

# LIS education in India: Emerging paradigms, challenges and propositions in the digital era

Item Type	Conference Paper
Authors	Mahapatra, Gayatri
Citation	LIS education in India: Emerging paradigms, challenges and propositions in the digital era 2006, :634-637
Publisher	School of Communication & Information, Nanyang Technological University
Download date	22/08/2022 22:42:46
Link to Item	http://hdl.handle.net/10150/106109

Mahapatra, G. (2006). LIS education in India: Emerging paradigms, challenges and propositions in the digital era. Presented at the *Asia-Pacific Conference on Library & Information Education & Practice 2006 (A-LIEP 2006), Singapore, 3-6 April 2006.* 

## LIS EDUCATION IN INDIA: EMERGING PARADIGMS, CHALLENGES AND PROPOSITIONS IN THE DIGITAL ERA

#### GAYATRI MAHAPATRA

P.G. Department of Library & Information science Utkal University, Bhubaneswar (Orissa), India Email: gayatri858@yahoo.com

**Abstract**. Libraries all over the world are moving beyond the conventional framework and giving the footprints of radical changes in the skeletal concept of LIS profession. The librarians of 21<sup>st</sup> century have to prepare themselves suitable for working in network environment and should also acquire necessary skills such as leadership; exploiting information handling; communication, crisis management, team building and decision making, etc. So, the library professionals are in dire need to acquire the relevant skills and expertise to track the world of information and become competent enough to serve in a digital culture. An attempt is made here to project issues related to the LIS education in India and suggests some proposals in this respect based on routine features and experiences. The study also proposes the core elements of the LIS curriculum and the vision of LIS education in India for coming decade. The paper also stresses the needs of revised course contents and allied challenges for readiness of Indian LIS education in digital era.

## 1. Introduction

The Information Communication Technology (ICT) and the computer science have brought metamorphic changes in information products, information seeking behaviour of the users, and the overall information organization. The changes in the process of information generation are due to the convergence of variety of technology, i.e. Hypertext, Multimedia, Virtual reality, etc. ICT has brought new structures and new mechanisms to organize and make information efficiently and instantly available to the users. Information being a strategic tool, the role and responsibility of the Library and Information science (LIS) professionals are at the push of transition from its traditional and ethical rigidity. Due to this, libraries all over the world are moving beyond the conventional framework and giving the footprints of radical changes in the skeletal concept of LIS profession. Internet has made it possible to communicate and share information available to all over the world. Therefore, it is said that the total world has been changed to a 'global village'. Along with this the World Wide Web (WWW) concept of the ICT in 1990s has made a wide spread of the use of the graphics, audio, video, and websites / homepages, etc. The libraries of the 21<sup>st</sup> century are named as libraries without boundaries or libraries having no walls. With the approach of this new millennium, it is presumed (Missingham, 1999) that "all signs indicate that it will be the age of 'wired' citizens and workers" Major trends are the expansion of bibliographic services, licensing and consortia agreement, delivery of information to scientists' desktops, full-text electronic publishing and linking from databases and library catalogues. The concept of digitization of libraries has made it possible to connect all the libraries of the world via networking. Therefore, information from these digital libraries can be accessible to any of its users to any part of the world. All these have serious impact on the library activities and services. So, the modern libraries are completely different from that of traditional libraries in all spheres of activities and in variety of collection. The information needs and information seeking behaviour in the electronic environment is also changing very quickly.

In India a major changes as regards to LIS profession is seen only in last few years. India is having a remarkable place in the world as regards to its history of highly developed civilization and culture. This is evident from the rich document collections available in variety of libraries that are scattered all over the country. Even during ancient time, big libraries were existed at the major seats of learning and during the medieval period, libraries were flourished under the royal patronage. In recent years, India is having all types of libraries, which are situated at the prominent places of learning. They include State Central libraries, Regional libraries, Oriental Manuscript libraries, and libraries attached to educational institutions, Research centers, Religious/Cultural organizations, Learned Societies and libraries managed by private organizations. After the introduction of advanced technology besides the conventional documents, these libraries are in the process of acquiring digitized documents. These libraries use all modern IT facilities in organizing their collections and providing all types of the information services using latest technology. In this category, the libraries attached to research

