

Shifting of LIS Education Towards Information & Communication Technology in Universities of Karnataka State: A Study

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Abstract

One of the important reasons for the under utilization of electronic information is the lack of requisite level of working knowledge and consumption skills among customers and information intermediaries. So, the conventional user education programmes need be redefined and reengineered with more emphasis on Information and Communication Technologies (ICT). It should be designed in such a way to provide confidence to the users in locating desired information. Describes the current status, the different patterns and levels of LIS education, as well as the programmes being offered by various universities. Provides an overview of the institutions providing LIS courses at various levels of regular courses and Impact of ICT on LIS Education Development. Emphasizes the need for having a national level accreditation body to maintain uniformity and standards in LIS education. Discusses the problems affecting the status of LIS education and suggests ways to solve these problems and the approaches to prepare the LIS professionals to face the growing challenges of the job market.

1. Introduction

There are 9 Universities functioning in Karnataka and among them 8 universities have LIS education with Academic libraries. The University Librarian is the professional head of the system. The university libraries could automate most of their operations and many of them developed digital libraries of theses and dissertations, including documents also.

As modern libraries world over are on the verge of rapid changes, the university libraries are also had witnessed several changes with the help of IT. Though there was some initial resistance to accept the changes and adopt the new technologies, the positive factors like easy availability, accessibility, flexibility, etc. of the digital documents have created an overwhelming response from the users and this has necessitated a total change in the tools and service procedures of the libraries. Consequently, several new skills, related to ICTs, have to be acquired by the users and staff. From the management side, the whole operations of the libraries need to be changed to suit the requirements warranted by the modern environment. The concepts such as library cooperation, centralized and cooperative classification and cataloguing, etc. have emerged in different forms. Online Journals and Library Consortia became a prominent and effective approach now. Here, the library management and professionals could play an important role to manage the changes in an effective way. That our library schools are also working in major role for providing a

cooperative workers for society they can change their syllabus not only teaching technology as theory and also teach practical aspects those which are suitable for present society.

2. LIS Education in India

India has witnessed a slow and steady growth of Library and Information Science (LIS) education. The foundation of LIS education in India dates back in 1911 by W.A. Borden only five universities (Andhra, Banaras, Bombay, Calcutta and Madras) were offering the diploma course in library science. After independence, new colleges, universities, educational institutions and learned societies were emerging and the need for professionally qualified personnel to manage their libraries was realized. As a result, the number of library science schools started to increase. Library associations which exist at various places started providing training courses. But now our library schools are adopting information technology for their service purposes. The Information and Communications Technology (ICT) has proven its role in accelerating sustainable development and bridging the ever-growing divide in our present day society. There is, however, a critical need to channel the vast potential of ICT in the right direction for the betterment of society and effective human development. So at present some of our library schools have facilities of ICT and its services are improved.

3. What is Information Technology?

Information Technology will be one of the key factors driving progress in the 21st century—it will transform the way we live, learn, work, and play.

Information Technology - is the science and skills of all aspects of computing, data storage, and communications. It is a new, rapidly growing area that is radically changing the world by making possible new ways of doing business, making entertainment, and creating art.

4. Why we Need Information Technology

Information is our product, our currency, our medium. More broadly, education involves information's discovery, generation, processing, organization, storage, transmission, and sharing. It's impossible for us to come up with an academic discipline that does not use information technology as a primary medium, and in many instances it is THE medium of choice and necessity. Faculty members in diverse departments can be heard frankly describing the quality of the IT environment as a vital element in their innovation and success in both teaching and research.

Besides lectures and demonstrations, the traditional and still significant tools for information transmission were books, periodicals, and manuscripts, but the proportion of contemporary library and reference materials available in digital format continues its rapid growth. Simulations, course-management and -enhancement systems, collaborations, multi-media

materials, web-aided research, communication with colleagues across campus and around the world, specialized and mass media—these are only a few of the most obvious of today's computer and networking tools of education.

If instructional and research uses of information tools are obvious hallmarks of institutions of higher education, uses in administration and management are no less significant. In department after department, the computer-based processing of information is what employees do, all day, every day. If that is obviously true in the Registrar's Office (class registration, course scheduling, room allocations, grades and transcripts, student advising) and the Business Office (accounts payable and receivable, the general ledger, and, oh yes, payroll), it is also the case in Admissions (recruiting, advertising, receiving and processing applications), Alumni and Donor Relations (staying in touch, maintaining alumni records, soliciting and processing gifts), Finance, Human Resources, Public Relations, Institutional Research, and in the day-to-day coordination of all those activities by the institutions' senior management. Even in Safety/Security and Physical Facilities information tools are key to efficiency and success. Auxiliary Services (dining, catering, bookstore, and other product-delivery services) use computers for planning, ordering, purchasing, organizing, record keeping, and the processing of point-of-sale transactions. For every day today effective work we need IT.

