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Adoption of E-Learning in Library and Information Science (LIS) Education

in North-East India: A Proposal

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Abstract: *E-learning allows for efficient transfer of knowledge in the real-time process, while at the same time empowering learners with the information technology awareness and skills crucial to succeed in the present Knowledge Revolution Era. The world scenario of Library and Information Science (LIS) education is changing fast. The change is enforced by many forces such as technology, demographic features, economic characters, etc. The present paper discussed the concept of e-learning and its application in LIS education. It also emphasized on the potential benefits of implementing e-learning in LIS education in North-East India and equally discussed the challenges that can affect in the adoption of E-learning in LIS education in North East India.*

Keywords: E-learning, ICT, LIS Education, North-East India, LIS School.

1. Introduction:

E-Learning is a concept derived from the use of Information and Communication Technologies (ICT) to revise and transform traditional teaching and learning models, and practices have evolved in the past decades. Today's Library and Information Science (LIS) educators are facing different challenges than their predecessors in the pre-Internet era, in teaching tomorrow's LIS professionals. This is because of the advancements in ICTs over the last two decades (Sen, 2009). Thus, a change in the information needs/seeking patterns of the patrons, as well as developments in ICTs have increased demands on the LIS faculty and the profession in general. The increased demands necessitated the need for changes in the curriculum, as well as the methods of teaching, and delivery processes. Similarly, these developments have had a profound and positive effect on education and other sectors. E-learning is becoming an increasingly important part of education in these days.

LIS education is responding to these changes by making appropriate changes in its teaching-learning strategies. The adoption of e-learning in LIS is a robust indicator of this response. The increasing influence of ICT on all aspects of life, including the educational sector, has necessitated that LIS schools in the developing world should follow their contemporaries in the advanced countries through the adoption of e-learning into their educational systems. This paper is an attempt to discuss the need for and/or potential benefits of E-learning in North-East India LIS education, taken into consideration the global requirements of E-learning in the rapidly changing digital environment.

2. Objectives of the Study:

The objectives of this study are as follows:

i) To know the current status of LIS education in the different LIS schools of North-East India.
ii) To identify the various factors involved in developing an E-learning curriculum.
iii) To identify the challenges faced by the LIS schools of North-East India in adoption of E-learning.

4. Scope and Limitations:

The study is limited to the Central and State universities of North East India which are offering LIS education in the region. Private and Deemed Universities are excluded from the study. The study is based on various primary sources and some secondary source materials in the form of books, articles, etc. for relevant information. Data for the present study were collected from the websites of the Universities as well as some of the documents provided by the LIS schools of North East India. This study reveals only the adoption of a proposed model of the E-learning method in LIS education in North-East India.

5. Literature Review:

Kumbhar (2009) discussed his paper on the different E-learning tools and some of the reasons for adopting E-learning in LIS education such as - management of change, increased expectations from the employers and the users, as well as changing learning trends, etc. **Imran (2012)** described the importance of E-learning in higher education with its extent; growth in Indian LIS education; major E-learning initiatives in India and future perspective concerning E-learning in India. **Lihitkar, Naidu & Lihitkar (2013)** discussed their article on the three E-learning methods which can be adopted in LIS education such as Virtual Classroom, Mobile learning, and Blended learning solution. They further revealed the major challenges faced by LIS professionals in India. **Mohasin, Shinde & S. (2013)** in their research paper highlighted the different modes of E-learning i.e., Synchronous E-learning and Asynchronous E-learning; different types of E-learning and also discussed the advantages of its adoption. **Abubakar (2014)** discussed the adoption of E-learning in Nigerian Library and Information Science (LIS) education. He also pointed out the challenges and benefits of adopting in E-learning and proposed a model for delivering E-learning in LIS education of different LIS schools. **Arkorful & Abaidoo (2014)** in their study investigates the benefits of E-learning in higher education particularly in the teaching and learning process and focused on the various advantages and disadvantages of its adoption and implementation.

