CHAPTER 2

REVIEW OF LITERATURE

2.0. Introduction

Present age witness a proliferation in literature in all disciplines. This has become a problem to every sphere of society. No doubt the word “Information Explosion” has become synonymous with it. The problem of information transfer is encountered in the day-to-day walk of life, be it information center, educational institutions, business operation, government offices and libraries et al to name a few.

Keeping this in mind the above problems, a quick access to information is needed to remove the constraints with libraries. Also to keep pace with the fact on international development, the Library and Information Science Education (LISE) have been compelled to turn the impact of technology for help in order to transfer information in an effective way.
History tells us that the transfer of information began with the development of Education even to the remotest area of the country. At this stage very chapter owes its title, the most recent trends of information technology, recent change in the syllabus, course structure etc in the field of Library and Information Science Education.

Therefore, throughout the literature selection the very characteristic has guided the investigator in the document to review process.

2.1 Investigator’s comments/ observation on Literature Review

The investigator began conducting the literature survey by listing full bibliographical references of articles on Library education from Library and Information Science Abstract (LISA), and other Library Literature. Beside these sources, books, monographs and journals on Library Education were scanned. Details of where and how the survey was conducted have been clearly mentioned in the preceding chapter.

One of the most important things that were noticed after the review was that the topic of the research is unique one. Here is the conclusion as to why it is so. This does not mean that the publication lack materials on library Education. There were an instance where an article like “Recent Changes in Information Science” thrilled the investigator instantly, but put down toward the end in spite of many sub-headings and representation. To cite an example, the investigator came across an article by (Abdoulaye, 2004) “State of Library and Information Science Education in Malaysia”. At the outset, this challenged the way topics that have been formulated. Although, the title of the article suggest is done only in Malaysia.

Beside the research questions that were in mind, the investigator also began to look for information that deals in impetus for library education, continuing education, teaching technique, facilities, and also article dealing with information technology. Article on recent trends in library education along with the subjects dealing in library education were also considered. Later they
were categorized for the purpose of presenting a proper selection of relevant literature and to eliminate any confusion over the term used in the statement of problem.

One of the most important factors that attract the investigator’s attention while reviewing some documents were that of library education without the use of information technology. These factors guide the investigator in limiting the search for articles published for the last five years. Because, technology was boomed during the time of 21st Century and hence it was cleared that the articles published during that time would be to simply present article of library education without the use of technology. Few articles that were traced and felt like presenting them in this chapter. The investigator also comes across the article “The Future of library Science Education” by (Gorman, 1999).

In the article Kraus stated that although libraries should in some way or the other find means to work corporately to provide access.

The investigator come across the article by (Naghshineh, 2003), “A Comparative case Study of Graduate Course in Library and Information Studies in UK, USA, India and Iran: Lesson from Iranian LIS Profession” The author’s study is carried out for curricular, revamping and the diversity of course offered at the Universities & Independent Institution. The article also discussed the diversity of degree offered, case and flexibility of higher education. Update course programmes emphasize on research, course and curricular development give encouragement to the investigator to analyses the course offered in the North–East Region, as none of the literature dealing with North-East region is not available.

Investigator also come across the article by (Islam & Chowdhury, 2006), which give emphasis on the factors which demand profession are changing, the factor is the growth of literature, complexity of subject, change in the forms of documents etc. The author give emphasis on the training methods must adopt to such changes. The focus of the discussion is on the History,
current structure, curriculum, teaching technique and article which interest is the importance of Accreditation.

In the article of (Mangla, 1994), gives the programmes of Post Graduate level offered by various universities, documentation center and research institution in South Asia. The article discuss the library scene, course, admission requirement and duration, enrollments, main feature of the curricular and teaching faculties, which give the similarities and difference of the South Asia region.

The investigator came across an article by (Kyriaki-Manessi, 2003) which gives ideas to the investigator over the last twenty years library and information science education towards information management education. One of the main factors for this transition was the great development of information technologies. Curricular had to be reshaped in order to accommodate the rising needs for knowing and handling new technologies. While there is a definite shift towards high-tech education, the parallel development of information management itself had already introduced a new dimension. New technologies had already introduced a new dimension. New technologies had imposed not only new ways of handling information but also introduced new format.

As information management schools seem to have been the natural evolution of traditional library schools, they kept for a while their information domain within traditional library holdings and functions, streams that were developed within the schools have developed a more ‘holistic’ approach towards information management. Traditional places of holding materials were dealt with as information organization. The approach was pushed forward by the further technological development and spread digitization, and the service depend heavily on new communication technologies in all three types of information organization i.e. database, electronic journals and electronic books. Tthis became basis upon common grounds among fields started to be recognized
and leading toward a common basis for education of information professionals. In other words, new-technologies have contributed a great deal in transforming traditional library schools to information management educational institution.

Investigator come across the article of (Mishra, 1997), “Rethinking of Library and Information Science in India”. Here the author discuss the importance of manpower i.e. librarian as a medium of transmission in communication process. Author presents the brief history of library and information science education in India along with observation on the Curriculum Development Committee Report (1992). Outline a details syllabus for B L I Sc and M L I Sc level to prepare professional for the 21st century.

In the article of (Mangla) “Library and Information Science Education: Trends and Issue” present the overview of library and information science course conducted at the Post-Graduate level in India by 80 Universities and two Documentation Center. Due to vast expansion of Library and Information Science Education across the country has raised many problems related to the level of education, selection of students, course content, accreditation, research, administrative status, employment opportunities and library and information science literature.

