In total 305 (84%) questionnaire were received back as complete and relevant for analysis. Calculations have been made manually for analysing the responses. The graphs have been prepared using MS-Excel.

DATA ANALYSIS AND INTERPRETATION

The questionnaires prepared for the study were distributed among Arts, Science and Commerce stream. Table 1 shows that 120 questionnaires were distributed to Arts,115 received and response rate for the survey is 95%. 120 questionnaires distributed to Science students and 105 were received from them. The response rate is 87%. 120 questionnaires distributed to commerce students and 85 received back. The response rate is 70%.Overall response is 84%.

FACULTY WISE RESPONSE

Table 1: Showing the faculty wise response

STREAM	NO OF ISSUED QUESTIONNAIRES	NO OF RECEIVED QUESTIONNAIRES	%
Arts	120	115	95%
Science	120	105	87%
Commerce	120	85	70%
TOTAL	360	305	84.72%

FAMILIARITY OF N-LIST AMONG STUDENTS

Table 2 shows that 279 students from arts, science and science stream are familiar with N-List e-resources. The response rate is 91.4%.only 26 students are not familiar with N-List.

Table 2: showing the familiarity of n-list among students

FAMILIARITY OF N-LIST	RESPONDENTS	%
Yes	279	91.4%
No	26	8.6%
TOTAL	305	100%

SOURCES OF INFORMATION ABOUT N-LIST

Table 3 reveals that 34% graduate students get information about N-List e-resources from Librarian. 21% respondents said that Library orientation class is a good platform to know about N-list e-resources. Students also learn about N-List e-resources by self learning and this percentage is 21%. 5% students get knowledge about N-List e-Resources from friends. Only 2% students state that they get information about N-List e-resources from others.

Table 3: Showing the sources of information about n-list

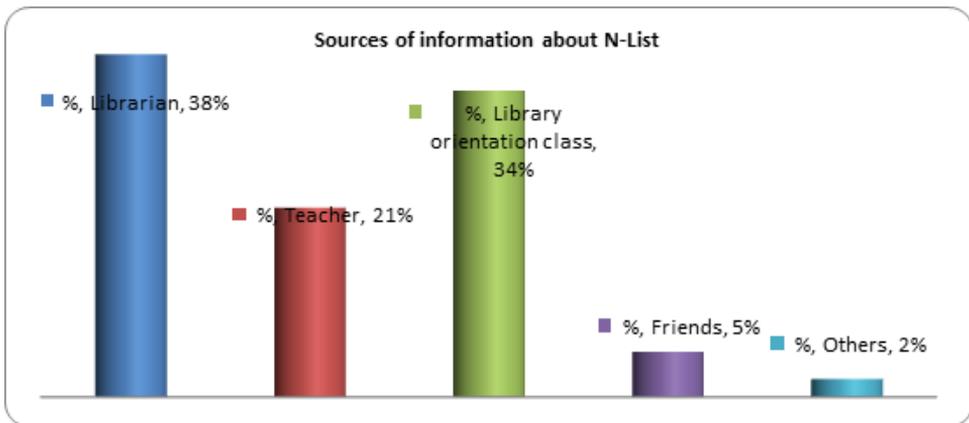| Sl No	SOURCES	RESPONSES	%
1	Librarian	115%	38%
2	Self learning	65	21%
3	Library orientation class	105	34%
4	Guidance from Friends	15	5%
5	Trial and Error	05	2%
	Total	305	100%

Figure 1: Showing source of information

TYPES OF N-LIST SERVICES USE FOR ACADEMIC WORK

Table 4: Showing the n-list services use for academic work

TYPES OF N-LIST RESOURCES	RESPONSES	%
E-JOURNAL		
American Institute of Physics	30	9.8
American Physical society	20	6.5
Annual Reviews	23	7.5
Cambridge University Press	-	-
Economic and Political Weekly	66	21.63
Indian Journals	65	21.31
Institute of Physics	34	11.14
JSTOR	23	7.5
Oxford University Press	-	-
Royal Society of Chemistry	32	10.49
H.W.Wilson	12	3.93
E-BOOK		
Cambridge Books Online	22	7.21
E-brary	-	
EBSCOHost-Net Library	12	3.93
Hindustan Book Agency	14	4.59
Institute of South East Asian Studies(ISEAS) Books	-	-
Oxford Scholarship	-	
Springer eBooks	34	11.14
Sage Publication eBooks	62	20.32
Taylor Francis eBooks	20	6.55
My library-McGraw-Hill	-	-
E-resources for Universities (Web of Science)	126	44.59
Bibliographical databases (MathSciNet)	15	4.91

The use of various types of N-LIST Services by the students of Mariani College, J.B.College and C.K.B. Commerce College has been summarised in the form of Table-4.