6. E-Learning in LIS Education:

E-learning is the most suitable teaching-learning method for delivering education in the modern ICT environment. The curriculum of LIS schools, globally, has changed dramatically

in the last couple of years due to development in Information and Communication Technology (ICT). Consequently, the role of information professionals as educators, teaching information literacy skills, either face-to-face or via the web, or through virtual learning has witnessed enormous growth in the last couple of years. It is, therefore, imperative that Library Schools should provide their graduates with the appropriate skills to carry out this responsibility (Secker, 2004).

E-learning can be provided in one of the following two modes: (Mohasin, Shinde & S. 2013)

(i)   ***Synchronous E-learning***: In Synchronous E-learning, the instructor and the participants are involved on Web in real-time or at the same time while delivering the course, class or lesson, through Web conferencing.

(ii)   ***Asynchronous E-learning***: In the Asynchronous E-learning system, the interaction of the instructor and the participants in the course, class or lesson at different times. For example, Web-based training (WBT), e-mail, blogs, and electronic bulletin boards, etc. This method allows participants to access training materials at any particular time.

6.1. LIS Education in North-East India:

There are a total of eight states in North-East India including Sikkim where LIS education has been provided through Regular/ Conventional and Distance mode. There are altogether ten (10) LIS Schools that offer Library and Information Science education in North-East India. The LIS education of NE India was first introduced at Gauhati University, Assam in the year 1966 and started as a one year Bachelor Degree course (B.Lib.Sc.) and later on, one year Master Degree (M.Lib.Sc.) course was also introduced in the year 1979. In the year 1984, both the two courses were renamed to B.L.I.Sc. and M.L.I.Sc. From the Academic Session 2001-2002, a two-year integrated Master's degree programme (MLISc.) was introduced with a fully revised syllabus. In North-Eastern Hill University (NEHU), Shillong, Meghalaya, the Library and Information Science course was started in the year 1985. It was the second university in the entire North-East India to start LIS education with a two- year integrated programme namely Master of Library and Information Science (MLISc.). Manipur University started a year Bachelor's Degree Programme in 1986 which was the

third university to start LIS education in NE India. Later on, the department introduced a one-year Master's Degree programme namely Master of Library and Information Science (MLISc.) in 2004. Later on, a two-year Integrated MLISc. course was introduced in the Department from the Academic Session 2006-2007. Mizoram University introduced one year Bachelor of Library and Information Science (BLIS) programme in 2002 and after one year the University also introduced one-year Master of Library and Information Science (MLIS) programme in 2003. From 2005, the University started two-year integrated MLISc. course thereby amalgamating previously one-year BLISc. programme and one-year MLISc. programme. In 2005, Centre for Library & Library and Information Science Studies (CLISS), Dibrugarh University, Assam, started one-year B.Lib.I.Sc. programme and later on, one- year M.Lib.I.Sc. programme was also introduced in the year 2007. D.S. College, Gangtok (Affiliated to Sikkim University) had started their BLISc. course in the year 2008. Assam University, Silchar was started its two-years integrated MLIS Course from 2009-10 Academic Session. Krishna Kanta Handiqui State Open University (KKHSOU), Assam also introduced a one-year Diploma in Library and Information Science (DLIS) programme in the year 2013 in Open and Distance learning mode. It was the first Open University in entire North- East India to introduce such a programme in LIS education. Assam Women's University, Jorhat, Assam started its two-year integrated MLISc. programme in the year 2015. In addition to these, Tripura University, Agartala has also started one-year BLIS and MLIS programme from the year 2016.

Besides the above courses, the various LIS schools of NE India also provide M.Phil. Degree and Ph.D. degree. which are given below in details-

Table 1: LIS Schools in North- East India

Sl No.	Name of the University	Nature of the University	Name of the LIS School	Year of Establishment of the LIS School	Courses offered	Website Address
1	Gauhati University, Guwahati, Assam	State	Department of Library and Information Science (DLISc.)	1966	MLISc. (2 Yrs integrated), M.Phil. & Ph.D.	https://www.gauhati.ac.in/arts/library-and-information-science
2	North-Eastern Hill University (NEHU), Meghalaya	Central	Department of Library and Information Science	1985	MLISc. (2 Yrs integrated) & Ph.D.	https://nehu.ac.in/department/11/Library-Information-Science-department

