

Comparing Library Science Education in India and Australia: Issues, Challenges and Growth Strategies for India

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How to cite this article:

Mehtab Alam Ansari, Shamim Aktar Munshi. Comparing Library Science Education in India and Australia: Issues, Challenges and Growth Strategies for India. Indian J Lib Inf Sci 2024; 18 (1):07-19.

Abstract

Library education in India and Australia has developed independently with distinct features. This paper provides brief profile of the history of India and Australia followed by discussion of the evolution of LIS education in both the countries. The paper is a comparative study. It discusses the different issues and challenges encountered in LIS education in India and Australia. This comparison is an attempt to critique improvements that must be made to LIS education in India to ensure on going sustainability and relevance. In India, the growth of library schools; dated LIS curricula; increasing student faculty ratios; accreditation; and the employability of graduates are some key issues. In Australia challenges include the broad employment landscape; mismatch between pay and qualifications; decreasing numbers of educators; existence of a multi-tiered system; LIS students and institutional affiliations. A number of strategies have been used in both India and Australia to enhance LIS education. Using LIS education in Australia as a benchmark the authors show how LIS education in India can be enhanced and improved.

Keywords: LIS Education; LIS Profession; Librarianship; India; Australia.

INTRODUCTION

This article presents some of the issues and challenges concerning Library and Information

Science (LIS) education in two important countries of different continents namely, India and Australia. Before independence, Australian and India were both part of the British Empire and both are members of the Commonwealth of Nations. Also, both the countries have adopted British model of education. Also, both the countries have a history of more than one century of LIS education in their respective countries. In the beginning of the paper, very brief profile of Australia is given followed by the evolution of LIS education in the country. Then article discusses certain issues concerning LIS education in Australia. Subsequently, this study highlights issues and challenges faced by LIS education before suggesting various measures which India needs to adopt in order to improve

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Received on: 18.01.2024 **Accepted on:** 20.02.2024

LIS education. Notably, LIS education in India and Australia has completed a century of its existence. During this period, India could not make significant progress while Australia has made remarkable progress in LIS sector. This progress could be mainly attributed to the research project Re-conceptualizing and Re-positioning Australian Library and Information Science Education for the 21st century. The main aim of the research project was to identify and examine the skill and the knowledge essentials for the successful library and information professionals in the 21st century. Significantly, the future of effective and relevant LIS education in India is a matter for all stakeholders in the profession. Purpose of this article is to compare LIS education in India with that of Australia and to suggest how the former can make progress

following the steps taken by the latter. This will bring standards of quality of LIS education as well as recognition of qualification for professionals in India.

METHODOLOGY

This article is primarily based on the secondary sources. Articles appeared in Peer-reviewed journals were consulted. In addition to this, the corresponding author has had a formal conversation with the noted scholars working in the field of LIS education while writing the present article. It is worthy pointing out that very useful information has been provided by these scholars thus enabling a significant improvement in the work.

Table 1: Some Facts about LIS education in Australia and India

LIS Education	Australia	India
Year of origin	1897	1901
Accreditation	ALIA	No agency/body
Number of Library Schools/ Departments	26 ALIA accredited Institutes	181
LIS Curricula	Periodically Reviewed	Latest reviewed in 2001
Student- Faculty Ratio	Balanced	Imbalanced (Less Faculty members)
Employment Opportunities	Broad and Diverse	Narrow
LIS Students	Optimistic about future career	Choose as a last option
Number of LIS courses	41 ALIA accredited courses + VET certificate courses	8
LIS students enrolment	4080 (in 2014)	5000 Approx (per year)
Trend Report regarding LIS education, skills and employment	Compiled annually by ALIA	No such report is available

Note: From Singh, S. P. (2003). Library and Information Science Education in India: Issues and Trends; Singh, K.P. & Chander, H. (2013). Professional Inclination of Library and Information Science (LIS) students of India: A Study of Socioeconomic Background and Career Choice Factors. *International Journal of Knowledge Content Development & Technology*, 3(2) Hallam, Gillian (2006). Trends in LIS education in Australia; Harvey, R. (2001). Losing the quality battle in Australian education for librarianship. *Australian Library Journal*, 50(1)

Evolution of LIS Education in Australia

Australia is one of the wealthiest countries in the world with the 12th largest economy. In 2014, Australia had fifth highest per capita income in the world. The service sector is the largest part of the Australian economy, accounting for about 67.4%, while industry and agriculture accounts 28.9% and 3.7% respectively. Urban population constitutes 89.4% of the total population and education expenditure is 5.3% of GDP (Central Intelligence Agency, 2017).

In Australia, origin of LIS education can be traced back to 1897 when H.C.L. Anderson, the then librarian of Public Library of New South Wales started tuition classes for his library staff and also initiated a process to adopt the British model

of library education (Hallam, 2007). Librarianship qualifications were first awarded by the library association of Australia in 1960 by schools based in universities or other tertiary level educational institutions. Bachelor's degrees in LIS education have been adopted in Australia from 1971 (Harvey & Higgins, 2003). At present, a qualified LIS professional can obtain professional membership of the Australian Library and Information Association (ALIA) with either a bachelor degree in LIS, a graduate diploma or masters (Rochester, 1997). LIS Education is offered at the university level with graduates becoming librarians, and at the vocational educational level through the institutes of Technical and Further education (TAFE) and graduates from these institutes become library technicians. Significantly, ALIA accredit LIS

programs that meet its standards for course contents and quality (Chawner, 2015). Process of course recognition assures potential employers about the range as well as levels of skills and knowledge of graduates entering the workforce (Nicholson & Tattersall, 2001). Harvey acknowledges that ALIA does scrutinize the courses for currency and relevance (Harvey, 2004). This has been achieved through the Annual Course Return (ACR) by each university (Hallam, 2006).

