

# Present Status of Information Communication Technology and Best Practices of College Libraries to Enhance Quality Information in Upper Assam

## Abstract

College libraries play a vital role to provide varied, authoritative and up-to-date information to meet the thrust of its users. The rapid changes of Information Communication Technologies have changed the scenario of the libraries in its day to day functioning. The development of the academic libraries in terms of ITs and services have changed the user's expectations in different ways. To congregate the demands of the end-users successfully it becomes essential to recognize and implement some best practices in the academic libraries of higher education institution. For this a library needs quantity of resources and must provide quality services. In this an attempt has been made to find out the present status of Information Communication Technology and best practices of college libraries to enhance quality information in Upper Assam.

**Keywords:** Information Communication Technology (ICT), Best Practice, LIS

## Introduction

A Library is a temple of knowledge. According to the father of Library Science Dr. S. R. Ranganathan, 'A Library is a public institution or establishment charged with the care of the collection of books, the duty of making them accessible to those who require the use of them and the task of converting every person in its neighbourhood into a habitual library goer and reader of books'<sup>1</sup>

According to Louis F. Fargo the aim of an academic library is –

- i. To acquire books and other materials related to course curriculum
- ii. To guide pupils to find out relevant information for both personal and curricular purpose
- iii. To develop pupil's skill , encourage the habit of personal investigation
- iv. To encourage lifelong education through the use of library resources
- v. To encourage social attitudes and provide experience in social and democratic living
- vi. To work cooperatively and constructively with institutional and administrative staff of the school

As such, an academic library helps it users to discover new materials and the equipment needed for their use for both individual and class room study and teaching. This also helps in the enlightenment of the personality of the individual at the intellectual, spiritual and mental levels and should include social virtue and foster intellectual development to make him a worthy citizen.

According to John Dewey, the great educationist and philosopher, "the aim of education is development of individuals to the utmost of their potential". A college library exercises great role in influencing and stimulating the user's mind and intellectual curiosity which is one of the major objectives of all educational institutions. Library of higher education performs functions like '...teaching, research, publications, conservation of knowledge and idea, extension, service and integration'<sup>2</sup>.

In fact, the higher education institutions play a significant role in the development of the society. The main function of society is to seek and cultivate new knowledge by way of research and extend higher education to the youth, to encourage academic investigation to the problems of the society. The academic library information services and the librarian play a vital role of intermediary to help the academicians and researchers to access, retrieve, and disseminate the required knowledge and idea to satisfy the inquisitiveness.

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All the Education Commissions and Committees have paid due emphasis on the role and importance of University Library. Radhakrishnan Commission (1948) rightly called it, 'Heart of University'. It plays a crucial role in dissemination of knowledge scattered in different sources of knowledge preserved in the library. Besides, usual teaching at the graduate and post graduate levels, the universities also give due emphasis on research. Research without support of the Library cannot be thought of. Apart from this, effective teaching and learning cannot take place without library support. This may be better explained in the words of the University Grants Committees report of Great Britain (1921) which said, 'The character and efficiency of a University may be gauged by its treatment of its central organization, the Library. We regard the fullest provision for library maintenance as the primary and vital need in the equipment of University.'<sup>3</sup>

Library is one of the social service production systems which serve the modern society with a fundamental commodity known as "Information". It is the product of human mind. When an individual interacts with environment in a non-physical form, knowledge is borne. Knowledge, when communicated to other becomes information. Hence information gets its value only when it is communicated and therefore, it has been rightly identified as a process of becoming informed. Library is concerned with this process and promotes the communication of information through its service termed information services.

Information communication technology is the electronic process for collecting, storing, processing and communicating information. The entire process is the combination of both computer system and telecommunication. Present day technologies of modern world have brought a drastic change in the field of information and communication technology. Information Communication Technologies has converted the world into a global village. The rapid changes of Information Communication Technologies have changed the scenario of the libraries in its day to day functioning. The development of the academic libraries in terms of ITs and services have changed the user's expectations in different ways. This has enormously changed the way of collection building and in providing different services to its end users. To congregate the demands of the end-users successfully it becomes essential to recognize and implement some best practices in the academic libraries of higher education institution.

