# NEED OF CHANGE IN LIBRARY AND INFORMATION SCIENCE EDUCATION IN INDIA AND SKILLS IN THE CHANGING KNOWLEDGE ERA: A STUDY

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#### **Abstract:**

The 21<sup>st</sup> century has clearly shown that the information technologies are changing and growing at a tremendous speed. The impact of web based e-learning and teaching environment has influenced every facet of library and information services in academic libraries and providing new opportunities and challenges to the library professionals for involvement in the knowledge based society. The information revolution and the knowledge that is available on the web have created new challenges to these traditional professional ethics. The emerging challenges of acquiring and providing access to electronic knowledge resources require librarians to change their role from traditional librarian to information scientist by learning and applying new skills to understand the evolving technologies to manage and provide quality on-line information services to the society.

# **Objectives:**

- The primary objective of this study is to analyze and explore the changing vision and the roles of future academic library professionals accordingly to meet the changes and challenges in the digital environment.
- To document the various changes and challenges evolved before the academic library professionals in the e-learning environment.
- To discuss about the various skills needed for the library professional to meet the present online and digital needs of the user.

**Aim of Paper:** We will also discuss in this paper the requirement of changes in the curriculum of Library and Information Science and skills of library professionals to meet the requirements of education Society. For this there is need to update the new skills of library professional's tune-up with present and future job requirements.

**Keywords**: 1. Library education, 2. Information Technology, 3. Academic Library Professionals, 4 New Skills, 5. Technological changes.

#### **Introduction:**

Curriculum guides student activities & develop instructional procedures for realizing educational objectives. Curriculum models are part of instructional design. Formulating theories of teaching, learning, instruction begins with what is known about learning and instruction. Teaching models are the basis of teaching theories. Curriculum models are a way of expressing teaching theories.

**Ocholla** (**n.d.**) **states that,** A curriculum is a fundamental part of any education or training programmes largely because it provides not only a list of courses or modules offered in a programme, but it also gives information on content, purpose, method, time/duration, trainers and location or situation of a programme or course - all of which are essential in a successful dispensation of manpower training and education."

The twenty-first century information professional must possess skills in selection, content management, knowledge management, organization of information, research services, developing and maintaining digital libraries, and bringing information resources to the desktop. People with the right skills are crucial to the success and competitiveness of contemporary information environments (Varalakshmi 2006). The jobs of the librarians have become more competitive with similar professions such as those in information technology. Library professionals must acquire the relevant skills and expertise to be competent in a digital culture.

Most of the curriculum followed in Indian LIS programs is outdated with little or no focus on the requirements of libraries or IT organizations. Programs may have traditional courses like classification and cataloguing, reference, bibliographic searching, and professional values, but the curriculum does not reflect the current needs of LIS field.

The purpose of library science education is to produce the competent professionals to manage the libraries. LIS education is directly linked with growth of libraries and growth in society. LIS schools have responsibility to produce such library professions who can handle the different needs of educational society so that right to information can be provided.

The term Information Technology (IT) is commonly used to for combination of computer and communication technologies used for information storage and dissemination.

Day-to-day growth in information and communication make lot of changes in our daily life. Libraries generally attached with educational institutes which are largely benefitted with the advances in technologies. The development in computer, audio-visual technologies has opened up new ways of collecting, organizing and disseminating the information.

In this environment side by side library professionals need to update their knowledge and skills so that they are play their role according to demands of educational industry.

Curriculum guides students to attain their educational objectives. Curriculum models are a way to express teaching theories. According to **Oxford Advanced Learner Dictionary:** Curriculum is the subject that are included in a course of study or taught in a school, college etc.

Dynamics changes in ICT sector leads to stress on library professionals and they have to remain flexible and adaptable to every change. These changes need some skills and knowledge for the professionals to meet the requirements of educational society. Librarians have to assist the information seeker by using different innovative methods. For this purpose traditional librarian

skills are not enough. It requires total transformation of skills and the way professional think and act. Using www(world wide web) and internet librarians can expand their resources and services and attract more users to the library.

21<sup>st</sup> centaury librarians and their curriculum, leading curriculum lacking behind the demands of educational industry.

India has world's largest higher education system i.e. approximately 700 universities and approximately 35000 college's affiliated to different universities and these are increasing day by day. Out of these approximately 150 universities impart library and information science (LIS) education. But there is lack of practical training even though in the case of correspondence cases its condition is very bad.

