1.0 BACKGROUND OF THE STUDY

Education is a process of development which includes three major activities teaching, training and instruction. Its objective in any discipline is to help its students to achieve highest degree of individual development of which they are capable. In the process of growth, development and social change, education has undergone an incredible change in the recent past and is still going through a phase of continuous change. LIS education is one of the many fast changing fields in higher education today, adapting them to the changing environment so as to meet the challenges posed by the ICT. To survive in this changed world, LIS professionals must be well educated, professionally competent with different skills and must have continuous exposure to new technologies. In this regard the role of LIS Departments of Universities is crucial. Every aspect needs to be given attention, so that our LIS schools can revamp the LIS education and produce best of professionals. The present study, deals with Blended learning, as a way of developing LIS education and adapting to technological realities without losing hold of traditional path. The study highlights the meaning, the need and the features of Blended learning along with the adoption of this method into Library and Information Science education in this global technological environment throwing light into the views of the LIS Teachers, Students and Research Scholars on Blended learning from selected universities of North East India.

1.1 EDUCATION IN THE ICT AGE

Every new development or change of larger social relevance brings new opportunities to the respective fields. The education in general and educators, students in particular has witnessed a tremendous change due to the changes brought in by ICT. It can be defined as the use of hardware and software for efficient management of information. It refers to the forms of technology that are used to transmit, store, create, share or exchange particular task by helping common man in fulfilling his needs. ICT has empowered teachers and students by providing a learning environment that helped to address different learning styles, and thereby fostered the development of 21st century skills. ICT has supported fabulously the pedagogy and complemented a teacher's existing pedagogical approaches. E-learning is the most popular influence of ICT in the field of education attempted through computer assisted instruction, computer-based training, online education, web-based training, etc. Students also are very much popular with ICT which gets reflected on their satisfaction when they use ICT tools in education with which they are comfortable. Today's learners no longer get satisfied with only traditional methods of teaching. ICT has provided some of the essential characteristics to meet student's needs to succeed in a learning environment. Gone are the days of passive learning where students used their senses to take in information from a lecture, reading assignment, or audiovisual, ICT has now provided active learning where the student gets to learn through participation and investment of energy in all three phases of the learning process (input, operations, and feedback). Therefore education in ICT age is nothing but a blend of both which started yielding a new and good impact on whole education scenario.

1.2 LIS EDUCATION

Higher education today faces many challenges. These challenges are duly backed by the revolution of Information and Communication Technology (ICT). The young people popularly known as Net generation have grown up or are growing up in constant contact with digital media. This has effected in their way of learning, which is little different from those of traditional ones and it has imposed heavy pressure on the educators as well. LIS education is one of the many fast changing fields in higher education today, adapting them to the changing environment so as to meet the challenges posed by the ICT. As technology became more sophisticated and more affordable, the range of services and mode of services that libraries are providing has also changed keeping in sync with the changing environment. From the traditional library to hybrid library, automated library, digital library and virtual library; the library environment has changed a lot along with library profession in a more dynamic way. To survive in this changed world, LIS professionals must be well educated, professionally competent with different skills and must have continuous exposure to new technologies. In this regard the role of LIS Departments of Universities is crucial. Every aspect needs to be given attention, so that our LIS schools can revamp the LIS education and produce best of professionals.

1.2.1 LIS Education: Indian Context

Since time immemorial, collecting and preserving books and manuscripts has existed in India in the form of library and in the early part of the twentieth century it began to be treated as a distinct field of specialisation. Today, LIS education not only includes the library specific subject but it also has been extended to subjects like computer application, statistics, information science, management studies and operation research. The LIS education is responding to these changes by making appropriate changes in its teaching – learning strategies. In recent times, many factors have affected the thinking on curriculum development and these factors will continue to have their influence in future. The library schools and LIS educators (teachers) have to shoulder the responsibility of cultivating and developing such abilities among their products (students), by considering their curricula from point of view of the needs of an information age and inclusion of ICT in the syllabus