LIS Education in Australia: Some Issues

Some issues related to the LIS education have been discussed by different scholars. Harvey (2001) has discussed education for librarianship in Australia and made a comparison with the US and Canada. (Berry, 2004; Dillon & Noris 2005; Stoffle & Leader, 2005) favored some changes in LIS education. Gorman (2004) notes some 'critical issues requiring attention' while Gerolimos (2009) highlights several issues which are having an impact on the present context of educational delivery for LIS. These issues include internationalization of LIS education, uniformity of qualifications, orientation of LIS education and competition with other disciplines involved in the management of information (Partridge, Menzies, Lee & Munro, 2010).

Broad Employment Landscape

The LIS field embraced the multi-disciplinary nature of the profession. As a result, there was a need for LIS education to consider the course recognition requirements of other associations such as Computer Society and the Records management Association of Australia (Partridge & Yates, 2012). This move had important ramifications which, by and large, 'still support traditional definitions of the roles, functions, and audiences of archives, libraries, and museums' (Trant, 2009). Partridge and Yates (2012) mentions that due to this scenario, 'national standards for curriculum are no longer clear cut or consistent'. A bell (2006) stresses that the landscape of information management is not only changing the roles in the traditional LIS employment sector but is leading to the creation of new employment opportunities. Notably, opportunities for LIS products exist not only in traditional libraries but in the areas such as knowledge management, records management, data management, web development etc. Biddiscombe (2001) opined that modern education should take into consideration the fact that there is a need for 'hybrid librarians'.

LIS Students

Combes, Hanisch, Carroll and Hughes (2011) examined student's experiences of library and information science education across both the tertiary and vocational educators sectors in Australia. This study considers four major themes to find out how students feel about LIS education in Australia. These themes are: learning opportunities, learner characteristics, learning experiences, and learner outcomes. Students were found generally optimistic about the future of the LIS profession, and considered that technology will continue to play a key role in their future careers. (Carroll and Murray 2010; Muilenburg 2005; Williamson 2002).

Mismatch between Salary and Qualifications

Universities qualifications in Australia are provided at several levels namely bachelors, graduate diploma and masters' degree. It is an irony that those who are holding masters degree are not receiving salaries commensurate to their qualifications. Harvey and Higgins (2003) point out that Australian Post-Graduate qualification within LIS field is not usually linked to higher salaries. This provides little incentive for prospective students to pay the extra cost incurred in pursuing masters degree.

Decreasing Number of Educators

The number of LIS academics is decreasing which is an alarming situation in terms of the currency and relevance of curriculum in the dynamic area of LIS education. Genoni (2005) has pointed out that LIS educators appear to be substantially less than what is potentially possible as an industry practitioner within the workforce.

Existence of a Multi-Tiered System

In Australia, a qualified LIS professional can acquire ALIA membership with a bachelor's degree in LIS, a graduate diploma, or a master's degree. This opens multiple routes to become a recognized professional worker in Australia. Harvey (2001) notes this scenario creates powerful stresses for LIS education in Australia. Carroll (2002) points out, 'one of the key dilemmas that has faced the library industry since the introduction of accredited tertiary/VET education has been the degree to which the two sectors of library employment converge'.

Institutional Affiliations

LIS Education in Australia face issues about what Cronin (2002) has called the 'increasing difficulty

in maintaining coherence of identity, image and purpose'. Harvey and Higgins (2003) notes that the 'discipline affiliations and faculty affiliations of Australian LIS schools indicated this clearly. The most common affiliations are information system, communication/media, education and business'. While some of the affiliations according to Harvey and Higgins, have been motivated by pragmatic rather than pedagogical, reasons as universities cut cost by grouping teaching areas into larger units, others have been actively sought by LIS faculty.

Evolution of LIS Education in India

India is a multi-lingual and multi-cultural democratic country. English enjoys the status of subsidiary official language for national, political and commercial communication. Urban population in India is 32.7% of the total population. Education expenditures in India were 3.8% of GDP. India's diverse economy encompasses traditional village farming, modern agriculture, and wide range of modern industries and multitude of services. Slightly less than half of the workplace is in agriculture but services are the major source of economic growth, accounting for nearly 2/3rd of India's output but employing less than 1/3rd of its labor force. Sector wise composition of GDP in India is 16.1%, 29.5%, 54.4% respectively for agriculture, industry and services (Central Intelligence Agency, 2016).

LIS education in India was first started in 1901 when John Macfarlane, first librarian of the Imperial library has taken initiatives for in-service librarians training. This training was continued till 1906 (Khan 1996). Gaekwad of Baroda has invited W.A. Borden, an American student of Melvil Dewey for the development of library system and library education. Borden started a short term training program in library science in 1911. Asa Don Dickinson, the then Punjab University librarian started, in 1915, a three months apprentice program (Satija, 1993). The first PG Diploma course was started in 1937 by the University of Madras which was originally initiated by S.R. Ranganathan, in 1929, as a certificate course at Madras Library Association. Significantly, University of Delhi was the first to start a Masters course in library science in 1948 (Mangla, 1994) while Aligarh Muslim University (AMU) has the credit to first start a Bachelors course in library science. However, University of Delhi had been pioneer in introducing M.Phil and doctoral program in library science (Singh, 2003).

Government of India has taken many initiatives for the development of library education. The

Working Group of the Planning Commission on modernization of library services and informatics (1985-90) recommended setting up of a National Centre for Education and Research in LIS and also suggested for provision for grants to LIS schools (Kumar & Sharma, 1973). A Committee on National Policy on Library and Information System (CONPOLIS) was set up in 1985; its report recommended the use of information technology in LIS education and establishment of accreditation agency for the maintenance of standards. National Knowledge Commission (NKC) was constituted in 2005 which recommended the establishment of well-equipped institutions for progress of LIS education. The first committee for curriculum development was Kaula Committee constituted in 1990. Later on, Karisidappa committee was constituted in 2000 for curriculum development which recommended for substantial revision of curriculum.

