QUALITY IN LIBRARIES

Seminar Papers
Thirty-Second All India Library Conference
S. K. University, Anantpur : January 3-6, 1987

Edited by
C P Vashishth

INDIAN LIBRARY ASSOCIATION
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FOREWORD

In a phase of accelerated development to improve living condition of people, vast expansion of our socio-economic base has been taking place, by creating new facilities, infrastructures, services, institutions, enterprises, etc as well as by strengthening and improving the existing ones. Perhaps, in our keenness to carry out massive efforts and to achieve quick results, we have not been that particular to devote attention to aspects like productivity and quality. These deficiencies have come up to the fore now as factors responsible for our falling short in terms of international standards. The government, at the present time, is, therefore, laying a great emphasis on the twin aspects of productivity and quality in all our national endeavours. There is an urge now to bestow conscious attempts to improve quality at every level, so that the country as a whole is recognised for high standards and excellence.

Quality factor is equally relevant to libraries and library services. There has been a considerable progress in library development in the country since independence. By and large, libraries which are mostly in government sector or government-aided, do get support and facilities to be able to serve user community appropriately. It is well known that Library Science as such in our country is sound, thanks to the impact of Ranganathan's contributions. But why then an impression is let loose that library services in our country are not up to the desired standard? There are familiar utterences by some sections of users that they find pleasure in visiting and using libraries abroad because of excellent services and that they do not get the same charm when they have to use libraries in our country. While we may not have to accept such pronouncements straightaway, it is worthwhile to reflect on them to see how library profession can find ways and means to improve performance, focussing attention on actual delivery of services than anything else incidental and less important than them. Surely, there should be scope to aim at a better quality in our library management and services in order to enhance user satisfaction.

Quality is a determining factor in performance of libraries. Performance is measured in terms of highest return and user satisfaction. A library which is known for quality in respect of resources, facilities,

organisation and services commands respect of user community and is made fullest use of. To put simply, quality pays. It pays among user community because credibility of the library has been established. It pays in running the library because productivity is increased. Quality is, therefore, one of the prime concerns of management. Quality is not to be construed as merely something relating to removal of defects. It is also not something related to any single library function. Quality must be an organic part of management and should embrace all activities of library system, from building resources to delivery of service to users. It should produce a wholesome image of the library itself.

Our libraries need quality improvement as a continuous feature. We do not seem to be making any conscious effort in this regard, though some elements contributing to quality control might be present in our library management practices. Parallel to vigorous campaign going on in the country to promote quality awareness in other spheres, the Indian Library Association had felt that library profession is also required to be sensitised on the need and importance of quality factor in library management and services. In view of great significance and topical interest, the Indian Library Association had selected this theme for the XXXII All India Library Conference (1986/87)

It is gratifying that the theme 'Quality in Libraries' has had a wide appeal among library professionals in the country as is evident from as many as 49 papers received for presentation at the Conference. The papers cover every important aspect for discussing the subject in the Conference in entirety. As has been ILA's usual practice, the papers have been published in this pre-conference volume to facilitate meaningful discussion of the subject in the Conference.

Indian librarianship is privileged to have 'Five Laws of Library Science' as a philosophical basis for qualitative management of libraries. It is, therefore, understandable that there are more number of papers on the significance of Five Laws on quality improvement in libraries. Design of libraries which is to be based on use and demand criteria and conforming to design in operational management of libraries have implications on quality factor and there have been some interesting papers on these aspects. Resources of libraries, in terms of reading material and other facilities are determining factors for effectiveness and usefulness of libraries. This aspect has been dealt with quite comprehensively by as many as 14 papers. Service aspect is paramount in libraries. The principal concern of libraries should be delivery of service to users in a manner which should command respect as institutions of utility and support. There have been a number of good papers on this subject. Personnel factor is crucial for successful functioning of libraries. By and large, performance of libraries is dependent upon quality of personnel manning them. This area is also covered by a few papers,

which describe experiences in education and training as well as in personnel management.

In a pre-conference volume like this, which carries articles on diverse aspects written by a multitude of authors, some heterogenous and non-uniform presentation becomes inevitable. Nonetheless, the volume, as a whole, is a useful contribution, carrying ideas and experiences on the important topic of quality in libraries, which has considerable significance and relevance in today's context, for a better organisation and management of our libraries. It is hoped that the material contained in the volume would stimulate interest amng library professionals on quality improvement in libraries.

T S RAJAGOPALAN
President, ILA

1 December 1986

PREFACE

The library profession in India is three generations old. From simple 'Library Craft' in 1915 it has now been developed into a full-fledged discipline of 'Library and Information Science'. It now enjoys the status of a professional subject in as many as 55 universities and institutions of higher learning. A large number of our professionals are working in foreign countries and also serving in international organisations. The contributions of Dr Ranganathan have been recognised the world over and quite a few foreign students each year prefer to study in Indian Library Schools. The profession has got recognition and two of its members have been honoured with the award of 'Padmashree' by the Government of India for their 'outstanding' contributions in the field of 'Librarianship' and 'Library Science'. Through the efforts of our founding fathers the University Grants Commission has accorded the academic status to librarians. But barring a few states this decision of the U G C has not been implemented for various reasons. Many a times 'The men who matter' have reservations about the performance of 'Library and Information Centre' of the organisation. They fully know the value of 'information' and also the role of 'book' in the nation building but when it comes to information personnel they turn a deaf ear. Sufficient financial provision for various proposals is not made, with the result the whole drive and initiative taken by the library and informational personnel suffers a setback. Even the latest document *National Education Policy-1986*: *Programme of Action* is silent about the 'library personnel' component.

It is true that 'Quality in Library' can only be brought by 'Quality Personnel'. The government and other funding agencies should give due consideration to the opinions expressed by the members of the profession from various forums. At the same time we too need to improve our performance, bring excellence in our functioning and add the element of 'Quality in Service'. We have to constantly review our methods, techniques, procedures, standards, norms, services and products to meet the new demands which are being put because of changed situation and environment. Traditional systems and services will have to be overhauled to fit in the scheme of new things and the automation of various library

operations. Proper mechanism will have to be developed to get the feedback from the user community so as to effect necessary changes in the policy frame of acquisition, processing, repackaging, organisation, storing, retrieval and dissemination of information. These are some of the issues which have engaged the attention of the contributors of the papers included in the volume. It is hoped that these will generate interesting discussion and the seminar will be able to frame resolutions which will have far reaching implications in bringing 'Quality in Libraries'.

Delhi
December 20, 1986

C P VASHISHTH

INTRODUCTORY REMARKS

0 INTRODUCTION

The theme of the seminar, 'Quality in Libraries' although couched in just three words, is an all pervasive one covering the entire gamut of library activities. There is nothing that we do or should do in a library that does not have a bearing on this theme. The planning and designing of the physical plant of a library, building-up the book collection, organising the collection and the services rendered have all to be geared to the improvement of quality.

All the topics which we had been discussing at conferences, seminars and other forums in the past had relevance to this topic. Indeed, they were essential components of this theme. But this is perhaps the first time that the subject is sought to be discussed in its totality and it is appropriate that this is being done when many revolutionary and far reaching developments are taking place in our field. However, it is not practicable to discuss all aspects of the topic because, as already mentioned, there is nothing that does not fall within its purview. Therefore, the discussion has necessarily to be confined to the major areas identified for special attention of the members of the profession for improvement of quality. These are the areas demarcated by the organisers of the Seminar on which papers have been received for discussion here.

1 COLLECTIVE RESPONSIBILITY

It is the collective responsibility of the library management, staff and the clientele to work for excellence of library work and service. The necessary infrastructure for promoting quality in terms of adequate financial support by the management, development of library resources, their sound technical organisation and organisation of services by the staff and the use of these services by the clientele has to be ensured. However, even in the most congenial environment, the ideal conditions for a library to function maintaining a high standard of quality would be difficult to create. We are all experiencing various constraints in providing these conditions. There is no library that can boast of adequate financial

resources. The physical plant of the library will be found wanting in many respects. The lack of adequate financial support makes it difficult for a quality book collection to be built up and for modern services to be organised and rendered. The staff provision would be unsatisfactory both in the qualitative and quantitative sense. While it must be our endeavour to get these deficiencies hindering quality rectified, they will continue to be realities that we will have to be reconciled to and learn to live with. Therefore, our attention in any exercise of exploring ways and means of improving quality in libraries should also be directed towards finding out what we can do in this direction within the present constraints.

