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## **Revitalization of College Libraries with Computer Assistance**

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### **1. State of College Libraries**

Availability of relevant up-to-date information is an important factor that contributes to quality and speed of development in every sphere of human activity. Education is mainly transmission of information, which leads to knowledge and hence it is not an exception to the above statement. Availability and utilization in teaching learning process; of up-to-date information on topics dealt in the college is essential to maintain the quality and relevance of college education. Libraries have to collect organize, retrieve and transmit current information to the teachers and students. So library is a complex system in the teaching environment.

Presently our college libraries are not in a position to fulfill this important objective due to various reasons. In a study carried out recently the problems of our college libraries were listed as; lack of good library policy, high rate of unplanned growth, irrelevant collections, poor organization of materials, high cost of collection and storage, unqualified staff, inefficient retrieval systems, diversion or unscientific use of funds etc.

Our college libraries lack reliability in giving teachers and students the information support they require. Despite the wide spread awareness of the need for efficient library and information services to maintain quality of education, libraries remain the most disregarded division in colleges.

Various studies on college libraries of India have pointed that the following factors have contributed to the deterioration of the college library systems.

- ? shift from stress on quality in education to providing facilities to more courses and levels without necessary infrastructure.
- ? deterioration of teaching-learning process.

- ? lack of awareness of the persons who headed the college and other academicians about the need for efficient library and information service to support teaching-learning process.
- ? appointment of persons who lacked sufficient qualification and competence to head the college library.
- ? deterioration of the quality in academic community.

It is against this background that we have plan the quality assurance in higher education. We do not have a base required for providing library services of a minimum required quality. What we are having is large quantum of printed materials mainly irrelevant or obsolete expressing the poor performance in identifying and acquiring them or assessing user's need, and to manage them manpower mainly meant for clerical or store keeping work brought up in a tradition of mere custodianship. Hence a vitalization of library services will require a total reorganization of the system accepting whatever is useful from the existing and discarding the unnecessary as a first step. Whatever the cost, the existing foundation is to be rebuilt with due care to bear a strong and efficient structure to be built upon it. This is to be done at maximum speed and at minimum cost. So rebuilding it on traditional lines when live library systems have incorporated the tools and techniques of information technology is not advisable. So we have to check how far and in what aspects the computer technology can be used by colleges rebuild libraries to enable them to provide efficient information support required for teaching learning process.

Most of the college libraries require a thorough revitalization process. Computers and Library Software offer immense possibilities for improving library systems and services. This paper examines how computers can be used for vitalizing the functioning of different subsystems of the libraries.

## **2. Library Management**

As vitalization process will effect changes in the structure and operation of college libraries; the success of such reorganized library in meeting the needs of teachers and students will rest largely on the shoulders of management. While the implications of the coming changes may not be immediately apparent to the majority of staff it is the responsibility of the manager to make them aware of it and prepare them to meet new challenges. To enable this; firstly Head of the College Library should be capable and prepared to respond to the new environment in an informed

and positive way. Secondly he/she needs to have thorough knowledge of the technologies that can be used to provide improved services to teachers and students. This necessitates following of standards prescribed by UGC in regard to qualification and status in appointment of the college Librarian.

Management Information for the librarian, which has earlier been characterized by disparate sources presented in a variety of incompatible formats, will become a sophisticated and integrated support system if the library is computerized. This will make information on the performance of the library more available to the Librarian and the Principal and will help further planning and programmes for development of services found more relevant to the users. Statistics that will become available in the computer system; on book issue like subject groups, document type, utilization of services etc. will help the review and analysis of library's acquisition policies. It can also help assessing the costs and benefits of introducing new or replacement services together with the implications of withdrawing some earlier ones.

A computerized Library Management Information System can facilitate the following:

- ? accurate and reliable management information,
- ? availability of more sophisticated techniques for review and analysis of collection and services.
- ? quick and effective decision
- ? efficient coordination,
- ? need based further development.

