

LIS EDUCATION IN DIGITAL ENVIRONMENT

By

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1 INTRODUCTION

Education for library profession is a revolutionary process. The core of the curricula is the people in relation to the information itself and technology that enable the provision of this information. There is a need to produce library science graduates with sophisticated management and policy and planning skills and the vision to translate core values of today and tomorrow's information world. Due to the ongoing developments in information technology sector, the information professionals trained in the latest information handling techniques would also become obsolete after a short time. Hence, the curricula must be reviewed constantly to determine whether the changes are in tune with the present and future job requirements.

2 WHAT IS LIS

Library science or **Library and Information Science (LIS)** is the study of issues related to libraries and the information fields. This includes academic studies regarding how library resources are used and how people interact with library systems. These studies tend to be specific to certain libraries at certain times. The organization of knowledge for efficient retrieval of relevant information is also a major research goal of LIS. Basic topics in LIS include the acquisition, cataloging, classification, and preservation of library materials. In a more present-day view, a fervent outgrowth of LIS is information architecture. LIS should not be confused with information theory, the mathematical study of the concept of information, or information science a field related to computer science and cognitive science.

Programs in LIS are interdisciplinary, overlapping with the fields of computer science, various social sciences, statistics, and systems analysis.

3 OBJECTIVE OF LIS EDUCATION IN DIGITAL ERA:

In digital era the objectives of LIS education can be stated as follows:

- To have a broad perspective on the principles of librarianship and information provision;
- To have an understanding of the management of libraries and other information agencies;
- To comprehend the principle underlying the organization, retrieval and management of information;
- To have enhanced practical skills in ICT;
- To face the crucial challenges of ICT;
- To meet the existing demands of the new information era;
- To master the WWW;
- To leave with marketable links;
- To pursue in a variety of library and information service contexts

In order to achieve the above stated objectives, the LIS curriculum needs to be rejuvenated and restructured.

4 NEED OF LIS EDUCATION

The education and training in LIS in the digital environment shall contribute to accomplish the following:

- Extensive theoretical and practical knowledge of information management and business;
- Behavioural attitudes and understanding and information needs of individuals and institutions;
- Financial and quantitative methods of analyzing organizational information;
- Problem solving methodology;
- Analytical abilities and critical thinking expertise;
- Research theories and practices
- Human resource management and quantitative practices and management;
- Competence in information handling
- Online information skills;
- Expertise in the use of electronic information;

- In depth understanding of information organization, marketing and using information retrieval systems;
- Analytical abilities to access information and to understand the principles of the organization of knowledge;
- Practical experience in information retrieval, indexing, cataloguing and classification of information resources;
- Information management in various professional contexts.

5 CHALLENGES FACED

LIS programs throughout the world are progressing from educating traditional librarian towards crafting specialists who could be employed in the vast information sector. Nearly all library schools throughout the world have incorporated changes in their curricula in the last few years ranging from total revamping of the curricula to minor tinkering. This appears to be a growing consensus that the library science curricula should focus on the wider context of information studies. Some of the new courses include studies on information seeking behaviour, ethics, information needs & analysis, user education, knowledge management, digital libraries, networking technologies, electronic publishing, information security, metadata etc.

Since the library science graduates have to compete with other professionals to survive in the information business, they have to be equipped to function immediately as competent professionals. Library science graduates are often being criticized as having inadequate knowledge and skills to bring changes in libraries. The blame indirectly is on the library & information science schools for not keeping up with the new developments. This requires the strengthening up of library science education to prepare graduates for specialist areas. So long as the mission of libraries is to bring information to people, the curricula of library education, however, will consist of the role of information in society, the needs, information gathering behaviour and theory and practice of information retrieval. New system today often requires redesigning the organization and developing new information architecture. Due to rapid development of technology there is a need of building, operating and maintaining information system, which are challenging for a number of reasons. Today the library professionals as well as library & information science education are facing tremendous challenge from computer and IT sector in the following aspects-

The strategic challenge: - This type of challenges occurs due to technical changes, which move faster than human and organizations. The power of computer hardware and has grown much more rapidly than the ability of organizations to apply and use this technology. To stay competitive, many educational organizations actually need to do be redesigned. Now each educational organization needs to educate the use of information technology, to simplify communication and coordination, eliminate unnecessary work and eliminate the inefficiency of outdated organizational structure. Each institution must redesign the way of designing, producing, delivering and maintaining goods and services.

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- 5.2 **Globalization challenge:** - This type of challenge occurs due to rapid growth of information technology at global level. There is an international impact on language culture and political differentiation. So there is a need to develop integrated multidimensional information system through proper training.
- 5.3 **Information architecture challenge:** - This challenge focuses on idea that how our pattern of education can best be supported by other information system. Many educational institutions cannot meet their goals because they are crippled by fragmented and incompatible computer hardware, software, telecommunication networks and information systems. So there is a need of "islands of information" into a coherent architecture.
- 5.4 **Information system investment challenge:** - This challenge focuses on how an institution determines the educational value of information system. This problem raised by the development of powerful expensive computers. So each institution must understand the cost benefit from adaptation of a new method

- 5.5 **Responsibility and control challenge:** - These challenges say to establish an information system to ensure special steps to be taken to see that they are accurate, reliable and secure.

6 BASICS OF CHALLENGES

Basics of challenges in the professional development are:

- To impart basic knowledge to globalize products, methods and services.
- To build the necessary skills of new professionals and workers
- To expose the professionals to the latest development which directly or indirectly affect them
- To broaden the vision of professionals by providing suitable opportunity for interchanging the ideas and experiences.

In order to maximize our potential and professional growth, it is important to continually enhance, build our current skills and development an effective career plan.