In the same pattern the investigator came across an article by (Singh, 1996), “Restructuring of M L I Sc Course: Issues and Implication”. The article give more emphasizes on the need for restructuring M L I Sc course to develop quality manpower to satisfy the demand of an energy information society in India. Give more focus on the new model should be developing core competence for information communication, information use and user, end user training, information resource management, information technology and research evaluation. These tasks require a national level effort for quality control via accreditation. The author pleads for establishing a national level accreditation body on the pattern of Indian Council of Technical Education (AICTE) or Medical Council of India (MCI).
In the article of (Haridasan, 2003), “LIS Education: Accreditation and its prospects”. Gives more focus on the library and information science education scenario can be gauged by the trends that have crept up IT the profession.

After Post-Independence phenomena, library science education saw great development in terms of curriculum development, course design, thought content, formation of board of examiners and board of studies. This tremendous change reflects the existing infrastructure, services and information networks within the country. All these demand qualified manpower to manage effectively and with more proficiency.

World today has shrunk into a global village, bridging the gap between countries, people, technologies and information. With these new trends, there is a need for including newer ways of information acquisition, processing, storage, retrieval and transmission. Present trends also reflect interdisciplinary character of subject being supported by library and information scientists. Implication of these new trends demands a change in the present curriculum to accommodate programmes that will equip to the new requirement of the information market.

2.1.1. Factors for Accreditation

   a. Course is in accordance with type of libraries.
   b. Uniform Syllabus
   c. Course Content
   d. Training Based Education
   e. Quality Improvement
   f. Training
   g. Management Qualities

These are the following factors described by the author which impress the investigator a lot.
The important aspect of manpower development is to developed education system of LIS. The onus of preparing new generation of professionals is to take on the challenges of the information age and respond proactively to the changing scenario with the community of library education. LIS schools now have the daunting task of improving the quality and relevance of LIS education through improved infrastructure in the form of ICT laboratories, internet connectivity and of course trained manpower. The new paradigm for LIS education is characterized by new syllabi, new approaches and methods of teaching. Standardization in the field of LIS education is found to be useful for achieving and maintaining desired objectives, targets and goals. The immediate task is to establish a mechanism for accreditation of LIS courses to be followed in different library schools in India.

There is no accreditation agency in India like the American Library association (ALA), Committee on Accreditation in USA and Canada to ensure a reasonable standards and quality of educational programme. The report of the Committee on National Policy on Library and Information System (NAPLIS) stressed the need for such a body (Agarwal, 1997). The accreditation agency should be responsible for recommending minimum standards in terms of faculty strength, intake criteria, teacher student ratio, evaluation methods, library and laboratory facilities, availability of teaching materials, finance and physical facilities. It should take care of regular revision of LIS syllabi for uniformity and standardization in the overall LIS education system. Library and Information Science Education reach a juncture where its objects need to be redefined. The basic aim of Library and Information Science Education should include, to acquire with library activities, to teach how to manage libraries using latest technologies to make aware of responsibilities, to serve better, utilizing various services, teach professional ethics, beside communication skill, negotiate well alert and smart and computer literate should be accompanied. In the article of (Nelson, 2004), discuss that the standard, are most effective for a valid evaluation,
and the regional accrediting associations and ACRL (Association of College and Research Libraries, a division of ALA) have developed standards from time to time. The first ACRL standards were for college libraries and published in 1959; two-year college standard were published in 1960; and university standards were published in 1979. The process of accreditation in the United States is one of self-regulation and there has been improvement through the evolving accreditation process, which has provided some assurance that an institution has met at least the minimal standards. The self-regulation of higher education in the United States began with the formation of six regional accrediting associations between 1885 and 1924.

In the article of (Estabrook & Montague, 2003), discuss that LIS education strengthened its position within higher education, it encountered turbulence in its relationship to the library profession. Two lightening rods are Accreditation and the Congress on Professional Education. Accreditation is the voluntary, non governmental system of evaluation used in North America to protect the public interest and to verify the quality of services rendered by different types of service organizations and institutions. The accrediting body for schools of library and information sciences is an organizational part of the ALA with members appointed by the president. Receipt of the professional master’s degree from a school accredited by ALA is a prerequisite for employment in most public and academic libraries.

According to the article of (Borawski, Carmody, Conboy, Hallenbeck, King, & Knappenberger, 2007), discuss the difference between Certification vs. Accreditation. Certification refers to the written assurance provided by an independent third party that the management system conforms to the requirements of a particular standard or requirement. While Accredited certificate results when that third-party has attained formal recognition from an accreditation body that is competent to carry out certification in specific sectors. Accredited
certificates issued by accredited certification bodies may be perceived in the market as having increased credibility.

In the article of (Padamini & Prasad, 2001), discuss about the standardization in the field of LIS education is found to be useful for achieving and maintaining desired objectives, targets and goals. It requires in achieving uniformity in respect of producers, processes and product etc and may prove to be useful in LIS education in many ways. It is a degree of excellence or a uniform pattern or process specific by a standardizing body. Accreditation refers to approval or recognition of one party by another on the basis of some standards. In order to achieve academic excellence, it is essential to lay down norms of education and ensure their adherence consistently and regularly. Proper quality control and guarantee by some recognized body of the professionals is necessary to achieve this goal. Absence of accreditation leads to sub-standard education, malpractice and unethical activities in the profession.