Oxford Advanced Learners Dictionary describes best practices as quality of high standard, excellence, highly improved, outstanding per excellence service. It means way of doing something that is usual or expected way in a particular organization or situation, guidelines for good practices. In this process of developing best practices we take action rather than good ideas, and we improve our skills.

A best practice may be innovative and be a philosophy, policy, strategy, program, process or practice that solves a problem or create new

opportunities and positively impact the whole organization (NAAC, 2006)

The implementation of quality improvements in the library means a change from an inner process oriented view, to a customer oriented interactive approach. It is the intersection between the public tradition and the service of customer in a market-oriented environment that creates a challenge for improvements of library service quality.<sup>4</sup>

Quality management in education is a vital element in the development of the modern society. In a higher education institution quality is a multidimensional approach. To build a quality environment in a higher education institution the active participation of all the stake holders of the institution is highly essential. Library of a higher education institution is such a functioning agency which can be said to manifest one such dimension.

To assess the quality of the academic libraries, the University Grants Commission of India has set up NAAC (National Assessment and Accreditation Council) for conducting audits and inspections on the quality of service provided by the higher educational institutions, including library services. To manage the quality of academic libraries they must develop systems, philosophies and strategies as guided by the assessment guidelines defined by NAAC.

With the time the higher education institutions have come to realize that quality enhancement is essential not only for the institutions but also for the nation. To enhance the quality in education environment the library and information services and libraries have to shoulder some new responsibilities and challenges with the parent institution.

### Objectives

The study aims to study the best practice that enhances the academic information environment and usability of the provincialised college libraries and to study the present Information Communication Technology environment of the provincialised College libraries of Upper Assam.

### Delimitation of the Study

1. The present study has been delimited only to the provincialised college libraries of Upper Assam as notified by the Government of Assam on 22<sup>nd</sup> December 2005(Assam Act No. XLVI of 2005). Colleges of professional and technical education, non-provincialised colleges, government colleges, junior colleges are not included in this study.
2. The area taken for the study is Upper Assam. In this study, Upper Assam comprises of Tinsukia, Dibrugarh, Sivasagar, Jorhat, Golaghat, North Lakhimpur and Dhemaji districts. For this study, the provincialised college libraries under the affiliation of University of Dibrugarh have taken into account.

### Methodology

The study has been conducted through descriptive survey method. Descriptive survey method is concerned with the present and attempts to determine the status of the phenomena under investigation.

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### Population

The study was conducted regarding the best practices and Information Communication Technology (ICT) to enhance quality information environment of provincialised college libraries in higher education institutions of Upper Assam

There are a good number of Academic Libraries to support its parent organizations and in the upliftment of their academic programme. The study covers only the provincialised College Libraries of Upper Assam as notified by the Government of Assam on 22<sup>nd</sup> December 2005(Assam Act No. XLVI of 2005). All the libraries of provincialised college of the area have been regarded as population in the study.

### Sample

A representative 30% of the population has been selected as the sample of the study on the basis of simple random sampling technique .

### Research Tools

The following tools have been selected for the present study:

Self structured questionnaire for librarians

### Statistical techniques

To perform the work, various well defined statistical techniques have been used to analyze the data.

1. Simple percentage calculation
2. Graphical Representation

### Findings and Analysis

Computerized services are essential to cope with the fast changing logistics of any enterprise in the world. The application of the same in the libraries also allows no alternative. In Assam the use of this benefit of modern science has come late. However the libraries are all set to change their mode of operation even though it is late in comparison to the same in the other parts of the country. The following table highlights some of the best practices adopted by the library to provide quality services which enables to meet the growing thrust of the users.