The Table-4 depicts that there are 66(21.63%) students use 'Economic and Political Weekly', about 65(21.31%) students use' Indian Journals', "Institute of Physics", users are 34(11.14%). "American Institute of Physics", uses by 30(9.8%) students. About 32(10.44%) students use "Royal Society of Chemistry". "Annual Review" users are about 23(7.5%)."JSTOR" uses by 23(7.5%) students. About

20(6.5%) students use "American Physical Society" "H.W. Wilson" users are comparatively low, it is about 12(3.93%).

Again when we notice the above table-4, we see that "E-Resource for Universities(Web Of Science)" e-book users are about 126(44.56%).It is followed by Sage Publication E-Book and its percentage is 62(20.32%). "Springer e-book" users are about 34(1.14%).22(7.2%) students use "Cambridge Books Online". About 20(6.55%) students use "Taylor Francies e-Book". About 15(4.91%) students use "Bibliographical databases (MathSciNet)"."Hindustan Book Agency" users only 14(4.59%) and it is followed by EBSCOHost-Net Library and its percentage is about 12

FREQUENCY OF USE

Table 5: Showing the frequency of use

FREQUENCY	RESPONSES	%
Daily	115	38
Many times a week	66	21.63
Once a week	64	20.98
Once a month	35	11.47
Less often	25	8.19
Total	305	100%

Table-5 shows that approximately 38% respondents use N-List e-resources daily.21.63%user use N-List e-resources many times in a week.20.98% user use N-List e-resources many once a week. 11.47 %%user use N-List e-resources once in a month. 8.19 % respondents use N-List e-resources less often.

PURPOSE OF USING N-LIST

Table 6: Showing the purpose of using n-list

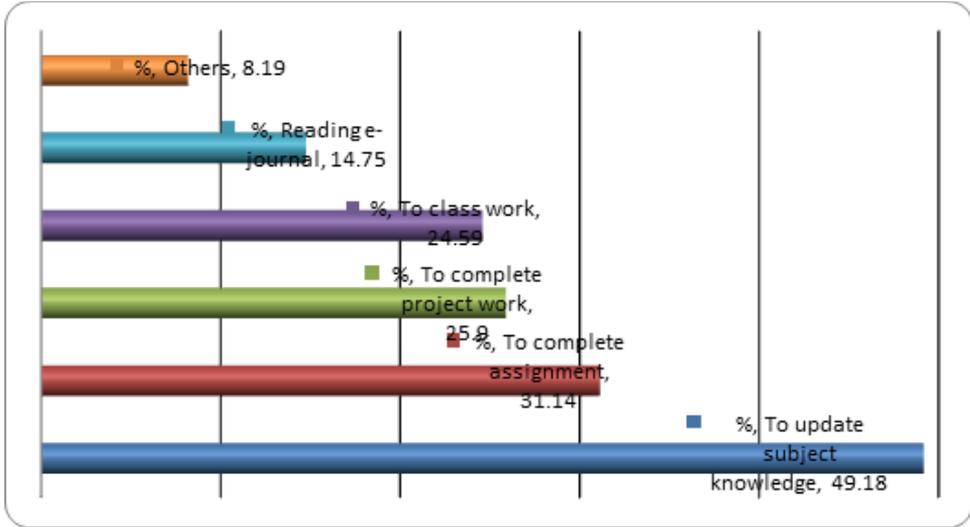| PURPOSE	RESPONSES	%
To update subject knowledge	150	49.18
To complete assignment	95	31.14
To complete project work	79	25.90
To class work	75	24.59
Reading e-journal	45	14.75
Others	25	8.19

PURPOSE OF USING N-LIST

Figure 2: Showing the purpose of using n-list

Table-6 and figure-2 reveals that students use N-List e-resources for various purposes.49.18% students using N-List e-resources to update their subject knowledge.31.14% students using N-List e-resources to complete the assignment. 25.90% respondents complete their project work with the help of N-List-e resources. 24.59% respondents using N-List e-resources to solve class work. 14.75% students reading e-journal by using N-List e-resources. Only 8.19% students use N-List e-resources for other purposes.

