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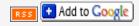Follow this and additional works at: https://digitalcommons.unl.edu/libphilprac

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Challenges and Problems of Library and Information Education in India: An Emerging Knowledge Society and the Developing Nations of Asia

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Introduction

In the 21st century, several professions are adapting with changes and pacing with new useful technologies for their survival and advancement. In this century creation of new knowledge, capturing of new ideals promptly and their timely application is crucial for success in any endeavor. Integration of ideas to find solutions to complex problems, technological convergence to develop better and cheaper products, and progression towards greater interface between policy, strategy, research, practice and service to clientele is taking place. A new kind of competitive work environment, is emerging where cutting edge knowledge, ingenuity and new ideas make a big difference in advancement and hence there remains a constant hunt for talent and hiring people having agility, requisite skills and competencies, inclination for updating, penchant for learning and doing work in a better way through constant innovative approach. The mantra for development in this century is thus to pick up the people most suitable for jobs at hand, effective management of knowledge

resources and ideas for finding most appropriate knowledge applications in work processes and operations.

The ongoing processes of globalization and liberalization have led to intense competition in every sphere of life and set forth the need for immense search for ideas and application of knowledge for outperforming others, cutting costs and finding knowledge based solutions to problems. Institutions and organizations having adequate and efficient knowledge support systems performing knowledge intensive work and leveraging success from knowledge and expertise are thriving in this era. Successful Institutions and organizations around the world have embraced formal knowledge management initiatives as a way to create value from their intangible assets. Creation of new knowledge through R&D, accumulation of existing knowledge through constant search and strategic use of this knowledge determine the creation of wealth. According to the World Bank reports, to day almost two third of the world's wealth comes from knowledge. Knowledge is now a key input for an organization's success and the currency of the new millennium and wherever greater intensity of knowledge activities exists, it has the potential to transform those societies into knowledge-based societies.

In the industrial society pen was mightier than the sword. In the knowledge society mouse is more powerful than the pen. Connectivity including connectivity during mobility is very important in knowledge-based societies for just in time information search. From fixed phones people are shifting to mobile phones, from personal computers to personal digital assistants, from place centered Internet connectivity to WIFI and WIMAX networks. Technology enabled constant connectivity has helped in generation and use of more information and production and distribution of knowledge. Knowledge based societies are thus created by the advances in information technologies and are fueled by the Internet. Because of enhanced connectivity, the hierarchal management structures are getting just dismantled and are being replaced by spatial management systems where instead of limited flow of information, we witness free flow of information and knowledge inputs can come from anybody in the system. The information networks provide most democratic access to information resources at any time and any place, thus accessing relevant information and its strategic use at a faster speed has become important. Teddy Roosevelt once said, "Nine-tenths of wisdom consists in being wise in time." Knowledge based societies therefore demand work performance at a speed and agility in decisions and actions. Looking at the global information resources, an individual may have propensity to do many things but finds little time to do the same. As an individual, one has limited time and capacity to acquire and process information and do work. Therefore, individuals and organizations are making investments and finding ways to save time. Strategic alliances, collaboration on mutually beneficial areas and agreeable terms are taking place to achieve quick success and big targets.

In the knowledge based societies organizations are metamorphosing to learning organizations, creating knowledge infrastructure for churning new ideas to ensure enhanced earning by creating economic value out of new ideas. Learning organizations encourage their employees to continuously upgrade their skills and competencies and have knowledge of state of the art technologies that are applicable to their work. "Any large organization to-day has to survive, grow and prosper in a highly competitive, dynamic rapidly changing complex environment, where human obsolescence is as common as that of machines and where survival is only of the fittest." (Bhatia & Singh, 2000) The present networked information environment has facilitated increased awareness of learning opportunities through greater flow of information and helped the people to realize their true potentialities. It has ensured more information to greater number of people, offered more choices for decision-making and problem solving, led to diffusion of cultures and converted the world into a global village. It has also created an information chaos, problem of digital divide, division of information haves and have nots and challenges of imparting information literacy to millions of people in a country like India.