At present the state of LIS education is in a state of disharmony. The immediate task is to establish a mechanism for accreditation of LIS course to be followed in different LIS schools in India. The value of accreditation has been discussed and emphasized repeatedly at national seminars and conferences. But no concrete effort has yet been made in this direction. In order to maintain academic standards, it is very essential to establish some professional agency at national level, which can undertake the work of accreditations of the LIS courses as being done in certain other professions. In the article of (Rath, 2002), “Education for Information: Emerging Scope and Challenges in India”, discuss about the application of information and communication technologies in Libraries, information center and documentation center have compelled the traditional library professionals to change into information professionals to develop their skills in collecting, organizing and disseminating information to users. The emergence and establishment of specialized information and documentation centers, information system and networks, library and
information networks at local, national and international level further necessitated education training on different facets of information. Developments in computers and communication technologies have created more possibilities in making an increasing amount of information more accessible to a greater number of people. It is now possible to access and retrieve information from sources across the globe through international networks, database, mass media etc. Therefore Education for Information Science Education is of vital importance to face these challenges. Such course intended to prepare students to assume professional positions in a broad spectrum of national and international information.

In an article of (Varalakshmi, 2006), discuss about the library and information science profession to expect the Library and Information Science School to produce graduates suitable for the present need and student’s high expectations from their academic programmes. These necessitate redefining and reengineering their goal.

In an article of (Kumari, 2001), review the historical as well as current status of library and information science education in India, trace out various areas where proper planning and decision making to meet the recent change in the field. (Singh S., 2003) trace the emergence of library and information science in India. Describe current status, the different patterns and levels of library and information science education as well as research programmes being offered by various Universities, emphasize on the need of national level accreditation bodies. (Yang, 2004) review the relevant literature, and the introduction of international professional standards and progress made by other countries. (Mishra R., 1999) discuss four compares units the nature of internet and its uses in the academic library, how to use internet and its uses in the academic library, how to use internet, developing the skill to host and evaluation of internet service and resource.

The investigator comes across an article by (Isaac, 1996) which deals with the future prospective development of information technology with regard to application in library science.
In an article by (Gupta, 2003) which deals with the development of library and information science education with reference to Africa. In the article by (Rath, 2002) deals with the challenges and scope of library education for information.

Investigator comes across the article about the facilities available at the schools (Iyer, 2002). (Lavagnino & others, 1998) deals with the challenges meeting the need of growing non tradition bodies and training students that is rapidly changing. (Hildenbrand, 1999) discuss human resource respond to library technology. Structural changes brought about by information ages, may foreshadow a resurgence of inequality for librarianship in information age, emphasizing faculty and student in the emerging programs of Library and Information Science Education. Nwakoby discuss the physical facilities for the staff and students, the library and its resources as well as other technological support. Assumed the adequate provisions of these facilities would result in conducting satisfactory programs in library Education.

(Jeng, 1997) discuss the proportional representation, minority requirement, stereotype, English only policy for instruction in the class, affirmatives action and immigrants accents. Evaluate the impact of an interactive online tutorial to improve students citing and reference practice. (Mangla, 1973) and (Harshsda, 2003) discuss the importance of teaching methods in Library and Information Science which categorized as lecture method, class test method, seminar method, observation method, dissertation method, assignment method, internship method etc.

2.2 Subject on Education

In the article of (Sowell, 2003), the education librarian, like many librarians in general and specialized librarias, fills a numbers of roles in the provision of library and information services to library users: acquisition, organisation, dissemination and interpretation of knowledge as well as instruction of users to be self supporting. Most education librarians prepare for their multiple
roles through a combination of training and experience. According to the article of (Bookstein, 1986) library education is in a great state of change now as at any time since its introduction as part of higher education. The ultimate cause is economic. The widely felt sense of economic contraction that now prevades higher education is causing many university administrations to demand of each program justification for its exisstance in an university setting. Under such scrutiny, the library school suffers from a number of disadvantages: it is relatively small; it is often isolated; it is imperative that library schools understand how they are perceived and establish models of library education adequate for the needs of the profession and comprehensible to colleagues from tradational academic background.

Library school faculty are best suited to take up this task; the profession will benefit most if it is among library educators, where sympathy for maintaining strength in this area is greatest, that the precise form taken by the question of how library education should fit into higher education is defined and the categories for responding to it is established. Through exacerbated by economic stringency, the tension between library education and the tradational disciplines is not new. Unlike divinity, medicine, and law, it does not have the weight of tradation on its side. Much of the professional activity of its graduates is invisible to their clients, and much of a library’s clerical operations are confused with professional activity. Probably the most important failure of library schools has been to articulate forcefully enough, in a manner that has meaning within the academic setting, the intellectually demanding problems with which library research deals and their social importance. The library has traditionally been the most prominent formal mechanism through which society has attempted to preserve and access information. Education provides us a sense of propriety, priority and perspective. It is also pragmatic as it changes with on going life. Education is the process of realizing the truth and reaching the goal.
The most important factors affecting libraries and alternative access structure dependent on them can be identify as-

i. Economic conditions- these affect libraries directly but also indirectly through their impact on the organizations that libraries serve on.

ii. The relationship of library and society- the relationship between libraries and highly literate populations. This is particularly important today in the face of economic pressure to increase the effectiveness with which library resources are used and in light of the opportunities offered by newer technologies for changing radically the ways in which scholars interact with information resource.

iii. Technology- computers have often been cited as a critical factor changing library operations. It is important that the library schools continue to examine and analyze the impact of computer related technologies that is likely to influence the condition of libraries in the near future, but they must recognize the potential for other technologies that independently but epically in their interaction with computers.

iv. Communication technology- including high band width channels, packet switching.

v. The emergence of very high capacity storage devices, permitting access to, and potential distribution of very large quantities of data.

vi. The availability of low-cost, high-capacity personnel computers.

vii. New forms of publication. A reasonable model of the library of the near future would include machine-readable data and full text in machine readable form.

