6.1 CONCLUSIONS

The role and perception of libraries and information centers continue to change in the 21st century. It is therefore necessary to evaluate the effectiveness of library and information systems in the changing scenario. The changing scenario calls for skills and competencies beyond the daily operational skills. Therefore the schools of library and information studies play an important role in creating human resources thereby providing appropriate education and training. This is evident from the study undertaken by the scholar that library and information science education has to go a long way and there is a need to revamp and improve the professional skills of the teachers, students, researchers and staff to face the new challenges. Although there are many library and information science departments grown over the period of time but hardly the attention has been paid towards infrastructure and manpower development.

Since, University Grants Commission (UGC) is instrumental in developing model curriculum in library and information science but many schools are lagging behind in terms of physical and ICT infrastructure, human resources (teaching staff) and financial constraints. As it has been suggested by many respondents to go for a need based curriculum, it is equally important to make the teachers up to date which has an impact on teaching and learning. Teachers are the testimony of success. This can only be achieved through career oriented courses like Refresher Course, Orientation Programmes organized by Academic Staff Colleges and supported by University Grants Commission (UGC). Besides the curriculum and syllabus, it is essential to provide focus on ICT skills, communication skills, E-publishing, web-designing, digital information sources and services. A close link and coordination are very much essential among the LIS educators, practitioners and researchers. Departments should undertake different types of training programmes with training modules to familiarize and develop hands on experience on the different components of ICT. This is the high time that the Ministry of Human Resource Development with close coordination with UGC and NAAC should think for establishing a national accrediting agency in library and information science unlike NCTE, AICTE, MCI, BCI so that it could ensure qualitative development of library and information science education which has a great impact on its services.
Future Avenues for Research

Today’s library and information professionals are confronted with a broad range of challenges and opportunities to improve the effectiveness of their organizations, to respond better to the information needs of their communities, and to provide leadership in the information environment. Innovative, original and scientific research in library and information science not only increases the quality of services but solves the practical problems of library and information profession. The emerging areas of research in an electronic and digital environment have posed serious challenges to library and information profession paving a way to entirely transform and meet the challenges. More number of Research Fellowship need to be awarded by UGC, CSIR, DRDO, ICSSR. Some of the well established LIS departments having required infrastructure may be recognized as Advance Research Center. Library and Information Science being an established discipline of study has not only focused library and information science education at undergraduate and post-graduate, it has gone beyond this level by offering M.Phil and Ph.D programme. Already the researchers have been carried out on the different areas of library education and library services but the growth, development and popularity of ICT in general and internet technology in particular has widened the scope of research. Many researchers around the world including India are engaged in evaluating internet/web resources, web mining, library website development, website usability, content creation, development and management of digital resources including its preservation, evaluation of search engines, information literacy, e-learning, virtual reference, copyright and Intellectual Property Right (IPR) etc. These researches already carried out or research in progress has scientifically brought innovative solutions to the practical problems of librarianship. Research under progress shall also contribute a lot in bringing innovative and original ideas for qualitative improvement of library and information science education in India and abroad.

This research topic undertaken by me paved the way to come across many academic and professional issues confronted by library and information science education in the country and more specifically in the north east region and in the process I gained experience to contribute to my academic and professional endeavour.
6.2 SUGGESTIONS

Based on the feedback received from the respondents, the following suggestions are made for the qualitative improvement of library and information science education in the north east region and national level as well. Suggestions are made by the senior library and information professional of the country and north east region including my own supervisor so as to bring it before the appropriate national bodies in future as follow up action and implementation.

1. Objectives of LIS Education

The successful pass out students working in different libraries and different capacities including senior library and information professionals of north east region opined that LIS education should be planned and developed in a more realistic and objective manner. LIS education should not only meet the immediate needs but the future needs. The scope and coverage of LIS education should be at par with national and global standard. Respondents also suggested that introduction of Masters course and its syllabus should be based on market survey. The vision of new and already established departments and mission of the MLIS course should aim at creating appropriate human resource in the country.