PLACE OF ACCESSING N-LIST E-RESOURCES

Table 7: Showing the place of accessing n-list e-resources

PLACE	RESPONSES	%
College Library	222	72.78
College computer lab	87	28.52
Home	23	7.54
Cafe	17	5.57

Table-7 shows that 72.78% respondents search N-List e-resources in college library.28.78% search N-List e-resources in computer Lab.7.54% search N-List at home. 5.57% respondents search N-List at Cafe.

MOST USED SEARCH STRATEGIES TO ACCESS N-LIST

Table 8 and figure 3 shows that majority of students browse N-List e-resources by Title and its% is 31.47%.Next 24.6% respondents search by subject. Publisher information is used by 22% for browsing N-List e-resources. Keyword browsing respondents are 18.03%. Only 3.9% respondents use quick search.

Table 8: Showing the most used search strategies to access n-list

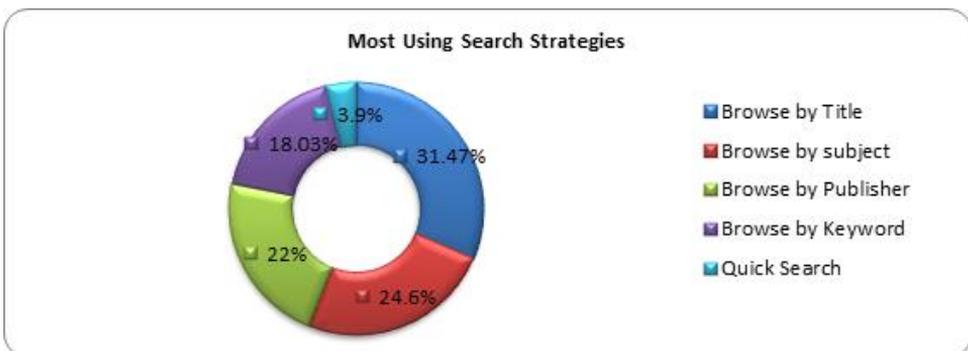| SEARCH STRATEGIES	RESPONSES	%
Browse by Title	96	31.47
Browse by subject	75	24.6
Browse by Publisher	67	22
Browse by Keyword	55	18.03
Quick Search	12	3.9
Total	305	100

Figure 3: Showing the most using search strategies

PREFERRED PHYSICAL STORAGE MEDIUM USED FOR STORING DOWNLOADED RESOURCES

The preferred physical storage medium used for storing downloaded N-LIST resources in summarized in the form of table-8.

The Table-9depicts that 238(78%) students prefer to store downloaded N-LIST resources in 'Pen Drive', followed by 56(18%) in 'Memory Card', and 11(4%) in 'Compact/ DVD' for storing N-LIST resources.

Table 9: Showing the preferred version of storage media

STORAGE MEDIUM	RESPONSES	%
Pen Drive	238	78
DVD/compact disc	56	18
Memory Card	11	4
Total	305	100

OPINION ABOUT E-JOURNAL COLLECTION IN N-LIST

It is evident from above table-10 that the majority of the Arts and Science and Commerce students in three colleges expressed their opinion about N-LIST e-journal collection is excellent. The 21.96%, 10.49% and 7.5% of responses of students are good, moderate and poor respectively.

Table-11 also depicts that 85(27.86%)students Problems/Barriers while using N-LIST Services to 'Varied search pattern', followed by 65(21%) ' less Bandwith", about 62(20.32%) students express that "Virus affect" is a problem while using N-LIST Services.36(11.80%) students express that while they use N-List the required page loading takes more time, which is a problem."Unnecessary pages " are also a problem for 32(10.49%) students."System Hang Up "is also a common problem for 25(8.19%) students.