### Inception Year of computer and library automation in the College Libraries

S. No.	Years	Inception year of Computer in the libraries (Number of College Surveyed 20)	%	Installation year of Lib Automation software. (Number of College Surveyed 20)	%
1	1995-2000	3	15%	0	0%
2	2000-2005	13	65%	0	0%
3	2006-2010	2	10%	18	90%
4	After 2010	2	10%	0	0%

(Table1.1: Inception Year of computer and library automation in the College Libraries)

Table 1.1 shows that out of the twenty colleges surveyed computers were inducted into the libraries as late as before 2000 with three colleges leading in this respect. Most of the other colleges did the same simultaneously within 2000 to 2005, while only two

colleges have introduced computers after 2010 in their college libraries. The induction began suddenly mainly because of the NAAC visits to all these colleges.

### Numbers of Computers in the Library

Sl. No.	Number of Computers	Number of College Surveyed 20	%
1	1 – 5	16	80%
2	6-10	1	5%
3	11-15	-	-
4	Above 15	3	15%

The study shows that 80% provincialised college libraries have up to five numbers of computers, 5% colleges libraries have more than six but less than 11computers. On the other hand 15 % college libraries have more than 15 computers in their library to perform different works and provide services to its clientele.

### Library Automation

Sl. No.	Automation	Number of College Surveyed 20	%
1	Not Started	2	10%
2	Partially Automated	18	90%
3	Fully Automated	-	0%

(Table 2 : Nature of library automation)

From the Table-2 it can be said that libraries of these colleges are not fully automated, although 90% college libraries are partially automated and 10% colleges have not started the library automation process till date.

### 2.1 Professional Software Used for Automation in the Library

Sl. No.	Name of the Software	Number of College Surveyed 20	%
1	Soul	18	90%
2	Libsys	-	
3	Koha	-	
4	e-Granthalaya	-	
5	CDS/ISIS	-	
6	Others	-	

(Table 2.1: Library Professional Software Used for Automation)

Only 90% provincialised colleges have installed the library professional software for automation. Rests of the colleges are not installing any library professional software in their libraries. All the college libraries are using the software named SOUL provided by INFLIBNET for automation of their libraries.

### Operating System used in the computers of the library

Sl. No.	OS Used	Number of College Surveyed 20	%
1	Windows	20	100%
2	Windows and Linux	2	10%
3	Any Other	-	0%

It has been seen that that almost all the college libraries of the area uses Window as their operating software in the computers. Apart from this 10% provincialised college libraries use both windows and

Linux software as their operating system for the computers available in their libraries.

**Computers used in the Lib. Automation Process**

Sl. No.	Number of Computers	Number of College Surveyed 20	%
1	1 – 5	17	85%
2	6-10	-	-
3	11-15	1	5%

The table highlights that 85% colleges are using five or below numbers of computers and 5% colleges are using fifteen or below 15 numbers of computers for the library automation process.

**Automated Services Offered**

Sl. No.	Computerized Service Offered	Number of College Surveyed 20		%
		Yes	No	
1	OPAC	18	2	90%
2	Cataloguing	18	2	90%
3	Serial Control	1	19	5%
4	Online Purchasing	-	20	0%
5	Circulation	7	13	35%
6	Library Management Operation	18	2	90%

(Table3: Computerized Services Offered)

Table-3 exposes that 90% college libraries provide different computerized services like OPAC, cataloguing and library management operations. Only 5% and 35% college libraries are practicing Serial Control and Circulation Process respectively through computerized service.

**Library Digitization Process**

Sl. No.		Number of College Surveyed 20	%
1	Fully Digitized	-	-
2	Partially Digitised	-	-
3	Not Started	20	100%

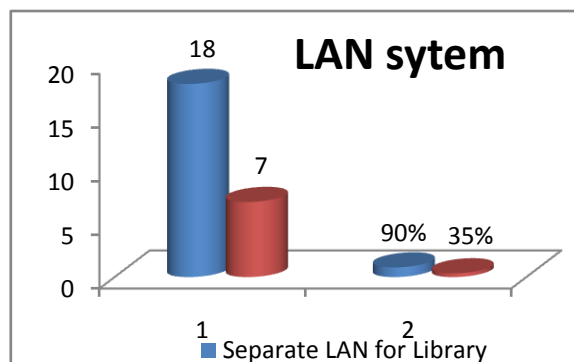
From the study it has been seen that digitization process is not yet started by the college libraries of this area.