2. Curriculum and Syllabus

The LIS curriculum designed by the departments need to be a need based curriculum befitting to the national and global job market. Although UGC is responsible to prepare a model curriculum (latest-2001), either this is adopted fully/partially or not at all. To the extent possible the curriculum should reflect 50:50 ratio of theory and practical components with clear emphasis on Librarianship and ICT components. A need based curriculum should include library automation, networking and Internet, Information System and Retrieval, Content development, Digital Library, Design and Development of Library Website, Use and Evaluation of Web Resources, Knowledge Management, E-Publishing, Copy Right and Intellectual Property Right in electronic environment. A need based and qualitative curriculum can only designed with help of Educators, Practitioners and Researchers. The syllabus should also be designed in such a manner to benefit the UGC-NET and SLET aspirants. Some of the respondents also made special emphasis on Open Source Software, resource generation/mobilization,
outsourcing, personality development and leadership which may form the part of the syllabus.

3. **Human Resources**

Faculty is the testimony of success of the students. Trained, specialized faculty with up to date knowledge and skills could deliver teaching and learning more effectively. To achieve the standards of excellence sound professional knowledge, up to date content and good communication skills are the three essential characteristics of a good teacher. The faculty members should be open to self evaluation and accountability.

One of the major targets that we have to achieve is to make our profession more attractive to lure and induct best brains into it. Teaching and Learning must be laboratory and library oriented. Faculty and student exchange programmes among the leading universities of national and international level shall allow both teachers and students be exposed to latest trends and developments. In the changing information environment, web based education is an added advantage which all the teachers and students should be motivated to access, store and retrieve vast amount of information pertaining to their area of teaching and research.

4. **Physical/ICT Resources/Teaching Aids**

Physical resources not only include building, furniture and equipment, more important is ICT infrastructure. A well equipped information processing laboratory with computing and network infrastructure including Internet connectivity facilitate practical to be undertaken by the students. Adequate ICT infrastructure need to be developed in each school to supplement teaching and learning. Teaching aids include library software, digital library software, LCD, Laptop, scanners, printers etc.

5. **Skills and Competencies**

The skills and competencies expected from LIS learners are broadly grouped into the following categories.

a) **ICT Skills**: The changing library profession into information profession requires ability to handle sophisticated technology including networking and Internet skills.

b) **Information Management**: The ability to collect, access, store, retrieve and disseminate information to users.
c) Communication Skills: Effective and interactive communication skills of the LIS professionals add value to the library and information centers to cater the potential users. Good communication skills not only make users to understand library services, but an effective means of marketing library and information services.

d) Leadership Skills: The curriculum should also include the ability to develop leadership skills of the LIS professionals to carry forward the plans and policies of the libraries and information centers in 21st century. To nurture, encourage and reflect intellectual leadership capacity by focusing on student-centered and practice in teaching learning is the need of the hour.

e) Seminars and Colloquia should form part of the curriculum and syllabus to improve the communication skills of the students.

Traditional skills of Librarianship need to be revamped to suit the digital environment.

6. Library Internship/Apprenticeship
LIS educators strongly felt the introduction of internship/apprenticeship as compulsory component MLIS course varying from 3-6 months. This will provide an opportunity to each and every student to expose themselves various management techniques of a library including ICT application in libraries. Further understanding the practical librarianship, each student can make a choice of his/her career path by developing knowledge and skills in the most emerging areas of LIS profession and demand from the national and global job market.

7. Information Resources
Inadequacy of both print and electronic resources in the form of latest books, journals, reports, monographs inhibit the academic and research development. Majority of schools of library and information studies in the country are today confronted with financial problem to procure these leaning resources. Peer reviewed national and international journals, research and reference books, guides and manuals and other primary sources of information resources be procured by university libraries to supplement qualitative teaching and learning in LIS courses.
8. Continuing Education
Seminars, conferences, workshops, symposiums refresher courses, specialized training programmes at regular intervals may be conducted. This will provide a platform to educators and learners to expose themselves to the latest trend and developments in LIS education and research. Specialized training programmes in collaboration with NISCAIR, NCSI, DRTC, DESIDOC, NASSDOC, DRTC, INFLIBNET, RRRLF, British Council, American Center could provide opportunity to develop skills in digital library, open source software, institutional repositories, information management, information literacy etc.

9. Need for a National Accreditation Agency
LIS experts have a serious concern for maintenance of standards or assuring quality in LIS education. Experts have viewed that unlike other national accreditation agencies such as AICET (Technical Education), NCTE (Teacher Education), Bar Council of India (Legal Education) Medical Council of India (Medical Education), there should be a similar national accreditation body for maintenance of standards in LIS education.

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