2 SESSION OF INTROSPECTION

It is in this context that I consider this seminar more as a session of introspection for all of us. This is an opportunity for us to examine ourselves and ask ourselves the question whether we are doing our best under the given conditions. This must also be a frank and open exercise to identify our deficiencies and finding out where we have been wanting. The questions that we have to ask ourselves are:

(i) Are we fully involved in our work with a proper insight into the needs of the clientele whom we are expected to serve ?
(ii) Are we responding to their needs to the maximum extent permitted by the conditions in which we work ?
(iii) Are we making a sincere effort to keep ourselves abreast of the developments in our field and trying to apply some of them at least in our libraries ?
(iv) Is our attitude to our management and clientele such as to instil confidence in them ?
(v) Have we been successful in projecting a picture of library service as anything more than the traditional book lending service ?
(vi) Are we projecting a united healthy image of our profession to the public ?

To me it appears that these and such other questions represent the most important points that should engage our attention when we think of improving quality in libraries.

We would be less than frank if we hold the view that there is nothing left to be desired in these respects. I am sure that all of us would agree that there is a lot of scope for improvement on our part as far as these matters are concerned. It is only if the library profession functions as an understanding and cohesive team exhibiting excellent team spirit in our work that we will be able to project a healthy image of the profession

and render the types of services expected of us for the overall development of the society. The survival of our profession as one needed by the society would also depend on this.

3 THE CLIENTELE

I have also referred to the use of the services of a library by the clientele as an important element in the infrastructure to be provided for ensuring quality in libraries. In this respect also we are in an unenviable position as far as the large majority of libraries are concerned. One prominent dark spot in our library scene is the absence of a demanding clientele. This is because of the persistence of the tradition of class room-centered education in our country at all levels with the library playing only a marginal role, if at all. In this situation most of our students and teachers and the educated public do not make as extensive a use of the libraries as their counterparts in the advanced countries. This absence of or low demand for library service has a stifling effect on the enthusiasm of many of the young members of our profession with the result that over a period of time their professional competence declines. The professional development of a librarian takes place in the process of his responding to the demands of the clientele. This is the reason why the personnel working in research libraries and to some extent in university libraries are able to develop professionally on the jobs, while librarians working in isolated college and public libraries with no access to professional literature, no colleagues to interact with and no clientele to make demands for modern services, decline professionally.

What can be done to prevent the professional decline of this kind of a large number of our colleagues ? Of course, there are continuing education programmes available in the country in increasing measure. But these programmes would be of no avail if the participants who undergo them find themselves without the opportunities for applying what they have learned, in the practical field. This is a situation to the correction of which the profession should address itself in all seriousness. This can be done at several levels, but the most important, I think, is to work for the moulding of a library conscious and library using community of people. The most essential step to be taken in this direction is to persuade the authorities to pay greater importance to library use by students at all levels of education especially in the schools. If the students are initiated into the reading habit and if they are made to feel that they have necessarily to depend on and use the books in their libraries extensively in their academic preparation, it will be possible to develop in them what may be called a library culture. Such library culture is the most important prerequisite for libraries to be well organised and run. Quality in libraries is a necessary corollary that would follow from this.

The library profession has also the responsibility of organising suitable public relations work to create enthusiasm in the people about the libraries and to make them aware of their importance. Librarians in an area should periodically meet and chalk out programmes for such promotional work.

Another effort that we can put in to create demand for library service in an environment of the absence of demand, is by supplying the service. The theory of supply and demand is as valid in the case of services as in the case of commodities and products. It is often due to the lack of awareness of services that there is no demand for them. If a service is once rendered and the people are given an opportunity to taste its benefits, there is sure to be more demand for it and also for other services. Ranganathan's advocacy for aggressive library service assumes great significacne in this context. It will set in motion a healthy cycle of supply and demand contributing to quality in all respects.

4 KNOWLEDGEABILITY OF STAFF

I have referred earlier to the need for librarians to instil confidence in the mangement as well as in the clientele. This has to be through their knowledgeability and understanding attitude and behaviour. The librarian has to be knowledgeable not only in terms of his professional expertise and competence, but also in terms of his grasp of the subject field under his charge. We should never lose sight of the fact that our domain is the universe of knowledge or a branch or a few branches of it. It may not be that in the beginning we would be well versed in that subject. Indeed, in the present context of high specialisation of research and the consequent atomisation of knowledge, it is difficult to find a person who combines professional expertise with subject knowledge. But if the librarian is to be true to his profession and take his responsibilities seriously, he must endeavour, in the course of his career, to pick up sufficient knowledge of the subject field concerned, in order to be able to organise library services intelligently and with a proper insight into the needs of his clientele. In other words, he must become a part of his environment and be in perfect tune with it. If, when a reader approaches the librarian for materials on a subject he is working on, he evinces a sense of awareness of the subject and is able to direct him to suitable sources, the confidence of the reader in the librarian is enhanced. If, on the other hand, he displays total ignorance of the subject, the confidence of the reader will be shattered. It is not difficult for the library staff to pick up sufficient knowledge of a subject field in the course of their work as evidenced by the fact that there are many instances of librarians with social science and humanities background performing extremely well within science libraries and vice versa.

5 PROFESSIONAL UNITY

It is also necessary that we project a united and strong image of our profession. This, unfortunately, is not the case at present. We very often present a picture more of division and conflict than of unity and cohesion. Why this should be so, is difficult to understand. It is not that this phenomenon does not exist in other professions. But it seems to be more pronounced in ours. True, when a group of people work together there are bound to be differences of opinion. But we should learn the art of resolving these differences through mutual discussion. We should develop an attitude of live and let live in respect of our relations with each other. This should not be difficult if all of us are animated by the goal of improving quality and sincerely pursue that goal.

6 CONCLUSION

It is through the collective and concerted efforts of all concerned that it will be possible to get the library accepted by the society as an important institution indispensible for its progress. If that acceptance of the importance of the library by the society can be ensured, there will be steady improvement of quality in libraries in all respects.

The recommendations emanating from our Seminars are usually addressed to agencies outside our profession such as the Central and State governments, University Grants Commission and others who are responsible for providing library service. But most of the recommendations that would emerge from this Seminar, I think, should be addressed to ourselves, for, among all the parties who can contribute to the raising of quality in libraries, we are the most crucial and important.

Professor K A ISAAC
Director of the Seminar

6 December 198

AN INTERPRETATION OF THE FIVE LAWS OF LIBRARY SCIENCE IN INFORMATION SCIENCE

M ANURADHA*
G SURYA RAO**

1 GENESIS OF THE FIVE LAWS OF LIBRARY SCIENCE

In 1928, Professor S R Ranganathan formulated the *Five Laws of Library Science*. He could arrive at these principles on the basis of his observations of the working libraries within and outside the country, and his experiences and experiments which he could conduct as a working librarian in the Madras University Library. He collected all possible inferences of these laws and found that the observed library practices were part of them. He finally enunciated them in 1931 in the form of a book entitled *Five Laws of Library Science.*

Ranganathan called these Five Laws as normative principles because in the light of these Laws it is possible to decide whether a particular process or a practice in library service is helpful or unhelpful. These Laws contain a philosophy of librarianship that harmonizes with the concept of service to increase the utility of graphic records for the benefit of society. Thus the Five Laws of Library Science are found to be useful in providing logical interpretation of the present and future library practices and services.

Later, when Ranganathan was growing as a librarian, he was able to see that the generic word 'book' could better be replaced by the word 'document' in order to meet the new trends of library services. Realising the suitability of the word 'document' over the 'book', he modified the laws.

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In essence the modification is only the replacement of the word 'document' in place of 'book'. In fact both the 'book' and the 'document' are physical forms and both contain information. Therefore, when the terms 'books' or 'documents' are used, one obviously implies information contained in these physical forms.

2 THE NORMATIVE PRINCIPLES OF INFORMATION SCIENCE

The stage has now come when the traditional type of library with its outdated services is fast becoming obsolete as it is unable to cope with the increasing mass of knowledge in the shape of books and other non-book materials. Consequently, the concept of librarianship has changed into information science, the library services into information services. Machines, computers and various other electronic gadgets have already been introduced in the process of storage and dissemination of information. In the light of these changes, the Laws of Library Science conceived by Professor Ranganathan could perhaps best be enumerated as Normative Principles of Information Science in the following way:

Information is for use;
Every user his information;
Every information its user;
Save the time of the information user; and
Information Centres are growing organisms.