**LAN Facility**

Sl. No.	LAN	Number of College Surveyed 20		%
		Yes	No	
1	Separate LAN for Library	18	2	90%
2	Library Connected to the Other Departments of the College through LAN	7	13	35%

(Table: LAN facility)

The table shows that 90% college libraries have separate LAN facility and 35% college libraries are connected with the different departments or the administrative building of the college.



**Internet Connectivity**

Sl. No.		Number of College Surveyed 20	%
1	Dial Up Connection	-	0%
2	Broad Band Connection	18	90%
3	Leased line	-	10%
4	V-sat	-	0%
5.	Others	-	0%

(Table 6: Internet Connectivity)

Table 6 shows that 90% college libraries having internet connectivity are connected through broad band connection of Tele Communication'

**Library URL and e-mail address**

Sl. No.	Separate Address	Number of College Surveyed 20		%
		Yes	No	
1	URL	3	17	15%
2	e-mail	7	13	35%

(Table8: Library URL and e-mail address)

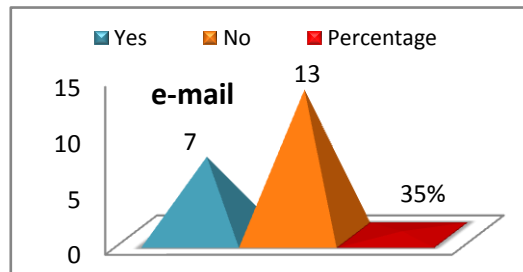
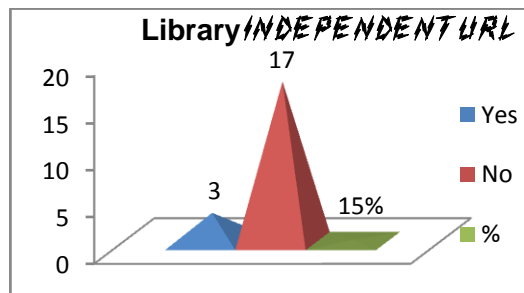


Table-8 shows that only 15% college libraries have separate websites apart from the college website. On the other hand 35% college libraries have separate e-mail address.

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### Information included in the Library Website

Sl. No.	Information available	Respondents having own URL 3	%
1	Information about Library	3	100%
2	Users Feedback	3	100%
3	Notification of current arrivals of library	3	100%
4	Notice board displaying information	3	100%
5	Link to educational sites	3	100%
6	Link to Open Access e-journals	3	100%
7	Link to Open Access e-resources	3	100%
8	Link to e-databases	2	66.6%

The study ascertains that provincialised college libraries having their own URL have the link to open access e-journals, e-resources. It displays the information about the library. These sites have the provision for user feedback.

### Consortium Membership

Sl. No.	Name of Consortium	Number of College Surveyed 20		%
		Yes	No	
1	Inflibnet N-List	13	7	65%
2	Delnet	-	20	0%
3	Indest	-	20	0%
4	Any Other	-	20	0%

(Table -9: Consortium Membership)

A good numbers of e-consortium is developed in India during last decade. Still the college libraries is subscribing to only one educational consortium i.e. N-List sponsored by INFLIBNET. Only 65% colleges have been subscribing this consortium.

### IT Tools available in the libraries

Sl. No.	IT Tools	Number of College Surveyed 20		%
		Yes	No	
1	Computer Server	18	2	90%
2	Barcode Printer	7	13	35%
3	Printer	19	1	95%
4	Barcode Scanner	7	13	35%
5	Scanner	13	7	65%
6	Photocopier	20	-	100%
7	Projector	3	17	15%
8	Smart Board	-	-	0
9	Separate Telephone Connection	-	-	0
10	Fax	-	-	0
11	Digital Camera	2	18	10%
12	Camcorder	1	19	5%

(Table-10: IT Tools available in the libraries)

From the study it becomes clear that all the libraries of the area is not self sufficient in installing all the required IT tools. Only 35% colleges have Barcode scanner, barcode printer, which is utmost essential in the process of automation of a college

library. A good numbers of colleges have no projectors, digital camera and camcorder. Photocopier and printer are available in all the provincialised college libraries.