institutes such as BARC library, TIFR library, libraries/Information centers of ICAR, DSIR, DESIDOC, IIT libraries, BITS in biotechnology, etc. are worth mentioning. Some of the universities and other educational institutes are also rendering automated library services. These libraries also act as the national center in feeding data to their international counterparts that provide the information services through networks. The libraries of the metropolitan places like Delhi, Kolkata, Mumbai, Pune, Chennai, etc. are also interconnected by different networks like: DELNET, CALIBNET, BONET, PUNENET, MANET respectively. The scientific libraries, and other institutional libraries and information centers are also interconnected via their computer and other network facilities named CSIRNET, INFLIBNET, NICNET, ERNET etc. In India we are still getting two types of libraries i.e. one traditional libraries, and other is hybrid libraries where both the cultures are mixed. Most of the libraries are at the transition in development to digitalization. In this condition the LIS education is now facing much difficulties.

Therefore, the librarians of 21<sup>st</sup> century have to prepare themselves suitable for working in network environment and should also acquire necessary skills such as leadership; exploiting information handling; communication, crisis management, team building and decision making, etc. At the same time the jobs of the librarians have become competitive with other similar professions, specially the IT sector. So, the library professionals are in dire need to acquire the relevant skills and expertise to track the world of information and become competent enough to serve in a digital culture.

However, in this direction both the University Grants Commission (UGC) and other national level professional associations and organizations like ILA,IASLIC,IATLIS,SIS are trying continuously to revise and update the syllabus as per the current demands but still it is necessary to be properly framed as per the global necessities, with a consideration of regional requirements. Therefore an attempt is being made here to project issues related to the LIS education in India and suggest some proposals in this respect based on our experiences. The study also proposes the core elements of the LIS curriculum and the vision of LIS education in India for coming decade.

## 2. Market demands vs Quality products and Users' needs

The main objectives of LIS profession are to: provide training for building up leadership qualities among the LIS profession; develop knowledge on the latest techniques of information storage, transfer and retrieval; help to acquire necessary skills in handling, accessing and application of electronic resources, tools and media; and help to know the latest developments in the Information Technology (IT). In India, UGC and other national level organizations make continuous efforts to revise and update the syllabus so that products of the LIS schools of India will be found most qualitative in the market for their job prospects. Still it is a hard time for the LIS educationists in India to compete and achieve the goal. The observations of few library professionals about the modernization of Indian LIS course are also worth mentioning in this context. Arora & Mujoo-Munshi (2000) opined that "while libraries in India are increasingly using services and products of new IT, the library schools in India are slow in restructuring their curriculum in the light of the changes taking place due to potent technological revolution. Fresh Library science graduates find themselves completely bewildered when they happened to be in libraries using computers and other products and the new IT services". The educationists in India felt that "the emerging demands for digital librarians and the digital libraries may warrant the restructuring of LIS curriculum in India. It is also stated that the wide spread use of IT in the libraries has a direct impact on the LIS education. Consequently, it is suggested that the LIS schools in India have to develop a mechanism for determining adaptability and acceptability to the profession. So, there is no doubt that the responsibilities of LIS educationists in India have become most challenging, and that is, they have to find out some strategies, so that the products of LIS schools of India must find full competencies and confidence to work in an electronic environment in the 21ast century. It is highly recommended that an up-to-date and effective training should be given to the information managers in India because of the world wide cut throat competitive environment.

The information needs of users, their search habits, etc. are also influenced largely by the ICT. The users all over the world are connected to masses of information. The main issues for the users are adapting information patterns to meet new media, ongoing browsing as opposed to new project searching, and the ability to find quality information. Therefore, at present we are getting two types of information users: i.e. one fully knowledgeable of the latest IT and the others who are neoliterates having accustomed to the changing environment. The changing needs of library users now also call for good IT skills among the LIS professionals in India.

# 3. LIS education in India: current scenario

The LIS education in India can be discussed at four levels.

- 1. Geographical distribution of LIS schools and levels of education;
- 2. Curriculum development during 25 years;
- 3. Infrastructure available in the LIS schools; and
- 4. Developments in the course contents.

