

RESEARCH DESIGN AND METHODOLOGY

4.0 INTRODUCTION

While doing any research, the objective is to find a solution to a given problem by going through the available data and the unknown aspects of the problem and relating each other to make a solution. In doing so, the methods or techniques that a researcher uses in performing such research operations refer to Research Methods. So in all these processes, it helps the researcher like those methods which are concerned with the collection of data, those methods concerned with statistical techniques for establishing relation between the data and the unknowns and those methods which are used to evaluate the accuracy of the results obtained. So a research methodology is needed to be made during the course of studying a research problem. This chapter describe the methodology used for this study. The main objective of the study is to assess the awareness, usability and interest on blended learning and its tools by the students, research scholars and teachers of the Library and Information Science departments of North East India. Besides with the starting of an inclusive literature survey on the topic of research and other related fields, various series of steps that are involved in research methodology in carrying out this research are presented below:

4.1 RESEARCH APPROACH AND DESIGN

To meet the objectives of the study, the research design that has been used is descriptive type. A quantitative research approach has been used to collect relevant data from the students, research scholars and teachers of library and information science department from the selected six universities.

4.2 RESEARCH METHODS USED

To realise the objectives of the study, survey method using questionnaires as the main tools have been used for collection of data which were personally distributed. The researcher thus visited the concerned universities and observed the existing conditions of the departments of library and information science. Visits to different states of North East helped to receive the direct feedback from the respondents about LIS Schools and department observations made during the visit helped to verify the data received while conducting the study

4.3 RESEARCH POPULATION

In order to assess the awareness, usability and interest on blended learning and its tools by the students, research scholars and teachers of the LIS departments of North East India and to find out effective blended learning tools and to prepare draft guidelines which will help to enhance teaching and learning programmes in LIS Departments of Universities of North East India, a complete coverage of library and information science academia has been done from the six selected universities of North East India viz. Assam University, Silchar; Gauhati University, Guwahati; Dibrugarh University, Dibrugarh; North Eastern Hill University, Shillong; Manipur University, Imphal and Mizoram University, Aizawl. And the respondents covered are all the students, research scholars and full time teachers of library and information science department from six selected universities. Out of the six universities, two are state universities and rest four are central universities. Looking at the size of the total population of the study, the researcher resorted to make census study.

4.4 POPULATION SIZE

The target population in this research includes three major stakeholders. These are:

- **Teachers of LIS Departments:** All the full time teachers of the six LIS departments of six Universities of North East India were chosen to be the primary informants for this study (**Size=30**). The table below shows its break up.

Table 4.1: Population size of Faculty

<i>Sl. No.</i>	<i>Name of the Departments</i>	<i>Number of Faculty</i>
1	DLISc, Assam University	4
2	DLISc, Guwahati University	6
3	DLISc, North-Eastern Hill University	6
4	DLISc, Manipur University	4
5	DLISc, Mizoram University	8
6	DLISc, Dibrugarh University	2
Total (N)=		30

- **Students of LIS Departments:** All the students of the six LIS Departments of six Universities of North East India were chosen to be the primary informant for the study. So the total intake capacity of all the departments of Library and Information Science of North East India were taken into consideration for the population size of the Students.

Table 4.2: Population size of Students

<i>Sl. No.</i>	<i>Name of the University</i>	<i>Number of Students (Two Semesters) (as per intake capacity)</i>
1	DLISc, Assam University	25 + 25 = 50
2	DLISc, Gauhati University	25 + 25 = 50
3	DLISc, North-Eastern Hill University	25 + 25 = 50
4	DLISc, Manipur University	20 + 20 = 40
5	DLISc, Mizoram University	25 + 25 = 50
6	DLISc, Dibrugarh University	24 + 20 = 44
Total =		284

But, it is to be mentioned here that while the researcher went for survey, it was found in many departments that instead of specified intake capacity of

students, more number of students were given admission reasons may vary from rush of applicants to VC's recommendations. Along with that it also seen that in some departments lesser number of students was enrolled in place of specified intake capacity, reasons may vary from low applicants to poor performance in entrance examinations. So, considering all these facts the total number of student's population was found to be **(Size = 285)**.