3 INFORMATION : ITS ROLE AND SERVICES

The increasing complexity of present day culture with the spread of literacy increases the dependence upon graphic records which further intensifies the role of library with respect to information. Therefore, the role of libraries, whatever be their type, as centres of information sources is more important today than it has ever been before. Today a public library is considered as an essential element in the life of a community; an academic library is an integral part of an educational institution; and a special or technical library is indispensable in a government department, research institution, business or industrial organisation. The trend for developing these libraries, documentation centres, or any other kind of information centres has increased at present, primarily because information resources in any country are now recognised as important as other resources such as energy and minerals. The acquisition, organisation and dissemination of these information resources provide an essential basis for the socio-economic development of a nation as a whole, which is the aim of any nation.

Two important events that have been now taking place in the information field are the 'information explosion' and the 'inter-disciplinary research'. These have created new demands on the services to be provided by the libraries, documentation centres and other types of information centres. In order to meet these varied, changing and complex demands of the different user groups like the scientists, scholars, decision makers, planners, and even laymen, different techniques and services such as 'Selective Dissemination of Information' (SDI), 'Current Awareness Service' (CAS), 'Translation Services,' 'Reprographic Services', 'Inter-library Lending' etc, have been developed so as to provide the users the required information exhaustively, efficiently, and effectively, as well as in a form which would best serve their purpose. Computers and various other electronic devices are being introduced in place of the traditional library tools in many information centres so as to make the process of information storage and retrieval all the more easier, effective and efficient.

4 INFORMATION SERVICES AND THE NORMATIVE PRINCIPLES

The validity of the Five Laws of Library Science formulated by Ranganathan can be established in their modified form of the Five Normative Principles of Information Science, in the present day context of new dimentions of information field as described above and thereby indicate their implications.

The Five Normative Principles of Information Science indicate that the information provision is supreme and it is the ultimate function of any information centre. All its other activities such as acquisition, processing and preserving the documents which imply information are only the means to make the information provision possible and effective. This aspect is the implication of the first principle with its goal as promotion of use of information.

Information services which provide information needed by the user must be relevant, precise, and timely. Various services as already stated like the CAS, SDI etc, are all efforts towards the fulfilment of the implications of Second, Third and the Fourth Principles of the Information Science. These principles have specified the conditions to be satisfied to meet the requirements of 'use of information.'

The Fifth Law 'Information centres are growing organisms' relates to various factors responsible for the information explosion and the use of information and therefore for the growth of information centres. It suggests for a broad framework of the information system as a whole.

5 IMPLICATIONS AND OBLIGATIONS OF THE NORMATIVE PRINCIPLES

These principles contain certain implications in the procedures, concepts and practices of information centres and their realisation imposes certain obligations to be fulfilled. The implications have reference to the physical aspects of the information centres, their document content which involve information storage, and their services for the dissemination of information. The aim of all these implications is to provide information to the users.

The realisation of these implications necessitates to undertake certain obligations. These obligations relate to the organisation of network of information systems with proper coordination, provision of adequate resources with competent personnel willing to discharge their functions in the most efficient manner.

6 IMPACT OF THE FIVE PRINCIPLES

The Five Principles of Information Science have their impact upon the organisation, administration, and services of information centres like the libraries, documentation centres ever since they were first formulated as the *Five Laws of Library Science.* These laws have led to the establishment of a good number of libraries in our country. Some of the states have enacted library laws so as to establish public libraries freely to provide uniform library services. The influence of these laws has also particular relevance to the libraries, documentation centres, and other types of information centres in the industrial and business organisations, Government departments, the R & D research institutions, universities etc, in the country which have been showing a considerable progress in meeting the demands of their users.

7 CONCLUSION

Though a significant progress has been achieved in the provision of qualitative informational services in the country, there is still much more to be achieved in this direction fully respecting the ideals expressed by the Five Laws. Even now many libraries stick to the traditional methods in their practices and procedures. In the case of many university libraries the situation is the same. Though they are able to enrich their resources, there is no significant progress in their services as expected of them. The traditional methods and tools are, therefore, to be modified and improved upon to cope with the emergent problem of information explosion and the increasing demands for information. In the field of public libraries, the country has not yet passed central library legislation. Out of 23 states

only five states have passed library legislation. It is, therefore, high time for the Central as well as the other State Governments to pass library legislation for the establishment of a net-work of libraries on sound footings so that they can provide qualitative information needed at all levels for the nation's progress.

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FIVE LAWS : FOUNDATIONS FOR QUALITY SERVICE

K NAVALANI*
M S SIDHU**

0 INTRODUCTION

Dr Ranganathan has earned the title of 'Father of Library Science in India'. His contributions are internationally acknowledged and have won him many honours, citations, and awards. The International Conference on Ranganathan's Philosophy : Assessment, Impact and Relevance held in November, 1985 in New Delhi is a proof of his world-wide recognition and renown. It devoted almost a full session to 'Five Laws of Library Science'. A cursory look at the papers contributed in the Conference[1], indicates that they treated them more as philosophy than as a measuring rod of performance of libraries. It is very appropriate, therefore, that the ILA has thought of the topic 'Significance of Five Laws in quality improvement in libraries' for inclusion in the present Seminar.

For evaluation purpose, criterion is of utmost importance to clearly indicate the difference between effective and ineffective systems. The measuring tools should be easy to apply and realistic in terms of present and future situations. They should be relevant, reliable and valid. Further, they should be acceptable to the profession and authorities.

Before we discuss the criterion for measuring the 'quality in library' let us see what we desire from the library as an institution. To quote McGarry, "The library is concerned with people as creators and users of information, the ways in which information is stored and disseminated, and the complex and changing relationship between society and its store of recorded thought."[2] In the opinion of Lancaster the library has served its function adequately, if it has a supply of good, readable and up-

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to-date books on a subject.[8] Hence the quality of library can be "evaluated in terms of whether or not it is able to provide the materials sought by users at the time they are needed. What the user subsequently does with these materials is completely outside the librarian's control."[4]

"Dr Ranganathan is the greatest library author who has contributed greatest numbers of books on almost all the subjects on librarianship"[5] says Anis Khurshid. Five Laws of Library Science are central to various principles which are propounded in his works. "The disjointed way in which he found various library activities being performed separate from each other, are now interlinked, through his principles, to achieve the ultimate goal"[6] of the library. And they embrace "the entire role of the library in society in a fashion more systematic than any hitherto attempted."[7] To quote Prof Atherton, "They offer . . . the guidance and the rationale we need . . . when we critically review how we evaluate the libraries we use, visit, or work in, and how we work to improve the practices we follow and the library services we manage."[9] Lancaster considers these laws as major criteria by which one can evaluate the effectiveness of a library.[10] Wells feels that "standing on the four square on the remarkable work of this remarkable man and with aid of new technology, we now see the possibility of adequately assessing for the first time, the relative values of all parts that go to make up a total subject retrieval system."[11] The Five Laws state the goals and the ways of storing, organising, coding and disseminating messages in recorded materials in a traditional library. They help in quality improvement in library service. Do they hold good for this purpose in the face of fast changing environment ? Let us discuss each Law from the traditional and modern angles for measuring and improving the quality in the library and information services at macro and micro levels.

1 BOOKS ARE FOR USE

It is the touchstone for measuring quality of ibrary/information centre. It implies that books/documents/information are not for storage purpose only. We should evaluate the library and information system not because it has a big collection, or a big or instant storage capacity in computer. It is an input of the system. The quality depends on the output or effectively it interfaces with the user. The book/document/information should be accessible and available for use.

The message of the Law as enunciated in his book is to break the barriers to accessibility and availability of the books by choosing location of the library on shop analogy, keeping open the library for longer hours, making the furniture of the library comfortable, opting for open access, appointing well qualified staff with proper status, in optimum number and cultivating the attitude for service in the staff.

In the present information age, the Law pleads for removal of all types of restrictions in the use of information, viz physical environment, education, censorship, language, distance (through telecommunications), economic and technological disparities, ignorance (dialogue between experts and the common man), etc. It advocates for Universal Bibliographical Control (UBC) and Universal Availability of Publications (UAP).