7 PROBLEMS OF LIS EDUCATION

Like others profession LIS education is also passing through several problems, such as,

- Inadequate infrastructure facility i.e. well equipped ICT laboratories.
- Inadequate human resources i.e. training manpower.
- Providing an option to restrict ourselves to our regional languages for studying LIS course.
- Emphasis on teaching of traditional aspects by not giving enough scope for IT and practical aspects of library automation.
- Non-exposure of students to LIS before they join the course. Therefore intensive training is necessary.
- Lack of coordination and cooperation between library and department of LIS.
- Lack of training facility to the faculty of LIS schools
- Lack of financial resources
- Lack of supporting policy.
- Lack of standardization at the national level.
- No concrete effort to establish a mechanism for accreditation of LIS Course.

It is necessary to overcome the problems to sustain the challenges faced and to survive as professionals.

8 E-LEARNING & LIS

8.1 Reasons of e-learning: Growth of e-learning globally is steadily picking up pace due to various reasons. Reasons like costing, access, modularity timeless, relevance and accountability, some of the reasons why LIS education should go for e-learning mode are –

- Govt. incentives (financial or otherwise) in several countries to promote e-learning
- Language barriers being addresses with availability of localized, quality syllabus or courseware
- Availability of adequate infrastructure
- Shift to a knowledge based economy and subsequent importance given to knowledge workers
- Wide geographic dispersion of LIS employees due to increasing globalization.

8.2 Method of e-learning: There are three e-learning methods which can be adopted in LIS education, thus taking it globally. They are—

- a. **Virtual class room:** this trend is growing rapidly. This system uses synchronous tools or virtual classrooms to create and deliver content. The technologies allow LIS education to be provided through lecture, demonstration discussion and peer collaboration via the web.
- b. **Mobile learning (M-learning):** LIS education can also be given with the help of WAP (Wireless Application Protocol). Internet access is possible without being wired up to networks or telephone lines. This combines with other wireless devices is opening up the door to mobile learning.
- c. **Blended learning solution:** Blended learning simply means using different approaches to meet different content, learner and library needs.

9 INDIAN SCENARIO

Next to USA, India is the country which established the largest number of library science schools. India recognized the importance of LIS education relatively quite early because of the demand of manpower requirement felt in the various types of libraries. The 1st attempt was initiated by Maharaja Sayajirao Gaikwad of Baroda in 1911 when he brought Mr. W. A.

Borden, an American librarian to start a short training program to develop manpower. The training school at Punjab University was considered to be the second library school known in the world, the first being the Columbia school. Gradually other universities and library associations started setting up library schools. Madras Library Association (1929) and Bengal Library Association (1935) started certificate course. Among the universities, Madras University under Dr. S. R. Ranganathan took over the certificate course from Madras Library Association in 1931. The course was subsequently converted into postgraduate course of one-year duration in 1937. Postgraduate courses also started in other universities subsequently, i.e. Andhra University (1935), Banaras Hindu University (1941) and University of Delhi (1947). University of Delhi in subsequent years started providing facilities for research leading to doctorate degrees. It was again the first to start M.Phil courses in 1977. In addition to formal teaching courses, some universities have introduced correspondence courses at various levels of education. An important development in non-formal teaching is starting of a degree course by Andhra Pradesh Open University (Hyderabad) in 1985. Mohan Lal Sukhadia University (Udaipur) and Kashmir University (Srinagar) provide correspondence education at certificate level, Punjabi University (Patiala) at diploma level and Madras University (Chennai) both at certificate and degree levels. IGNOU equipped with multi-media instructional system also planned it from 1987. This provides facilities to professionals working at lower level to improve their qualifications and update their limited knowledge and skills and also to those who could not get admission to formal courses earlier.

10 PRESENT POSITION

At this moment, the status of LIS education in Indian Universities is as follows:

- 74 Universities provide Bachelor of Library and Information Science (BLIS) course,
- 63 universities provide Master of Library and Information Science (MLIS) course,
- 15 universities provide M.Phil in Library and Information Science course and
- 49 universities provide Ph.D in Library and Information Science.

Moreover 18 Open and Distance Education institutes also offer LIS courses. Besides, Indian National Scientific Documentation Centre (INSDOC), New Delhi and Documentation Research and Training Centre (DRTC), Bangalore provide Associateship courses in Information Science, which are equivalent to MLIS degree. NASSDOC once proposed to start Associateship

course from 1988, later on it was shelved. National Centre for Science Information (NCSI), an autonomous organisation under University Grants Commission (UGC) located at IISc campus, Bangalore provides an advanced one-year training course in Information Systems Management and Technology. LIS students at MLIS and Associateship courses are required to submit project report/ dissertation in partial fulfillment of the courses. UGC and ICSSR award scholarships to doctoral students. National Commission on Science and Technology, New Delhi; Raja Rammohan Roy Library Foundation (Calcutta) and ICSSR among others provide research grants for non-doctoral research. Defence Scientific Information and Documentation Centre (DESIDOC) also provides JRF programme in Library and Information Science.

11 CONCLUSIONS

The ground reality of the present LIS education system indicates that the quality improvement is essential and unavoidable not only for its survival but also for facing the major changes and challenges of today and tomorrow in the field of LIS education. The introduction of new IT application on educational technology, involvement of working professionals, proper coordination and revitalized delivery and support services will certainly make LIS teaching-learning process more qualitative. The new curriculum design must take into the worldwide phenomenon of convergence of libraries into computerized documentation and information centers. Hence the media and technology has significant role to play in the curriculum and teaching of LIS programs. The curriculum should maintain balance between both traditional and IT components. If the LIS departments need to sustain the challenges then they have to set global standard of LIS education.

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