### **3. Collection Development**

Quality of library and information services given in a college depends on the quality of collection that is there in the college library. Even five percent of the collections available in college libraries are not relevant or useful to satisfy the day-to-date requirements of students and teachers. The collections lack popular encyclopedias, dictionaries etc. But consists of thousands of textbooks that have gone out of syllabus in dozens of copies, which were of no interest, or use in the context of information services in a college. Even though these duplication and entry of obsolete material has occurred due to a wrong acquisition policy, the role of the lack of a catalogue or database of available materials and resultant inefficiency of acquisition system in duplicate checking etc cannot be disregarded.

An efficient book acquisition system in a college should collect at the college; information about all new publications on the subject taught in the college; in the pre-acquisition stage. This information should be classified according to subjects and transferred to concerned subject departments for comments. The titles also should be checked with the catalogue or database of the available titles and the current order file in order to ascertain that the items are not available in the library and that they are not already ordered. The acquisition system should also keep full details of vendors, files of subject interests of the colleges and should be able to create purchase orders and chase the vendors with ease.

Using a manual system for acquisition of books will require additional staff, stationeries and completion of the technical processing/ catalogue of the available materials. A computerized acquisition system forming part of automated library can undertake the following functions with speed and efficiency.

- ? preparing a database of available materials
- ? maintaining of accurate and up-to-date record of orders
- ? duplicate checking before placing orders
- ? printing of purchase orders
- ? sending timely reminders
- ? maintaining of up-to-date fund account
- ? maintaining of complete vendor file
- ? preparing of current activity report
- ? preparing vendor performance report
- ? invoice accounting and listing of invoices for audit
- ? economy of staff.

#### **4. Reference Collection and Services**

The collections in college libraries lack sufficient source materials for providing different kinds of reference service that will be essential for supporting postgraduate studies and research. So good reference collection consisting of popular dictionaries, encyclopedias, handbooks, yearbooks etc. needs to be built up in all college libraries. The reference collection of a library is normally built up by the effort and funds of many years. But due to unscientific collection development methods; reference collection as required has not come into existence in any college. The acquisition of materials required for a basic reference collection at one instant will be very costly

and no college can afford that. But if the libraries are getting computerized general reference sources or specialized sources in subjects of interest to the colleges can be acquired for the reference section in non-print mediums at less cost than in print form.

Computerized library can provide all types of reference service with speed and efficiency using printed and electronic sources available in the library as well as accessible to it under various programmes. The Current Awareness Services (CAS) of an automated library can do the following.

- ? review the select publications immediately upon receipt.
- ? select the items of relevance to the teaching and research programmes.
- ? notify the items to the departments to whom they are related or to the teachers who are working on those topics.

A computerized library can provide Selective Dissemination of Information (SDI) service as part of the reference services. Computerized SDI system can construct document profiles, can match them and provide selected information to the user, can assess feedback from users and modify user's profiles if it becomes essential. Such an SDI system can perform the following functions.

- ? continuously watch the documents being admitted into the system.
- ? evaluate the relevance of each document from the point of view of users' interest.
- ? form comprehensive idea of users' requirements.
- ? save users' search time.
- ? prepare individual notifications
- ? continuously interact with users through feedbacks.

## **5. Classification and Cataloguing**

Computers can support and supplement classification systems and make information search easier and efficient. In a service library books and other documents in its collection requires to be classified and arranged according to a standard scheme. It is a preliminary requirement for locating a book or books on a given subject asked for by the teachers or students. But in most colleges the books in the collection remain unclassified. With support of computers and electronic versions of classification

schemes this work can be completed within a very short period. Classification system using the computers can help the classificationist to:

- ? select isolate terms and group them and arrange them in their hierarchical sequence.
- ? synthesize the class number
- ? save time avoiding the referring of the schedules of classification scheme
- ? Improve accuracy and speed in classification.

Books in most of the college libraries remain un catalogued. Cataloguing them is essential to know what book is available in the college and where. Only if a complete catalogue of books is available the library can satisfy the various approaches through which teachers and students seek books. To utilize the book fund effectively by avoiding duplication and acquiring materials related to the subject gaps in the library a catalogue is unavoidable. Without a catalogue that could satisfy author, title and subject enquiries; tracing out a book asked for will be impossible and the collection will remain unused.