- **Research Scholars of LIS Departments:** Another strong contender of informant of this study is Research Scholars of LIS departments. However, in case of research scholars, random sampling technique has been used. As we all know research scholars are of two types, one is part time and another one is full time. So basically part time scholars are very hard to find in the department generally duly backed by their jobs issues, living in other part of the country and so on. And the full time scholars are usually small in number and also they keep on moving for their own research work. So the researcher went for random sampling technique to collect data from research scholars. Thus when the researcher went on survey visits to the departments, questionnaires were distributed to those research scholars who were present at that time. So the total number of research scholars the researcher met in the six LIS Departments from six universities is 38. **(Sample Size = 38)**

Therefore, the total population size (N) of the study is **(Faculty = 30 + Research Scholars = 38 + Students =285) = 353**

4.5 DATA COLLECTION METHOD

Data serves the foundation or the raw material for analysis. In the present study, both primary and secondary methods of data collection are adopted. The primary data were collected from the students, research scholars and teachers of the library and information

science department from the six selected universities of North East India. These data were collected through well structured questionnaires which were distributed personally by the researcher and were collected either on the spot or after a day. The questionnaires were filled by the respondents in the presence of the researcher. Constant attempts were made to cover maximum response rate. Secondary data are those data which gives the additional validity to the primary data. The secondary data that were collected to support the study are the survey reports, research papers, chapters taken from books, journal articles, and University websites.

4.6 DATA COLLECTION TOOL

The data collection tool that has been used in the present study is the most popular questionnaire method. It is more economical and easy to administer. Keeping in view the objectives, two different sets of questionnaires were devised. One set of it was administered for students and research scholars and the other for the teachers of the library and information science department. Structured questionnaires were designed. The questionnaires comprised of questions covering every possible aspect of blended learning and its usability in library and information science education without sacrificing its simplicity and objectivity. The questionnaires were divided into two parts, firstly general information, secondly, use and awareness of Blended Learning. To facilitate quantification and analysis, close-ended questions were used along with rating scales. Few open ended questions too were included so that respondents can express their views freely. Efforts were made to pre-test and finalize the questionnaire for distribution. A covering letter was attached with the questionnaire which briefly explained the research topic and assured the respondents about confidentiality of their response and purpose which is of research only. Particulars of the contents in both the questionnaires have been given in the following part.

The Students and Research Scholar's questionnaire has covered following facets:

- A. General Information
- B. Facilities
- C. IT Literacy Levels
- D. Familiarity with E-Learning
- E. Blended Learning Awareness

The questionnaire for the Teachers has covered following facets:

- A. General Information
- B. IT Literacy Levels And Facilities
- C. Familiarity with E-Learning
- D. Blended Learning Awareness

These questions were prepared to realize the knowledge of blended learning and the extent of utilization of blended learning tools, their preferences and expectations about the blended learning and its impact on library and information science education. Copies of both types of the questionnaires are appended as **Appendix "II"** and **"IV"**

4.7 PILOT STUDY

As a part of pilot study, questionnaires were pre-tested by using a small population of LIS teachers and students of Assam University as the samples. After the pilot study, the suggestions and recommendations were taken into consideration and the questionnaires were modified accordingly and after that the questionnaires were finalized.

4.8 DATA ANALYSIS TECHNIQUES

After the collection of filled in questionnaires, the data were analysed in the light of the research objectives. The data were then coded, presented in suitable tabular forms, computerised and analysed using quantitative data analysis software namely MS Office

Excel, while MS Office Word was used for other word processing works like typing the texts and drawing tables. Lastly the analysed data were presented by figures, graphs and textual presentation for lucidity. Finally the findings of the study have been sketched from the interpretations based on the views given by the respondents.

4.9 TIME PERIOD

The study was proposed during 2013 and the data were collected during the period September 2014 to April 2015.

4.10 PROFILES OF LIS DEPARTMENT OF SELECTED UNIVERSITIES

A brief overview about the profiles of six selected Library and Information Science Departments from six different Universities of North East India on which the study was carried out. The departments are lined up according to their chronological order.