5. ICTs Defined

In order to assess the potential role of information and communication technologies for development, a proper understanding is required of what ICTs actually are. According to UNDP: "ICTs are basically information-handling tools—a varied set of goods, applications and services that are used to produce, store, process, distribute and exchange information. They include the 'old' ICT of radio, television and telephone, and the 'new' ICT of computers, satellite and wireless technology and the Internet. With appropriate content and applications, these tools are now able to work together, and combine to form a 'networked world'—a massive infrastructure of interconnected telephone services, standardized computing hardware, the Internet, radio and television—which reaches into every corner of the globe."

6. The Importance of ICTs

ICTs present a revolutionary approach to addressing developmental questions due to their unequalled capacity to provide access to information instantaneously from any location in the world at a relatively low cost.² This has brought down global geographic boundaries faster than ever thought possible. The resulting new interconnected digital world heralds the fluid and seamless flow of information, capital, ideas, people and products. Thus, McLuhan's notion of a Global Village seems more appropriate now than when it was first

coined.³ The advances made in convergence technologies, whereby the mode of information available is no longer restricted to text but includes real-time audio and video data streaming, have many implications for and applications in all fields of human knowledge as well as in social, economic and political life.⁴ In fact, many governments, the private sector and civil society members are beginning to recognize the immense potential offered by ICTs in overcoming structural and historical weaknesses. They argue that ICTs offer the developing world the opportunity to 'leapfrog' several stages of development by the use of 'frontier' technologies that are more practical, environmentally sound and less expensive than undergoing the traditional stages and cycles of progress to the information society.

The Curriculum of LIS According to The recommendations of Prof. B.L. Choudhary Committee

Bachelor of Library and Information Science

Syllabus

Paper Title

- i) Foundation of Library and Information Science
- ii) Knowledge Organization, Information Processing & Retrieval (Theory)
- iii) Knowledge Organization, Information Processing & Retrieval: Classification of documents (Practical)
- iv) Knowledge Organization, Information Processing & Retrieval: Cataloguing of document (Practical)
- v) Information Technology: (Basic) and Library Automation
- vi) Management of Library & Information Centers Institution
- vii) Information Sources & Service (Theory)
- viii) Information Sources & Service (Practical)

Master of Library and Information Science

Syllabus

- i) information and communication
- ii) information analysis, repackaging and Consolidation (indexing, abstracting, repackaging and consolidation)
- iii) information retrieval (Vocabulary control, thesaurus, information storage and retrieval & bibliographic description)
- iv) research methods & statistical techniques

- v) information technology: basics & applications (theory)
- vi) information technology: basics & applications (practical)
- vii) academic library system and information procedures (theory)
- viii) dissertation

Elective Subjects

- i) system analysis, design and management
- ii) agricultural information system
- iii) social sciences information systems

The curriculum is influenced by a number of factors including the academic level of the program and its length, requirements of the accrediting professional association, and the ethos of the parent educational institution. It also differs from one University to another University depending upon the need of the environment and also the facilities which are available in different Universities.

7. Impact of ICT on LIS Education Development

Library and Information Science education in India has experienced a long history and is growing fast in recent years. It is an applied science with distinctive characteristics of the times and explores the methods involved in collecting and using information resources with ICT. In order to meet the user needs and promotes communications between art and science, it has formed a guiding thought for its teaching campaign: try all efforts to cultivate qualified personal that are capable in the information management profession and the meantime have composite and practical skills in other fields. Under this thought, it puts emphasis on the cultivation of capable students who know their major very well, who have the potential in orientation and competition, and who combine ability with integrity.

At present, the master's and doctor's degree programs in library and information science aim mainly on training LIS professionals with high ability engaging in teaching and scientific researches. For graduates, they will receive well education through systematic studies on theory and practice and will become good practitioners in LIS circle after they graduate. With good academic environment, scrupulous scholarly attitude and steadfast work spirit, both faculties and students dedicate themselves into the scientific study. For this they have changed their curriculum in standard manner for education purpose of the students. Hence the below table explains the present syllabus regarding to practical knowledge.