3	Manipur University, Manipur	Central	Department of Library and Information Science	1986	MLISc. (2 Yrs integrated) & Ph.D.	http://www.manipuruniv.ac.in/department/library-info-sc-deptartment
4	Mizoram University, Mizoram	Central	Department of Library and Information Science	2002	MLIS. (2 Yrs integrated) , M.Phil. & Ph.D.	https://mzu.edu.in/school-of-economic-management-and-information-science/
5	Dibrugarh University, Dibrugarh, Assam	State	Centre for Library & Information Science Studies (CLISS)	2005	B.Lib.I.Sc. - 1 Yr & M.Lib.I.Sc. - 1 Yr	https://dibru.ac.in/faculty-of-studies/2014-12-25-09-02-49/centre-for-library-information-science-studies
6	D.S. College, Gangtok, Affiliated to Sikkim University, Sikkim	Central	---	2008	BLISc.- 1 Yr	http://www.res.ac.in/dsc/
7	Assam University, Silchar, Assam	Central	Department of Library and Information Science	2009	MLIS. (2 Yrs integrated) , M.Phil. & Ph.D.	www.aus.ac.in/library-information-science/
8	Krishna Kanta Handiqui State University (KKHSOU), Assam	State	Hiranya Kumar Bhuyan School of Science and Technology	2013	DLIS (Diploma in Library and Information Science)- 1 Yr.	http://kkhsou.in/web_new/details.php?p=a0ZiR3BnNDRXWHNoUWtreXF2L3R0Zz09
9	Assam Women's University, Jorhat, Assam	State	Department of Library and Information Science	2015	MLIS (2 Yrs integrated)	http://www.awu.ac.in/set.html?lib
10	Tripura University, Tripura	Central	Department of Library and Information Science	2016	BLISc.- 1 Yr. & MLISc.- 1 Yr.	https://www.tripurauniv.ac.in/Page/departmentsDetailsHome/16-DepartmentsHome

Table 1 shows that there are a total of ten LIS schools which include six central universities and four state universities which provide different LIS programmes throughout the North-East India region. Amongst them, Department of Library & Information Science (DLISc.), Gauhati University, Assam is the oldest and Tripura University, Tripura is the newest LIS school in the region.

Table 2: Strength of Faculty Members in LIS Schools of NE India

Sl No.	Name of the University	Faculty Strength		
		Assistant Professor	Associate Professor	Professor
1	Gauhati University (GU)	03	--	01
2	North-Eastern Hill University (NEHU)	03	01	02
3	Manipur University (MU)	02	01	01
4	Mizoram University (MZU)	03	01	03
5	Dibrugarh University (DU)	03	--	--
6	D.S. College, Sikkim University (SU)	--	--	--
7	Assam University (AU)	01	01	02
8	Krishna Kanta Handiqui State University (KKHSOU)	--	--	--
9	Assam Women's University (AWU)	03	--	--
10	Tripura University (TU)	02	01	--
	Total	**20**	**05**	**09**

Table 2 shows the total strength of Faculty members of different LIS schools in North East India. It can be said that the Faculty strength of different LIS schools in the region is quite satisfactory and the LIS schools can think for delivering various LIS courses in online mode if the other factors like curriculum design, infrastructural facilities, etc. are meant to be available at these LIS schools.

6.2. Proposed Model for Developing an E-Learning Curriculum for LIS Schools in North-East India:

Consequently, to develop an appropriate E-learning curriculum for the LIS schools in NE India, the following pre-requisite are the important factors :

i) Goals and objectives: There should be some goals and objectives while delivering different programs through E-learning mode.

ii) Curriculum design: The design of the curriculum is an essential part of the E-learning process. The designing of the E-learning curriculum is a join process of

respective faculty members of the LIS school.

iii) ***Curriculum review and revision period***: The curriculum review and revision period should be taken precisely and depending upon various factors, especially based on the latest developments in the Library and Information Science field.

iv) ***Networking among the LIS schools***: For delivering LIS education in E-learning mode, it is necessary to establish a proper network among the LIS schools in the NE Region. The Faculty members of various LIS schools must agree to come with an E-learning Network for delivering LIS education throughout the region.