LIS Education in India: Challenges

Some of the issues and challenges pertaining LIS education in India have been discussed in the following paragraphs:

Mushrooming of Library Schools

In India, there are around 181 departments/ colleges where Bachelor in Library and Information Science, Master in Library and Information Science, M Phil and PhD courses are available in library and information science (Singh & Chander, 2013). Singh (2003) notes that there is no check and balance on the emergence of LIS schools in India. As a result, a number of institutions had come into being without having basic facilities. Furthermore, this growth affected standard which further resulted unemployment in the job market. Moreover, scenario in many universities imparting education through distance mode is not impressive as they do not have adequate number of teaching centers and computer laboratories. Singh (2003) stresses that in the absence of feedback from students; teaching-learning process has become passive. Furthermore, the LIS schools in India are not enjoying the professional recognition like computer engineering and business administration (Jagtar & Malhan, 2010).

LIS Curricula

Role of information professional is changing and expanding in every part of the world. Thus LIS schools are required to constantly take notice of the competencies required in this changing world.

Jagtar and Malhan (2010) stresses that course curricula should be constantly revised in order to meet the requirements of not only present time but also for the future. They note that, "LIS curricula not only needs more frequent revisions, but also have potential for ample expansions as information management is no more limited to print media". Phuritsabam and Devi (2009) also point out that in South Asian countries; traditional aspects such as cataloguing and classification dominate the curriculum. They are of the view that LIS syllabi in whole of the South Asian region are quite old and should be restructured with redefined objectives to accommodate emerging changes in libraries and expectations of the users. Pyati (2010) while highlighting an enhanced role for information policy in LIS education opines that the content based approach of an information policy course can complement more traditional courses within LIS programs, which often focus on skills development for employment. Pyati states that, "LIS educators should embrace opportunity to develop future leaders and policy makers". Karisiddappa (2004) also favors the inclusion of information literacy in the LIS curricula.

Student Faculty Ratio

In late 1950s, teaching faculty in library science schools in India were part time, usually drawn from the respective university and the university librarian used to function as the head of the department (Phuritsabam & Devi, 2009). The UGC committee in 1965 recognized the need for full time teacher in the schools/departments of library science. Indian UGC panel on library and information science in 1982 recommended that a university department should have adequate full time teaching staff and also full time head (Mangla, 1998). The Curriculum Development Committee (CDC) in 1992 recommended one professor, one reader and three lecturers for a department running Bachelor in Library and Information Science with not more than 40 students and Master in Library and Information Science with intake of 15 students. It further stressed that one additional teacher should be appointed for every additional 10 students (Singh, 2003). However, no department in the country is fulfilling the recommendation of the UGC. For example, the department of Library & Information Science at AMU has two professors, four associate professors and two assistant professors and is one of the largest departments in terms of faculty strength. However, the intake of Bachelor in Library and Information Science is 60 and that of Master in Library and Information

Science 25. Besides these two courses, library science as an optional subject is also being taught at B.A. Level and at present 15 students are enrolled in the first year and 6 in BA II year. Furthermore, more than 40 research scholars are also registered in PhD program. Notably, PhD students with old registration, requires more amount of time from supervisors to accomplish their work fast, thus, increasing the workload of the faculty members. Singh and Chander (2013) reports that around 5000 students are enrolled every year in the various courses related to library science in India.

Accreditation

It is of paramount importance that standards and norms of education must be consistent in order to achieve academic excellence. Sharma (2005) indicates that all library schools in South Asia needs to meet certain uniform standards for the registration of students, curriculum updates, hiring of full time qualified faculty, excellent library science collections, research facilities and availability of computer labs for students and faculty members. Therefore, there is a need to have accreditation bodies in every South Asian countries to monitor the progress of library schools. Chakraborty and Sarkheel (2009) also observed that there is a need for the accreditation of LIS schools/departments to improve the quality education in library science.

Role of Professional Bodies

In India, there are three prominent professional bodies namely, Indian Library Association (ILA); Indian Association for Special Libraries and Information Centers (IASLIC) and Indian Association of the Teachers of Library and Information Science (IATLIS). The formation of these three associations had come into being in 1933; 1955; 1969 respectively. The broad objectives of the ILA at the time of its inception were defined as: Furtherance of the library movement in India; promotion of the training of librarians; and improvement of the status of librarians. Significantly, in 1987, accreditation of institutions imparting library and information science education and training was also included (Indian Library Association, 2016). IASLIC governing body has created Special Interest Groups (SIG) on library and information education (Indian Association of Special Libraries and Information Centers, 2016). Notably, one of the aims and objectives of IATLIS formation was to promote exchange of ideas on education in library and information science (Indian Association of Teachers of Library and Information

Science, 2016). However, still, there is no national accreditation body for LIS education in India. Finally, India is a democratic country with multi-party system. In a democracy, number matters most. Unfortunately, all the three prominent associations, mentioned above, do not have encouraging numbers that may influence policy makers. With less than fifteen thousand members, these associations may not expect support from any political party.

LIS Students

Indian society is yet to give due recognition to the library and information science profession. As a matter of fact, brilliant students join medical and engineering professions. After selecting courses namely M.B.B.S. and B.Tech, as their first choice, students aspire to get admitted in MBA, MCA, and other professional courses. Only left over students, in most of the cases, join library science courses. Jagtar and Malhan (2010) observed LIS programs were not offering situations to attract the best students for enrollment. Authors note 'LIS schools should also develop a body of knowledge that creates substantial demand in the market place and fetch high salaries for graduates'. Wijetunge (2009) stressed that while the educational authorities are keen to recruit the students with the best academic qualifications, 'the LIS educators too expect their students to possess entrepreneurial flair and an ability to work well as team member because these are valued by the world of work. It is essential for the library schools to attract students with these qualities if they are to be taken up by the employment market'. Singh (2003) also mentioned that LIS students are not enthusiastic in opting for library science as their first choice. Nevertheless; she suggests that more attention towards selection criteria is needed to attract the best brains. She notes 'even to attract middle level talent, incentives like scholarship and fellowship are needed. Merit should not be only criteria for admitting the students. Admission test and interview should also be adopted to select appropriate students'. She further suggests that good general knowledge, communication skills and desire to serve others should also be taken into consideration while selecting students.