### IT Resources Available

Sl. No.	IT Resources	Number of College Surveyed 20		%
		Yes	No	
1	e-books	13	7	65%
2	e-journals	13	7	65%
3	Audio Cassette	7	13	35%
4	Video Cassettes	5	15	20%
5	DVDs	20	0	100%
6	CDs	20	0	100%
7	Floppies	1	19	5%
8	Microfilm	-	-	-
9	Magnetic Tape	-	-	-
10	Gramophone records	1	19	5%

(Table -11: IT Resources Available)

The study shows that various IT resources are available in the college libraries of the area surveyed. Out of these 65% college libraries have e-books and e-journals facility. All the college libraries have educational DVDs and CDs. Apart from these 35% college libraries have Audio cassette and 20% have Video cassette. On the other hand 5% have floppy disks and Gramophone records in their college libraries. No responds is found from the college libraries about the availability of Microfilm and Magnetic tape.

### Best practices of college libraries

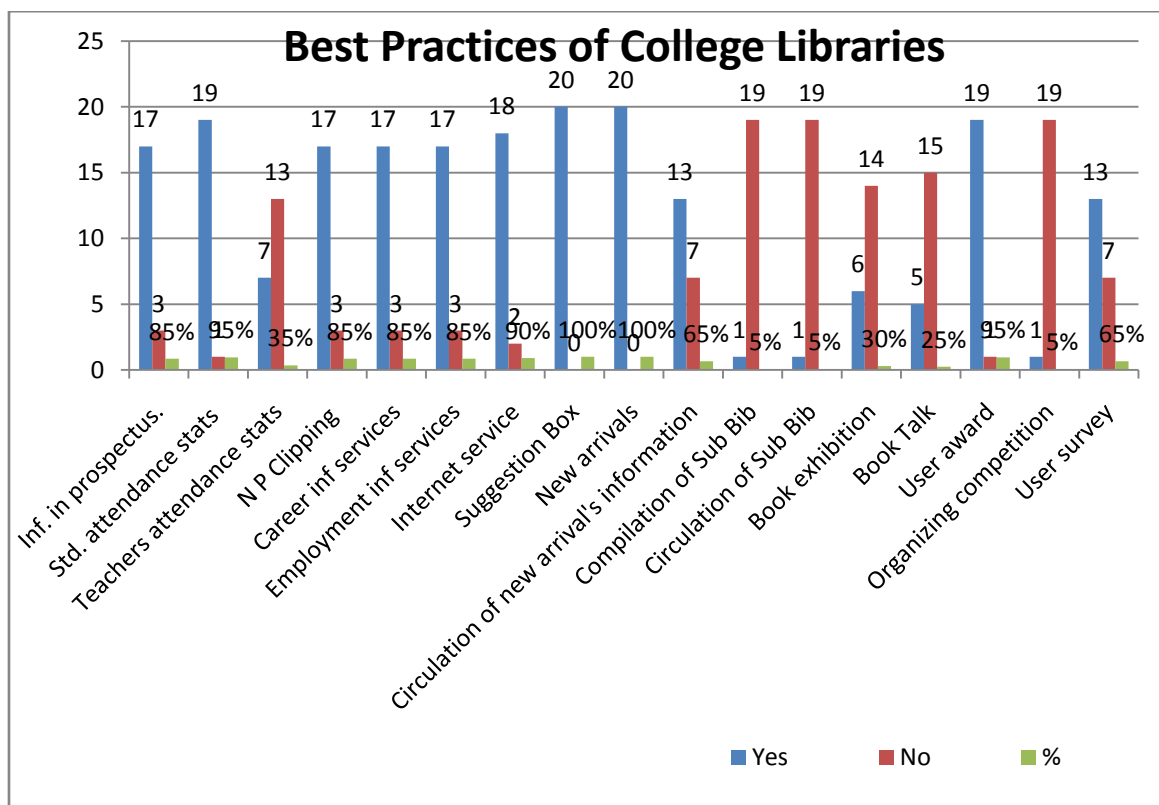
Sl. No.	Service Offered	Number of College Surveyed 20		%
		Yes	No	
1	Inclusion of sufficient information about the library in the college prospectus.	17	3	85%
2	Compiling of students attendance statistics	19	1	95%
3	Compiling of teachers attendance statistics	7	13	35%
4	Displaying News Paper Clipping on the notice board periodically	17	3	85%
5	Career information services	17	3	85%
6	Employment information services	17	3	85%
7	Internet service to the user community	18	2	90%
8	Suggestion Box and timely response	20	0	100%
9	Display of new arrivals of the library	20	0	100%
10	Circulation of new arrivals information to the concerned departments	13	7	65%
11	Compilation of Subject	1	19	5%