2 EVERY READER HIS BOOK

This has brought basic change in the evaluation basis of libraries. Earlier the librarians and the libraries used to assume or imagine the requirements of the users. They did not attach importance to individuals. They had compiled Standard Lists of Collections, Lists of Subject Headings and introduced other practices in library, thinking that they would be useful to average reader or majority of them, not being concerned with exact needs of each individual. This meant neglect of reader and it resulted in the reader being pushed down the scale. Further, in all our activities and services collection building, classification, cataloguing, readers services, etc.—the all important reader was only taken for granted and his needs, requirements were not assessed actually.

Enunciating the implications of this Law, the Master had assigned responsibility at four levels, viz State, Library Authority, Library Staff and the Reader. But in the present context, when we aim quality service both at micro (individual library level), and macro (national and international level), the staggering implications of providing every user his decument/information at international level reveals to us the necessity of international and world librarianship. Resource sharing at local, regional, national and international levels can alone ensure quality of provision and satisfaction of every user's needs.

In the new context, responsibility also devolves upon international organisations—professional and others, and intergovernmental agencies to provide quality service mandated under this Law which entails provision of any document or piece of information to any user, anywhere in the world at any time, in any form and in any language. Finally, data bases and networks are a necessity for the efficient and effective achievement of this ideal, "Every Reader His Book."

When we emphasise individuality of user we should not fail to discern each group of community, which might have been neglected completely or is not being paid adequate attention resulting in low quality and substandard service. Minority and certain ethnic groups, immigrants, the deprived and the disadvantaged etc merit our special attention. The Law enjoins upon the professionals to provide standard and quality service to all such groups or segments of population.

If our creed becomes user-centred service, quality service can mean

this and only this and nothing else—librarians shall have to regard the user at the starting and the ending point and right through. For this, user information need surveys will be of paramount importance to tailor all our policies, programmes, methods and techniques, etc with the sole aim of providing quality service to each reader and to his entire satisfaction. We shall have to constantly evaluate our performance on all fronts against the yardstick of user satisfaction. In fact systems thinking will govern everything and reader will be deemed to be part and parcel of the system. "User is after all the reason for the existence of the whole system".[13] His satisfaction is the key goal of the librarian as a manager.

Further, the Law asks for a fundamental change. It emphasises the individuality of *Every* Reader and *His* exact needs (*His* Book). To quote Girja Kumar and Krishan Kumar, "The User is the King. The techniques of library science are basically intended to subserve the larger objective of satisfying the user."[14] With this, the reader becomes the centre and cynosure of our attention. There can be no library service without identifying his information needs. His reaction to our services must be known first hand. The present era is one of individual-oriented or customerised library and information services. Tony Carbo Bearman, Executive Director of U S National Commission on Libraries and Information Science, rightly believes that Era IV [present era] is emerging in which repackaging the products and services is being designed to meet the needs of individuals whether at home or in business and industry. He is specific when he says, "This era introduces exciting new challenges for information professionals to identify individual user's needs, develop new products and markets and sell them. Delivery of information to homebound citizens and the packaging of information for the scientists in industry are just two examples of these services."[15]

3 EVERY BOOK ITS READER

It carries a more active connotation such as bringing every material to the attention of every actual and potential user through some form of dynamic service. "The ultimate test of the quality of a library collection, however, is the extent and mode of its use,"[16] rightly remarks Lancaster. It implies to identify the materials, match the same with the needs of individual user. It is essential for cost-effectiveness and quality service in library. An unused book/document/piece of information is a total loss to the library and the community, hence a curse. In other words, it indicates failure on the part of the system, which can be due to the faulty policies and practices of collection development and purchase, storage and organisation errors, or lack of marketing and promotional activities.

Ranganathan advocates open access, classification, cataloguing, bibliographies etc, reference service, proper book selection, extension services

and publicity for increasing quality of services in libraries, under this Law.

In the modern context, the linked issues are information flow to the less developed nations and regions and the information provision for social, economic and technological development. We now talk of Universal Bibliographic Control as a means for finding user for information. Further, this Law asks for scientific management of libraries, clearly defining the goals, preparing policy for collection development, proper programme and right practices in purchasing, organising efficiently the collection according to user needs, more efficient and effective finding tools resulting in maximum use of materials, user oriented organisational structure of libraries, applying marketing strategies for library services, etc. In the words of Boomer and Chorba, "The degree to which available resources are used and the ultimate contribution of a library to user productivity should be monitored and reported. This feedback on use and productivity can be used by the library manager in making decisions and allocating resources relevant to the availability of library services and information bases. A key task of this work has been to demonstrate that practical and valid measures of these concepts can be implemented on a cost-effective, operational basis in a library."[17] It emphasises the need for library managers to scan the operational environment in order to adjust their plans and strategies to fit in with the new climate.

Thanks to the new technology, the SDI service aids in quality service in this sphere. User's interests profile is continuously updated and gives the required feed back and usefulness of documents collected. It is constant and continuing evaluation of use of materials and enables to review and adapt collection building and its organisation, etc.

4 SAVE THE TIME OF THE READER

In the present era, when the tempo of life is becoming fantastically fast, the reader is extremely hard-pressed for time. He desires nothing less than expeditious and instantaneous services which has become the most important aspect of quality service. Add to this the fantastic increase in the volume of information and almost uncontrollable increase in demand for it by information users. One at once realises the utmost importance of the Law among the Five Brothers.

Lancaster is of the opinion that Ranganathan, in his Fourth Law "recognised a secondary, but still important, objective relating to the internal efficiency of the library; namely, to make bibliographic resources accessible in ways most convenient to the user."[18] Rzasa and Baker restated this in terms of the primary goals of a library:[19]

1 To maximise user need satisfaction;
2 To minimise time loss to the user.

The devices proposed in the Law are: open access, 'APUPA' pattern of classified arrangement of books on shelves, stack-room and other guides, various types of catalogue entries, bibliographies, reference service, issue methods which save time, inter-library cooperation, central location of the library, etc.

To provide expeditious service, which is *sine qua non* of quality service, desiderata in the present context are described below.

First of all the library and information service units must change their old and outdated management style. Libraries are service oriented institutions; hence are "labour intensive"[20]. "And in a highly labour-intensive organisation . . . the major scope for improvement in efficiency and effectiveness must come through effective use of human resources."[21] Martell's[22] and Booz's[23] studies suggest changes in structure of libraries which would lead to significant improvements. The Management Review and Analysis Programmes (MRAP)[24] as developed by the Association of Research Libraries (USA) have shown how libraries have benefitted from the concept of 'total organisation approach'. Scientific management emphasises systematic examination of methods, techniques, processes, procedures, records, etc. Systems analysis must become part of management practices. Libraries should conduct a rapid assessment of their current situation. Work, Time and Motion and Work-flow studies should become matter of course. These self-study programmes initiate a broad scale management review process to identify problems, analyse them and bring in the induced changes for efficient and effective management of libraries, thereby 'Save Time'.

Since time is money and no library in the present times can afford an island-like existence, resource-sharing and library cooperation have become imperative for quality service based on maximum utilisation of the scanty resources. Paucity of resources can be obviated only by treading this path. Creation of more and more networks, data bases and telecommunication facilities have become absolutely essential for effective services. As McGarry rightly puts, "Electronic information systems are increasingly indispensable to manage the rising tide of information."[25]

Considering the growth of online bases in the last few years the momentum behind the developments in the use of technology including the advent of the home computer and service, user friendliness must be the basis of organisation of our systems. User education in the use of systems, systems standardisation, online user manuals, etc enable the provision of quality service, which is demanded by the Law. Finally, each library and information unit must be fully geared to provide effective and efficient I & R Service assistance in search of information from databases to ensure service of better quality and greater and quicker satisfaction of users' information needs.

5 LIBRARY IS A GROWING ORGANISM

The Law tells us the vital characteristics of a library as an institution, i e "from the physical facilities to administrative practices, the library must be open ended, always ready to expand,"[26] as Garfield beautifully describes it in a nutshell. Its tips are for the future planning and organisation of a library, and library and information services. This Law envisages continuing growth in three directions:

1 Documents,
2 Users,
3 Professionals.

To take documents first, the recorded literature in the form of documents (in all their formats) is growing stupendously and in staggering proportions. Allen Kent points out that this phenomenal growth has thrown forth three dimensional frustrations before the library world:[27]

(a) "The physical impossibility that an individual scientist or scholar in any field can read and remember all of the literature that has a reasonable probability of being useful and interest at an unspecified later time;
(b) "The economic impossibility that an individual or his organisation can process for later exploitation a major part of the literature that exhibits probable pertinent interest; and
(c) "The mechanical impossibility that the traditional library tools can cope efficiently with the detailed requirements of research workers for information of precisely specified relevance."

