

# ANALYSIS OF LIBRARY SCIENCE AND INFORMATION TECHNOLOGY

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**Abstract:** *The research in LIS in the past was considered primarily to provide a theoretical foundation to professional practice. The roots of research in LIS profession appears to be not very deep. Research in library science during the Twentieth Century in the areas of LIS can be traced to the Library School of the University of Chicago, in mid-1920s. The visionary efforts of the Chicago School bore abundant fruit and offered leadership to the world in library science research (Shera 1976). The pace of library research is picking up everywhere today due to social pressure, as well as, inspiration. In justifying the programme in profession, it has been urged that “if librarianship aspires to become a profession, it should depend upon research to develop its knowledge base and its theoretical framework” (Wilkinson 1983).*

**Keywords:** *library science, library information, technology, library development.*

## INTRODUCTION:

The library is one of the most important units on campus. It facilitates the teaching, research, and extension programs. Every effort is being made to have its own space at a central location with functional structure built on modern architectural principles. All students, teachers, research scientists, administrative personnel, and other campus community depend on the library for their intellectual and information need. The library caters to the requirements of degree program of B.A., B.Sc., B.Com., M.A., M.Sc., M.Com., Ph.D. in different disciplines etc.

## THEORITICAL FRAMEWORK:

The origins of the college libraries can be traced in the early history of our academic institutions of higher learning. By 1800 some of the institutions definitely had libraries, and rest of the colleges, share the distinction of having libraries that antedate their founding. Previously the library as a storehouse of books and the librarian as a guardian of these books still clings as like a millstone round the neck of the college librarian today. Until this old parochial concept of librarianship is completely swept away by the entire goodwill and active support of college faculties, college librarians will continue to work under a distinct handicap in attempting to carry out the objectives of modern college librarianship. It is true that while college librarians unreserved proclaim accessibility and practice open shelves in most college libraries today, the faculty still too often regard the library as a storehouse and the librarian as a bar to the free and easy use of books. Like all human institutions, they had their defects. But nevertheless they made their contribution to the formulation of policies and procedures which are regarded as important today. The informal process operates constantly simply by living in a certain environment, gaining day to day experiences and from mass of folk-culture. But it is inadequate for the modern world. However, the formal system of education in college does not meet the total educational need of

society. Specially, due to explosion of knowledge and with the coming of technology, there is increasing demand for various new educational requirements of today's world. Moreover, the formal system of education in India does not reach out yet to every individual of the society. In colleges students study and read and obtain a rear grip over the respective subjects. This fact has not always been generally recognized, and some comment on the development and significance of the early college library would seem to be in point.

## DETERMINANTS OF COLLEGE LIBRARIES:

The most significant determinant stimulating the educational service of college libraries in the sixties was the work of the private organizations. In 1954 the UGC organized the Advisory Group on Academic Libraries to study the problems of college libraries with a view to selecting certain institutions for special grants. The purpose of the UGC and its advisory groups, while primarily to select institutions for grants where they would do the most good, was also to stimulate careful thinking about the problems of college libraries governing boards, and faculties of the colleges.

## PROCESS OF ADAPTATION:

In considering changes within the college that have affected library service, it is important to keep two facts in mind. First, the college library does not exist as an independent institution in itself. It derives its objectives from the college of which it is a part. If the college library is to be significant, its services, organization, and administration must contribute to the realization of the objectives of the institution it serves. Second, the philosophy and theory of college education which determine college library practices are in a constant process of adaptation. Sooner or later the form, content, and method of education on all its different levels must change in conformity with the new philosophy and theory. Such has happened in the twentieth century, more

especially in the last twenty years. The inferences to be drawn from these two facts for college libraries are so obvious they require no elaboration. Of greater value is a brief examination of the actual changes in educational theory that are affecting the form, content, and method of college education today, and of the implications of these changes for the library. The first essential of the college library is its content. It must have a live, growing collection. It must have the order standard sources in books and journals as well as material of current interest. If the library is limited simply to a small collection of current books, it will not promote the sort of instruction which endeavors to stimulate individual investigation and inquiry. It may have rare books and special collections, but the main collection which students use for class work and individual investigation and study must be kept weeded and up to date. Obsolete as well as little-used older books must not be allowed to clutter up the shelves. The richness and liveness of the collection, however, do not necessarily insure its use. To be effective, the library must serve an institution in which the teaching methods and curriculum are of such a nature as to draw heavily upon library materials. The library staff must be prepared to help in instructing students in the use of the library and in methods of investigation.