The Employability Scenario

Unfortunately, not many jobs are available, in the government sector. Unlike other professional courses like medical and engineering, LIS course providers rarely offer any placement opportunity.

Career counseling and job placements are yet to be included within the periphery of LIS teaching obligations and/or curricula (Chakraborty & Sarkhel, 2009). Consequently, library schools are required to enormously expand their curricula and offer specialized courses in areas such as social informatics, business informatics, financial informatics, agricultural informatics, health informatics and legal informatics and so on. Jagtar and Malhan (2010) notes that library schools have tremendous opportunities to prepare information professionals to step into new roles such as knowledge engineers, information architects, information analysts, hypermedia specialists and decision support specialists.

What India can do?

Maintenance of Standards

In their study of standards of LIS education worldwide, Dalton and Levinson (2000) recommended three models that aim to establish and maintain the standards for library and information science education namely government monitoring; formalized LIS accreditation /approval processes; individual course/departmental standards. Therefore, there is a need to have accreditation agency in India. The Indian Library Association may be given the responsibility for the recognition of courses. With its dynamic and visionary president, Prof. Shabahat Husain, perhaps ILA will be able to adopt a conceptual approach in terms of articulating the core knowledge, skills and attributes. Indian LIS professionals should meet Human Resource Development (HRD) minister and Chairman of the UGC to convince them about the pressing need for a single professional body. In addition, office bearers from all the library science associations may try to raise this issue in the parliament via representatives of different political parties. Once accreditation agency is decided, it will open the doors for future progress of LIS education in India.

Need for a National Level Project

In Australia, perhaps the landmark step occurred in 2009 with the inception of a national research project: *Re-conceptualising and re-positioning Australian library and information science education in the twenty-first century* (Partridge, et al.). It is recommended that efforts should also be made to launch a national level project in India like Australia with the government funding. This project should attempt to examine how LIS education in India can produce LIS graduates

with appropriate skills and knowledge in the fast changing library environment. The project team may be comprised of senior faculty members as well as library professional having a remarkable track record. They need to apprise the bureaucrats and core group of all political parties that the LIS sector can play a crucial role in realizing the cherished dream of former president APJ Abdul Kalam to see India as a knowledge super power by 2020.

Improving its Global Rankings

The government of India through HRD ministry aimed at catapulting some Indian technology institute to the top league of global academic rankings. However, their poor academic performance; international faculty ratio & international student ratio criteria etc. are what is holding them back. Directors of seven Indian Institutes of Technology met the HRD ministry officials recently and sought Rs 218,700 million as investment to improve their research output, faculty, infrastructure and international outlook in order to break in to the top 100 club of global university rankings by 2018 and top 50 by 2020 (Chopra, 2016). Similarly, Vice-chancellors of all the universities having LIS schools/department should try to convince the HRD minister and UGC chairman for enhancement in their budgets so that LIS education in India can be internationalized. This investment will result in generating institutional income through LIS education.

Cross-Country Cooperation

In the present era, hardly, any field can make progress without regional and international collaboration. Undoubtedly, political, social and cultural differences between countries will act as barriers in collaboration and cooperation. However, serious efforts are needed to form cross-country cooperation. LIS schools in India must take initiatives to form cross-country partnership with other countries of Asia to carry out joint research project, joint course development and ICT based learning through arrangement of workshops, seminars and conferences. Apart from growth in LIS sector, this academic partnership may result in the reduction of hostilities particularly between Indo-China and India-Pakistan relationship. Being important country in Asia, India should develop a high collaborative culture.

Jobs vs. Wages

More than a jobs problem, India does have wages problem. Recently, almost 85 percent of the 3 million applicants for the government peon post were having PhD degrees in one of the states in northern India (Sabharwal, 2016). Likewise, in a central university for the post of semi-professional assistant, many applicants were with PhD degrees. In both the cases, applicants were already had a job. However, they were struggling with the menial wages. Ironically, people in the private sector get paid too little than their counter parts in the government sector. Notably, the large number of applicants for the government jobs are not only running towards overtly secured government jobs but also running away from low paying private jobs. Regulatory intervention is urgently needed from ministry of labor to remove this lacuna. Youth unrest witnessed in the form of agitations in various parts of the country can be countered effectively with removing this serious fault.

Closer Liaison with Industry

In Australia, it was imperative that universities produce students who possessed not only discipline knowledge but also a high level of personal and interpersonal skills (Bennett, Dunne & Carre, 2000; Dearing, 1997). To fulfill the desire of industry, ALIA has maintained a close liaison with the industry. Unfortunately, in India, neither any university nor any association seeks any opinion from industry. It is recommended that the LIS sector in India should also have a closer liaison with industry so that the training to LIS graduates can be given as per the requirement of industry. This liaison with industry will also enhance the job prospects in the corporate sector.

Professional Development Program

Though, in India orientation courses and refresher courses are conducted through UGC Human Resource Development Centers. However, these centers are located only in select universities of India. Furthermore, orientation course is provided only once and participation in refresher courses is also needed only twice. Therefore, a newly recruited Assistant Professor and Assistant Librarian are required to attend only one orientation course and two refresher courses for their promotion to associate professor and deputy librarian. This kind of participation does not provide an opportunity

for career long learning. Therefore, LIS educators and practitioners in India should be encouraged for career long learning through professional development program on the pattern of Australia.

Student Voices

India should take steps to conduct the study about the educational experiences of LIS students across the country. This study will reveal students expectations, perceptions and level of satisfaction with the LIS courses. Furthermore, the study will also help in developing a profile of current LIS students in India. In all likelihood, this step will generate enthusiasm among students for LIS education.

Share to Survive

Many universities in India have incorporated some heavy IT stuff in their curriculum. This is particularly seen in research methodology course where statistics component is difficult to teach by the regular faculty members. Consequently, students do not receive sufficient inputs in the classrooms with regards to components such as descriptive statistics and inferential statistics. To solve this problem, subjects developed by a consortium like Australia be encouraged.