Let us now turn to 'users'. Social, economic and educational factors, scientific and technological developments, fast increasing research activity and a number of other circumstances have virtually turned every modern man into both a seeker as well as user of information. In the present information age, and information dominated society, no man can exist without information. To put it explicitly, universe of users covers each individual on this planet. This stunning growth in the number of users also poses seemingly impossible questions.

To think of the professionals, it is not difficult to realise that to meet the challenges of explosion in the number of documents and the number of users, referred to earlier, library and information world and the society will need a manpower as in other professions—Law, Medicine, Engineering, etc. This manpower will meet the requirements of professional organisations and institutions and new demands, and provide consultancy services.

It is now for the profession to exploit appropriate technology to

maintain and improve information access and quality services in libraries.

The Law is futuristic in its approach. It treats library as an open system. An open system is one, "that ingests energy from the environment usually in a form different from the form in which it was ingested."[28] Hence, the message of the Law is not always to stick to traditional ways. And now "We have better means of monitoring of information use and the ability to make use of such management information."[29] The more we adjust to the environment, the better the quality of service.

6 CONCLUSION

The Laws are the conceptual foundations for decision making and identifying key elements of value in performance evaluation, as discussed above. Management by Objective (MBO) links up objectives with strategies for key tasks, marrying programmes measures with targets, thereby leading to solid advantages for any organisation. The Laws are tangible objectives and help to construct processes and activities which lead to their attainment. They can be used for policy making, planning, programming, decision making at every stage both at micro as well as macro levels. And they can help in evaluating the performance of library and information service in communication system.

"We are altering our info-sphere fundamentally. We are not merely de-massifying the Second Wave media, but we are adding whole new strata of communication to the social system. The emerging Third-wave info-sphere makes that of the Second Wave era seem hopelessly primitive by contrasts,"[30] asserts the famous futurologist Toffler.

It is obvious that the future of the library and information services is inextricably entwined with that of the communication and information systems in society. The future library and information service should be capable of evolving in a compatible fashion with changes in library operations, changes in management needs and advances in technology."[31]

Dr Ranganathan had become a legend in his life time and his legacy of Five Laws of Library Science sets forth goals and measuring instruments for library and information services. They throw a challenge to challenges of change.

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FIVE LAWS IN A NEW KEY AND QUALITY LIBRARY AND INFORMATION SERVICES

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Library is a social agency of communication. Conditions of the society fundamentally affect the library it espouses; and in turn are reflected through it. Within the prevailing social standards, library as any other social institution, strives for meeting the demands for the best possible services to the members. The quality library service may be by some administrative methods, which are bureaucratic impositions from above. Such methods, consequently, prove *ad hoc* for a profession, if at all these are applicable and acceptable. Such an approach will not provide answers to many of the 'whys' and 'hows', which every scientist is trained to ask. The second way is through self-imposed professional methods, which *inter-alia* include professional philosophy and ethics. The latter being a quasi-scientific approach, is nevertheless necessary for a profession. Service is the essence of our profession. Tenets for quality services to the clientele can be drawn from some normative principles. When S R Ranganathan (1892-1972) observed library services in action as a student of the discipline in Great Britain during 1924-1925, there were no laws to explain the varied library practices in different libraries. Ranganathan set before himself the task of construing the rationale behind all those disparaged practices. Actuated by such needs Ranganathan formulated the *Five Laws of Library Science* in 1928 after four years of gestation and rumination. A protracted inductive process fermented the laws and intuition crystallised them. The interesting story of their origin and development has been narrated elsewhere.[1]

By philosophical and literary standards the *Five Laws of Library Science* (1931) is itself a book of quality. It provided (so badly needed) academic contents to library science struggling to gain respectable place in the academic circles. By rigorous application of inductive and deduc-

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tive processes Ranganathan tangibly demonstrated that library practices are equally amenable to scientific principles. In the second edition 1957 (reprinted 1963) a chapter on scientific method further enhanced the value of the book and the laws therein.[2] It proved the scientific lineaments of the library science contents. This chapter was included to bring home some sceptics who had severe reservations regarding the scientific nature of library science.

The Laws were formulated in the days of librarianship more or less dealing with the back of the books. By simply changing the parameters, the laws found ready and equal applications to documentation. And now T S Rajagopalan and T N Rajan have shown with illustrations their applications to information science as well.[3] It is no exaggeration to say that in an information society the applications of the laws are more visible—as Einstein's theory of relativity is more demonstratable in the age of space travel. Laws find ample applications in modern information services and systems. Thus like phoenix laws have self-renewing nature and capacity.

Ranganathan coaxed the laws to deduce pragmatic tenets for qualitative services in every type of library. The laws provide guidance for library architecture, library administration, library rules, book selection and reference service to name some at random. They help to formulate the rules for cataloguing. They also prove a wise counsel in personnel management. Not to be left behind is the physical bibliography. Laws have unequivocal bearings on the quality of paper, printing and binding of the book for making a book inviting and convenient to use. Laws also lay down standards for the physique of the book which lends itself to comfortable use by the readers. That nothing in library and information science is beyond their purview is proved by the fact that the Five Laws are a fountain head out which Ranganathan produced about 60 books covering the whole gamut of the discipline.[4]

Laws also hold their sway on the relevant areas of the fringe subjects such as adult education and book science. A neo-literate society can hopefully look towards the laws for the spread of literacy and book culture. One can also look upto the Laws for designing the LIS education curricula. In the classroom teaching the Laws readily come to the aid of the teacher to elucidate the various concepts and to explain the 'how' and 'why' of them above all. In a nutshell the implications of the laws are infinite and continuous in an ever changing society. Laws, as a touchstone, can also be employed to compare and test the quality of different practices and procedures. More importantly, the laws explain not only the rationale behind the current practices but also point towards the future trend. Being laws these are inherently prognostic. Ranganathan's approach was futuristic too. The laws have supplied library science the needed norms.

For providing qualitative library services Laws can be implored to yield implications jointly as well as individually, as described below.

First Law. The information is for use. In an information society as the name suggests, the information will be the primary need of the individuals—of course, next to the basic and biological needs. Information is a resource of high value; and the extent of its development and use will determine the social, economic, technological and academic advancement of the society. In an information society information industry is the premier economic sector employing about 60% of the labour force.[5] The First Law pleads for the unhindered flow of information from the producer to the consumer, and easy and ready access to databanks. Information technology is the very fabric of such a society. Information must be presented in easily usable capsules.

Second Law. Information is for all. This law asserts the supremacy of the reader over the book or the information. This law follows simply from the basic tenets of the information society. In an information society almost everyone is information user. Here 'All' means individual users as well as the type. User surveys and user studies are urged by this law to assess their needs. It will also require a continuous programme of user education, enabling the readers to some extent meeting their own specialised needs. Philosophy behind the new concept of user education is aptly described by an Old Chinese saying : "If you give a man a fish, he will have single meal. If you teach him how to fish he will eat all his life."[1] Additional implications are library and information services by legislation; wider information networks; central databases with diversely ramified terminals; and analytical and multi-access catalogues. UAP, the Medium Term Programme of IFLA is a step at the international level to provide information universally. This law demands obligatory participation of every country in this programme to make this long cherished dream a reality.

In face of the information revolution the information scientist will have to be careful as not to overwhelm the user with information. A pursuit to serve the users exhaustively with the relevant information is likely to bring an information overload on the users. Such a state will hinder the pin-pointed and timely use of information. This law cautions us against the information overload. This is the incipient problem which is engaging the minds of the information personnels.[6]

Third Law. Every bit of information its user. This Law in a way supplements the work done by the first two Laws. This is a Second Law viewed from the side of the information which by itself is an inert commodity. Value of information lies in its use. Initiation for its use

mostly comes from the user as it follows from the fact that knowledge is knowee dependent. Information is a commodity in the market governed by the demand-supply relations.[7] All the Five Laws are in consonance with the economic laws applicable to the marketable commodity, information. Therefore, the Third Law will inherently seek for its self-fulfilment. No producer will bring goods in the market for which there are no buyers. In library science, it was a Law most observed in its breach than in its fulfillment. But in days of information science this Law seems the most observed one. Anyhow, this Law also recommends the recycling of information. Professional methods of advertisements and marketing will yield dividends.