UGC has played a major role in promoting career development for academic librarians to keep current with skills, knowledge, and competencies to face new challenges. One major step was the launching of Academic Staff Colleges at various Universities and initiating training programmes to library personnel in universities and colleges through refresher courses and various professional developmental activities. In 1986, Mehrotra committee of UGC recommended National Eligibility Test (NET) as a requirement for lecturers, assistant librarians, documentation officers and college librarians to improve the standards of the profession. According to Bhattacharya (1994), the continuing education programmes must take account of the following:

- Sponsor conferences, symposia, seminars, workshops, refresher courses, special lectures, etc.
- Offer opportunities to professionals to attend the continuing education programmes;
- Identify areas appropriate for refresher courses, and support their organization by competent implementing agencies.

Short term training programmmes were initiated by the Indian National Scientific Documentation Centre (INSDOC) [presently National Institute of Science Communication and Information Resources (NISCAIR)]. NISSAT (National Information System for Science and Technology), has conducted several short-term courses in computerization, including CDSIS are organized regularly WINISIS software. workshops and At present, DELNET(Developing Library Network) in KOHA and other open software. DRTC (Documentation Research and Training Centre) also conducts regular workshops on Open software, Green Stone Digital Library(GSDL), and other ICT applications relevant to library profession. INFLIBNET (Information Library Network), in association with UGC, organizes various workshops across the country in Library software, like Soul, Digital Library software, etc. To create awareness among the academic community, INFLIBNET also conducts regular user awareness programmes for online journals and E resource management training to Library professionals across the country. Recently, due to the developments in open source software, many libraries have started organizing workshops for imparting practical training on open

software to the staff members and also to professionals of other institutions. Various publishers are also offering training programmes to access their products mainly E-resources to increase their usage. The library associations in India, Indian Library Association (ILA), Indian Association of Special Libraries and Information Centres(IASLIC), etc., organize yearly conferences, which encourage the professionals to participate in conferences and to publish their research output.

### **Objectives of the Study:**

The primary objectives of this study are

- To analyze and explore the changing vision and the roles of future academic library professionals to meet the changes and challenges in the digital environment.
- To document the various changes and challenges evolved before the academic library professionals in the e-learning environment.
- To discuss about the various skills needed for the library professional to meet the present online and digital needs of the user.
- To know the contents of IT in LIS Curriculum of different LIS departments.
- Upto which extent practical training/skill development activities included.

# **Need of Study:**

- Educational industry demands of virtual library but our curriculum is still at the hybrid (traditional +digital) library.
- Reference courses are not arranged frequently.

## Globalization challenge faces by LIS Professionals:

 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.

### 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.

## 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

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.

#### **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.

#### 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.
- 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.
- 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.

#### Need of New Skills in ICT era

In present day environment, professionals owe much greater responsibility to be an effective information professional. Closer look at the existing skills of the professionals reveals that for

facing the challenges of today and tomorrow, they not only need to acquire wider range of skills but also need to keep themselves upto date. Biddiscombe (166) stressed on the need of maintaining and preserving those essential skills that have always made librarians respected in their communities. He further adds that they need to retain their flexible working skills, their openness to new ideas and their personal attention and caring approach to user needs. New environment demands that LIS professionals must remain flexible and adaptable for the change. Realizing the fast upcoming advancements, Sridhar in 2000 predicted that LIS professionals must have technical skills, IT skills and managerial skills as the world is in transition. Thus acquiring new skills is the demand of the time for number of reasons like:

- Fast incoming technological changes;
- Emerging structural changes;
- To prepare staff for changes coming in the work culture of the parent organization or to give transferable skills to make the staff more employable anywhere;
- One may not have all the skills to do the job he currently holds, or because the job itself is changing (Lawes 29).

The style of doing the job by the professionals is changing the way to perform each task associated with the job. It is not always possible to recruit the staff with new skills. What is possible is to provide regular development opportunities that prepare them for the new roles. This is possible by continuing education in order to maintain job effectiveness in a changing information environment and to meet the demands put upon them by the society. Information professionals need to continue to learn, update and refresh their knowledge to prevent the onset of professional alienation in performance and to adjust to the culture and change prevalent in a new information environment (Odini, 103).