In the article of (Boll, 1972) describe the pressure which beset library education at the present time and the five commonly considered, but apparently irreconcilable views regarding suitable solutions of these pressures. It suggest that the optimum solutions can be reached only by coordinated, national wide factual study of professional trends and needs of librarianship
educational objectives, which takes into account the immediate as well as the more distant future. The major objectives are (a) **clarification as to whether librarianship will, in the foreseeable future, remain one profession or whether it will split into several sub professions;** (b) **the development of an effective, nationally coordinated library education program and of improved instructional techniques.** The issues pertinent to library education are the need for, and extent of, a central professional core; the need for additional relevant, but non-professional, subjects that could be part of a core; the depth of penetration suitable for various aspects of librarianship; the use of laboratory instruction and internship; and the optimum length of the study. The librarianship may well split not along the standard divisions by type of library, or by type of service, but into functional clusters: bibliographical and readers services, social, motivational, and public relations aspects; middle and higher level administration; school and children’s librarianship and information science.

In the article of (Bookstein, 1971), education is the use of quantitative methods to become an increasingly important part of a librarians education. In such an education, the development of appropriate attitudes may be important than mastering particular technique. The paper examine the nature of decision making in libraries, with the view of learning with qualities ought to be developed while in a library school. In the article of (Audunson, 2005), library and information science is a complex patchwork. This is the case of LIS educations. Although LIS as an academic and educational undertaking has common historical roots related to the need or qualified staff in libraries, research and education has developed in different directions. In the article of (Glazier, 2002), deals with the proposing model for mapping the processual change associated with disciplinary and paradigmatic development. Change of this sort is contingent on the degree of consistency achieved within theory groups. Consistency, in this case, is equated theory and paradigm dominance. The symbolic interactionist supplies the assumption on which model is
accomplished by contrasting with Thomas Kuhn’s theory. The recent history of library and information science education in the U.S. serves as context and exemplar for application of the model.

In the article of (Mittle, 1967), discuss library is both social and cultural institution. Its function and objectives are closely related to the values and beliefs current at any time in the community itself. Since education is a life-long process, it is essential to provide an institution for this purpose. This institution is none other than a library. Librarianship as a profession is growing at rapid speed not only in India, but throughout the world. The basic reason for the development of librarianship is (a) the rapid expansion of knowledge and its record and the steady growth of literacy have greatly increased the library’s role and functions throughout the world; (b) the librarian’s duties and responsibilities have multiplied in number and degree; and (c) this broadening and deepening calls for library personnel with a high degree of general and professional education.

Major objective of a nation is to achieve self sufficient in the development of trained manpower. To achieve this, a nation has to give emphasis on proper training and education. Education is viewed as the key to development, both personal and national.

Library and Information Science Education play a major role in the development of a nation. Professional trained manpower is one of the important resources required for setting up information system and service. Therefore, Professional trained manpower is an essential component for the development of Library and Information System and Service in the Nation.

The purpose of Education is to acquaint the individual with the broader area of the particular field of study and at higher levels to equip the person with necessary capacities to pursue further the deeper realms of any branch of the field. The philosophy of Library and Information Science Education help to achieve the objectives of the Library and Information Science School.
According to it, Library School should prepare well trained manpower for performing complex and highly complicated task connected with modern Library.

2.2.1 Objective of Education

Objective of education is to trained manpower to achieve the highest degree of individual development for which they are capable. With the growth and development of (environment) society to which it belongs has undergone tremendous change in the recent past and is still going through a phase of continuous change.

2.2.2 Categories of Education

1. General Education
2. Academic Education
3. Professional Education

*General Education* is to impart to the general public the knowledge of language and the mental development to understand others views and to be able to express his own views to others.

*Academic Education* is to impart to the process or group of persons who seek detailed knowledge of a discipline and faculty, as a whole of specific aspects of the same.

*Professional Education* is to impart to the person of group for the purpose of achieving knowledge of the techniques applied to a particular profession, trade or technology.

2.3 Librarianship

By Pierce Butter “ No advanced state of civilization can be achieved or maintained itself unless the necessary proportion of each generation are well versed in the corresponding knowledge. In this act of transmission of knowledge stands the library professional as a mediator between the originator and the end user. As the need for knowledge are growing in a big way which is rightly called “information explosion” the role of library profession also increased in more demanding way.” Simultaneously, in response to environment change, the subjective
decision of the librarian gives way to objective scientific analysis of his profession. During the last six decades of this century has witness a tremendous development of Library and Information Science from its rudimentary form to the status of a discipline being offered at the University level. However there are arguments doubting the status of Library Science as discipline for example: “The problems of Library Science have yet to defined, and then Library Science itself has to emerge as a discipline.”