The beginning of the 20th century marked the beginning of LIS education in India. There is a vast literature crediting Sayyaji Rao Gaekwad, the then Maharaja of the erstwhile princely State of Baroda, for initiating the LIS education movement in the country. American librarians, William Alanson Borden and Asa Don Dickinson were the first LIS teachers in India. John MacFarlane, an Englishman, who happened to be the first librarian of the Imperial Library (now National Library, Kolkata) also, shares the credit for training librarians in our country. In fact, MacFarlane's training programme is the first case of LIS education in India reported in literature.

LIS professionals realising the need for education acted through Library Associations. The first such attempt was a school set up by Andhra Desa Library Association in 1920. In 1929, Madras Library Association (MALA) started a School of Library Science for training college and school librarians in the state of Madras. Prof. Ranganathan was instrumental in instituting library school under the auspices of the Association and also taught the students. Gradually universities like Madras University (1931), Andhra University (1935), Banaras Hindu University (1941), Bombay University (1944), Calcutta University (1946), and Delhi University (1947) started the library science programme. The decade of 1960s saw some very important events taking place affecting LIS education in the country. Documentation Research and Training Centre (DRTC), Bangalore and Indian National Scientific Documentation Centre (INSDOC), now named as National Institute of Science Communication and Information Resources (NISCAIR) are two of them.

The levels of LIS education that are being offered now by Indian universities, institutions and associations can be categorised into Certificate or Diploma in Library Science (C/D.Lib.Sc.), Master of Library and Information Science (MLISc), Master of Philosophy in Library and Information Science (M.Phil.), Doctor of Philosophy of Library and Information Science (PhD), Doctor of Literature in Library and Information Science (D.Litt). Besides these degrees, there are some other courses too which got evolved with time and requirement and further helped in the growth and development of the discipline. They are PG Diploma in Information Technology, Post MLIS Diploma in Library Automation, PG Diploma in Archives & Documentation Management, PG Diploma in Library Automation and Networking, Advanced Training Course in Information Systems Management and Technology. Specialized courses like diploma programme in special librarianship and diploma programme in archives and related subjects, Post Graduate Diploma in Digital Library and Information Management PGDLIM (e-Learning Course). Also the Distance Education schools like Indira Gandhi National Open University (IGNOU) gained a pride of position for providing quality study modules and good lab facilities along with good faculties in this flexible mode.

In regard to present position of number and level of courses offered by universities in India, it is to be noted that 181 universities are offering library science courses, 131 are offering bachelor's degree course, 136 are offering master's degree course, 41 (out of 136) are offering two-year integrated master's level course, 21 are presently offering Mphil degree, (19 departments started and closed), 93 universities (including 10 distance education universities) are offering PhD degree and 2 universities offering D.Litt. programme in library science. (Singh and Babbar, 2014)

Various Government initiatives in respect of LIS education in India have been taken from the beginning like Advisory Committee for Libraries, Working Group of Planning Commission, National Policy on Library and Information System, National Knowledge Commission, UGC, Library Committee, Review Committee and Curriculum Development Committees which had a huge hand for the present state of LIS education in India. Microcomputers appeared on the scene in library activities and services during the 1980s. Accordingly, library schools began incorporating computers in the syllabus. Again with the growth of internet and the web, new technology based tools came up in the LIS field. The major challenge for LIS education now is to be with the technology. In response to the needs of new millennium, UGC has recommended Model Curriculum 2001 wrapping the technology around all concepts of LIS curriculum so as to enable the student to learn and train themselves according to the demands of ICT environment.

1.2.2 LIS Education: Scenario in North East India

North East India is the Eastern-most Region of India connected to East India via a narrow corridor squeezed between Nepal and Bangladesh. It comprises the contiguous eight sister states—Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and the Himalayan state of Sikkim. These states are grouped under the Ministry of Development of North Eastern Region (DoNER) Ministry of the Government of India. The Siliguri Corridor in West Bengal connects the North Eastern region with the main part of India. The Northeast region can be categorised into Eastern Himalayas, Northeast Hills, Brahmaputra and Barak Valley Plains.