#### 3.1. Geographical distribution of LIS schools and levels of education

LIS education in India has undergone a long way since the introduction of one year-P.G. Diploma course at University of Madras in 1937 which in fact served as a model for the development of library science education programmes in the country during the pre- and post independence period until 1950s. It is estimated that there were five universities conducting diploma course before independence. During the 1970s, the number increased to 42 and at present 167 universities and their affiliated colleges are conducting LIS courses. The degrees offered by the universities at various levels are(AIU, 2004): Certificate course in Library science; Diploma and Post diploma in Library science; Honors course in Library and information science; BLIS; MLIS one year; 2 year integrated course in MLIS; M.Phil; Ph.D. in Library & information science; Certificate in ICT application in Library (CICTAL); P.G. Diploma in Library automation and Networking (PGDLAN).

At the Bachelor degree level, LIS courses are conducted by 87 universities/colleges and at Master degree level by 89 universities/colleges, while Ph.D. in LIS is offered by 52 universities. Eight universities and 12 colleges offer certificate programmes and six universities and six colleges offer Diploma programmes in the subject. Some have also introduced M.Phil programmes in LIS. The course is offered both as regular and distance mode. Further, the LIS schools are scattered over the states and union territories of India. This depicts the mushrooming growth of LIS education in India within a span of about 50 years. Beside these courses, various advanced level short-term training programmes are being offered as a part of continuing education programmes. These courses are run by the institutions/ organization where the infrastructures and other facilities are easily available such as: NISCAIR, New Delhi; SAARC DOC. Centre(SDC), New Delhi; IFLIBNET, Ahmedabd; NASDOC, New Delhi; DELNET, New Delhi; IIM, Lucknow, SENDOC, Hyderabad, and various Library and information science associations like ILA, IASLIC and universities.

## 3.2 Curriculum development

In LIS, the curricular change is a well-accepted and continuous phenomenon in India. At the university level, after independence, the UGC controls mainly the general course structure of various curriculums. A review of the literature shows that since inception UGC has given due emphasis on the curriculum design for the LIS departments along with the developments in the University and college libraries. The first such review committee is known as Ranganathan committee (Ranganathan, 1965) on Library science education entitled "Library science in Indian Universities". In 1980s, a marked change in LIS education programme was required due to the introduction of IT in to the Library field. As a result the next attempt for the revision was initiated by the UGC in the early 1990s. The UGC constituted CDC (Curriculum Development Committee) on library & information science under the Chairmanship of Prof. P.N. Kaula (1993). The report of this committee was published in 1992 under the title" Report of the curriculum development committee on library & information science." The publication of this curriculum helped the university departments to update their syllabi as per the requirement in the profession during these periods.

Soon after this, many changes occurred in ICT sector, which had a direct impact on the libraries. This made the UGC to undertake a study on the previous report of CDC on Library & information science. It was felt that immediate restructuring of CDC report was further required to reconsider. The committee discussed all the aspects of the curriculum and finally proposed modular syllabi for Indian Universities. This report was published in 2001 under the title" UGC model curriculum, Library & information science" by Prof. C.R. Karisiddappa (2001) being the Chairman. The CDC (2001) recommended that " in view of the emerging network environment, in view of the fundamental shift in the goals of the library, and in view of the changes in information storage and delivery mechanisms, the educational programmes should cater the needs of these changed settings by including in their course contents, the knowledge and skills required to function effectively in such an environment". This curriculum enumerated in detail the contents of each module along with objectives of the module and expected outcomes of the modules. Besides this, one important feature is that a part of the report

contains a detailed syllabus for a 2-year integrated programme leading to MLIS along with the marking pattern, number of credits, number of hours of teaching theory and practice. Out of all the syllabi published so far, this syllabus seems to be useful and, therefore, soon after its publication, majority of the Indian universities have modified their course structure as per the recent CDC report (2001). So now, almost all the university departments in India are having common syllabi for teaching the LIS subjects. However, there exist still some lacunas at some level for which the LIS professionals in India are still to get full satisfaction of the present curriculum and teaching.