India and the Knowledge Society

India is becoming the knowledge capital of the world and more than 300 Multinational Corporations have already set up their R&D facilities here and several more are in the process of doing so because of availability of world class intellectual workers at low salaries. Further a number of Indian and western companies are co-developing products especially in the areas of information technology, biotechnology, and pharmaceutical sciences. "For the western partners, the first objective in these alliances is to cut costs. In the US, specialized research outsourcing firm pay for a drug company $250,000 and up for the full time services of a PhD chemist. With an Indian partner, the same work can be done at one-fifth the cost." (Enardio & Weintraub, 2008) Indian brainpower in several high tech areas is getting global recognition. Indian scientists and engineers participation in the Big Bang, experiment proves their caliber and capabilities. "For starters they put together crucial components to activate the Large Hedron Collider (LHC) much below the sanctioned costs and CERN spearheading the experiment reacted with a surprise gesture, it left the balance money to finance the visits of Indian scientists to the experiment site. Indian scientists proved their worth to such an extent that all-precision made jacks on which the entire machine rests were made in India. Besides the jacks, nearly 2000 corrector magnets and circuit breakers were made in India in association with CERN scientists." (Sinha, 2008) The problem in India is that even the intellectual assets are not fully utilized to create an economic value. "We are not able to utilize our immense work force which is equal to the value of oil in Saudi Arabia to our advantage" observed an analyst at recent Confederation of Indian Industries (C11) meet" (India Pinning,

2008)

On one hand India has world-class scientists and engineers and on the other hand million of people have no access to higher education. As a result knowledge gaps do exist within the country. According to World Bank report entitled, Unleashing India's Innovation, "the output of economy could increase over five fold if all enterprises could achieve national best practices based on knowledge already in use in India." (India must …2008) The problem largely in India is not as much as information transforming to cutting edge knowledge assets as the information accessibility for transforming people to look at and act on opportunities that exist in various sectors of her growing economy. Millions of people in India live in poverty because they are illiterate and they do not have capability to access and use information. Many of such people inherit skills from their families and learn lessons at their work places. They know more than they can explain to others. They do not know how to create a commercial value out of their ideas. In a country like India, the recorded knowledge thus represents only the partial repository of the sum total of the available knowledge. A lot of knowledge exists with individuals, in arts and crafts and traditional practices. Illiterate people especially in the rural areas improve their work practice with their own experiences and lessons learnt.

Traditional knowledge usually remains cocooned with some communities and is not shared because of lack of system of knowledge protection and phobia of ideas robbery. "Non communication of knowledge that remains confined to select communities is often a cause of its ultimate demise. For example in medieval India the art of fine and film thin muslin was well known. The art died because weavers were reluctant to share this art with others." (Khairah & Singh, 2008) Advances in ICTs have helped in enhanced social networking, increased sharing of information and leapfrogged the process of development in India. "To-day one in four Indians have a mobile phone. It's said that by 2020, every employed adult in the country would have one… It virtually reverses the socialist mantra talk less work more, that many Indians half-believed for years. Now the new Indian chant may be talk more, work more." (Kurup, Saira, 2008) The Internet connectivity is also growing in India at a very fast pace and some national level computer networks have also come into existence.. The country has a widely distributed government owned network namely NICNET of National Informatics. Library networks such as Information and Library Network (INFLIBNET), Developing Library Network (DELNET), are also emerging. Some private companies are also developing their computerized networks in India e.g. e-choupals of Indian Tobacco Company (ITC) for agriculture information services to farmers in rural India. These developments are transforming the society in general and have a profound impact on libraries and information centers.

Ongoing Development in Libraries and Information

Centers

Libraries and information centers are undergoing metamorphosis and are reengineering their services, reskilling their staff and reorganizing their work space in consonance with changing information systems, better and more effective information communication channels, and users' preferences for accessing information. The networked transmitted digital documents are increasingly accepted as a medium for recording and transmission of information because of elimination of need for physical storage, economical accessibility at the fast speed, possibility of using the same documents by several users at the same time, and multimedia integration. Digital collections have helped to realize the goal of universal availability of publications in the true sense and provided freedom to have personal space to instantly communicate ideas through blogs. The digitization of uniquely held collections in libraries along with creation of billions of web pages have facilitated access to enormous volume of information on desktops but it has also created challenges of data mining, evaluation and quality filtering of information and deprived information access to those users who have no access to information technology infrastructure or lack competencies to effectively use it.

The media convergence, the large scale unbundling of information, advances in information architecture, possibilities of spatial information search, web 2 technologies are helping libraries to repackage and customize information as per users' specific information needs. The user has come to the central stage of service where library coordinates services to a user using a variety of formats and media. There are now enormous possibilities to expand the social, educational, recreational and inspirational role of libraries. Traditional libraries cannot meet the requirements of fast information delivery and knowledge communication needs of the knowledge society. The days of select books and other documents that can suit and serve the needs and purposes of many are over, we have entered an era where we require developing designer information products and services, providing information prescriptions to solve institutional and individual information problems and render guidance, help and emotional first aid to modern info stressed users.