The developments in the field of Library and information science in India have paved the way for its development in North East region too. The light of LIS education fell on North East in the year 1966 in the state of Assam, when Gauhati University library started one year BLibsc course under the guide ship of the then University Librarian Jogeswar Sarama. Initially it was started as an evening course. Later in 1979, one year MLibSc course was started. In 1983, the University started the Department of LIS independently. In the year 1985, the department was renamed as the Department of Library and Information Science and both BLISc and MLISc became full-time day courses from then onwards. The department started its two year MLISc integrated programme in the year 2001.

In the same year i.e., 1985, North Eastern Hill University of Meghalaya state established the Department of Library and Information Science with a new kind of approach introduced for the first time in the country a two-year integrated programme leading to MLIS.

Next was the state of Manipur where in 1986, the Department of Library and Information Science was established by the Manipur University with a PG course of BLIS. Later on they also followed the 2 year integrated MLIS course.

After a gap of 6 years LIS education in North East India got to see ray from the state of Mizoram, where the Mizoram University in the year of 2002 started the one year BLIS course and in the next year i.e., 2003 started one year MLIS course. And eventually the department headed towards the 2 year integrated MLIS course.

In 2004, another chapter to LIS education in North East India was added when one year BLIS course was started in the state of Sikkim by DS College, Gangtok, which was

then affiliated to North Bengal University of West Bengal but now it is affiliated to Sikkim University.

In the year 2005, another University from the state of Assam named Dibrugarh University opened up a centre known as "Centre for Library and Information Science Studies (CLISS) with one year BLIS course. After that in 2007, they started one year MLIS course too.

In 2009, Assam saw another rise in LIS education when Assam University came up with the Department of Library and Information Science with two year integrated MLIS course which eventually got started in 2010.

Besides that in the same year i.e., 2010 state of Tripura got the light of LIS education when one of the colleges named Ramthakur College, affiliated to Tripura University started one year BLIS course which now got closed.

North East India's first PhD course in Library and information science was started by the Manipur University in the year 1987. After that many universities started having this course. M.Phil. course was first started by Mizoram University in North East India in the year 2007 and presently Assam University has also started offering MPhil course.

So, out of the eight states of North East India, 6 (six) states are having Library and Information Schools who are offering LIS education. In total 8(eight) Universities are providing LIS education in North East India in regular and irregular way. It is seen that except two states, all other states of North East India are having LIS education i.e., Arunachal Pradesh and Nagaland.

1.3 IMPORTANCE OF TEACHING AND LEARNING METHOD IN EDUCATION

In this ICT age, keeping in mind the need of today's learners, one of the main challenges of education policy makers is of involving technology in education. There are three approaches to it. First, by introducing ICT in lesson units that is in curriculum secondly, by using ICT, as a means of storing and retrieving of information and thirdly, by using ICT as a method of delivering instruction. So far, LIS education is concerned, first two approaches which have been well covered to some extent till now. The third approach has not got sufficient thought till today. The capacity of an institution depends upon its physical infrastructure, human resource, curriculum, internship facilities, and social infrastructure. But often one thing which gets off our mind is the teaching and learning method which too has equal importance in building an institutional capacity. The way of delivering education is also as important as what is being delivered. Earlier it was not at all an issue but nowadays when more students are coming from techno savvy environment, it has now become important for the teachers to pay heed to the learner's interest and approach accordingly so that teaching and learning gets its own life. The fusion of ICT in LIS education has already made it attractive and now it's time for using new technologies in imparting this education to make it interesting as well as developing future librarians in a better way.