Regional Diversity

India is a vast country and area wise ranks seventh in the world. Ironically, all the good schools/departments are located in the northern part of the country. Government must make efforts to open some good institutes in other parts of the country. Initiatives may be taken for national institute of higher learning in the southern part of India. This will bring regional diversity.

Help from Australia

India and Australia both enjoy good relationship in various fields. Apart from sharing political, economic, and security relations; both the countries have very old sporting ties. Greg Chappell, a brilliant Australian cricketer was appointed coach for Indian cricket team in 2005 to prepare team for the crucial World Cup tournament. Another Australian, Ric Charlesworth, one of the greatest hockey minds was also appointed in 2008 as technical advisor to men's and women's hockey teams. Significantly, both the Australians have identified many-many problems associated with the Indian sports and subsequently proved themselves high-performance managers for

Indian cricket as well as hockey teams. Therefore, India should also seek help from Australia with an aim to bring reforms and improvements in the academic fields including LIS sector.

What Australia can do?

457 Visa Issue

Australian PM Malcolm Turnbull's four-day visit to India in mid April, 2017 was followed by a 'review' of the 457 visa program, which is used by a large number of Indian skilled professionals, particularly in IT sector. This move has raised concern among Indians who forms about 25 per cent of 457 holders particularly at a time when the US president Donald Trump has also adopted a hard line on immigration. Therefore, the Australian government should be lenient towards the 457 visa program.

LIS Education Program

India forms the second largest group of overseas students in Australia. This has been possible due to the generous visa conditions. Notably, Indian students recognize that Australia provides really high quality education in the world class universities. However, LIS students in India are not much aware that they can receive education in flexible learning atmosphere of Australia. Therefore, some awareness should be provided using various tools to let LIS students "You can come back to India with a top-notch qualification and work experience".

Memorandum of Understanding

Australia may take initiatives in signing Memorandum of Understanding with the Indian Universities to enable exchange of LIS faculty members and students from both the countries. This move will particularly benefits faculty members as well as students of India.

Scholarship

There are some bright Indian students in the field of library science who cannot pursue their masters and doctoral degrees in Australia due to high fees. Through library science scholarships, Australia can help those students who are eager to enhance their academic qualifications in globally reputed universities in Australia.

Better Protection to Students

Between 2008 to 2012, a series of attacks on

Indian students including one murder in Australia have prompted anger in the Indian sub-continent. Better protection to Indian students will repair the reputational damage caused by these violent incidence in Australia. It is worth noting here that foreign students were worth nearly \$ 20 billion to Australia's economy in 2016.

RESULT AND DISCUSSION

In both India and Australia, the objective of LIS education is to provide trained man power to work into different kinds of set up. The application of information technology contents in the syllabi of LIS has broadened the scope of LIS field. Therefore, LIS graduates should be well equipped to work not only in traditional libraries but also in a library with the state-of-the-art set up in its different divisions. In both India and Australia, it is argued strongly that the LIS curricula should be matched with the expectations of the employer. However, in India, syllabi of many universities are quite old and need to be restructured (Singh, 2003). Unfortunately, some of the universities still need to implement model curriculum designed in 2001 by the Curriculum Development Committee. Rather, there is an urgent need to constitute another committee for re-designing new curriculum as report of the CDC is close to two decades old. Furthermore, no significant head way has been made regarding National Knowledge Commission which recommended for revamp of LIS education, training and research.

In Australia, ALIA launched its professional development program way back in 2000 to encourage members with respect to career long learning (ALIA, 2005d). Furthermore, ALIA accreditation means that courses have passed rigorous assessment by senior professionals and hence it acts as an assurance for students for a bright career in the LIS sector. Hallam also mentioned that distinction has been made in the professional development program between the necessity of developing both LIS specific areas such as acquisition and management of resources and generic areas like effective communication, critical and evaluative thinking. Efforts are also needed in India on the similar lines. The lots of best students in India initially try their lucks for medical, engineering and management courses and mostly left-over students join LIS courses. Jagtar and Malhan (2010) suggested that LIS schools must develop a body of knowledge that might create substantial demand in the market to fetch high

salaries. Unemployment in LIS can be cited another reason for not attracting brilliant students in India. While in Australia, the unemployment rate for library professionals was below average compared with the total Australian workforce (ALIA, 2016).

Accreditation is necessary to achieve academic excellence. However, there is no national accreditation body in India. In the context of LIS education, expansion and inclusion is not a problem, but quality of education. Significantly, the Australian Library and Information Science Association (ALIA) has recognized the courses related to library and information science in the country. ALIA acts as the standard body for the library and information profession. It holds the responsibility for the recognition of courses that provide a library and information qualification (Hallam, 2007). Results of ALIA accredited institutions in the Excellence in Research for Australia evaluation conducted in the Australian Research Council; Monash University was rated above world standard and Queensland University Technology at World standard for their research output in the field of library and information studies (ALIA, 2016). On contrary, 'No Indian university comes close to the world's best. The three key criteria that push Indian institutions down in global rankings are: Teachers, libraries and good research. All three are inter related. Good teachers need assured careers with eager students and a rich library' (Krishna Kumar, 2016).

On being compared, situation in Australia is far better regarding LIS education. Undoubtedly, national research project: *Re-conceptualising and re-positioning Australian library and information science education for the twenty first century* has played an imprtnat role in the growth and improvement of LIS sector. Government of India should also come forward to examine carefully the existing scenario pertaining LIS sector so that progress can be made in this important sector. Furthermore, the role of universities, Professional Associations, and individuals cannot be ignored: 'Library schools don't operate in a vacuum. LIS education need a healthy infrastructure involving faculty, students, alumni, and practitioners' (Ling Hwey Jeng, 2005). Hallam (2007) reports that LIS education requires concern, cooperation and collaboration today, tomorrow and future. Australia marched ahead significantly showing concern, cooperation and collaboration. If India wishes to make the notable success in LIS education, it also needs to take necessary steps to meet the country's requirements through revamp of LIS education and training.