Fourth Law. Save the time of the user. In an information society nothing is as scarce and unreplenishable as the time. In every social transaction the time is the over-riding factor. Information has a value only in context of time. Scientific information is cummulative in structure, rapidly making the earlier information obsolete. Rate of obsolence of information is too high. Information is unstable, to say in other words. In the world of information, value and time are locked in an inverse relation equation. Hence the timely supply and use of information makes all the difference in the days of very rapidly moving frontiers of knowledge. All these considerations urge us to simplicity, standardisation and brevity in library rules and procedures. It also recommends the use of automation in information handling. CIP, MARC and various ISBDs are some of the devices and programmes for the speedy and standardised processing of information. On-line services, use of sattelites and other telecommunication gadgets are there for the quick transmission of information.

Fifth Law. Information Centre is a growing organism. Here growth is taken to mean expansion as well as change i e the growth is both additive and cumulative; child growth as well as adult growth. Knowledge grows because society grows and vice versa. Growth is the fundamental property of any system. Libraries and information centres individually as well as collectively are open-ended systems. Libraries grow individually as well as grows the library system of the country or region.

Growth always takes place in time and, therefore, growth is diversity in time. The growth also requires quick information processing procedures, so as to avoid the lag or arrears of work. In fact the Fifth Law is intimately linked with the Fourth Law; therefore, most of the implications are equally applicable here. Time also insinuates future. F W Lancaster with exegesis of the Fifth Law proves that his vision and testament of a paperless society is a simple pointer of this Law.[8]

This outstanding characteristic of change and growth of knowledge

has major bearings on its planning and dissemination. Sharing of information and cooperation in information services at the international level, Universal Bibliographic Control, international library and information science organisations promote the objectives of this Law. We should bridge the gaps in the existing services and avoid duplication. Growth always brings in specialization. Users grow and their needs become highly individualistic. It will require diversified information services to provide information on bespoke basis.

Introduction of microforms in information storage and retrieval has been actuated by the physical growth of information and information carriers. Now, it is the electronic and audio-visual media making itself convenient to cope with the shrinking space and expanding documents. Electronic media has ushered in an era of paperless libraries. In such a state of affairs the role of information personnel will change drastically. The major and all inclusive implication of this Law is that we should be prepared to welcome the change and work for it.

These are some of the obvious or superficial applications of the Laws to plan and provide quality library and information services. Many more such implications may be cultivated with time and continuous interaction between the Laws and the work problems. Laws can be invoked to solve problems on the spot. Laws provide concrete and unambiguous findings and marked directions for the development of all types of library and information services. Laws operate both at the micro and macro level of information economy. Therefore, these are vital to better planning of library and information centres and services both at the national and local levels. Anis Khurshid is very apt in saying that it is the normative base provided by the Five Laws which has helped the development of total system approach in the information transfer process.[9] Therefore the Five Laws are extremely promising and fairly capable to resolve implications for implementing the new world information order.

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FIVE LAWS OF LIBRARY SCIENCE—IMPACT OF FIFTH LAW

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0 INTRODUCTION

Librarians, literary and intellectual activities and human culture have been growing side by side and parallel to the growth of the society and cultural attainments of man. It is because of this phenomenon that human history records the existence of libraries in one form or another during every period of its cultural heights and attainments. In all the centres of civilization, we find records and traces of the libraries.

The modern social scientists and scholars therefore feel that libraries, literature and culture as well as social evolution are inseparable factors of human behaviour and always had an effective mutual impact on the growth of each other. With the steady growth of the society, these have been growing and with every major change in the social concept, the parallel change has been occurring in these areas also.

The very meaning of the term 'Library' has been changing from time to time. These changes in meaning have been evolutionary and also speak of the attitudes of the different social setups of the respective periods of human history towards the libraries.

The concept of the library has been understood and interpreted in various ways, such as (a) for keeping books, (b) for collecting books, (c) a collection for use, (d) an orderly collection for use, (e) for storing, communicating and digesting, (f) a social institution, (g) an institution for self-development, and lastly (h) a trinity (books, readers and staff).

Dr S R Ranganathan, a pioneer in the library field and a library scientist, with his renowned knowledge and experience, a man who made a practical approach to study, digest and assimilate has contained the

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entire librarianship and library services into *Five Laws of Library Science* —which is nothing but a '*Panchakshari' mantra*; by its mere application the problems faced with regard to librarianship can be solved instantaneously and convincingly.

1 FIVE LAWS

In 1931 came the first edition of the *Five Laws of Library Science.* This was the foundation work upon which was based all Dr S R Ranganathan's future work. They are five in number, viz (1) "Books are for use", (2) "Every reader his book", (3) "Every book its Reader", (4) "Save the time of the Reader", and (5) "A library is a growing organism". These are all simple statements, but so is the First Law of dynamics. It is from such simple statements, so pregnant with meaning, that one can deduce the whole of what it is now fashionable to call 'Library Science'. They lead to open access, classified shelf arrangement, catalogues, guiding of libraries, library publicity, dissemination of information, machine storage and retrieval of information, the provision of what we now call 'non-book materials' (hardly known then), good library management, and methods of coping with too many books by schemes of cooperative purchasing, provision and warehousing. This was the first book to deal with the fundamental reasons for librarianship. Hence, the book is a classic.

The impact of growth of the universe of knowledge in various subjects formulated into a reading material and published for the use of the readers, thus started the librarians to acquire and building of collection into their libraries. The *Fifth Law* of Library Science refers to the growth of the library in all aspects. It can be static without addition of new arrivals from the world publication market. The alive and active library is one which builds up its collection of noteworthy and useful literary value and serves to its readers efficiently and expeditiously. A passive library is one wherein readers are not visited often. Whenever they feel for relaxation they do visit the library. Here the fifth law will not be satisfied.

As per the fifth law, the collection should have steady growth year by year, and the readers will also grow to consume and digest the growth of the collection. A library card catalogue will be expanded with the addition of new books and catalogued for the reference of the readers. The shelf arrangement will have to be expanded as and when the collection grows into the library. The amenities and services to the readers will be developed suited to the situation. The proliferation and explosion of literature has made all the libraries to acquire the required collection, process them and keep ready for the use of the readers. For this technical as well as ministerial jobs library personnel have to be recruited as

per the staffing formula depending upon the growth of the collection as well as readers of the library. To meet all the duties of above nature, dissemination and retrieval of information, the budgetary provision will have to be increased.

For the plinth area, reading space, stack area, cataloguing room, processing sections etc, while planning a new library building, the fifth law has to be kept in view and accordingly the building programme may be designed and automation introduced.

2 IMPACT

Presuming that the Fifth Law, 'Library is a growing organism' will reach its climex and develop into a gigantic dimension—what steps are to be taken to contain or arrest its natural tendency:

(i) How much space (site) can be set apart for its growth in terms of area and finances. Whether this growth should be horizontal or vertical.
(ii) How much allotment can be expected of the financial agencies for the procurement of documents (books and non-book materials).
(iii) What concrete measures are to be taken up to curb the untenable growth tendency—by weeding out of books; by separating the less used books; by converting certain documents into micrographics in certain identified areas.
(iv) How many staff (quantitative and qualitative) are going to be appointed.
(v) What concrete suggestions or ideas are thought of to modernise the libraries in introducing library automation to regulate monotonous nature of work and waste of time to help improve the services to readers.
(vi) What steps are going to be taken for changing the outmoded thinking and acts of the professionals.
(vii) At what level can we expect the support for and fulfilment of one's ambition to modernise the library and service rendered on par with the Western countries.
(viii) In spite of all these efforts what steps can be taken to curb the atrocities of book thieves and unsocial acts of users.
(ix) Can we, the professionals find ways and means to stop its uneven growth and suggest congenial scientific development of growth keeping in view the important factors, like space and finance.
(x) Will the revival of closed access in the existing open access system be a solution or can a solution be found for modernity and culture.

Until and unless the professional librarians take up a challenge to answer the issues raised, I do not opine and think personally that even the existing libraries can continue to play an effective and meaningful role.