According to some people introducing technology into teaching would make negative impact on education as it would lose its actual traditional charm of chalk and blackboard. So to overcome this fear, we need to keep a balance of both traditional and technological method. Because the fact that ICT in education is going stay here can't be denied. So the education policy makers should be keen on introducing technology in teaching learning method along with traditional face to face learning.

Introducing Blended Learning could be one of the means of improving the quality of teaching and learning in LIS education. Blended Learning is a mix of both traditional face to face learning with that of online learning. Traditional learning is more class oriented and less flexible in terms of class schedule, use of latest technology and learning methodology while Blended Learning is flexible and support both class room as well as online teaching. While both onsite and online learning can accomplish course and program objectives, in a blended system, these modes of learning are combined in order to enhance the learning and teaching experience for both students and faculty.

1.4 SIGNIFICANCE OF THE STUDY

Science and information technology brought innovations and inventions with increasing speed. One of the fields affected by information technology is education; it brought fast, current, cheap, and reliable tools to education. LIS education is one of the many fast changing fields in higher education today and in this information age it is very necessary to keep abreast of all new changes that are taking place in the work place.

LIS programmes face the dual challenges of providing quality education and preparing future professionals to work in blended environments. Education and training programmes are constantly changing and developing, and in recent years the rising interest in e-learning has expanded and shifted its focus so that many practitioners are now concerned with Blended Learning programmes which makes learning more accessible, engaging, relevant, flexible, reducing amount of time and exploiting ICT and training facilities. Blended Learning provides opportunities for students to engage in discussing, debating, developing understanding, reflecting and building knowledge, integrating faceto-face and technology mediated interactions. Blended Learning increases the options for greater quality and quantity of human interaction in a learning environment. It offers learners the opportunity "to be both together and apart." A community of learners can interact at anytime and anywhere because of the benefits that computer-mediated educational tools provide. An instructor can begin a course with a well-structured introductory lesson in the classroom, and then proceed with follow-up materials online. Blended Learning can also be applied to the integration of e-learning with a Learning Management System using computers in a physical classroom, along with face-to-face instruction.

Therefore, it seems that the use of Blended Learning has a special role to play in the modernization of LIS education because better services will be rendered only if quality education is provided and at the same time students being developed with skills in librarianship, information technology, and instructional design.

There are not much studies conducted about Blended Learning in India. And the awareness and use of Blended Learning in LIS education is completely new research approach in this field. It is important to explore the extent of adoption of Blended Learning in LIS education and awareness by LIS Departments of Universities of Northeast region of India. Hence, this study is considered relevant to assess the awareness, usability and interest on Blended Learning and its tools by the students, research scholars and faculties of the Library and Information Science departments of North East India.

The study stresses the urgent need for administrators and education policy makers to evaluate the effectiveness of Blended Learning in LIS education in moulding the library professionals to meet the demands of future library environment. It is also the responsibility of the teachers to provide quality opportunities for LIS students to develop their skills, knowledge and competencies to keep pace with the rapidly changing environment.

1.5 STATEMENT OF THE PROBLEM

Considering the above factors, the statement of the present study is entitled as "Awareness Towards Blended Learning as Paradigm of LIS Education in Selected Universities of North East India: An Analytical Study". A specific problem needs a solution and as no previous study related to this has been made, hence, the need is felt to have a study with all the available vital information about them, so that it provides us knowledge about the present scenario of Blended Learning on LIS education. It is hoped that the study will seek to answer question bothering on the availability and awareness of Blended Learning on LIS education environment in LIS Departments of selected Universities of North East India and what can be done to fill the gap if any.

1.6 DEFINITION OF KEY TERMS

Awareness

"The state or condition of being aware; having knowledge; consciousness or perception; concern about and well-informed interest in a particular situation or development of a situation or fact"

Blended Learning

"Blended Learning is a formal education program in which a student learns at least in part through online delivery of content and instruction with some element of student control over time, place, path, and/or pace."

