Abstract

The Paper discusses the modernization of University and College Libraries in India taken place during the latter half of the last century. It gives an account of the contribution of the University Grants Commission in terms of Reports, conduct of seminars, workshops, financial assistance for replenishing collections, constructing library buildings, upgrading library services. The role of other national bodies like AIU, AICTE, NAAC and Library Networks also is described. This modernization facilitated their transformation into the 21st Century Academic Libraries. While explaining the special features of 21st Century Academic Library the landmarks of the forward march like professional literature analysing the transitory period, New Five Laws of Library Science are indicated. The special features of 21st century academic libraries like library soft wares, retrospective conversion, digital library initiative are also discussed. The changing librarianship is explained emphasising the new competencies for library and information professionals. It is concluded that though the core work of libraries remain the same the old ways to carry them out are changed due to ICT applications. The library services too are enhanced and have become more effective.

Keywords: Twenty First Century Academic Libraries. Twenty first Century Librarianship. Modernization of Libraries. University and College Libraries in India.

Introduction

The academic, i.e. University and College libraries constitute a significant segment of libraries in India: Libraries of 430 universities of different categories, and 20,000 colleges of various types catering to the study and research needs of around 110 lakh students and 5 lakh teachers. (Figures rounded) These figures grow upward with the turn of every academic year. This progress is spectacular, especially when we compare these figures with those on the eve of our Independence in 1947; 18 universitites and 600 colleges. In the wake of this unprecedented expansion the situation of academic libraries, however, remained varied depending on the patron Institutions they are part of; the Universities they belong to, the States they are located in, and the encouragement and for that matter, lack of it from the clientele they serve. There are, therefore, very good, good and not so good academic libraries in India at present.

Reports of Commissions and Committees

Fortunately, the Education Commission Reports like Radhakrishnan (1948) and Kothari (1964) have recognized the significant role of libraries in higher education and recommended strongly their all round development. Dr. C D Deshmukh and Dr. S R Ranganathan have provided a firm foundation for academic libraries in the form of 1959 (Pub. in 1965) Report of the Library Committee of the UGC. Such Reports are harbingers of all round development of academic libraries. A glaring example of the University of Delhi, which is holding this International Conference, can be cited. The Delhi University Library was officially surveyed by Carl M White, Programme Specialist in Library Administration, the Ford Foundation, and submitted his Report to the then Vice Chancellor, Dr. C D Deshmukh, in 1965. The recommendations in the Report touch on almost all the core and related aspects of such a Premier University Library, located in the capital of the country. The Report kept before other University Libraries in the country a model of a University Library.

M.A. Gelfand’s book, University Libraries For Developing Countries, published in 1965 by UNESCO in its Series: Unesco Manuals for Libraries, needs a special mention here as it throws in many innovative ideas for the development of University Libraries. As the book is specially written for University Libraries in Developing countries like India, it has a great significance in the forward march of University Libraries. Coming from an International body like UNESCO it has certainly influenced the Governments
of developing countries to promote and support the cause of University Libraries.

Development of Academic Libraries
The various library development schemes of the UGC during last over fifty years; ranging from grants for infrastructural facilities along with those for replenishing library collections, launching and implementing various activities and programmes through INFLIBNET to the sanction of special grants for upgrading library facilities, have kept the academic libraries in the country in shape and services. The efforts of national bodies like Association of Indian Universities (AIU), All India Council of Technical Education (AICTE), National Assessment and Accreditation Council (NAAC), and some individual States and Universities too have contributed to this development in terms of formulation of some norms and guidelines for their effective functioning. The Planning Commission, Professional Associations like ILA and IASLIC and State and Central Governments have also their share in this development. City and national level Library Networks too have accelerated the pace of the development of academic libraries in their own ways. The National Knowledge Commission of Govt. of India’s Report on Libraries entitled, “Libraries, Gateways to Knowledge: A Roadmap for Revitalization” published in 2007 also directs the future development of an academic library.

A Modern Academic Library
A perception of a modern academic library in India started emerging notionally from 1931, the year of the publication of Dr. Ranganathan’s revolutionary book, “Five Laws of Library Science”. This book could be aptly called The book of the Millennium in our field due to its immense impact and influence on Libraries and Librarianship.

Quite a few changes were effected since then. The old concept of the book centred librarianship was changed to the reader centred librarianship. New ideas like open access, reference service, library co-operation, documentation and information services were emerged and settled, paving the way of future developments. The old concept of library service limited to a single library has undergone a phenomenal change extending it beyond the four walls of a library.

Ranganathan’s innocuous fourth law, ‘Save the time of Reader’ has assumed new meaning, introducing an idea of instantaneous library service, now seen brought into practice with the help of various manifestations of ICT.