ROLE OF FIVE LAWS IN IMPROVEMENT AND SOCIALIZATION OF LIBRARY SERVICES WITH EMPHASIS ON ASPIRATIONS OF SECOND LAW

ABDUL MAJID WANI*

0 INTRODUCTION

In our country, libraries have been in existence right from the days when man learnt the art of recording and communicating ideas. But from those days (when the libraries were regarded as the personal property of their owners and the books as rare commodity with much attention paid to their preservation than to their use) to the present times when these are considered as the social institutions, the development of libraries had to pass through various stages. These stages can be divided into four periods.

01 FIRST PHASE

Ancient period to 1200 AD during which came into emergence the Buddhism and Jainism including the golden age of imperial Guptas when the great classical works on religions, philosophy and medicine and literature were stored in the libraries attached to the temples, palaces of the kings and centres of knowledge like Taxila, Nalanda, Vallabhi and Vikram Shila etc.

02 SECOND PHASE (1200-1800 AD)

During this medieval period came some alien invaders who after settling down in this land came to appreciate our great cultural values and then contributed to the development and growth of libraries. Among

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them were the Khilji Sultans like Jalal-ud-Din Khilji who established imperial library at Delhi under the librarianship of Amir Khusrau and Mughal Emperors like Humayun whose love for libraries is well known.

03 Third Phase (1800-1946 AD)

This includes the period during which the country remained under British occupation. The Britishers and other Europeans, no doubt, took away from this land of civilization a large amount of literary wealth in the form of Sanskrit, Persian and Arabic manuscripts and transported that to their countries to enrich their libraries and museums. However, being educationally forward and library minded, they established public libraries in Calcutta, Bombay and Madras in the beginning and later on a network of public libraries was spread in other States also. In this way, they also made their contribution towards the development of libraries. It was during this period viz 1928 when laws of library science were formulated by Dr Ranganathan.

04 Fourth Phase (since 1947)

Post-independence period

In spite of the fact that our libraries stand no comparison to the libraries in the developed countries which have tremendously large resources and a century old library tradition, we have since independence established a large number of libraries and diverse library services have been introduced on the lines of various social institutions to serve every citizen irrespective of caste, creed, colour, birth, sex, socio-economic status etc. In this development, the set of Five Laws of Library Science has been instrumental to a large extent.

1 NEED AND BACKGROUND OF FIVE LAWS

'Necessity is the mother of invention' is the universally accepted truth meaning that everything in this universe came into existence with a background and need to serve some purpose. Likewise came into existence the Five Laws of Library Science formulated by Dr S R Ranganathan in 1928 to serve the purpose of functioning as normative principles of library science and library service. These were first published in a book form by the Madras Library Association in 1931.

Ranganathan had observed that in spite of a number of libraries in the country, the books for common man were mere touch-me-not items and their being restricted to only a few was quite contrary to the purpose of their establishment and as such were inadequate for the educational,

cultural, political, moral, ethical and intellectual development of the country and its people. He resolved to overcome these problems by formulating these five normative principles or laws to ensure that:

(a) the library helps the life-long self-education of one and all;
(b) the library provides upto-date information on all subjects to one and all;
(c) the library impartially provides every bit of recorded knowledge to every seeker, as a help in the discharge of their functions in respect of local, national and international affairs;
(d) the library contributes to productivity drive by informing top managements about the latest trends in diverse enterprises by ploughing back into the minds of researchers, designers and technologists every piece of relevant new thought promptly and pin-pointedly;
(e) the library provides to one and all a harmless and elevating use of leisure;
(f) the library preserves the literary remains of humanity for posterity as vehicles of culture and as source materials for antiquirian research; and
(g) the library continuously works for the social well-being as an agency of all socialized recorded thought and thus performs the educational, political, informational, economic, industrial, cultural and antiquarian functions.

2 FIRST LAW : BOOKS ARE FOR USE

The law signifies that the books are to be used for the thought contained in them and there should be no restrictions or hinderances that may obstruct their use. It means that library should socialize the use of books to make itself in real sense a social institution. Any elements of bureaucracy that bring even a slightest hinderance in maximizing the use of library, should be eliminated to ensure that library is open to one and all without any discrimination of birth, age, sex, or socio-economic status.

Here the mention of age has deliberately been made because upto the early years of the present century even, the admission to libraries was restricted to the readers not below the age of 18 years. Even scholars like Maulana Azad were refused admission to library on this account. Quoting this in his inaugural speech delivered by him at the opening ceremony of our National Library Maulana Abul Kalam Azad, the then Education Minister, said:

"When the Council of National Library invited me to open it formally in its new home, my mind naturally went back to my first contact with

it some 48 years ago. This was in 1904 when I was a young man of about 16. I had completed my studies and according to the prevailing practice in our traditional system of education, was lecturing to a group of students in various subjects. I came to hear that the Buhar collection of the library contained a rare copy of Al-Beruni's famous work 'Al-Qanun'.

Accompanied by a friend Mirza Fazal-ud-Din Ahmad who later published my book 'Taskara' I went to the library. It was as you, no doubt, remember, then known as the Imperial Library and housed in Malcalf Hall. It was necessary to seek a readers permit and Mirza Fazal-ud-Din was given one without any comment. When, however, he asked for a pass for me, the library assistant looked at me intently and enquired about my age. I said I was about 16. On hearing this he refused to give me a permit as he said, "no one below 18 was allowed to be a reader of this library". Mirza Fazal-ud-Din interceded on my behalf and said whatever be my age, I was already a professor in logic, philosophy and Muslim law. I should therefore be given the facility to use the library, if need be by making an exception to the rules. I looked at the library assistant and felt that he was not inclined to believe the statement. Mirza Fazal-ud-Din tried to see the librarian but unfortunately he was not available and I had to return home in disappointment".

The First Law means to demolish for ever such rules as do not permit a reader to use library on one pretext or the other. In short, it means to measure the greatness of a library by the use of its material and not the size of its collection or building or staff. To satisfy this law in real spirit here follow some of its implications:

(i) The library building should be well ventilated and so located that it is accessible to all readers of the locality. It should be functional to accommodate all sections of the library with sufficient arrangements of furniture and light, and the book racks with top shelves being easily accessible to a standing man.
(ii) The library staff should be polite and fully equipped with geniality, scholarship and professional competence.
(iii) Money should not be wasted for infrequently used costly books by public libraries. Such books can be purchased by national and state/central libraries. Selection should be based on needs and requirements.

3 SECOND LAW : EVERY READER HIS BOOK

This law signifies that any reader who comes to the library should return satisfied and not disappointed. The Law means the library staff to

take into consideration the choices and tastes of all types of readers they expect to visit the library and keep available their books to them. To come to the expectations of this law, the library is required to take following steps:

(i) *Open access system.* Besides the other implications, the open access system is the main thing that can satisfy the expectations of this law. This system enables the reader to decide what he should read and has not necessarily to be dependent on the catalogue. Open access being a system in which the entire collection is easily accessible to the reader, can ensure that the reader does not return disappointed as he can shift his choice to another suitable book if the one that he wanted initially is not available.

(ii) *Book selection.* The law means the library staff to be well informed about the tastes and subject interests of its readers so that they can make selection accordingly. Book selection policy should be such that it cares equally for the needs of seasoned scholars and the neo-literates and the whole spectrum between these two extreme standards should be covered to ensure every reader his book.

(iii) *Inter-library loan.* According to some poet

> "*kon hai woh Jo nahin hai hajatmand*
> *Kiski hajat rawa karay koyey*"
>
> (Every one has to be dependent on another person in one or the other respect)

To keep its promise of making every reader his book available, the library may borrow books from other libraries. Because howsoever rich a library in its collections ma/ be, it cannot afford to purchase every book that is published. The Second Law, therefore, provides for the inter-library loan which on one hand ensures that the reader is not disappointed for want of his book and on the other hand promotes the spirit of cooperation among libraries.

(iv) *Catalogue.* Catalogue is another facility that Second Law demands. Both alphabetical and classified parts of catalogue with subject analytical entries are required, because in many books that are composite in nature, neither titles nor main entries fully disclose their contents. The hidden contents need therefore being exposed by cross reference entries. A regional or union catalogue is also a must to facilitate inter-library loan without delay.