Table: 1 University Syllabus Regarding to IT (2006-2008)

Sl. No.	Syllabus	Mysore University (Mysore)	Bangalore University (Bangalore)	Karnataka University (Dharwad)	Gulbarga University (Gulbarga)	Mangalore University (Mangalore)	Kuvempu University (Shimoga)
1	Ist Semester	-	-	MS Word- Creation of documents Alignment, Format.M.S. Excel, Power Point presentation	MS DOS, MS Windows, MS Office (MS word ,Excel and Power Point)	-	DOS, WINDOS Power point & Excel
2	IIInd Semester	MSDOS	Operating System, DOS, WINDOWS, World Process, Excel, Power Point Presentation	-	Library Softwar Package (Soul and Easy lib)	MS DOS	Soul demo (Models only) & Libsys
3	IIIrd semester	Library	-	Web Page, HTML, CDS/ ISIS, WINISIS, Soul demo (Models only)	Preparation of Slides in MS Power Point, WINISIS & MS Access, CDROM Databases search	Library Automation	CDS/ISIS WINISIS
4	IV Semester	Meta Data Digital library	Library Automation, Software, Soul, Libsys, Data Base Management System,	-	internet (Search Engine, Website, Web Page designing & Publishing	Metadata- digital library	Web designing

Note: Among 9 Universities 1 is Kannada university Hampi has no library science department and 2 were recently added 1 is Women University, Bijapur and another one is Tumkur University, Tumkur. Because of new origin of these, data is not available. According to this data we are concluding that there is no uniformity in giving education of IT from all the Universities. They are not taken much carefully viewing their curriculum to put more emphasis on emerging areas like computer and communication technology needed regarding to present era.

Table-2 Staff Strength of Selected Universities (2006-2008)

Sl. No.	Staff Strength	Mysore University (Mysore)	Bangalore University (Bangalore)	Karnatak University (Dharwad)	Gulbarga University (Gulbarga)	Mangalore University (Mangalore)	Kuvempu University (Shimoga)
1	Professor	2	2	2	3	2	1
2	Reader	4	2	1	2	2	0
3	Lecturer	0	1	2	1	1	3
4	Total	6	5	5	6	5	4

Note: Among this some few staff are working as a guest lecturer in some universities. According to the above table, among the 6 universities the staff strength and different cadre also mentioned very clearly. The table explained that there is probably no sufficient staff in all Universities. So, hence it is very clear that there should be problems of insufficient staff in all universities.

Table-3 Student Strength of Selected Universities (2006-2008)

Sl. No.	Student Strength	Mysore University (Mysore)	Bangalore University (Bangalore)	Karnatak University (Dharwad)	Gulbarga University (Gulbarga)	Mangalore University (Mangalore)	Kuvempu University (Shimoga)
1	Ist Semester	25	24	25	34	16	28
3	IIIrd Semester	28	25	20	28	23	41
5	Total	53	49	45	62	39	69

The table-3 is explained the student strength of the selected universities. From this we can find out there is no uniformity and standard regarding to selection of students and this will vary from year to year according to the applications of the students.

8. Problems of LIS Education

Library Science programmes at the university level have existed for more than six decades and have strong roots, but the profession still suffers from many problems, which are affecting the status of LIS profession. The most important is an urgent need for a national level accreditation body. Not much has been done, even with the establishment of the National Assessment and Accreditation Council (NAAC). There is a need that all the organizations running LIS courses without adequate facilities be abandoned. Other problems requiring discussion by the UGC and other national level professional bodies are discussed below:

- (a) Accreditation
- (b) Mushrooming of Library Schools

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- (c) Inadequate Faculty Strength
 - (d) Lack of Library Facilities
 - (e) Information Technology Laboratory
 - (f) Curriculum Revision
 - (g) Admission Procedures and Intake
 - (h) Students' Selection Criteria
 - (i) Training Programme

8. Conclusion

The world of information is undergoing rapid change. An information age at a great turning point in the history of civilization. The day has arrived when it is most important to learn to access, analyze apply and evaluate such information. As traditional custodians of information, librarians and LIS education teachers are need to be aware of the implications of these changes and develop technological and managerial skills, which will enable them to make effective use of information and to meet their organizations changing information need.

Development of information technology is playing a crucial role in restructuring of the libraries. Shift from human dependent operations to machine dependency, mechanization (data processing) to knowledge processing, stand alone system to network computing, local LAN to wireless access protocol systems. Document centered information to user (Access) centered information; print media to electronic (Access) media, data capture methods, human to machine oriented. Library automating (in-house) to web-enabled services (WAN Access), online information retrieval to CD-ROM Databases to Internet. These prolonged shift in application of innovative IT to library and information profession can be attributed to the changes emanated in the last 2 decades.

The library and information professionals are acquired such knowledge and skills now a day. The empowerment of library and information professionals with IT skills is aimed at providing services that are expected of from the clientele in the new environment. So, library science educations of Karnataka Universities are shifting from traditional to technology and they are adopting technology and its kinds of services for their students and their up gradation.

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