The availability of abundance of information through networks at any place and at any time has smashed the monopolistic practices in information handling. The greatest challenge for libraries is to continue their contribution to the society by staying competitive and staying ahead of other information providers. To achieve this, networking of libraries across the globe is essential and still more important is professional networking of library professionals for sharing information on best experiences and best practices adopted by libraries and information centers around the globe. For the modern libraries, technological and management issues are becoming as important as technical processes. The management of change and adoption and absorption of new

technologies in the work processes and service provisions is itself a great challenge. Libraries are required to constantly upgrade their technologies, continuously watch how users' information searching methods and priorities pertaining to various information channels are changing and what way library managers can quickly step into new roles to bridge the service gaps existing or likely to be created by the knowledge society. They are required to develop plans to offer differentiated value in providing information services and offer more and better services as technologies advance and more effective knowledge management tools are available.

The ocean of available information reflects enormity of possibilities and opportunities for pursuing and extending work in one's area. It raises the motivation and information users thus have propensity to undertake more and more work related to their areas but find very limited time to do so. People are therefore finding smarter ways of doing work including searching and accessing information. Busy researchers and executives prefer information consultancy service to receive requisite information inputs instead of browsing books, reading elaborate reports or spending hours to search through search engines. They demand quick access to exact actionable information. Libraries thus need to extend their services from mere document and information supply service to participatory information advisory service, perceive users problems and their work at hand, identify reasons and motivation for information search and provide possible prescriptive knowledge giving due regard to their value system and culture. Library professionals thus must possess ability to look at information through different angles, pay individual attention to each information user and help them to construct meaning out of information in a wide range of contexts and thus facilitate assimilation of information and just in time learning.

Next level of service demands that individually libraries must act as information refining units undertaking information evaluation and quality checking of both print and electronic documents and storing only worthwhile documents and in this process also develop all possible by product information services, e.g. creating hyperlinks after linking information with information. Collectively the coherent assemblages of such refined quality content may be linked through networks and coordinated to create a comprehensive and massive national and even international information organization and dissemination service.

Traditionally libraries have focused on organization and management of print collections and documentation of latest primary sources of printed information. Present day information environment also demands multimedia and hypermedia organization, documentation of audio sources and worthwhile documentaries and movies that appear in hundreds of television and cable networks around the world. It demands seamless integration between information users and information sources, cross-disciplinary communication of information in the interest of

cross fertilization of ideas and agile and flexible library and information system that is capable of quickly and comprehensively satisfying users information demands. This kind of environment require removal of all barriers and bottle necks that hinder the flow of information so that intellectual assets are properly managed for sustaining a competitive position for the organization.

Large scale digitization, production of electronic information resources, unbundling of information and availability of information in the open source domain have given birth to a variety of aggregator services and information access tools e.g J-Gates, Ingeta.com, Moreover (aggregator of blogs), Scopus, Science Direct. A variety of information products in the commercial and non-commercial sector are emerging e.g. MD consult, SKOLAR MD, OCLC'S First Search, MD Consults' First Consult, Cockrane Library Review, LEXIS, NEXIS, IBID, etc. A variety of new generation information tools are also emerging that help in content creation, content extraction, content management and retrieval .e.g Ulrich Serials Analysis System is a suitable tools to analyze and rationalize serial collections. Ficstar webgrabber help to extract data from Google, Yahoo, Aamazon.com, Monstor.com, e-commerce sites and all kinds of member lists. (Fictsar, n.d.) Jasmine Milne (2004) reported headline-grabbing devices that help to track and control global news sources. Several other information products and knowledge management tools are being developed and synergy it taking place for value additional in the existing products and tools e.g Pubmed and Biomed central collaboration, Wilson databases link to Scirus.

The recognition of library and information services in the emerging knowledge society will depend on what value we offer to the society while developing information products and services. Indian libraries and information centers in fact require transforming themselves from information processing and administrative units to more effective service providers and institutions that provide outreach service to meet vital information needs of the society and groom the hidden potentialities of people through information literacy programs. They can help to convert the human beings to human resources and be more innovative in their work by channelizing relevant information. Innovations trigger from the information on what exists at present and what better and more convenient can be done. In the existing landscape of work, merely doing a job well is not enough. Constantly finding ways through work being handled to build a better world is important and elevating, and enriching the lives of those who come in contact is essential. Access to right information and opportunities can help the people to become what they are capable of becoming. In India we are not yet having a vibrant library and information system for organized control and distribution of information for meeting the needs of everyone in the society. In addition to many other factors, one of the important reasons for this situation is lack of preparation for

developing library and information manpower in tune to present turbulent times.