2.3.1 What is Discipline?

By Phenex Discipline “Is knowledge organized for institution”

Foshay ascribes to discipline three elements ‘a domain, a set to rules and a history”. Fraser adds two more elements with what Foshay ascribed to a discipline by defining a discipline as:

“A body of knowledge organized around basic concepts. These concepts form the structure of a discipline. Each discipline has its particular approaches, tools and methods for discovering and ordering information”.

Dictionary of Education: “Discipline refers as a body or domain or knowledge where precession of meaning and depth of analysis are achieved by the use of distinctive concepts. More basically, a discipline can be seen as activity committed to the refinement or extension of knowledge in accordance with convention about how intellectual inquire should be conducted and its out come evaluated. Here, emphasis is on a domain and facility for research and extension of the boundaries of knowledge.

The above definitions talks about the same attributes, which a disciplines should have in different terms.

In short a discipline should have a philosophy of its own i.e. a strong theoretical base. The philosophy includes principles and all other established explanations of “Why” rather than “How”.
2.4. Development of Library Science to Information Science

a. Library Economy

b. Library Science

c. Documentation

d. Information Science

e. Informatics

Library Economy: Like any other branches of the universe of knowledge, the frontiers of librarianship as an independent discipline has undergone a change from library economy to library and information science. However, these changes have always linked with the formal tools and not with the basic philosophy of librarianship. As early as 1876 Melvil Dewey used the term “Library economy” to denote the discipline aiming at the collection, storage, display and dissemination of recorded knowledge.

Library Science: Of till the end of 19th century, librarianship continue to remain as an art of organizing and managing the collection of reading materials in libraries. Gradually, librarians started developing mechanism employing certain rules, codes, principles etc. based on the observation and experiments. Consequently, the term “Library Economy” was replaced by the term “Library Science”. However, this change from library economy to library science was not the change of the content but it was merely a change in the methodologies and tools of librarianship.

Documentation: In 1930’s a new terminology “Documentation” appeared in the scenario of Library Science. Thus, the concept of ‘documentation’ further extended the scope as well as methodology of library studies encompassing all area of recorded human knowledge both macro as well as micro-nascent. This extension of library activities to documentation improved the techniques of communication of recorded specialized knowledge in order to give maximum accessibility to the information contained.
**Information Science:** In 1960’s, the invention of automation brought many changes in library operations especially in the storage and retrieval of information. This technological evaluation paved the way for transforming the concept of “documentation” to “Information Science”. Hence, the emerging of ‘information Science” by replacing the term ‘Documentation’ is an outcome of technological revolution which provides greater access to information by using sophisticated communication technologies.

**Informatics:** with the rapid development of science and technology and its application to information operations and activities, a new area of study has emerge known as “Informatics”. It is defined as the totality of disciplines and technologies for the systematic treatments (particularly by computer) of data and Information seen as the medium for knowledge with view to its convention in time and its communication in space. The concept of informatics, a term derived from French term “Informatique”, is essentially a new development encompassing field related to design, construction, evaluation, use and maintenance of data processing, storage and communication system including hardware and software as well as organizational and human aspects. Thus, informatics is the service including what is often called computer science, its technological and theoretical foundation as well as its applications.

2.4.1 Trends in Library and Information Science Education

In India, Library and information Science Education is well progressing compared with other nations. This is due to the vision and ideas of Dr S R Ranganathan than and the support of U G C. Most of the Library and Information Science Education in India are of traditional mould conducting traditional courses. With the development of technology some Library and Information Science School are introducing course based on modern information technology.

The scene of Library and Information Science is witnessing a vast change with the changing environment caused by automation, digitization, communication technologies, networks,
globalization etc. The awareness of the society has considerably increased making it a more interactive form. With these new trends, there is the need for inculcating newer way of technical and information technology education for providing more transparency among the various activities. The world today has shrunk into a global village, bringing the gap between countries, people, technologies and information.