Preparing a complete catalogue of available materials within a time limit is essential to make every available book easily accessible to teachers and students. Using manual methods may take years and huge quantum of labor to complete the work. The work can be automatically cleared at less cost and time.

Classified catalogue can be generated and maintained using computers and this can be used for online information search. Computerized indexes can be maintained as a retrieval tool to provide various access points through which the user can identify the document of his interest. A computerized cataloguing system can facilitate the following:

- ? efficiency and speed in cataloguing
- ? economy of staff and services
- ? improved updating of the catalogue
- ? variety of outputs
- ? more bibliographical details and depth of subject cataloguing.
- ? multiple online access to very large files from remote locations.
- ? improved information accessibility through increased access points.
- ? speed in locating and retrieving information.
- ? search of items by combination of index terms.

## **6. Lending Services**

Most of the colleges use Register System for issue of books. Issue records of live users of a time run through hundreds of volumes of issue registers in colleges. For charging and discharging, sending timely reminders for books that are due from users, and for preparing annual dues reports, huge quantum of stationeries, staff time and resources becomes essential. Systems like Browne or Newark etc are not advisable in college libraries which have to serve thousands of students. Considering the limited staff and resources that will be available to colleges automated circulation system will be more cost effective and efficient.

A computerized circulation system can do charging, discharging, overdue control, reservation and associated file maintenance activities. It can generate annual dues reports of teachers and students for which if done manually college library staff had to devote much of their time and effort. A computerized circulation system can provide the following information.

- ? a document if not available in the library is issued to whom.
- ? documents issued to a group.
- ? documents due on a particular date.
- ? details of the users.
- ? facility for reservation

## **7. Periodicals Management**

The colleges use registers for recording the receipt of periodicals. There is no foolproof system for watching the receipt of all issues, sending reminders for issues not received etc. A system that can efficiently control the recording of receipt of journal issues, sending reminders for issues not received, renew subscription in time, and maintain details of completed volumes sent for binding etc. is essential. A computerized serials management system can undertake the following functions.

- ? provide accurate and up-to-date record of subscription and holdings
- ? print subscription renewal and reminder letters.
- ? maintain complete supplier file, and give supplier performance notice.

If library is using computers an index of journal articles also can be prepared and maintained in regard to the items of which back volumes are kept bound.

## **8. Hardware and Software Requirement**

For library automation or for using computers to revitalize library services firstly the colleges have to acquire and install required computers and software. This is a one time investment only. The systems can be used to clear all the pending technical and other works. The same systems after completing the arrear works can be used to automate the day to day functions and services of the library as well as to offer new and innovative services.

All college library will require at least five computers for Library automation. Even with one system the work can be started and additional systems can be acquired subject to availability of the funds. The author recommends a Pentium computer with minimum 40 GB HDD, 256 MB RAM, CD Writer, 15" Color monitor, speaker, 54 kbps modem and other standard accessories. Software required will be Windows 95 or its later versions, MS Office, and library application packages. If more systems are used Windows NT software for networking them is to be acquired. If cataloguing work only is to be done at the first instance CDS/ISIS package developed by UNESCO can be used. Data from this can be exported to other integrated packages which libraries decide to use later. From the catalogue database prepared using CDS/ISIS other similar packages stock registers also can be printed. If other library housekeeping operations are also to be automated library packages from various commercial and government agencies are to be considered and one apt for the system is to be selected. UGC's INFLIBNET has developed an integrated package named ILMS. Then there are packages from private agencies like Alice for Windows, Libsys, etc. Software packages for various specialized services like Procite, Reference manager etc are also available. A classification scheme available in electronic form also can be acquired. It is better that UGC or The Government Department that manages colleges prescribe some standards in regard to computer hardware, software and other library application packages to be used by colleges.

## **9. Advantages of Computerization**

College libraries require a total reorganization and need based further development if they are to provide any kind of information services required for teaching learning process. All essential subsystems of college libraries should be reformed. Any lacking subsystem should be established and their function should be clearly defined. All the



arrears of technical processing works require to be cleared off within a fixed time span. Only after that the library services will become reliable and efficient.