Challenges and Problems of LIS Education

There are several challenges in keeping the LIS education programs relevant to new kind of jobs in the market and new work performance requirements at work places. Whenever, some changes are introduced in the educational programs, needs for still more changes emerge to align such programs with the job markets and new roles and responsibilities in the libraries and information centers. So long as the information environment remains fluid, LIS education programs will remain in a state of flux, demanding constant change and adaptation to new developments, technologies and desired service levels. However, there was ever no time in the history as to-day when library and information science educators are able to offer broad based, flexible and diversified LIS education and training programs that can suit the manpower requirement for knowledge management in different sectors of economy. Further, the courses of study can be tailored to any requirement of imparting specific need based skills and competencies.

In the constantly changing landscape of information, library professionals are facing instability but not insecurity. They are required to constantly add value to existing services, intimately integrate technologies with work process for facilitating uninterrupted supply of information and innovate new services that suit the changing work styles in organizations and facilitate saving of time. As profile of libraries and information centers is changing, so do the role of librarians. Library professional's role has now expanded to solve every possible information problem through best possible manner in a given situation. Besides the knowledge of technical processes and tools, time management, collaborative work on networks, relationship management for better user services, cooperation with colleagues, image management, fund raising, technology selection and up gradation are also getting importance in the work performance of library professionals. The changing work performance requirements in libraries and information centers also profoundly influence the competencies and skills desired from library professionals. Today's library professional is required to be search engine guru, effective net worker, service coordinator, information evaluator and marketer, keen innovator, prompt learner, information counselor and team worker. Several Indian LIS schools by and large are not preparing their students for such roles, desired competencies and skills. Therefore they require revamping their facilities, reviewing their educational programs, preparing their faculty, and building a curriculum with a difference that may match the needs of knowledge society.

There is no dearth of library and information manpower in India as there are more than 100 library schools in existence. There is

definitely a shortage of manpower having desired skills and competencies. Present LIS curricula focus on preparing manpower mainly for traditional library systems with some addition of courses on ICTS, whereas the demands for managing the knowledge and information resources are growing in almost every area of economy. In spite of such a large number of library schools, three fourth of the university libraries in India have vacant positions of university librarians. In addition to other factors, this also shows that adequate efforts are not being made for library human resource development and preparing the professionals for leadership roles. Because of talent hunt by prestigious institutions and better pay packages and perks offered by the corporate sector, some library professionals are attracted to such job settings. For instance an Assistant Professor at DLIS, University of Jammu is hired as Knowledge Manager in WIPRO-a computer hardware and software company. A librarian at the Indian Institute of Management, Lucknow was hired as Professor of Communication at the same institution and afterwards became the Director of a prestigious management school at New Delhi.

The LIS education programs in India prepare manpower mainly for libraries and information centers, whereas knowledge management demands are surfacing almost from every sector of work. LIS schools are not prepared to meet the suitable manpower needs for such service demands in diverse settings and institutions. The LIS education programs also did not fragment enough to facilitate education in specialized domains such as children and schools media librarianship, electronic publishing, hypermedia organization and virtual libraries, digital reference service, corporate knowledge management, etc. With the expansion of education, increasing information needs and growing breadth of knowledge applications, the major challenge for library schools is to what limits the courses can be offered and how to facilitate infrastructure especially the faculty to meet the growing requirement of the diversity of courses and flexibility in education.

Current LIS education models in India focus on the functionality of document procurement, document organization, document supply, database development and the Internet search assistance. The new knowledge resource based models are looking for information professionals who can quickly provide problem solving information indicating useful new ideas. Such models focus on unabated supply of refined, reliable and need based information for continuous learning and preparing and motivating imaginative minds for most appropriately and competitively doing the assigned jobs. LIS schools in India are not able to adequately respond to emerging information scenario created by the electronic publishing and dynamics of the knowledge society. Because of lack of adequate faculty strength several library schools are letting the courses go on as they are going on. The course revisions if any are undertaken with some patches here and there, whereas the present courses are required to be completely redefined and recasted keeping in view the contemporary information systems,

global technological developments and local needs.