The present trend also reflects inter disciplinary character of subjects being a common occurrence is with subject like psychology, computer science, tele-communication, managements being supported by Library and Information Science. These have made possible the coexistence and inter relationship between disciplines. The implications of these new trends demands change in the present curriculum in such a manner, so as to accommodate programs that will equip the professionals with knowledge, skills and technique to acquire, organize and disseminate information according to the new requirements of information market. (Freiband, 1992), aim to identify multicultural issues and concerns relevant to library and information science curricula. The ability to recognize, accept and deal with various elements of cultural diversity as one of the key survival skills needed in the twenty-first century. The growing interest in multi cultural curriculum reflects new educational need that have arisen as a result of the challenges posed by profound changes that are taking place both at the international and national levels. Students of library and information science, as future scholars and professionals in a highly interconnected and interdependent global enviroment, several factors make it imperative to have grounding in the role of culture in human informational and communication behavior. Operationalizing a multicultural curriculum requires conceptualization of two dimension of library and information science instruction: paedagogical and content-related. LIS education in a multicultural context is certainly a challenge in that it involves rethinking the functional assumptions about knowledge. (Gupta, 2003), explores the discipline of marketing of library services as a new academic subject in library
and information education focusing on the Indian experience. Reasons for applying marketing in any library is not to increase profit but to increase in user satisfaction and increase of funding in turn, since increased customer satisfaction will often result in their increased willingness to use and pay for services offered. Marketing is not new to libraries, it is as old as modern librarianship and the origin of marketing date back in 1870s. Where the approaches of library experts were market oriented. The topic of Marketing of Information Services has been included in the syllabi of many universities in India to train future librarians. There is a strong need to re-energise researchers, teachers and policy makers to consolidate efforts to develop the marketing of library services as an academic discipline. (Haseri & Martin, 2009), Knowledge Management (KM) is a multidisciplinary field of study which encompasses topics from several disciplines. The application of this new cooperation as a means for LIS schools to help broaden the appeal of LIS education to a wider audience. LIS schools had seized on developments in technology as offering new ways of connecting and collaborating, and they responded to these changes with program initiatives and unique collaborative arrangements. Author outline subjects and topics for potential cooperation in area of Knowledge Management as follows: a) LIS and business academics; b). LIS academies and government; c). LIS academies and government and business; d). LIS academies and professional organization; e). Exchange programme in LIS; f). Coordination with national/international practical projects and g). comparison of the curricula of LIS schools, business schools and industry oriented schools. (Singh & Malhan), identify the emerging trends and lingering issues in library and information science education in India. LIS education in India has been profoundly influenced by the constant changes in libraries, new methods of information handling, and information and communication technology (ICT) enabled time saving and user-friendly ways of accessing information. Social networking sites are emerging for interpersonal communication and new types of information sources. LIS schools are required to constantly take
notice of the skill set and new competencies that are in demand in the market place and accordingly create new wherewith and conform their curricula to meet the requirements of present times and time ahead. It also stress that modern LIS education requires infrastructure such as media labs, IT labs, and information products experimental labs. (Abdullahi, Kajberg, & Virkus, 2007), stress the importance of international and intercultural opportunities in serving as essential components in educating and training library and information professionals. It provide an overview issues and trends in internationalization of higher education in general and illustrates the concepts that have affected library and information science education settings and programs primarily in Europe and the USA. The International Federation of Library Associations and Institutions (IFLA) Section on Education and Training, focus for co-operation between educators and schools in the LIS field throughout the world. Standards for library schools, equivalence and reciprocity in terms of qualifications, curriculum development and the establishment of a LIS core curriculum, continuing professional education as well as listing of LIS schools, archival programs etc world wide have been among the priorities of the section. In the USA and Canada, the Association for Library and Information Science Education has set up a special Interest Group and an International Relationals Committee to maintain liaison with LIS education programs and groups in other nations; to recommend cooperative ventures and programs with other nations and interest group. In Europe, there is a joint forum for European LIS schools, the European Association for Library and Information Education and Research (EUCLID). The basic purpose of EUCLID is to promote links and co-operation between LIS schools and LIS educators in Europe.

The most difficult and the most significant way of achieving internationalism in LIS education is to revise and improve the curriculum for all students whether they can take part in exchange programs or not. The international curricula should be curricula that prepare graduates for a defined international profession, leading to internationally recognized professional
qualifications and interdisciplinary programs, such as regional and area studies covering more than one country, and curricula in which the traditional/regional course area is broadened by international cross-cultural/ intercultural approaches.