#### **NECESSITY REGARDING COMPUTERIZATION:**

Information handling process has developed to the present stage through an evolution that continued thousands of years. The advent of computers has enabled men to collect, collate, integrate, and disseminate information with an efficiency on speed unprecedented in history.

Computer is a general purpose, automatic, stored program, and electronic machine. It uses digital signal for recording and moving data and instruction. It can perform any task that can be carried out systematically, using a precise step by step method.

Among the electronic devices invented by man computer has made a greater impact on the society than another single device. They are so versatile that they have become indispensable to librarians, information-handlers scientists, engineers, teachers students, manager and administrators. They have strengthened man's power in numerical computation and information processing and thereby have increased the effectiveness of organization, especially those, that collect, store and disseminate information.

Information retrieval deals with the representation, storage, organization and accessing of information item. Efficient storage and retrieval of reliable information are of crucial importance to science and technology. The development of information technology has revolutionized the process of information retrieval. The possibility of ready access to information from a single computer terminal stimulated the imagination of research workers in the early seventies. It was this goal and the

fascination of interaction between, man and machine, that inspired the major changes that have taken place in information retrieval. A number of management science application in libraries are concerned with increasing the immediate availability of information, more exhaustively and pin pointedly to the user. The vast magnitude, baffling, complexity and wide scatter of information has always presented very intricate problems.

#### **EXPERIMENTAL SETUP:**

#### **DESCRIPTION OF LIBRARY SERVICES:**

Colleges libraries extend their services to the academic community and provide the following services:

1. Display reading material, selected and acquired for convenient use through a helpful shelf arrangement, systematic classification and cataloguing.
2. Provides reading material through its lending services to the researchers.
3. Makes provision of information services with a view to locate facts and references needed for day to day work and for long range research projects.
4. Guides the readers and explore its resources to the maximum use of library potentiality.
5. Provides bibliographical services in a special field of researches on demand or offer.
6. Elaborate its potential services of inter-library loan.

#### **INFORMATION TECHNOLOGY AND COLLEGE LIBRARIES:**

Information technology has been a talk of today. Every library whether Research, academic, and public are going forward towards applying information technology, not fully but partially or in phases. There are college libraries which have adopted the modern techniques or in phases. There are college libraries which have adopted the modern techniques of automation and their impact has given a shape of a modern library giving CAS and SDI services pin pointedly and exhaustively. Present colleges are research centers and the research scholars need the information available throughout the world and that promptly without wasting any time. It is possible through information technology. There are college libraries which have been computerized and many are on the way of computerization. The future of the libraries is the digital library or paperless library.

The colleges library of Uttar Pradesh are, no doubt working on traditional systems. There are few which have

not adopted even cataloging and classification. But on the other hand there are colleges which have adopted automation project and working on it with the help of UGC and the inflibnet programme. Few colleges have adopted information technology on their own efforts resources.

**SOME ISSUES BECOME MORE EFFECTIVE:**

All of the initiatives which formed were based in an understanding of how the college operated, what the college was trying to achieve and what impact other factors such as structural, staffing and financial changes were likely to have. To this extent, each initiative was situation specific, but there were a number of recurring themes associated with success, several of which were highlighted in the internal and external evaluations of the initiatives. These elements were picked out and explored in the seminars and workshops as potential success factors, where their relevance was usually reinforced from the experience of achieving change described by the participants.

**ENSURING THAT THE BASIC SERVICE CONTINUES:**

An interesting aspect of our work on achievement and impact indicators in the study colleges was the recognition that some college librarians appear to have confused development planning and maintenance planning. Given the amount of work required to keep the library running efficiently and to respond to day-to-day demands it is apparent that any development activity will at best occupy spare capacity and otherwise require some sacrifice of efficiency in less important areas of service maintenance. A regular reaction from libraries when faced with this picture in our workshops and seminars was “We’ll have to learn to say no”.

Unfortunately, saying no runs counter to the ethos of most college librarians, who share a strong commitment to providing services to people and who may also be concerned that refusing to help when asked might close doors to future collaboration. Nevertheless, our exploration of a wide range of initiatives aimed at supporting teaching and learning has convinced us that:

**CLEAR FOCUS FOR DEVELOPMENT IS CRUCIAL:**

Where the initiatives were successful, there had always been clear exposition at the outset of what was being attempted (even if the picture changed over time). This was important because it led to prioritization of development and maintenance activities and enabled college managers and teaching staff to share the vision, support the work and sometimes to adapt it to fit their own aims. The successful initiatives tended to support the contention from the educational literature that innovators should be willing to share or give up ownership of these ideas and to see them reinterpreted by other participants.