Adoption of Contemporary Technologies
Contemporary technologies like micrography and reprography were adopted by academic libraries for giving value added services. New services like referral besides reference, inter library loan, current awareness service (CAS) and selective dissemination of information (SDI) could be taken up due to these and such other technologies. Around 1965 library science courses qualifying academic library professionals were updated and modified so as to address these changes in the profession. Before the advent of Computer and Communication Technologies and their development into Information and Communication Technology (ICT) in India, the academic library services became both comprehensive and intensive. Though the library collections were print dominant, the non-print material started sneaking into them. Due to inflationary trends the concept of library co-operation was further expanded to resource sharing and library networks. Compilation of Union lists of journals and Union Catalogues of their holdings in different libraries was undertaken by national bodies. Projects of preparing indexes to Periodical Literature were launched and completed the professional contour of the academic library services is thus widened and strengthened for further advancements.

Academic library development is always tied with the development of the Institution it serves. There have been many qualitative changes in the areas of higher education and research during last over five decades. Changes in the pattern of undergraduate and postgraduate education, examination reforms, impetus to vocational and professional education, innovative teaching methods, multi-disciplinary research, faculty improvement programmes, distance mode of education and open universities, IT based education, autonomy granted to educational institutions, collaboration with foreign universities … all these also are changing the context and purposes of College and University libraries in India.

Fifty years ago the issues concerning the College and University libraries were : status and salary scales of academic library staff, system of Professor in Charge of Library, staffing pattern, and sanction and timely disbursement of UGC and Govt. grants. Professional bodies at local and national levels were engaged in settling them in favour of libraries and librarians. Now most of these are stabilised satisfactorily, though some difficulties are experienced in the implementation of the decisions in this behalf.

A 21st Century Academic Library
The new environment obtained by the introduction of information and communication technologies is well described by a phrase, Twenty First Century. All the three important processes of the scholarly world, viz., generation, organization and dissemination of information and knowledge were subject to constant change since 1980s. Medias were changed for recording, preserving and disseminating information and knowledge. Libraries became multi media centres of information resources, leaving behind their dull and drab image of repositories of old dusty books! Materials like microforms, audio and video cassettes and now various electronic products for use both off line and
on line representing born digital and converted digital documents are changing the faces of stack rooms and reading areas. This special type of material needs special equipment of different makes for their effective use. The combine of computer and communication technologies introduced a series of changes in the functioning and services of academic libraries. These changes are so substantial as not to spare any area or process in the library from them. The entire library is, more or less, put on scrutiny for change to avoid repetition and redundancy, time lag and delay in the whole working of the library, by new and novel combinations and linkages possible due to the application of technology. This ICT based phase of library development has resulted into not only extending the access of library users to the documents extensively but also quick retrieval of bibliographical and textual information. The erstwhile concepts of storage, various sections based on the types of the library material, technical processes and reader’s services, work flow, and staffing pattern too are warranting a fresh look. The library management is becoming more integrated than before.

A 21st Century Academic Library is the one which could assimilate these changes to the benefit of all the concerned: the organizers of the Library, the users of different kinds and the library staff.

21st Century Librarianship
Professional literature available on this transitory period of the development of academic libraries in USA and UK well describes the features of the 21st Century Librarianship. The following two documents published by National Professional Associations can be cited in support of this. 1. Redesigning Library Services, A Manifesto, by Michael Buckland, ALA, Chicago, 1992 and 2. The Library in the 21st Century, New Services for the Information Age, by Peter Brophy, Library Association Publishing, London, 2001. The individual University Libraries have drawn modernization or automation plans, and completed them in phases. As for technological advances libraries formed Electronic Networks, joined Consortia and brought them in their libraries. Institutions like ‘Friends of Libraries’, and ‘Alumni Associations’ helped raising funds for modernizing some. Professional bodies like SCONUL in UK and Research Library Group (now merged with OCLC) & ACRL a division of ALA in US played an important role in directing and monitoring these developments. Library staff including student assistants have been trained in applying new technologies to library routines and operations. Library users too were taken into confidence while effecting these changes in libraries. Traditional methods are replaced by new ones without much ado. In the developed countries this change over in academic libraries was possible without any hassles due to external forces like computer literacy and technological applications in different walks of life.

New Five Laws of Library Science
It is interesting to note that modernization of academic libraries initiated from the promulgation of Ranganathan’s Five Laws of Library Science, in 1931 reached a stage well described by New Five laws of Library Science formulated by Michael Gorman, the past President of ALA, along with Walt Crawford in 1995. which have given new meanings to Ranganathan’s Five Laws in the changing situations. They are:

1. Libraries serve humanity.
2. Respect all forms by which knowledge is communicated.
3. Use technology intelligently to enhance service.
4. Protect free access to knowledge, and
5. Honour the past and create the future.