Indian LIS education curricula are based on the Western education and focuses on information supply to learning communities, whereas a number of people in India are illiterates who also need information through some media to do and accomplish in their own vacation. Several people in India are not able to make adequate use of even existing information facilities due to lack of information literacy. No library school in India is presently offering a course to prepare manpower for imparting information literacy. The present LIS educational programs are concentrating on information processing whereas the Indian situation also demands information presentation according to the level of users so that information may facilitate action. Multimedia presentation of agricultural information in some areas of India has proven greater impact, better understanding and prompt action on actionable information transferred. For instance, Nalluswamy Anandaraja, a farmer's son begged the young scientist award for developing farmer friendly interactive multimedia compact disc and testing its effectiveness in transfer of farm technology. "He prepared a multimedia CD to educate farmers in three villages in Thondamuthur block in the Coimbatore district of Tamilnadu state on reasons for eryophyte mite reducing the yield of coconuts. His finding was that the knowledge of the pest and its management among farmers went up from below 2 percent to over 50 percent" (Kumar, 2007).

LIS schools in India face a challenge of preparing manpower for hi-tech academic and research institutions on one hand and on the other hand knowledge workers are required for millions of illiterate people for whom getting access to printed information means nothing, but having access to spoken word and getting meaning out of it is important. Presently the Indian library schools are not prepared to provide knowledge workers to serve the needs of latter category of people who also need information. Collaboration with government departments such as agriculture extension, village health visitors for some joint projects can help to render right kind of outreach services for information dissemination. The LIS curricula must empower the present and future professional potential to meet the societal information needs in a timely manner without any bottlenecks.

Efforts are needed to attract the best possible students to the profession and retain the newly educated talented graduates in the profession. In the BLIS programs run by Indian library schools, the minimum requirement for admission is graduation. A new entrant to the BLIS program does not have prior knowledge of library and information science. Beginners often continue to think what is at other end of the tunnel. At the beginning of the course even some students drop out. An analysis of data of the University of Jammu, Jammu reveals that of the 30 students admitted for the one year BLIS program, 10-15% of the students dropped every year since the inception of this program in 1983. Further random interviews with students indicate that a number of students join

the course with the mind set of getting a job instead of building a challenging career.

Strategies for Improvement

1 Indian library schools need to develop a flexible ands scalable system of LIS education. It requires not only tailoring LIS education programs to the existing societal needs but also step into areas of enormous service gaps that exist to adequately cater to the information and communication needs of the Indian society. LIS schools should spearhead across boundaries, grow across horizons and diversify educational programs in areas such as social informatics, medical informatics, legal informatics, financial informatics so on and so forth. This will facilitate a very flexible system of LIS education and offer greater choices to learners to opt courses that suit their qualifications, individual needs, interests and levels. The emergence of interdisciplinary subjects too demands cutting across boundaries of traditional curricula. The present compartmentalized type of curricula that is concentrating mainly on core subjects must be revamped because of its limitation to expand the knowledge base of students.

2 The present LIS courses have been developed on the premise of librarianship as humanism in practice and information service as a work activity for societal good and free for all. The emerging information environment offers enormous opportunities to create economic value through knowledge management and strategic information handling provided the LIS education and training programs are properly oriented to such objectives. Efforts should be continuously made to prepare professionals and empower them with knowledge and skills that not only help them in self employment but also offer them better opportunities for employment than what exist at present. Some professional librarians in India have very successfully set up corporate houses in information products and services in the cities of Bangalore and Gurgaon.

3 Library and information professionals are increasingly working in a networked environment, dealing with library automation packages and web based information resources and services. Every LIS professional irrespective of his future place of work must have knowledge and skills for handling information technology and has the competency for creation and collection of information using the Internet. The course contents must incorporate practical training of information technology and the Internet to the extent that library professional should have knowledge of database development, handling familiar library software packages, are able to create dynamic web pages and collect information fragment and documents on the Internet and aggregate them to virtual library resources of the institution. They should also be able to handle routine hardware problems in libraries and create necessary information tools and content through collaborative efforts in the network environment. Library professionals should

be trained to organize personal services to clientele that approach for service as well as network enabled services that reach up to their desktops.

4 Coordinated and well planned research effort in LIS research is desired in the country to enhance the knowledge base of the profession and pursue areas of practice that not only helps the professionals to better serve the society but also make them more indispensable for employment. The LIS research should be more focused on key issues of current and recurring concern. Coordinated research can even be initiated in the Asia-Pacific region after analyzing and identifying key professional issues and concerns.