CONCLUSION

There is a very rapid change in Indian society and economy that is underway at a time when the whole world is witnessing transformation. India and Australia have worked together to counter many challenges including violent extremism. As a matter of fact, no country can make progress in isolation. Hence, India can chalk out strategies in order to bring reforms in LIS education in co-operation with Australia.

With the passage of time, LIS had grown and developed into a full fledged discipline. It is estimated that approximately 181 LIS departments affiliated to universities and colleges are offering LIS education in regular and distance mode. Many issues and challenges concerning LIS education have been faced by the LIS professional in India. (Singh, & Chander, 2013). Mushrooming of library schools, LIS curricula, accreditation problem, unemployment, student faculty ratio and quality of students are of significant concerns in India. Concerns for the improvement in LIS education have also been shown by the government of India. However, more efforts are needed to carry out significant improvements.

Australia has paid more attention in response to array of issues concerning LIS sector. This is evident in the trend report which has been compiled annually by ALIA with reference to LIS education, skills and employment. Current report says, 'Although the LIS workforce is small, our sector has significant reach and profile because millions of Australian uses library services'. India also needs to make continuous efforts on the pattern of Australia to bring substantial improvements in LIS sector. Unfortunately, in India, UGC do not put sufficient pressure on universities as they are autonomous bodies. Consequently, academic criteria and standards set by the UGC are followed by some universities and neglected by others. Hence, there is an urgent need to establish some national body for quality control mechanism. Furthermore, there is no emphasis on life-long learning process in India. On contrary, LIS professionals in Australia are encouraged for life-long learning process which is linked to their professional success. ALIA launched professional development program to ensure career-long learning for LIS professionals. India should also start such programs.

In recent years a remarkable success has been achieved in LIS sector of Australia. This has been possible with the identification of a range of issues

confronting LIS education in the country. Possibility of addressing these issues occurred through a national research project: Re-conceptualizing and re-positioning Australian library and information science education for the twenty first century. The purpose of the project was to chalk out a framework for preparing LIS professional for the twenty first century. Having recognized the three major and equal stakeholders in the education, process students, educators and employers; the project was framed around three areas that represented three key stakeholders groups in LIS education (Partridge & Yates, 2012). It is recommended that India should also launch a national level project to identify challenges confronting LIS education in India. This project team should comprise of versatile and visionary professionals with an aim to prepare library professionals for rapidly changing library environment. Knowing student's voice is also vital as they are one of the stakeholders in library education. Australia has undertaken a project under the department of higher studies to find out the perception of LIS students. There is also a need to examine experiences and perceptions of LIS students in India. Voices of students about LIS curriculum, teachers and their teaching methods, infrastructural facilities will be vital for making improvements in different spheres of LIS sector.

Significantly, education is an important determinant of the quality of human resource. It not only equips an individual with skills, but also allows an individual to choose among the larger set of opportunities and thus become a tool for empowerment. An important challenge of education in India is to improve its quality. Steps taken by the government of India are not sufficient to respond emerging information scenario. Therefore, growth strategies in India may be formulated on the lines of steps taken in Australia for the improvement in LIS sector. India has a significant advantage of being a country with one of the largest and youngest populations. However, India needs to make persistent efforts not only channel this demographic advantage but also need to fight to counter bureaucratic hassles, nepotism and territorial conflicts in various Library associations. As a matter of fact, higher education sector in the country is in a bad shape. Consequently, no Indian university finds place in the global rankings (Krishan Kumar, 2016). Solution to this problem lies in revitalizing technical education. It involves increasing budget of higher education, tightening recruitment procedure of faculty members, reducing the intake of students, producing quality research outputs etc. The key to find Indian presence

in the global LIS scenario is accreditation. Without getting institutions to take accreditation seriously and tightening the accreditation procedure, Indian LIS education cannot establish its hegemony even in South Asia, needless to say the worldwide. However if serious approach to improve the higher education, in general, and LIS, in particular, is adopted, India will be a knowledge super power by 2030, if not by 2020.