2.4.2. LIS Education in Global and Indian Scenario

In the article of (Virkus, 2005), increasing interest in internationalization has been evident in library and information science (LIS) education in Europe. European LIS schools have started to participate more actively in joint activities to respond to the challenges of globalization, to improve, innovate and strengthen the LIS curricula and course to serve the changing needs of students and the global employment market and to meet the international standards of quality in teaching, research and services. (Bell, 2002), present the situation of LIS education in South Africa which led to the democratisation of library and information science education, which deal with the inextricably link to the social, political and economic events in South Africa as it prepared for its first democratic elections in 1994. From the tradational approach to library and information work prevalent in the apartheid era emerged an alternative approach. This new approach recognised strong links between libraries and the struggle for democracy and rejected the idea of librarianship as a neutral activity. Various leading librarians in South Africa began to criticise the prevailing model of education for librarianship and to redefine its educational goals and objectives. The need for more appropriate training as well as rapid technological changes necessitated curriculum revision. By 1994, in spite of plan, policy making and recognition of the need for change in the education for librarians, problems of fragmentation, a lack of articulation of programmes and little differentiation and specialisation persisted in LIS education and training. Although there have been further policy initiatives and gains resulting in legislation in the 1990s, the democratisation process of LIS education in 2001 is far from complete. (Gorman,1999), analyses characteristics of the information profession with suggestion for the future. It focuses on
professionals values, professional parameters and the impact of information technology. He also suggests how educators need to view the future of the profession in order to introduce the necessary changes to educational programmes gradually but consistently. (Dalton & Levison, 2000) present detail about the issues facing researchers working at the University of Central England, UK. The paper describe the issues currently hindering the international movability of LIS professionals. The author describes three possible methodological approaches for the research and their respective drawbacks. The first and initially favoured possible approach is to produce a database detailing the various accreditation criteria required for recognition by the appropriate national library organisations. However the accreditation is often a subjective procedure and is carried out in relatively few countries worldwide. The second approach examines the existing procedures operating within the EU to allow for recognition of overseas qualifications across all curriculum areas. A short description of NARIC service and their role in the area. However this service currently operates within the EU only. It also tend to make general comparisons without distinguishing between accredited and non-accredited qualifications. The third possible approach is to compile a detailed database which looks at the course duration and course content of each LIS education institution throughout the world. The issues of equivalencies of qualifications throughout the world are difficult, although it may not be a situation that is unique to the LIS profession. It is clear that some standards and systematic way of judging equivalences of library education. (Takeuchi & Kim, 1999), the author tried to analyze the elements affecting the weakness in terms of quality of education, employment system and career development of Japanese librarians. The library Law opened the door for the LIS education at the university level in Japan. There are 9 four-year old universities with departments or sections specialized in library and information science and 8 masters and 4 doctoral programs in Japan. In addition there are some 200 colleges and universities, including junior colleges, offering a varying number of courses
in librarianship. However, the majority of these schools offer a very limited, minimum 20-credit courses prescribed in the library law and the Ministry’s ordinance attached to the Law. Moreover, summer intensive 20-credit course, which are mainly for non-qualified library workers are organized by several universities/colleges in cooperation with the Ministry of Education, Science, Sports and Culture annually. Education for librarianship in Japan has been provided at different levels. Students are required to complete no less than 124 credits over four year and submit a thesis in their final semester for Bachelor degree. There is a big gap between the quality of education in the LIS departments providing comprehensive programs and the one offered in the 20-credit courses. (Bronstein, 2007), identify the current trends in library and information science education related to the user centered approach adopted by libraries and information professionals in response to the advent of the internet. This change has transform the provision of information and the roles of the information profession and the nature of their work. In response to the changing nature of information work, LIS education has undergone significant changes over the years. The evolution in computers, communication technologies and digital content in the last two decades has had a dramatic impact both on users’ information behaviour and on the nature and character of the information profession. The author identify that LIS curricula have been successful in blending between the tradational approach to LIS education that aims at providing students with basic information handling skills and user centered approach that focuses on the information needs and behaviour of users. To accomplish these goals, LIS education program need to strengthen their user-centered focus by developing courses in their curricula that develop social and personal skills. (Kyriaki-Manessi, 2003), present some of the current issues in LIS education in general and in Greece in particular. It also examines the forming of professional identity of information scientist in Greece today. Libraries, archives and museums are regard as interrelated institutions this is so not because of their similarities in the information process, but rather because of their common
background as keepers of historical tradition and culture in Greece. Library and information science studies are at the undergraduate level. A graduate program is not yet available but there are two proposals for graduate program under close examination in Greece.

In the article of (Byrne, 2000), present the challenge for educators and practitioners in Australia and to find methods to improve the overall quality of new graduates in order to develop a culture and consistency for innovation in the library profession and to foster leadership. External influences include globalization, multilingual and multi cultural challenges, media developments and eWorld opportunities. However, the traditional emphases on ethics, professionalism and objectivity, and on cooperation and collaboration remain crucial as does our responsibility to think globally, endeavoring to address the implications for those in both developed and developing nations. These considerations suggest that our professional education and training, both initial and continuing should address such issues as: socioeconomic context; knowledge economy; modes of publication, including diversification of media, scholarly information etc; networked electronic information; intellectual property; pedagogy- both understanding how people learn and developing teaching skills; information literacy; technological proficiency; ethics and intellectual freedom; collaboration. (Kavulya, 2007), assess the status of the job market for library and information science professional in Kenya and the adequacy of current curricula and training resources in LIS training institutions in the country. And to identify priority areas of training and critical IT skills required by LIS professionals in relation to current job market and performance requirements. The job market of LIS professional in Kenya is perceived to exist. However, there is a general observation that the current LIS training programmes in Kenya do not sufficiently address current job market requirements due to inadequate training resources in LIS training institutions; lack of adequate ICT content in the courses; courses that are irrelevant to the job market and an inadequate
length of industrial; attachment. The issues are part of the current discourse of LIS training in the sub-Saharan Africa where communities are in transition to the information economy.

In the article of (Shariff, 2003), discuss the present situation of libraries and the needs for library and information science education in Brunei Darussalam. LIS education at the tertiary level has not been established in Brunei. Many libraries do not have qualified library staff. University Brunei Darussalam (UBD) library, being the biggest library in the country, undertake major initiatives in assessing development of other libraries by providing training and consultancy, and conducting LIS courses. LIS education is slowly developing in Brunei Darussalam and librarians themselves are taking the responsibility in making the relevant bodies aware of the need to set up library and information science education in Negara Brunei Darussalam. They look forward to their own home-grown graduate librarians who will be able to develop the libraries effectively and contribute to the development of the country. (Hallmark & Gonzalez, 2002), studied three programs of the Graduate School of Library and Information Science (GSLIS) at the University of Texas at Austin which support education in LIS in Latin America and present contrasts in goals, participants and outcome. The Lozano Long endowment has energized the University’s Latin-American community. As GSLIS continues to adapt and expand both its electronically-based and traditional curricula to meet the needs of its constituencies in Latin-America.