## 3.3 Infrastructural facilities available

Adequacy of infrastructural facilities is one of the important elements for offering qualitative teaching. The infrastructure includes the teaching and other non-teaching staff and laboratory equipments. It is noticed that except few university departments, the majority of the departments do not have the proper infrastructure facilities. The teaching departments are suffering from the minimum staff having the latest knowledge of ICT although many developments are occurring in this field. At the same time, the laboratories attached to the teaching departments have inadequate number of computer and other equipments to train the library professionals. The UGC is also in its stride to having comprehensive and proper training facilities for the in-service training for the LIS teachers.

#### 3.4 Developments in the course contents

The model curriculum designed by the Karisiddappa committee (2001) made maximum efforts to incorporate a considerable number of IT components. At the same time the report has recommend that the "revision of syllabus is required to be undertaken very cautiously with break –even manner, not entirely overawed either by the invasion of IT or by sentimental attachment to various philosophical and historical components". The report provides six core modules and one elective module. The modular system is framed as per the Unesco report published in 1987, Asia-Pacific report named "A curriculum for an information society", 1998 and other similar works done in the field.

The modules are: Foundations of Library & information science; Knowledge organization, information processing and retrieval; Information sources, products and services; Management of libraries & information centers/ institutions; Information technology: basics and applications; Research methods and statistical techniques; and Electives.

An illustrative list of ten elective options is available in the syllabus. The electives belong to the study of different specialized subjects, e.g., Business information system, environmental information system, Agricultural information system, etc. there are a number of practical papers introduced such as: Knowledge organization, information processing& retrieval practice; Information technology—basics (practice); Information sources and services (practice); Information retrieval (practice); Information technology.

This modular curriculum has given a lot of freedom to the departments to design their syllabus with modifications as per the local needs. Therefore, the CDC (2001) has taken care of maintaining a symbiosis between the traditional and technological elements in this model curriculum.

#### 4. Issues and challenges of LIS education

In spite of the best efforts done by the UGC in developing the modular curriculum (2001) and demanding all the teaching departments to revise their syllabi, the LIS profession and educationists experience following challenges.

- There is a wide gap between ICT and education systems in India. Because out of 11,562 colleges in India about 10% have Internet and out of 274 universities about 5% are having Internet connectivity(Goel,2004).
- Most of the LIS departments do not have minimum qualified IT oriented faculties with some exceptions and also do not have sufficient number of equipments to teach the practical for the subjects.
- 3. The faculty improvement programme is not so strong and effective because of shortage of manpower and budgetary provision at the individual university/college level.
- 4. The present system of teaching method i.e.Face to Face(F2F) is also found not preferable because of developments in ICT.
- 5. The developments in www and Internet technology have brought great challenges to the LIS professionals.

- 6. Different mode of publications i.e e-publications and hyper media.
- 7. Introduction of multimedia, hypertext, e-book and e-journals etc. in the library collection.
- 8. Globalization of library profession and library education.
- 9. Increased use of computers and network facilities, which have changed the information needs of the people.
- 10. Rise in the number of LIS departments both in distance and regular modes without considering quality of the products, the job opportunities and infrastructure availability.
- 11. The crucial issues related to the position and function of library and information science professionals for the scientists who are directly connected to the Internet resources and full text database services. It seems that for collecting information they do not need at all the help of any library professionals.
- 12. Different type of employment opportunities, which are coming up for LIS graduates due to the technological changes. For example, web content manager, meta data creators, electronic publishers, etc.
- 13. In India there is also resistance to change in the new settings and work culture.
- 14. Survival of LIS profession in India in an ethical manner.

# 5. Propositions

The following propositions are suggested for the LIS education in India.

- 1. Provision of minimum infrastructure facilities by the controlling authority by giving sufficient funds.
- 2. Assessment and accreditation of universities by any controlling organization at the national level to judge the quality of the products.
- 3. Keeping a balance between the job opportunity and number of LIS products produced each year.
- 4. Introduction of e-learning techniques to improve the quality of the products with minimum qualified teachers.
- 5. Developing the competencies and confidence among the professionals by giving knowledge of latest technology.
- 6. Keeping liaison between the LIS educationists and the library professionals for providing training in specialized courses.
- 7. Making provision of modular courses for the new developments in the field.
- 8. Giving more importance in deciding the research topics which should be related to the current issues such as "Need of LIS professionals in electronic environment, etc".