Table 10: Showing the opinion about e-journal collection in n-list

OPINION	RESPONSES	%
Excellent	183	60
Good	67	21.96
Moderate	32	10.49
Poor	23	7.5
Total	305	100

FACED PROBLEMS/BARRIERS WHILE USING N-LIST SERVICES

Table 11: Showing the faced problems/barriers while using n-list services

PROBLEMS/BARRIERS	RESPONSES	%
Varied search pattern	85	27.86
It is taking more time to get connected to the required site	36	11.80
Systems hang up	25	8.19
Virus affected	62	20.32

Unnecessary pages	32	10.49
Less Bandwith	65	21
TOTAL	305	100

FINDINGS AND SUGGESTIONS

In the present study, the authors have provided a useful summary of use and awareness about N-LIST e-resources by the graduate students of Mariani College, J.B.College and C.K.B.Commerce College of Jorhat District, Assam: A Stud

The major findings of the study and suggestions to improve the access and usage of these electronic information resources have been summarised below:

FINDINGS

The major findings of the study are

✓ 279 students from arts, science and science stream are familiar with N-List e-resources. Response rate is 91.4%.only 26 students are not familiar with N-List.

✓ 34% graduate students get information about N-List e-resources from Librarian. 21% respondents said that Library orientation class is a good platform to know about N-list e-resources. Students also learn about N-List e-resources by self learning and this percentage is 21%. 5% students get knowledge about N-List e-Resources from friends. Only 2% students state that they get information about N-List e-resources from others.

✓ 38% respondents use N-List e-resources daily.21.63%user use N-List e-resources many times in a week.20.98% user use N-List e-resources many once a week. 11.47 %%user use N-List e-resources once in a month. 8.19 % respondents use N-List e-resources less often.

✓ 49.18% students using N-List e-resources to update their subject knowledge.31.14% students using N-List e-resources to complete assignment. 25.90% respondents complete their project work with the help of N-List-e resources. 24.59% respondents using N-List e-resources to solve class work. 14.75% students reading e-journal by using N-List e-resources. Only 8.19% students use N-List e-resources for other purposes.

✓ 72.78% respondents search N-List e-resources in college library,28.78% search N-List e-resources in computer Lab.7.54% search N-List at home. 5.57% respondents search N-List at Cafe.

✓ majority of students browse N-List e resources by Title and it's % is 31.47%.Next 24.6% respondents search by subject. Publisher information is

- used by 22% for browsing N-List e-resources. Keyword browsing respondents is 18.03%. Only 3.9% respondents use quick search.
- ✓ 238(78%) students prefer to store downloaded N-LIST resources in 'Pen Drive', followed by 56(18%) in 'Memory Card', and 11(4%) in 'Compact/ DVD' for storing N-LIST resources.
- ✓ Majority of the Arts,Science and Commerce students in three colleges expressed their opinion about N-LIST e resource collection are excellent. The 21.96%, 10.49% and 7.5% of responses of students are good, moderate and poor respectively.
- ✓ 85(27.86%)students Problems/Barriers while using N-LIST Services to 'Varied search pattern', followed by 65(21%) ' less Bandwith", about 62(20.32%) students express that "Virus affect" is a problem while using N-LIST Services.36(11.80%) students express that while they use N-List the required page loading take more time, which is a problem."Unnecessary pages" are also a problem for 32(10.49%) students."System Hang Up "is also a common problem for 25(8.19%) students.

SUGGESTIONS
- ✓ The students should be trained in using advance search options available in search menu of N-LIST resources for retrieval of relevant information.
- ✓ The Library and Information Centre should organize seminars, workshops and orientation programmes for students for accessing N-LIST e-resources at regular interval of time to keep them pace with latest technological changes.
- ✓ College library computer infrastructure should be improved for providing better N-LIST e-resources.
- ✓ The students should further improve their information searching skills to make better use of largely available electronic information resources.

CONCLUSION

Technological advancement and easy internet accessibility change our lives globally. In today's internet atmosphere we mostly depend upon e-resources. Each and every individual now have smart phone or other electronic gadgets which are used widely not only for interacting people but for accessing required e-resources in one click. But for accessing available resources user must have technical knowledge. With the development in the area of Internet and information technology, more and more of the educational resources are being produced, distributed and accessed in the digital format. The government of India is spending large amount on the e-resources which are made available via consortia. The electronic resources in the virtual world represent a large

investment of people's effort, money and wisdom. The users should become familiar with latest information resources and to make optimum utilization of electronic information resource available in the institution. Wide use of N-List e-resources makes it fruitful and success.

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