In the article of (Mittal, 1967), trace the development of Library and Information Science Education in India. The author also discuss the course offered; course contents; admission; teaching staff; working hour; physical facilities and problems faced by LIS education in India. (Yusuf, 2007), highlights the importance of LIS education in Uttar Pradesh. It assessed status of LIS education with the help of various indicators: growth of universities/LIS schools; status of universities; level of courses; mode of education and location of the library schools of the states. The author stress that if there is unbalance in the LIS education continues, there will be problem of
quality manpower. (Dutta & Das, 2001), present the scenario of LIS education in India. It provide the list of universities providing LIS education in Indian Universities; 74 universities provide BLIS course, 63 universities provide MLIS course, 15 universities provide M.Phil course and 49 universities provide Ph.D. in Library and Information Science. He stress on to update the syllabus regularly. (Satija, 1999), article gives the state- of- the- art overview of LIS education in India as a back-ground to reviewing the doctoral research in the field. At present about 107 institutions, mostly university colleges and polythechnics, have LIS education courses. Of these, the M.Lib.Sc. course is being offered by 67 universities; 11 universities offer M.Phil. though this degree has no value in the job market. Today 32 universities have Ph.D. research facilities. One university recently awarded a D.Litt. that it claimed to be the first such degree in Library Science all over the world. Another problem with library schools has been a lack of public relations and marketing of their images and product. It trace the origin and growth of Ph.D. programmes in LIS in India and highlights the initiative and efforts of Dr. S.R. Ranganathan (1892-1972). The article provides annual data on the quantitative output of LIS Ph.D. theses and ranks major Indian universities by their output.

In the article of (Mishra & Panda), present the situation of LIS education at Orissa and Manipur. LIS course at Bachelor degree level was first introduced by Sambalpur university in the year 1976, followed by Utakal university in 1981. MLISc course was first started by Utkaal university in 1983 followed by Sambalpur in 1985. The author also mention that LIS course in Manipur was established on April 2, 1986. (Chakraborty. & Sarkhel, 2009), trace the development of LIS Education in India from its inception up to today’s scenario. They present that the different modes of LIS training have been delved into- namely, regular courses offered by the universities, specialized courses by NISCAIR (INSDOC), DRTC, NCSI, etc., distance education LIS courses offered by open as well as regular universities and also certificate course offered by BLA and
some other organizations. The study tried to map the resources used for teaching LIS by comparing syllabuses of different universities and Institutes and to assess how far these resources co-relate in imparting LIS education with the today market demand for LIS professionals.

2.5. Impact of ICT and Knowledge Society

Currently both the traditional libraries and the digital libraries coexist in India. LIS education in India has not become receptive to the new emerging situations. The library schools have failed to develop the required knowledge and skills relating to the use of information technology among students. As a result, the graduates from LIS departments have little competitive potential in the information market. With digital library acting as an information depository, there are many challenges concerned with the description of objects and repository, interoperability and collection management. The underlying value of digital resources to the users will depend upon the quality of the contents, the organisation, the data management systems and the presentation of the data. XML has rapidly gained popularity as a markup language for information, finding constituencies in both the document-centric and data-centric world. A variety of web applications and industry initiatives have announced their support for XML. The related standards in the field such as MARCXML are also based on XML technology. The crucial role of XML in the Integrated Library Management System (ILMSs) has also been identified.

The concept of XML has been brought into library related courses, such as electronic publishing, electronic document processing, network resource management, information technology tools and applications, information organization, digital archives and so on. (Chang, Huang, & Hopkinson, 2011) found that in England, one of 8 LIS schools has XML related courses. In America, 2 out of 50 LIS schools has XML related courses. However, LIS schools in England and America arranged XML concept into teaching materials as a section unit in some courses. The study aim to provide LIS schools and library associations in Tiwan and South East Asia with
necessary information to take into account the need of LIS schools in their curricula and to plan future XML-related courses and provide directions for planning for continuing education for LIS specialists. The authors conclude that LIS schools should consider providing optional XML-related courses with practical sessions, and library associations should provide XML-related continuing education to enhance LIS students professional qualification. (Paul, 2011) aim to the subsequent editions of an international training program in information management. (Georgy, 2011), European Universities and universities of applied sciences were undergoing vital changes partly as a result of the Bologna Declaration which aims at implementing an unified and interchangeable course system all over Europe. Bologna represents the most comprehensive and profound higher education reform of the last decades. It challenges European universities and universities of applied sciences at a time where the percentage of the population seeking higher education degrees is increasing continuously, the higher education institutions are taking on ever more diverse and demanding task, while simultaneously, however, the budget and especially state financing cannot keep up the pace with the growing demands. The author emphasize on the need of the core curriculum that must be derived from its function as a planning tool for developing new courses and study degrees. The aim of it is to stimulate the discussion process within the LIS community and providing orientation for future and intra-institutional planning process. The core curriculum implies that all student have a uniform body of knowledge in different subjects and, presumably such a curriculum will produce education and responsible graduates for science and practice in LIS.

(Maitaouthong, Tuamsuk, & Techamanee, 2011), aimed at developing an instructional model by integrating information literacy in the instructional process of general education courses. The development of high quality graduates is an important higher education issue due to the employment market demand and changing work conditions. Information literacy is an instructional
method that aims to develop the skills and qualities expected by society and employers. The incorporation of information literacy courses in the curriculum, library orientation, short training courses for self access learning. (Sarrafzadeh, Hazeri, & Alavi, 2011), discusses the use of Web 2.0 technologies by LIS academics in Iran and to explore the challenges they face for using these technologies. The need for LIS students to get familiar with Web 2.0 technologies has been reinforced in recent years. Preparing LIS graduates for the emerging library 2.0 environment and meeting the needs of net generation are the reasons for supporting the idea of using Web 2.0 tools in LIS education and Incorporation of its related themes in the LIS curricula.

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