REFERENCES

1. Abels, E. G., Howarth, L. C. & Smith, L. C. (2016). Envisioning our information future and how to educate for it. *Journal of education for library and information science*, 57(2).
2. Abell, A., (2006). Roles in the e-landscape. *Business Information Review*, 23(4), 241-251.doi: 10.1177/0266382106072249.
3. AC Nelson Research Services (2000). *Employer satisfaction with graduate skills: research report*. Retrieved from http://www.dest.gov.au/archive/highered/eippubs/eip99-7/eip99_7.pdf.
4. Agarwal, U. K. (2005). Visible State of library Education in Rajasthan. In Shubha Tiwari (Ed.), *Education in India* (pp. 1-2). New Delhi: Atlantic.
5. Australian Library and Information Association (2010). Enrolments in Library and information management courses. Retrieved from <http://www.alia.org.au/employment/enrolment/courses/>.
6. Australian Library and Information Association (2016). LIS Education, Skills and Employment, Trend Report. Retrieved from https://www.alia.org.au/sites/default/files/ALIA%20LIS%20Education%20Skills%20and%20Employment%20Trend%20Report%202016_0.pdf.
7. Australian Library and Information Science Association (2005a). ALIA's role in education of library and information professionals. Retrieved from <http://www.alia.org.au/policies/education.role.html>.
8. Australian Library and Information Science Association (2005b). Courses in library and information management. Retrieved from <http://www.alia.org.au/policies/courses.html>.
9. Australian Library and Information Science Association (2005c). Library and information sector: coreknowledge, skills and attributes. Retrieved from <http://www.alia.org.au/policies/core.knowledge.html>.
10. Australian Library and Information Science Association (2006c). ALIA recognition of courses: Criteria for recognition of first award courses in library and information technician level. Retrieved from <http://www.alia.org.au/education/courses/criteria.html>.
11. Australian Library and Information Science Association (2006d). Employer roles and responsibilities in education and professional development. Retrieved from <http://www.alia.org.au/policies/information.centres.html>.
12. Berry, J. N. (2004) Blatant Berry: Don't Dis the LIS "Crisis". *Library Journal*. Retrieved from <http://www.Libraryjournal.com/article/CA456234.html>.
13. Biddiscombe, R. (2001). The development of information professionals' needs for internet and IT skills: experiences at the University of Birmingham. *Program*, 35(2), 66-157.
14. Blainey, G.(1968). A shrinking world keeps its own distance. Retrieved from <http://old.smh.com.au/news/020/18/opinion/opinion.1.html>.
15. Bennett, N., Dunne, E., & Carre, C. (2000). Skills development in higher education and employment. A London: The society for Research into Higher Education & Open University Press. Philadelphia: Society for Research into Higher Education & Open University Press.
16. Carroll, M. (2002). The well-worn path. *Australian Library Journal*, 51(2), 117-125.
17. Carroll, M. & Murray, J. (2010). Swirling Students: A study of Professionals and Vocational Training Avenues for the Library and Information Industry. *Library Trends*, 59(1), 188-207.
18. Central Intelligence Agency (2016). The World Fact book-Australia. Retrieved from <https://www.cia.gov/library/publications/resources/the-world-factbook/geos/as.html>.
19. Central Intelligence Agency (2016). The World Fact book-India. Retrieved from <https://www.cia.gov/library/publications/resources/the-world-factbook/geos/in.html>.
20. Chakraborty, S. & Sarkhel, J.K. (2009). LIS education in India: an appraisal of the parity between the syllabus and the market demands. Proceedings of the World Library and Information Congress: 75th IFLA General Conference and council, Milan, Italy. Retrieved from <https://www.ifla.org/past-wlic/2009/86-chakraborty-en.pdf>.
21. Chawner, Brenda (2015). Library and Information Studies Education in New Zealand and Australia: Background, Issues, and Challenges. *Journal of Education for Library and Information Science*, 56 (1), S17-S26.
22. Chopra, Ritik (2016, November 15). IITs estimate cost of improving its global rankings. *The Hindustan Times*, p.5.
23. Combes, B., Hanisch, Jo, Carroll, M. & Hughes, H. (2011). Student voices: Re-conceptualising and re-positioning Australian library and information science education for the twenty-first century. *International Information & Library Review*, 43(3), 137-143.
24. Cronin, B. (2002). Holding the center while prospecting at the periphery: domain identity and

- coherence in North American information studies education. *Education for Information*, 20, 3-10.
25. Dearing, Ron (1997). *Higher education in the Learning Society*. Leeds, England: National Committee of Inquiry into Higher Education.
 26. Dillon, A., & Norris, A. (2005). Crying Wolf: An Examination and Reconsideration of the Perception of Crisis in LIS Education. *Journal of Education for Library and Information Science*, 46(4), 280-298.
 27. Genoni, P. (2005). The changing face of LIS higher education in Australia, part 2. *in Cite*, 26(8), 18.
 28. Gerolimos, M. (2009). Skills developed through library and information science education. *Library Review*, 58 (7), 527 – 540.
 29. Gorman, M. (2004). Whither library education. *New Library World*, 105(9/10), 376-380. doi:10.1108/03074800410557330.
 30. Gorman, M. (2011). Confronting the Crisis in Library Education: Satellite Broadcast and Webcast. Proceedings of the *National Teleconference*. Retrieved from http://www.Dupage_press.com/no_cache/library_learning-network/previous-teleconferences/ala.
 31. Hallam, Gillian (2006). Trends in LIS education in Australia. In Khoo, C. & Singh, D. and Chaudhry, A.S., (Eds). Proceedings of the *Asia-Pacific Conference on Library and Information Education and Practice 2006, Preparing information professionals for leadership in the new age*(pp. 41-51). Retrieved from <http://arizona.openrepository.com/arizona/bitstream/10150/105355/2/07>.
 32. Hallam, Gillian (2007). Education for library and information service. In Ferguson, S. (Ed.), *Libraries in the twenty first century: Mapping future directions in information services* (pp. 310-336). Waga waga NSW:Centre for Information Studies.
 33. Harvey, R. (2001). Losing the quality battle in Australian education for librarianship. *Australian Library Journal*, 50(1), 15-22.
 34. Harvey, R. (2004). Changes in the librarianship curriculum: Where are we heading? *Australian Law Librarian*, 12 (2), 33-36.
 35. Harvey, R., & Higgins, S. (2003). Defining fundamentals and meeting expectations: Trends in LIS education in Australia. *Education for Information*, 21(2/3), 149-157.
 36. Indian Association of Teachers of Library and Information Science (2016). About IATLIS. Retrieved from <https://sites.google.com/site/iatlিশome/about-iat>.
 37. Indian Association of Special Libraries and Information Centres (2016). Activities SIG on Library & Information Science Education. Retrieved from <http://www.iaslic1955.org.in/Default.aspx?PageId=83>.
 38. Indian Library Association (2016). About ILA: Vision Mission. Retrieved from http://www.ilaindia.net/index.php?option=com_content&view=article&id=4:vision-mission&catid=8&Itemid=111.
 39. Jagtar Singh & Malhan, I.V. (2010). Trends and Issues in LIS Education in India. Proceedings of the IFLA Satellite Meeting. Retrieved from <http://conf.euclid-lis.eu/index.php/IFLA2010/IFLA2010/paper/download/15/15>.
 40. Karsiddappa, C.R. (2004). LIS curriculum from the developing countries. Proceedings of the *70th IFLA General Conference and Council World Library and Information Congress*. Retrieved from <http://ec2-54-194-84-58.eu-west-1.compute.amazonaws.com/greenstone/collect/toolbox/index/assoc/HASH01e5.dir/Library%20And%20Information%20Science%20Curriculum.pdf>.
 41. Kaur, Trishanjit (2015). Challenges and Concerns for Library and Information Science (LIS) Education in India and South Asia. *Journal of Education for Library and Information Science*, 56 (1), S17-S26.
 42. Khan, M. A. (1996). *Library Science Education in India*. New Delhi: Sarup.
 43. Khurshid, Anis (1976). Intellectual foundations of library education. *International Library Review*, 8, 3-21.
 44. Krishan Kumar & Sharma, J. (1973). *Research libraries in developing countries*. New Delhi: Vikas.
 45. Krishan Kumar (2016, October 11). Shortcut to scholarship. *The Indian Express*, p.9.
 46. Ling Hwey Jeng (2005). The points of ALA Task Force on Library School Closing. PRISM, 13(2). Retrieved from: <http://www.ala.org/ala/accreditation/prp/prism/prismarchive/FA05v13i2.pdf>.
 47. Macauley, P (2004). Challenging librarians: The relevance of the doctorate in professional practice. Challenging ideas. In Janine Schmidt (Ed.), Proceedings of the *ALIA 2004 Biennial Conference*. Retrieved from <http://dro.deakin.edu.au/view/DU:30005313>.
 48. Mangla, P.B. (1994). Library and Information Science Education in South Asia: India, Pakistan, Bangladesh and Sri Lanka. *Education for Information*, 12(4), 399-427.
 49. Mangla, P. B. (1998). Library and Information Science Education: Trends and issues. In Jain, M. K., (Ed.), *Fifty years of Library and Information Services in India* (pp. 285-293). New Delhi: Shipra.
 50. Miwa, M. (2006). Trends and Issues in LIS Education in Asia. *Journal of Education for Library and Information Science*, 47(3), 167-180.
 51. Muilenburg, L.Y., & Berge, Z.L. (2005). Student barriers to online learning: a factor analytic study. *Distance Education*, 26(1), 29-48.
 52. Mulvaney, J. P., & O'Connor, D. (2006). The crux of our crisis. *American Libraries*, 37(6), 38-40.
 53. My burgh, S. (2003). Education directions for new information professionals. *Australian Library Journal*, 52(3), 213-228.