4.10.1 Department Of Library and Information Science (DLISc), Gauhati University

The Gauhati University is the oldest and largest University of North East India established in 1948. The sprawling university campus is situated in Gopinath Bordoloi road at a distance of 10 kilometres from the heart of the Guwahati city. It is a State University. The university is having 41 Departments, 1 Law College and 1 Institute of Science and Technology. The Department of Library & Information Science was started in Gauhati University in the year **1966**. It was the first Post Graduate LIS Department in the North East India. It started with one year Post graduate course BLibSc (Later BLISc). And in 1978 one year MLibSc (Later MLISc) was introduced. In the year 2001, as per the UGC guidelines, an integrated two year MLISc course was introduced with four semesters. The intake capacity of the MLISc course is 25 seats. After 1989, the department started conducting PhD programme too. Presently there are six LIS teachers including two

Professors, one Associate Professor and three Assistant Professors. The main objective of the department is to acquaint students with the principles of modern management of Library and Information centres and to make them aware about the growth and development of universe of knowledge and its organization in different fields. The department is having a departmental library with a good number of collections. The department is having one computer lab, LCD Projectors, Printer etc.

4.10.2 Department Of Library and Information Science (DLISc), North Eastern Hill University

North Eastern Hill University (NEHU) is a central university established on 19th July 1973 by an Act of the Indian Parliament. The university is located at Shillong, the capital city of Meghalaya. It had another campus in Tura. North Eastern Hill University is the only source of higher education in this hill region. In fact, NEHU is the second university to start LIS education in the North East Region after Gauhati University. The department of library and information science was established in **1985** with a new approach to Library and Information Science education in the country. The Department introduced for the first time in the country a two-year integrated programme leading to Master's degree in Library and Information Science (MLISc). The same pattern of education was later recommended by the UGC under Model Curriculum in Library & Information Science in 2002. The intake capacity is limited to 25 seats of which 20 seats are reserved for the students from Meghalaya. In addition, the department also has PhD programme which was started from the year 1990. Presently there are six LIS teachers including one Professor, one Associate Professor, and four Assistant Professors. The Department is having computer laboratory with internet facilities. There is one departmental library which stores the job dairies and dissertations of MLISc students. The main objectives of the department is to give the students an understanding of the basic principles of fundamental laws of library science

and to enable him/her to understand and appreciate the functions, purposes and services of Libraries and Information Organizations in this fast changing world of “Information Age” and to train the students in the techniques of Information Management and equip them with the latest developments in Information Technology (IT) and its applications in libraries and information centres.

4.10.3 Department of Library and Information Science (DLISc), Manipur University

The Manipur University, established under the Manipur University Act, 1980, came into existence on June 5, 1980. It became a Central University on October 13, 2005, under the Manipur University Act, 2005, passed by the Parliament. Located in the historic Canchipur, as a teaching-cum-affiliating university at Imphal, the capital city with territorial jurisdiction over the whole of the state of Manipur, the University has a campus of 287.53 acres with scenic surroundings. The University campus is only 7 km from the heart of Imphal city on the Indo-Myanmar Road (National Highway 39). The University has six Schools of Studies including the School of Medical Science and 29 departments which constitute these Schools. Department of Library and Information Science (DLISc) of Manipur University has been established on 2nd April **1986**. Professor M.R.Kumbhar, the then University Librarian of the University was its Head. In response to the demand for training human resources in this field particularly for the state of Manipur, it started offering one year PG programme in BLIS with an intake capacity of 40 students. After that MLIS was introduced in 2004 with an intake capacity of 6 students. From 2006-2007 academic sessions, two year integrated MLISc programme with four semesters was started replacing the two old programmes. For this programme intake capacity is limited to 20 students with provision for 5 seats against lateral entry at the 3rd Semester. From the year 1987, the department started providing facilities for carrying out research programme

leading to Ph.D. Presently there are four LIS teachers including two Associate Professors and two Assistant Professors. The main objective of the department is to give the students an understanding of the basic principles of fundamental laws of Library and Information Science and to enable him/her to understand and appreciate in this fact changing world of “Information Age” and to train students in the techniques of Information Managements and equip them with the latest development in Information Technology (IT) and its application in libraries and information centres. The department is having IT laboratory for the academic and research requirements. The department is having good collection of books which are kept in department office room.