v) ***Methods of E-learning***: The two methods i.e., Synchronous E-learning and Asynchronous E-learning to be used for delivering E-learning by which the users will be benefited through accessing materials at any time.

vi) ***Skill development programmes for Faculty members***: Proper Skill Development program for faculty members should be done by organizing various training programs, workshops, etc. concerning modern ICT environment and other emerging trends such as Knowledge Management and Knowledge Sharing, Digital Libraries, Pricing Policy of E-resources, etc.

vii) ***Sufficient arrangements of infrastructural facilities***: For the curriculum to be successful, all the LIS schools in North-East India are expected to make sufficient arrangements such as the installation of state-of-the-art e-learning technologies, infrastructural facilities, arrangements of proper hardware and software requirements and all other necessary teaching aids.

viii) ***Target audience***: The expected target audience should be the LIS professionals and students who are willing to enroll in the various short term courses through E-learning mode.

ix) ***Learning outcomes***: With the application E-learning, Learners can E-communicate; anytime and anywhere learning; Learners active participation; multiple collaborations such as teacher-student, student-student, as well as teacher-teacher and collaboration between the content development experts and the technology people and Facilitates lifelong learning.

x) ***Delivering of course materials***: The course materials include curriculum, courseware, assignments, Video lectures, examination questions, etc. The various course materials should be made available in both online and offline formats. Most of these are

made available in electronic format, most of the time online.

     *xi) **Organizing workshop**:* The necessity of organizing workshop are- for identifying the prospective learners, what they are expected to learn, the objectives of the e-learning programs, market demands, as well as how the programs would be delivered, to determine the various levels of such programs and the assessment methods.

     Depending upon the above discussion a proposed framework can be outlined which takes into consideration the vital aspects in curriculum development. The diagram in Fig. 1 specifies the proposed framework for developing the E-Learning curriculum for LIS schools in North-East India-
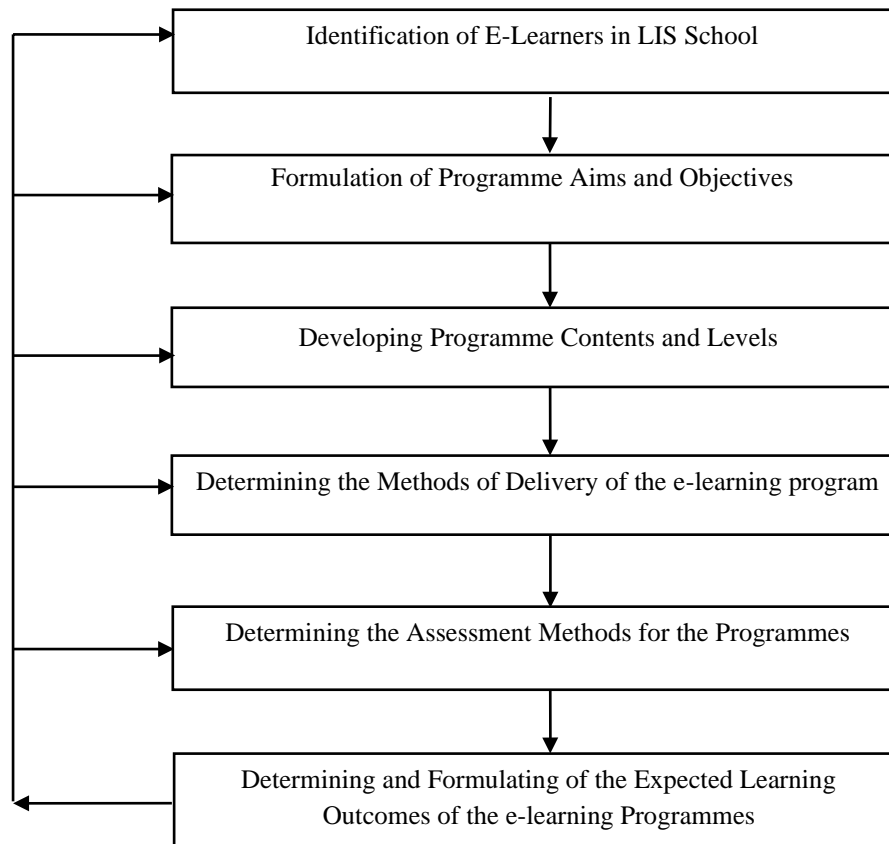
(Source: Abubakar, 2014)