54. National Knowledge Commission (2007). *Report to the nation 2006*. New Delhi: National Knowledge Commission.
55. Nicholson, J. & Tattersall, N. (2001, Nov.). *Issues, challenges and directions in education and training for the current and future library and information services sector: an association perspective*. Proceedings of the ALIA LISEKA Ideas Forum.
56. Partridge, H. & Yates, C. (2012). A frame work for the Education of the Information Professionals in Australia. *The Australian Library Journal*, 61(2), 81-93.
57. Partridge, H., Menzies, V., Lee, J. & Munro, C. (2010). The contemporary librarian: skills, knowledge and attributes required in a world of emerging technologies. *Library and Information Science Research*, 32, 265-271.
58. Phuritasabam, B. & Devi, P. (2009). Trends in Library and Information Science Education in South Asia: Issues and Challenges. *Proceedings of the Asia-Pacific Conference on Library & Information Education and Practice*. Retrieved from <http://www.slis.tsukuba.ac.jp/a-liep2009/proceedings/Papers/a23.pdf>.
59. Planning Commission (1984). *Report of the Working Group of the Planning Commission on Modernisation of Library Services and Informatics for the Seventh Five Year Plan 1985-90*. New Delhi: Planning Commission.
60. Poynton, C (2004). Received wisdom. *Managing Partner*, 10(9).
61. Pyati, Ajit. (2010). Understanding the role of Information Policy in LIS education. *Feliciter*, 56(3), 116-117.
62. Ranganathan, S.R. (1965). *Review Committee Report on Library Science in Indian Universities*. New Delhi: University Grants Commission.
63. Rochester, M.K. (1997). *Education for Librarianship in Australia*. New York: Mansell.
64. Sabharwal, Manish (2016, November 21). Jobs vs Wages. *Indian Express*, p. 10.
65. Satija, M.P. (1993). Research in Librarianship before and after Ranganathan. In Navalani, K and Satija, M.P. (Eds.), *Pettits petals: A tribute to S R Ranganathan* (pp. 27-45). New Delhi: ABC Publishing House.
66. Seavey, C. A. (2005). The Coming Crisis in Education for Librarianship. *American Libraries*, 36(9), 54-56.
67. Sharma, R. N. (2005). Development of Library and Information Science Education in South Asia with Emphasis on India: Strengths, Problems and Suggestions. *Journal of Education for Library and Information Science*, 46(1), 77-83.
68. Singh, K.P. & Chander, H. (2013). Professional Inclination of Library and Information Science (LIS) students of India: A Study of Socioeconomic Background and Career Choice Factors. *International Journal of Knowledge Content Development & Technology*, 3(2) 5-15.
69. Singh, S. P. (2003). Library and Information Science Education in India: Issues and Trends. *Malaysian Journal of Library & Information Science*, 8(2), 1-17.
70. Stoffle, C. J., & Leeder, K. (2005). Practitioners and library education: A crisis of understanding. *Journal of Education for Library and Information science*, 46(4), 312-319.
71. Trant, J. (2009). Emerging convergence? Thoughts on museums, archives, libraries, and professional training. *Museum Management & Curatorship*, 24(4), 369-387. doi:10.1080/09647770903314738.
72. University Grants Commission (1992). *Report of the Curriculum Development Committee on Library and Information Science*. New Delhi: University Grants Commission.
73. University Grants Commission (2001). *Model Curriculum Library and Information Science, Report*. Retrieved from <http://www.ugc.ac.in/policy/model-curr.html>.
74. University Grants Commission (1986). *National policy on library and information system-A presentation*. Report of the Curriculum Development Committee. New Delhi: University Grants Commission.
75. Whitmell & Associates (2004). Preparing for demographic change: Workforce and succession planning of the Australian technology network. Ontario, Canada: Whitmell and Associates.
76. Williamson, K. (2002). *Research methods for students, academics and professionals: Information management and systems* (2nd ed.). Wagga Wagga, NSW: Centre for Information studies Charles Stuart University.
77. Wijetunge, P. (2009). Selection of students to LIS education programmes in Sri Lanka and some related issues. *Proceedings of the 27th Conference of the Indian Association of Teachers of Library and Information Science (IATLIS)*, India. Patiala: Punjab University.