The march of academic libraries and librarianship towards 21st century is well reflected in these.

We have now already entered into the 21st Century, and our concern is how to move towards the 21st Century Academic Library in a real sense. The implied ‘Challenge of Change’, however, can be met only when special efforts are made to incorporate them into practice. It is essential to understand the benefits of the changes in entirety. Blind imitation, false competition or status symbolism are dangerous. Ad hocism too does not lead to the desired goal. Sudden changes breed resistance from within and without. Moreover, it should be remembered that more than 90% of our University and College Libraries, being the products of the last century, carry burden of old traditional methods and procedures. The ACRL published a book in 1997 entitled “Restructuring Academic Libraries; Organizational Development in the wake of Technological Change”. It presents case studies of some select University and College Libraries in US. The Editor of the book, Dr. C A Schwartz describes the situation faced by academic libraries as historical discontinuity; and explains it as “Information Technology in the 1990s is advancing more rapidly than our (Library) profession is prepared to assimilate the changes. Indeed the acceleration of computer networking has shown no respect for traditional organizations or Institutional arrangements in higher education as a whole”. He further cautions that “ill planned radical change would prove costly and unwieldy. All the same prolonged hesitancy, attempting too little too late, would conserve the library’s stability at the expense of its relevance on campus. On a broader plane, if enough libraries averted basic organizational changes, our profession would lose its relevance in the scholarly communication system”. He pleads for boundary spanning in respect of all the vital aspects of an academic library; its organizational set up, its public and technical services. He proclaims that the days of
functioning of an academic library in stark isolation have bygone!

**Features of 21st Century Academic Libraries**

The academic libraries as such are varied in nature, subject areas, and sizes too. One model or road map for moving towards their 21st century versions may not work. However, some issues common to most of them may be specified as **special feature of the 21st Century Libraries**. They are as follows:

1. **Library Softwares**: Organization of an academic library on modern lines, its upgradation and/or automation starts with selection of a suitable library software. It is experienced that proper professional guidance in this behalf is not available to libraries and their authorities. There are four patterns in this regard:

   i) There are a number of cases where the library software is prepared by the Computer Dept./Section of the Institution itself. In this sense it is 'institutional', and all requirements of libraries are not met by them. The libraries have no choice other than going ahead with this ineffective and incomplete library software. Though these library softwares are better than the ones downloaded and used from those freely available on INTERNET they are not improved or upgraded as per growing needs and they are responsible for the non performance of many a new activity.

   ii) The softwares of the Library Networks made available free or at concessional rates to its members. Though the Networks initially do take pains to make them more professional than those of the Institutions, they at times cannot meet adequately customization needs of individual libraries. They also lack the service base and trouble shooting assistance, when needed.

   iii) **Commercial** library softwares are promoted with marketing skills. Though quality of some of them is good they are expensive for smaller libraries. A survey of academic libraries of moderate size in Mumbai reveals a very dismal situation in this behalf. Quite a few libraries had to go in for a new software abandoning the old within a short time for several reasons! Multi-lingual collections, professional procedures, library transactions … are not given proper attention in some. The Annual Maintenance Contracts are quite hefty and their non payments lead to lack of up grades.

   iv) **Open Source** library softwares have entered on the scene of late offering a new alternative. The tag of ‘a free library software’ attracts many small and large libraries to it. For its smooth and uninterrupted use a lot of planning including financial is necessary, in addition to the essential competence of the library staff to operate it on their own.

Library Softwares, in fact, should facilitate both library operations and library services and enhance their scope, periodically. If use of software limits both, it hinders the development of the library. Library software is a one time purchase and it is basic for automation and upgradation. All the concerned should be aware of this. The technological versions as dos based, window based, linux based, web enabled … have their respective merits. They are much related to the computer configuration available and maintained in the library. Due attention should be given to this factor too and avoid future deadlocks!

Library softwares help integrate different tasks of a library saving time and simplifying procedures. Moreover by using certain modules of the software libraries can do many more house keeping tasks like stock verification and generating various reports. Electronic security systems too are integrated with it. The library professionals should get themselves acquainted with these varied potentialities of library softwares and make maximum use of them for the benefit of their clientele.