A study by the author on comparison of cost for revitalizing library services using manual and automated systems has shown that approximately 33% benefit can be derived when using computers in various functions for clearing pending technical works and improving the system. In some functions savings up to 80% is possible when using automated methods.

In the existing college environment; with available finances and limitations the manual system will never complete the pending works or achieve the goals of the college library and could never extract even the minimum utility of materials already collected.

Many studies on college libraries of India reveal financial constraints as the main reason for the colleges for not improving the library facilities. But whatever is allocated for library development goes waste due to the lack of qualified and competent library staff, and standards and policies in regard to collection development, services etc.

Recently the expert bodies especially the latest one, Expert Committee on College Libraries constituted by Government of Kerala with Sri V.P. Joy as Convener has identified most of the problems and suggested measures for rectifying them. College libraries will be forced to undergo revolutionary reforms if they are to be of any use to teaching learning process or bring any returns for the huge amount spent on them.

If college libraries are improved using computers they will get required computer systems, which can be used for automating all library operations and services without any extra cost. This computer system will give the library the following advantages.

- ? library will be able to build up the required basic collection it lacks in non-print materials like CD-ROMs etc. immediately and at one fourth cost than otherwise required.
- ? all pending technical processing works like classification, cataloging etc. can be cleared within a short span of time with maximum cost effectiveness.

- ? Collections worth crores of rupees remaining dead due to the poor organization of materials will get organized for use and will start to give its full utility.
- ? as complete catalogue of already acquired materials will be available in computerized database, utilization of book fund more effectively by avoiding duplication, filling in subject gaps etc. will become possible
- ? sharing of available materials between different departments of the colleges will become possible which could avoid duplication of costly reference materials.
- ? information services in the colleges will become speedy and efficient and much time of staff and users will be saved.
- ? operation cost for classifying, cataloguing, indexing etc. will be highly reduced.
- ? all library records will become standardized.
- ? circulation, stock verification etc. will become speedy and fool- proof.
- ? many new services can be introduced without any extra cost or manpower and many services and records can be generated as a byproduct of the records already available.
- ? present staff insufficiency in colleges can be overcome to a large extent.
- ? increased productivity in terms of both work as well as service will become possible and it will make the library a live organ supporting the teaching-learning process in the college.
- ? by computerizing the library the college can join the information and library networks like INFLIBNET organized by UGC, which could enable teachers and students of the colleges to use the information resources and services of organizations worldwide as well as of library consortia.

The use of computers in libraries is becoming a significant factor in the evolution of library vitalization programmes. Not only could computers in college libraries save a great amount of time of teachers and students, but also the records that they search with computers may be more accessible than the records manually accessed. Campus wide networks can be established in colleges and computers can be kept at each department. The system can also let the users see by themselves whether the document they search is available or checked out.

Students and teachers can access the OPAC catalogues through workstations located throughout the college, i.e., in all teaching departments, waiting rooms etc.

connected to the network. Computer system can perform bibliographic searches more quickly and conveniently than is possible with traditional systems consequently saving time.

### **9.1 Contribution to Quality Improvement**

Effects of computerizing college library will be felt mainly at three levels, firstly in the way in which library delivers information and secondly in modes of preparation of lectures by teachers and thirdly in the methods of learning by students. In addition there will be other influences on a more general level which will affect the relationship between the college library and the teachers and students receiving and assimilating information. One of the chief characteristic of existing teaching - learning system is non availability of sufficient relevant up to date information and the restricted access. With computerization college libraries will get a fitting and effective organization aimed at the information needs of teachers and students. If true role of libraries in colleges can be fully appreciated by academic administrations and due attention is paid to develop libraries accordingly they can provide the colleges with a powerful tool for the development of better teaching-learning environment. The huge amount that goes for maintaining higher education systems will give maximum returns of required quality. So Library Computer Systems (LCS) are forming part of all higher education institutions. Remaining out of the band wagon will be at the cost of the utility of money spent for higher education systems and also quality and speed of our progress.

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