5 LIS research must be focused on development of new information products and services as well as improvement of existing practices. Encouraging joint research programs, we should leverage advantages from co-lateral disciplines such as e-publishing, information technology, data mining, sociology, psychology, management sciences, etc, in the interest of growth of our own profession and enriching our own educational programs. Adequate balance and priorities in research must be set. For instance, before emphasizing on marketing of library and information services, we must see what we are supposed to sell.

6 The technological developments are flashed before they are actually practiced and used at large. LIS programs must accommodate such developments leveraging applications for better performance in services and keeping the education training programs ahead of times. Some large libraries are also testing technologies and developing methods to better serve the user communities. We are therefore heading towards an era where synergy without jeopardizing the autonomy will be required for joint mission oriented research with the participation of libraries and library schools in the interest of extending the frontiers of knowledge of our domain and advancement of professional practice.

7 In the ever-changing landscape of information, obsolescence of existing methods of information handing is now a reality. We require constantly scanning the newly emerging information environment and proactively anticipating changes to quickly adopt new ideas that offer our professionals opportunities for more learning and training to render enhanced services to society and more convenience to user communities.

8 LIS schools should have strategies in place for continuous change management and structural changes in courses they teach and training they impart. They are required to metamorphose to learning institutions from the teaching institutions with the emphasis on what the learners want to learn instead of what the schools want to teach. To do this, library schools will have to keep the courses ready like the ingredients of a Chinese cook and

customize course material keeping in view the learners' requirements, managing the courses with full time faculty, part-time faculty and expert lectures of specialists from various areas.

9 There is also a need for more practical orientation and learning by doing provisions in the present courses of study. More hands on experience are essential and as the students gain knowledge and acquire skills, they may be asked to handle challenging situations. This is possible if some provision of internship is kept at all the library schools.

10 Library schools should plan ahead of times and develop education programs that quickly respond to market needs, fill the skill gaps and prepare manpower for easy transition to the electronic information handling.

11 Developing right kind of LIS education programs is just one thing, but doing right things rightly is another important issue. We have witnessed a mushroom growth of LIS schools in India and there are no quality control mechanisms in place for infrastructure facilities, faculty and student strength. One of the major problems of LIS courses is accreditation to ensure credibility of the degree obtained. Quality education will not only produce quality professionals but also improve employment opportunities. Machines like musical instruments are the same everywhere; the man who works with them makes the difference. Besides accreditation, some other quality control mechanisms are also helpful for ensuring quality of LIS School. At the University of Jammu, we could make DLIS as one of five best Departments of the university as a result of our efforts for ISO 9001:2000 certification.

12 There is a massive need for reskilling the existing Indian library and information manpower. LIS schools therefore must expand their role for providing need-based continuing education for working professionals so that they may remain competitive in their jobs. LIS faculty should continuously work to evolve better curriculum delivery methods so that students may find the courses of study interesting, amusing and engaging. Faculty should also continuously develop and structure curricula in a way that may encourage learning, more learning and still more learning.

13 Education and training of trainers have a rippling effect on students. Educators and trainers therefore should be exposed to adequate oppurtunities for learning.Continuing education and skilling of LIS faculty is also a problem area in India. The National knowledge Commission (NKC) set up by the Government of India has recommended the establishment of a National Institute of Library and Information Science, which will also take care of learning needs of LIS faculty. In the emerging knowledge society, strategic professional learning by LIS faculty is as important as learning by their students. According to Alvin Toffler (1971), Johnny must learn to anticipate the directions and rate of change,

and so must Johmy's teacher.

Endnote Taking into consideration the emerging electronic information scenario, perceiving the need for new possibilities of desired skills and
Competencies in the ensuing years, library schools in the Asia – pacific region should collaborate to identify what way new competencies can be imparted to aspirants of LIS education with the twin objective of giving learners a better deal in life and offering the society and institutions effective knowledge managers. According they should build curricula and create infrastructure that not only match the dynamics of the knowledge society but also creates excellent job opportunities and better placements for their graduates. Emerging new information environment do have the potential to create new opportunities and avenues for young graduates but profession must oversee these developments and initiate appropriate actions so that employment generated in the domain of managing the knowledge resources, are not governed and geared by long years of service but by cutting edge knowledge, skills and competencies one possesses. Discussion on LIS education and training is never ending. Hence library schools in the Asia-pacific region should develop and maintain a wikipedia for prompt exchange of information and ideas in all aspects of LIS education and training.

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