Paradigm

"A typical example or pattern of something, or a pattern or model"

LIS education

"Library and Information Science Education is the education in LIS which provides students with the skills and qualifications needed to succeed in today's library environment."

University

"An institution for higher learning with teaching and research facilities constituting a graduate school and professional schools that award master's degrees and doctorates and an undergraduate division that awards bachelor's degrees"

1.7 OBJECTIVES OF THE STUDY

In doing something, there is always an objective that should be considered and research study is no exception. The objectives of the study helps to guide the researcher as well as readers that in actual, what is the need and why this study is being conducted or for which purpose this research is being done. The main objectives of the present study are as follows:-

- To reveal the awareness among the students and teachers about Blended Learning in LIS departments of selected Universities of North East India.
- ii. To reveal the use of Blended Learning tools and techniques of education like PowerPoint, Interactive whiteboard, Virtual communication tools, Podcasts, Virtual Learning Environments (VLEs), E-mail, chat or conferencing, discussion boards etc in teaching learning programmes of LIS education in Universities of North East India.

- iii. To understand the knowledge and skills on Blended Learning by the LIS teachers of Universities of North East India.
- iv. To find out the present status of ICT infrastructure and utilization of the same in teaching learning programmes of LIS education of Universities of North East India.
- v. To determine the challenges associated with the application of Blended Learning in LIS education by the Universities of North East India.
- vi. To find out if the students and academicians in the Library and Information Science (LIS) education and training are ready and eager to embrace innovative methods using technology in teaching and learning.
- vii. To find out effective Blended Learning tools and suggests some remedy which will help to enhance teaching and learning programmes in different LIS Departments of Universities of North East India.

1.8 SCOPE AND LIMITATIONS OF THE STUDY

The study is restricted to the 6 (Six) Universities of North-Eastern Region of India having Library and Information Science Departments, which are as follows:

- 1.8.1 Assam University, Silchar, Assam
- 1.8.2 Gauhati University, Guwahati, Assam
- 1.8.3 North Eastern Hill University, Shillong, Meghalaya
- 1.8.4 Manipur University, Imphal, Manipur
- 1.8.5 Mizoram University, Aizawl, Mizoram
- 1.8.6 Dibrugarh University, Dibugarh, Assam (Centre for Library and Information Science)

There are eight (8) states in North-East India, viz. Arunachal Pradesh, Assam, Meghalaya, Mizoram, Manipur, Nagaland, Tripura, and Sikkim. Out of these states, only 6 (six) states are having library and information science schools who are offering LIS education. It is seen that in total 8(eight) Universities are providing LIS education in regular and irregular mode. And out of them only 6 (six) Universities that are offering LIS education in regular mode are taken into consideration for the study. The study is limited to the students, research scholars and faculties of LIS departments of six universities.

1.9 ORGANISATION OF CHAPTERS

The study and the findings are reported in six chapters. The citation and the bibliographic reference follow APA style. The organizations of chapters are as follows with brief descriptions:

Chapter 1: Introduction discusses the background of the study, LIS education in India and North East India, role of teaching and learning methods, statement of the problem under study, definitions of key terms objective, scope, limitations and chapters used for the study.

Chapter 2: Literature Review deals with review of related literature covering LIS education; Blended Learning based on studies conducted in India as well as in abroad and is organized on the basis of importance and relevance of the study.

Chapter 3: Blended Learning: An Overview gives an outline of its meaning, features in general and application of Blended Learning on LIS education for betterment of course structure.

Chapter 4: Research Design and Methodology describes methodology of the research giving an overview of the research population of the study, universities in North East which are imparting LIS education, data collection tools and techniques.

Chapter 5: Data Analysis and Interpretation discusses and explains the analysis and interpretation of different data which are collected through different types of tools of data collection.

Chapter 6: Summary of Findings, Suggestions and Conclusion discusses and explains the major findings of the study including suggestions and recommendation for further research, finally concluding the study.