2. **Retrospective Conversion**: With a view to achieving the visible impact of technological applications the entire collections of the library are required to be brought in their range. Many academic libraries have to struggle for this necessary exercise. The staff on the establishment is not in a position to carry out this work of backlog. ‘Out sourcing’ is a way out. But it is unfortunate that due importance is not given to this work and it is got done hurriedly not following the professional norms. This leaves the library weak in retrieval of the material it has in its stock. A large number of documents in the stock remain hidden from potential users. A common observation is that due attention is not given to the assignment of the subject descriptors which is considered to be one of the core professional skills. Free text search or scores of keywords search result into frustration of users. Meeting subject approach to documents needs professional touch.

3. **Electronic Resources**: These are the digitally born or converted books, journals and other records. Showpieces, a few years ago, are now occupying a prominent place in academic libraries. They do have an edge over the print material in saving space and in easy and quick transfer, both on line and off line. Use of growing number of e books and e journals moves a library towards its 21st Century character. Joining a **Consortia** for increasing the ability of the library to offer its readers an opportunity to browse a wide range of journals is a new version of resource
sharing. The IFLA NET web site gives a long list of electronic products. It is left with the Librarians of academic libraries to take advantage of such products and serve their clients in their studies and research. Library professionals' competency of removing chaff from wheat grants them recognition. As they know standard works in print media they should know standard, authentic, authoritative electronic resources representing individual or group of documents as well as data bases. Linkages and aggregates are special features of the electronic resources. Their knowledge with licence tags is a must for a library professional these days. While going in for electronic resources their perpetual availability on the Library Computer System should be underlined. Due attention should be given to it while signing agreements or MOUs before subscribing to them.

A digital section of the academic library is the first in this direction. It can slowly be developed by providing with the necessary infrastructural facilities in the Library itself. New additions in this section will keep it more used day by day. The new ideas like Institutional Archives can be undertaken with the start of such digital library sections. This encourages to have a dynamic Library Website catering to the campus and outside campus spread clientele remote library services.

4. **Reader Friendly Organizational Pattern:** As Dr. Schwartz pointed out above the organizational pattern of academic libraries needs change. The Library should be run as a Service Organization and not as an administrative office! The present management in most of the libraries is more restrictive than reader friendly. Library timings, library rules and regulations, library facilities … all need a fresh look in the changing environment. Academic libraries are functioning along with other activities of the Institution. If they want to be the integral part of the Institution they have to adjust with other activities as well as to maintain their identity, and their exclusive services. Their role is that of a facilitator of achieving the high goals of these Institutions of Higher Education. As for students they are in the Institutions for a limited period and libraries have to pull them under their valuable influence by catering to their various study and research needs effectively. For researchers Academic Library is an invisible Guide, Friend and Philosopher. Managerial restrictions limiting facilities for no reason harm this image of the Library. Class rooms and library reading places have distinct features. However, the library in its entirety: stack rooms, reading areas, computer installations, service designated sections … should serve as the extension of the class rooms and teachers rooms. For this all necessary gadgets, new equipments, modern facilities in every respect should find place in the Library. The changing organizational pattern implies this.

5. **Transforming Traditional Libraries into the 21st Century ones:** The onus of transforming traditional libraries into the 21st Century ones mainly falls on their librarians. There is a lot of preparatory work to be carried out by the library behind the counter so as to serve readers well. This work is of technical and professional nature. All the work involved like procurement, technical processing, preparing a document for circulation, and actual lending transactions has undergone changes. Publishers' websites, Virtual Book Stores are pouring information of varied nature. Using these resources is a sign of moving with times. INTERNET Resources are at the services of all but librarians can use them as tools for better services to readers. Bibliographical and reference services too can be extended more promptly and precisely. There are quite a few professional websites useful as companions to library professionals. An example of such a web site, "Researching Librarian: web resources helpful for librarians doing research" can be mentioned here. Such professional web sites do assist to know and possess new competencies required for heading a 21st Century academic library.

**Conclusion**

The past history of libraries indicates that libraries have adopted contemporary technologies and moved ahead with times. The present changes are, however, fast and libraries are finding it difficult to keep pace with them. They need financial and administrative support from different agencies to meet the new situation. For transforming our traditional academic libraries into 21st Century libraries worth the nomenclature library professionals need be oriented to the newly emerging areas of the profession. It is encouraging to find individual Universities coming forth to provide library professionals similar opportunities through refresher courses, seminars and workshops.

Michael Gorman, in his book, "Our Enduring Values: Librarianship in the 21st Century", published in 2000 by ALA has analysed well the changing Libraries and the changing library profession. The core functions of Libraries, according to him, have remained the same, viz. collection, organization and dissemination of information and knowledge. The ways to carry them out, however, are undergoing change due to application of ICT. This applies aptly to academic libraries and librarianship too.

**References**