Since library managers are not in the position to replace all the existing staff with new staff, they have to ensure training and development for the professionals to keep them updated. With the increase of pressure on information professionals to keep up-to-date, to maintain and improve productivity, attending skill development courses is required time to time(Ramaiah and Moorthy,25). Regular LIS courses must focus on training on IT applications in libraries (Gulati,347-348). Today, with the advent of both ICT and global competition, new hybrid skills and competencies are required in order to become more customer-sensitive & customer-centered(Singh,520). To survive & sustain in the present environment, one has to have combination of generic, traditional and ICT related skills like digital archiving, content development, developing metadata, electronic database searches, network consortia access etc

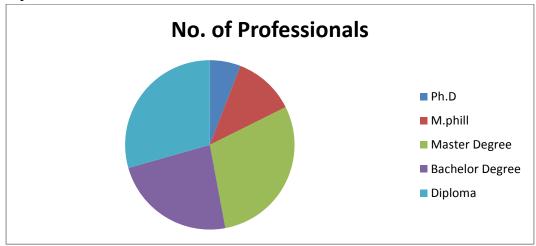
#### **Methodology:**

This is qualitative study. Aim of the Study is to take responses from individuals who hold senior positions in academic libraries to major challenges they face in this technology era. The technological skills are needed to successfully respond to these challenges. Based on the

information collected from different library professionals who are working in different educational institute like engineering, Architecture, Management, Pharmacy, etc. Data Collected with different modes is arranged, scrutinized, classified, tabulated and analyzed for better understanding. From this data, data of different types is separated as mentioned below:

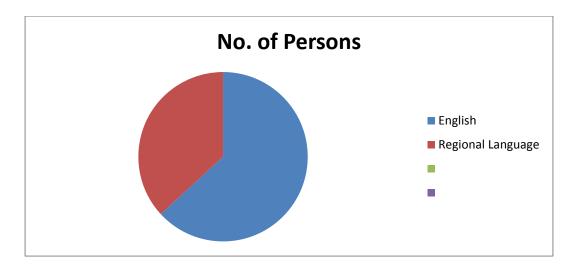
# • Qualification of professionals

Qualification of Professionals	No. of Professionals
Ph.D.	1
M.Phill	2
Master Degree	5
Bachelor Degree	4
Diploma	5



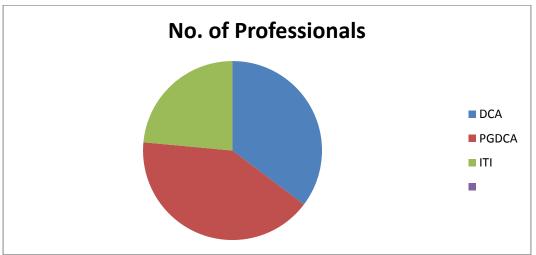
## • Degrees obtain in which language i.e. English or any other regional language.

Language	No. of Professionals
English	12
Regional language	07



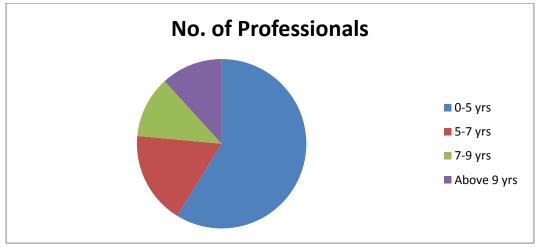
# • Technical qualification i.e. related to computer like DCA, PGDCA, ITI, etc.

Qualification	No. of Professionals
DCA	6
PGDCA	7
ITI	4



# • Experience:

Experience in Years	No. of Professionals
0-5 Year	10
5-7 Year	3
7-9 Year	2
Above 9 Years	2



# **Basic Skills Need for LIS Professionals:**

1. They must have the basic knowledge of operating systems

- Downloading and installing of different programmes.
- Attachment of auxiliary devices like- printer, scanner, etc. to a computer.
- 2. Basic knowledge about troubleshooting
  - Know to solve/repair problems
  - Know to find solutions on web
- 3. Knowledge about MS-office
  - Know about MS-word
  - Know about MS-Excel
  - Know about MS-word pad
  - Have knowledge to make slide shows under power point
  - MS- office Access
- 4. Knowledge of functions of electronic resource's work
  - Have knowledge about URL's and have a ability to tell about
  - Setup of electronic resources
- 5. Web
  - Proficiency in research tools available on the web
  - Understand the difference between HTML and MS-word documents
  - Know about the utility of web browser
  - Knowing to make screen casts
  - Knowledge about image and video editing for the web
  - Knowledge about social media like Face book, Twitter, Whatsapp, etc.
  - Knowledge about mobile device related technology and its applications to the library.

#### **Scope and Limitations:**

Scope of study was limited to the Library and Information Science departments of various universities. It is also extended to distance education programmes in Library and information science and regional languages used as medium of study. Study is also limited to the skills of professionals related to ICT.

#### **Conclusion:**

This paper is based on assumption:

- 1. To produce competent professionals, it is suggested that imparting education of LIS organizations should regularly update their curriculum.
- 2. Add or incorporating new area of knowledge and eliminating/removing irrelevant area from the curriculum.
- 3. Prepare a roadmap to provide directions for future to provide most efficient and effect LIS services to the users of technology era.

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