4.10.4 Department of Library and Information Science (DLISc), Mizoram University

The Mizoram University was established on 2nd July 2001, by the Mizoram University Act of the Parliament of India. It is situated at Tanhril Aizawl, the capital city of Mizoram. It is a central university under the University Grants Commission. With a view to equip the libraries of the state with technical man power, the department of library and information science was established in **2002**, with one year BLISc course followed by one year MLISc course in 2003. However, from July 2005, two-year integrated MLISc course was started replacing those two one year courses. From the same year that is 2005, the department introduced Ph.D. programme. In 2007, the department announced MPhil programme which was the first of its kind in North East region. Presently there are eight LIS teachers including two Professors, two Associate Professors and four Assistant Professors. The main objective of the department is to provide students an understanding of the basic principles and fundamental laws of library and information science and to enable them to understand and appreciate the functions and purposes of the libraries in the changing social and academic set-up of north eastern India and to train the students in the techniques of modern methods in librarianship and management of libraries. The department is having

Information Processing laboratory which is well equipped with Internet broadband. Also the department is having departmental library for its student, research scholars and faculties.

4.10.5 Centre for Library and Information Science Studies (CLISS), Dibrugarh University

Dibrugarh University is the eastern most University of India established in 1965 through the enactment of the Dibrugarh University Act 1965. It is a state University. It is a teaching cum affiliating University. The university through its various academic departments and centres of studies have been striving towards providing quality higher education in the different fields of knowledge. The Centre for Library and Information Science Studies (CLISS), was established in January 2005, with a view to imparting education and practical training in library and information services. The centre has been receiving huge response from aspirants for this course as it is the first and only centre to provide regular LIS course in Upper Assam region. One year full time degree course leading to BLISc degree was started from the academic session 2005 (January to December). After that the course has been upgraded to provide one year MLISc degree from 2007 with two semesters. It has an intake capacity of 24 (20+4 endowment seat) students in BLISc and 20 (15+2 endowment seat+3 deputation seat) students in MLISc. It has started its journey with part time LIS teachers. The CLISS has a vision to grow itself into a full grown department-cum-research centre.

4.10.6 Department of Library and Information Science (DLISc), Assam University

Assam University is one the central universities established by an Act of Parliament promulgated in 1989 (Act X111) and enforced by the Notification of the Government of India in 1994. The main campus of the University is 23 km. away from Silchar city, the tea capital of South Assam. The campus is spread over an area of 600 acres, drawing its 320

plus faculty from many disciplines, from all over the country; the university sustains a multidisciplinary approach to higher education. The University has sixteen (16) Schools on major disciplines and thirty five (35) departments under these sixteen schools. Department of Library and Information Science (DLISc) of Assam University has been established in the year **2009** under the School of Swami Vivekananda School of Library Sciences. It started its 2 years integrated MLISc journey from 2010 academic session with an intake capacity of 25 students. From 2013, DLISc started offering M.Phil and Ph.D programme too. Presently there are four LIS teachers including one Associate Professor and three Assistant Professors. The DLISc has been established in this university in view of the demand of the LIS professionals of NE region in particular and India as a whole. The department is committed to the University's mission of teaching, learning, research and community services. The department has been using ICT tools like Smart Classroom, computer lab and internet for both teaching and learning. There is a departmental library with a good collection of books on various areas of library and information science.

4.11 CONCLUSION

Through this study, the researcher made an endeavour on studying the awareness and usability of blended learning and its tools by the students, research scholars and faculty members of library and information science. For this, a series of research methods and techniques were adopted which formed an important part of the whole process. In fact these methods played the central role and paved the study towards its objective in a more systematic way. Here in this chapter details of the methods used have been discussed along with brief discussion of the profiles of the six LIS Departments of six different universities. Thus, the oldest department established in North East India was the LIS Department of Gauhati University and the department of recent origin is LIS Department of Assam

University. All six departments show cased the glorious history of LIS education in North East India along with present improvement. The data thus collected through questionnaire got analysed whose details and interpretations are discussed in the following chapter.