The assertion here is that development planning should be based on spare capacity or reassignment of time – at least at the outset. We accept the view (frequently expressed in the educational change literature) that significant educational change is likely to take from three to five years to accomplish. It was notable that in at least colleges, what had started out as ‘spare capacity development’ had gradually transformed the relationship of the library and its staff to the rest of the college to the point that early development had been institutionalized and become part of what was currently being maintained. The development focus had moved on to the next phase of change. Even the smallest college libraries were able to take on some ‘spare capacity’ development; although when there were only one or two staff this might require the library to be closed at advertised times.

**MAINTAINING A DISTINCTION BETWEEN INFORMATION AND KNOWLEDGE:**

Strategic educational planners and managers, from the current Prime Minister downwards, have occasionally slipped into a comfortable assumption that education can be transformed by ensuring increased student access to the Internet and other forms of electronic information by promoting IT training for teachers and students alike. The real issues for educators are about how to help learners to make sense of the available information and to transform it into knowledge; hence the emphasis being placed on information problem-solving skills such as learning skills, library skills and study skills (or in the language of librarians – information skills). Making it easier for students to gain access to information through intranets, extranets, subject-based gateways and other means is only part of the picture: supporting the students so that they can evolve into independent learners in the IT age puts new demands on teachers in shifting to a learning support role and requires librarians to extend and enhance their user-helping repertoire more systematically and to build up their competence in facilitating group learning.

**OPERATING AT STRATEGIC LEVEL:**

One of the college librarians in the case studies, who has now achieved Head of Faculty status, summarized what is required to moreover the library into a strategic position within the college into four concepts: positioning; pro-activity; persistence and patience.

Positioning, in this context, means ensuring library representation on the main curriculum planning committees of the college and seizing any opportunities to get involved in college initiatives and into other areas of curriculum management. One librarian was seconded to a senior management job of planning the accommodation for a multi-site college which was regrouping on one site. Success in this role ensured her continued presence as part of the college senior management team.

Pro-activity is likely to be college-specific, since each college has its own concerns and priorities. A good case

study example of 'strategic pro-activity' involved taking overall responsibility for the college Internet and educational IT programme and making this work so that the college is now a show-case for this type of work.

Persistence was personified in the Librarian visited early in the project who has been ejected from the college curriculum planning committee five times as a result of reorganization or change of Principal, but who was busy maneuvering his way back to the role. More generally, library development is seldom a smooth and painless process, libraries have been able to move forward despite major staff cuts, shifts in college priorities, difficulties over course funding and imposed changes in library manager roles.

Patience largely consists in being ready to wait for the opportunity to become proactive without creating undue resistance by trying to bounce people into change. This usually entails collaborating with other proactive managers on a shared agenda. An independent consultant at one of our seminars characterized the Librarians present as "True believers" and suggested that they did not necessarily make the best advocates, hence the need for patience - or cunning!

#### REFERENCES:

1. Sharma, C.K." Colleges and the Uttar Pradesh: A Survey". International Library Progress, 1997.
2. Stone. "Methods of evaluating reference service". Lib. jour. 67:296-8; Christ "Recording reference work". Col. and research lib. 58, 1992; pp. 27-37.
3. Turock, B.J. "Organisation factors in multitype library networking". Lib. & Inf. Sc. Research. 6(4) p.341-76.
4. University Handbook.
5. UGC." College and University libraries". New Delhi; UGC; p. 21-22 (Chariman ; S.R. Ranganthan)
6. UP University Act and Status.
7. Vishwanath, T. and Jayshri, Raghvan. "MALIBNET, a library network for Madras". Annals of Lib. Sc. & Doc. 41, 1994; pp.1-7.
8. Wahi, P.N." Economic recession and its impact on libraries and their services". ILA procs. 2002; 111-117.
9. Wilson. "Essentials in the training of university librarians." Col. And research lib. 1:17.
10. Wilson and Tauber. "Staff manuals in college and university libraries." Col and research lib. 2 :128.
11. Writson. "The college librarian and the teaching staff". A.L.A. bull. 29:182.
12. Yadav, S.K". Cataloguing and computer networking in libraries". NewDelhi; Shree Publishers., 2004; p.137-149.