The LIS education however, should have a minimum core subject along with a lot of Elective subjects on the advanced topics.

## 6. Vision of LIS education in India

The LIS education in India, in the digitized environment, should have the following vision.

- 1. Introducing e-education programme for the LIS education and developing Virtual Learning Tools(VLT).
- 2. Strengthening of research components in the areas focusing the need for the coming problems related to information users and innovating new curriculum and teaching techniques in digital environment.
- 3. Imparting training in modular courses to meet diverse types of users and libraries in India.
- 4. Outsourced teaching pattern for teachers and trainers through industry-academia-interface to inculcate the use of new tools and techniques of IT/ICT.

# 7. Conclusion

ICT has brought many new avenues for librarianship to increase their own capabilities in organizing and retrieving information in the 21<sup>st</sup> century. All the same it has given a challenge to the profession in a different way. Chowdhury & Choudhury (1999) noticed that a number of technical and related issues are to be addressed by hybrid libraries. The library curricula should strike the optimum balance between theory and practice(Mahapatra & Das, 2000). Courses on new technology should be provided. The information needs of user community and the overall changes that have taken place due

to need based adoption of ICT, the work in libraries has necessitated implementation of appropriate changes in the Library and Information Science syllabi for various levels of courses. These factors are to be taken up seriously while designing the course structure. But in India, it is having a peculiar problem as regards to organization of libraries is concerned. It is felt that about 90% of libraries are required to continue with traditional management and organization of their activities. Therefore, in India there will two types of libraries i.e. Digital and Conventional type. In this context it is required that majority of our manpower have to manage libraries in traditional way where classification, cataloguing, circulation, and other activities are mostly to be carried out manually. In this situation, the LIS education has to look after both the aspects and may continue to provide both educational configuration for manually operated conventional library system and fully computerized Library and Information Centers as well. In such cases the educational institute of the country may have to introduce some special paper like Manuscript Librarianship, Organization of Non-Book Materials. Digital Librarianship, Community librarianship, etc. is to be introduced, which would take care of providing depth knowledge on these types of libraries. This may help to produce manpower, which will be suitable for both types of libraries. The LIS specialists, academicians, librarians, information managers ,and intellectuals concerned with the development of libraries should think seriously about the future course contents of LIS education in the country. Nevertheless, the concept of outsourced teaching pattern from the specialist of IT and ICT industries would harvest a better knowledge base through industry-academia-interface, supporting the proper absorption and adoption of digital environment.

#### References

- Arora, J. & Mujoo-Munshi, U.(2000). Accepting the challenge of information technology: Reinventing the library & information science profession in the new millennium. In *Proceedings*, SIS Conference. (pp. 11-24)
- Association of Indian Universities (2004). Handbook on Library & Information Science (2<sup>nd</sup> ed.). New Delhi: Association of Indian Universities. (p. 99).
- Chowdhury, G.G. & Chowdhury, S.(1999). Digital library research: Major issues and trends. *Journal* of *Documentation*. 55(5), 412.
- Goel, D.R. (2002). Information and communication technology in education: Changes and challenges. University News. 40(20), 1.
- Karisiddappa, C.R. (2001). Model Curriculum: Library and Information science. New Delhi: UGC.
- Kaula, P.N.(1993). Report of the Curriculum Development Committee in Library and Information Science. New Delhi: UGC.
- Mahapatra, G. & Das, B.(2000). Changing needs and challenges of library &information science professionals : Aspirations and responsibilities. In *Proceedings of XIX National Seminar of IASLIC, Library and Information Profession at the crossroads*. Calcutta: IASLIC, (pp.67-74).
- Missingham, R.(1999). Science and technology: a web of information; impact of electronic present and future on scientists and libraries. In *Proceedings, Information on-line & on-disc 99, 9<sup>th</sup> Australian conference & exhibition, 19-21 January 1999*[On-line]. Retrieved on 5 August 2002 from www.csu.au/special/online99/proceedings99/205a.htm
- Ranganathan, S.R.(1965). Report of the Library Committee of the University Grants Commission. New Delhi: UGC,