Fig. 1: Proposed Model for E-Learning in LIS Education

6.3. **Benefits by Adopting E-Learning in LIS Education in North-East India:**

Like many universities in the world, LIS schools in the North-Eastern region can also think of an online course system for LIS education. This is because of adopting e-learning by the LIS schools in the region will help to improve the accessibility of LIS programmes to prospective students irrespective of location or time. Some of the benefits are discussed below:

i) E-learning offers new opportunities for LIS professionals to develop their knowledge and skills in a wide variety of areas.

ii) It makes the LIS professionals more confident and capable in the area of ICT usage.

iii) E-learning offers information professionals the opportunity to develop new roles and responsibilities both within and outside the information environment.

iv) It provides opportunities for professional collaboration in a wide variety of areas, because of its flexibility and cost-effectiveness.

E-learning is learner-controlled, in which case the individual has authority over the learning environment. It is self-faced giving chance for students to work with their time table and learners can access training when it is convenient for them, at home or in the office (Eke, 2011). Furthermore, E-learning also offers opportunities for intending part-time students who may not have the chance to attend a formalized LIS programme in the LIS schools in NE India.

6.4. **Challenges of E-Learning in LIS Education in NE Region:**

The successful establishment and implementation of any E-learning program depends upon the adequate provision of Information and Communication Technology (ICT), as well as ICT skilled personnel. Despite the potential benefits of E-learning in LIS education, the different LIS schools of North-East India still face many challenges. Some of the challenges include:

i) **Technology Challenges**: Technology is an essential requirement for the development of any prospective E-learning program. To ensure the overall success of the e-learning programs in the LIS schools of NE Region, proper hardware and software must be provided along with the sufficient number of computers, Internet access, audio/video,

as well as a dynamic LMS system. Most of the institutions lack technological infrastructure, well-equipped computer laboratories, and uninterrupted Internet access. Lack of ICT integration is also a matter of issue in the learning process in the NE Region.

ii) **Personnel Challenges**: For effective implementation of any e-learning program, there is a need for skilled LIS Faculty members having practical oriented computer knowledge and equipped with intensive and extensive knowledge of ICT. Without having high-quality teaching staff at the library schools, there is no scope for E-learning in LIS schools in NE India.

iii)**Curriculum Design of LIS Schools:** The success of any E-learning program depends on the development of a proper dynamic course curriculum. Since E-learning is different from traditional learning, the curriculum should be designed by integrating online courses, feedback mechanisms, checking assignments and attending users' queries, etc.

iv)**Management and Financial Challenges:** The major challenge in adopting the E-learning program in LIS education is lack of proper managerial and financial support, without which no significant development can be recorded in that aspect. Hence, to make certain the successful implementation of the E-learning programs in the LIS schools in the North-Eastern part of India, adequate managerial and financial assistance must be provided by the respective governments and other sponsoring bodies.

7. Conclusion:

E-learning is not only a method of replacing face-to-face education and training but also an important method of delivering information literary programs. In a developing country like India, it is arduous to design a new course and new e-learning for LIS education. Several issues and challenges are involved with this task but as soon as it is put forward, it will overcome all those problems. The Indian LIS education is slowly but steadily making progress in this direction. The availability of appropriate and adequate infrastructure will add momentum to LIS E-learning in India including the North-Eastern region. The major initiatives such as e-PGPathasala by UGC-INFLIBNET, SWAYAM, SWAYAM PRABHA, NPTEL (National Programme on Technology Enhanced Learning) by Seven IITs and IISc.

Bangalore, National Digital Library (NDL) Project by Govt. of India, e-Gyankosh, and FlexiLearn by IGNOU, CEC (Consortium for Educational Communication), etc. are a good signal in the country. The effective use of new ICT by the Indian LIS schools should be encouraged to produce professionals to manage knowledge resources in the electronic learning environment. So, in this context, the LIS schools of the North-Eastern region should implement various e-learning techniques for better development of their curriculum activities.

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