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	Bibliography			
12	Circulation of Subject Bibliography to the Concerned departments.	1	19	5%
13	Book exhibition on different occasions	6	14	30%
14	Organizing Book Talk	5	15	25%
15	Best user award of the library	19	1	95%

16	Organizing competition annually	1	19	5%
17	Conducting user survey periodically	13	7	65%

(Table12 : Different Services Relating to Best Practices)



From Table No.12 it seems that 85% college libraries have responded positively about the inclusion of sufficient information about the libraries in the college prospectus. In this context, librarians of these institutions take decision about the inclusion of different information of the libraries in the prospectus. Principals or the prospectus development committee consults with the librarian for inclusion of up-to-date information in the prospectus.

Regarding compiling the students' attendance statistics 95% of the college libraries compile students' statistics and 35% of college libraries compile the teachers' attendance statistics periodically.

The study reveals that 85% college libraries provide Displaying News Paper Clipping on the notice board periodically. 85% colleges also provide Career Information Service and Employment information service to its users. The entire college library provides quick response to Suggestion Box provided in the library premises and also displays of new arrivals are practiced regularly by all the libraries of higher education institution of the area. 65% college libraries regularly circulate the list of currently

available documents to the concerned departments. But the percentage compilation of subject bibliography and circulation of subject bibliography to the concerned departments is very low. Only 5% colleges provide this service to its users.

Book Exhibition on different occasions is carried out by 30% college libraries and 25% college libraries organize book talk.

Best user award is provided to the users by 95% of college libraries regularly. Apart from this only 5% college libraries are organizing annual competition among the user. From the survey it becomes clear that 65% college libraries are conducting user survey periodically.

**Conclusion**

The college libraries of Upper Assam in general are facing diversified problems since their beginning. These libraries have not been able to get rid of these maladies since their birth, although a few libraries of these are trying to face them but in a slow process.

The college libraries in this part of the state have no adequate facilities in terms of Information Communication Technology. In the present days of globalization and Information Technology, the library

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is no longer confined to a geographical space. It can have its own virtual space also. In its ideal form it transcends the limitations of time and space. But for all this it has to be ready to incorporate all the conventional and electronic information resources and Information Technology and related paraphernalia.

The present study has looked into different dimensions of the issue and has found that the application and management of best practices of provincialised college libraries of Upper Assam have not been up to the expectation. Individually, a few of the college libraries are quite ahead of majority of the libraries making use of quality practices and services. While these few libraries could serve as ideal ones in the region, the others need strong revamping to respond to the fast changing scenario. Some of the libraries are also of colleges with a total rural setting and these are not strongly tilted towards the technological revolution even now. In brief, the emerging picture is neither very encouraging nor very disappointing. Time, it seems that is set to change the course of events very soon.

Knowledge is and has to be empowering. A library is a storehouse of knowledge. Proper knowledge needs timely up-gradation. So updating of the libraries is a must not only for the colleges themselves but also to render dignified service to the society. In modern times, this can happen only if ICT and best practices of libraries are maintained properly. It should also be kept in mind that digitization of the libraries is also on the rise. Without a proper infrastructure, these smaller libraries might face challenges that will be too powerful to face. It too calls for adoption of timely measures. In modern times, this can happen only if management of entire library is done properly.

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