31 Second Law and Library Services in India

In his *Library Manual* Dr Ranganathan has put the 2nd law and its enunciation in the following words:

> "Books for all. Every reader his book. These two forms of the second law emphasise in greater detail the implications of the first law as viewed from the side of readers. They expect the public library to take into consideration every kind of reader, whatsoever, the age, the sex, the vocation, the capacity for self-help and willingness to read."

But when we take stock of facilities and services rendered by our libraries, we observe that these services are inadequate and not fully upto the expectations of the Second Law (viz books for all or knowledge for all or every reader his book as we may put it). 'Books for all' means books for every person irrespective of physical fitness or unfitness, sighted or blind, rural labourer or illiterate agriculturalist, because in this scientific age it is not book alone that carries knowledge but other materials, graphical/ audio visual also can impart education to those who cannot read books like sighted literate people.

32 Need for the Library Services for Visually Handicapped

In a great democracy like India believing in equal rights in all shades of life, visually handicapped people from all over the country should be given the same opportunities for education, for vocational training and employment as well as for taking active part in the general, political and cultural debate in society as their sighted fellow citizens.

Books and other library materials are the sources for the educational, political and cultural life of all societies. Therefore, the establishment of such systems as can produce the reading materials for blinds in the form of braille and tape together with a special library for this purpose at least one at the national level with its branches in all states should be a matter of priority and concern at least to the librarians if not politicians who know better making than keeping the promises. We cannot ignore blinds as we have them in a very large number in our country. WHO information indicates that there are about 40 million children and adult blinds in the world with 80% of them living in developing countries. Our country being bigger in size and population as compared to other developing countries, the number of blinds in our country is accordingly bigger.

This bigger problem could be solved by taking up bigger projects and systems and schemes. To realise this, it is necessary to disseminate information regarding library facilities for the blinds in some developed and underdeveloped countries.

33 Library Facilities to Blinds in African Countries

In many African countries of today, the existing educational system also includes the educational opportunities for the visually handicapped. Some blind students are even admitted to the post-graduate and other institutions of higher education after completing their studies at the primary and secondary level. Most of such qualified blinds are employed.

34 Mode of Library Services for Blinds

Though not adequately sufficient, but facilities like braille production are already existing in many African countries. Some countries have established recording studios for the production of talking books. Many of these being textbooks those of the African countries having a library for the blind, the stock of braille and talking books is based on donations from overseas countries. Table 1, based on information gathered from the participants in the Tanzania seminar 1980, shows that in all countries represented braille is in use as a reading medium and to a limited extent talking books also. National braille presses also exist in some African countries in spite of high initial costs of braille press.

Table 1

Country	*Material in use*
Cameroon	Braille
Ethiopia	Braille
Gambia	Braille, taglkin books, large print
Mauritius	Braille, talking books, large print
Nigeria	Braille, talking books, large print
Uganda	Braille, talking books, large print
Ghana	Braille, talking books
Sierra Leone	Braille, talking books
Tanzania	Braille, talking books
Zambia	Braille, talking books
Liberia	Braille, large print

In addition to their own production, they also use the braille, talking books and large print materials borrowed from and donated by developed countries like USA, UK and France.

35 Library Facilities to Blinds in Europe

Each European country has accurate statistics on its blind citizens. Records are also available on the age, educational qualifications, reading and professional interests of this population. The majority of the blind in these countries are old people who had earlier obtained their education and professional qualifications and established their reading habits. For example, in 1981 the Federal Republic of Germany had 74,000 blinds, 67% of whom were above 60 years of age. Denmark had 7,800 blind comprising mostly aged people.

Each country has a central institution or library that produces and sends by post all reading material which include braille volumes, talking books including journals, magazines and textbooks besides professional literature and recreational reading material. In 1981, Danish State Library stocked about 3,500 titles, 11 periodicals including a popular scientific journal *Budstikken* in braille and about 4,000 titles in talking books. The Dutch National Library for blind holds about 12,000 titles in talking books and 11,000 braille titles. In each of these countries, library services are offered to the blind as a part of social service.

The British National Library holds for blind the largest stock in braille in U K. Its loaning service caters to overseas borrowers as well. Apart from this library, the Royal National Institute for Blind (RNIB) has a students braille and tape library of international repute.

Some Suggestions

(i) Since the prerequisite of providing library services to blind is availability of braille and talking book, arrangements for establishing production centres of these materials should be made.

(ii) Reading material (both braille and tape) should be organised in a national library to be established particularly for blind.

(iii) Each State-Central library should open a section for services to blind with reading materials supplied to it by the national library. Teaching facilities may also be provided in such sections in collaboration with the State Education and Social Welfare Departments.

(iv) Reading material should be sent to the users by post. Such postal service should be free of cost. A Bill seeking free-of-cost postal services may be passed by the Parliament, if need be.

Contacts should be established with organisations dealing with such services to seek donations in the form of braille and talking materials from all over the world.

36 Law and Non-Literates

Second law has not been fully followed in the library services to non-literates. When we say books for all, it should mean one and all that constitute the population of India including about 70% of our illiterate people. Contrary to it, the library facilities are given to only literate class of the society which again form a chosen few when compared to the entire population of our vast land.

In this scientific age the illiterates are most deserving people to have access to the developmental information which is important for the progress. The rural development, over which the government is spending large amounts of money, is not fully possible unless basic education is imparted to the rural illiterate masses to develop and promote civic sense in them. Therefore, extension of library facilities to the illiterate masses is need of the hour in addition to the adult education programmes that are already existing.

Suggestions

(i) Libraries should be mobile in nature and make use of panchayat rooms/adult education centres for demonstrating their material and their use on scheduled days and timings.

(ii) Before hand, the library staff should contact and persuade the leaders of the community for taking their help to motivate masses to use library, as the same will provide them information about farming etc required for improving their lot.

(iii) Friendly meetings with the villagers should be held to know their interests, so that the materials could be accordingly provided to them in future.

(iv) On each visit, the librarian should take along with him the current newspaper, pamphlets, posters, books and cassette recordings in local and national language.

(v) Pamphlets and posters should depict health matters, family planning, water sanitation and food processing with special attention to different types of farming, with the help of pictures and diagrams. This will help increasing crop production. Materials should also educate people about the application of fertilizers and herbicides. This is most essential because the rural masses constitute our peasantry, and agriculture is their main occupation.

(vi) Cassette recordings should carry the radio talks about child nutrition, care of pregnant women, dramas and poetry in local language.

(vii) Arrangements for reading out information material to those who cannot read and write of their own.

(viii) Translating important reading material into local language.
(ix) VCR facilities to show various film recordings about agricultural and other developmental techniques to the viewers on scheduled timings.
(x) Providing reference service by answering the question of clients, and referring them to various offices and concerned ministers as and when needed.
(xi) Inviting ministers and the experts in health and agriculture and senitation etc to reply queries of the villagers occasionally.
(xii) Providing opportunities for chatting in a relaxed atmosphere on current political and social events to boost morale and civic sense in the clientele.

4 THIRD LAW : EVERY BOOK ITS READER

As we know, the Laws of Library Science were formulated to meet the single purpose of making the full use of library holdings by one and all. The problem was seen through five angles or aspects and was remedied or tackled by five laws. The third aspect of the problem being looked is the problem of book as an item willing to go to its user through the means provided to it by the librarian as it has no means of its own to call him or her to itself. To tackle this problem, the Third Law requires the librarian to work and speak for and on behalf of the book so that the book does not remain discarded on the shelf. Law suggests introduction of show case system, besides open access, accessibility to shelves, classified shelf arrangement etc.

41 Show Case

Small show cases attractive in nature should be fixed in the reading and stack rooms displaying stagnant books in them. The show cases should be labelled with catching legends like 'Books worth reading', 'Long forgotten books' etc.

5 FOURTH LAW : SAVE THE TIME OF THE READER

It forms the basic condition to improve the qualities of library. We know that physical hunger for food is compelling. Thirst for water is inexonerable. These will not be extinguished unless being attended to and will persist through time till satisfied. But mental hunger for books is not so compelling for many people. The information thirst is not inexonerable in the case of most people. The thirst dies out if not satisfied immediately. Therefore, information required by a reader should be handy with the librarian so that it could be supplied to reader on

demand, without the loss of any time. The message "Save the time of the reader" aims at making all possible efforts to meet the demands of readers in least possible time which among other things requires mainly the reference-cum-guidance service.

51 Reference-cum-guidance Service

It means to provide guidance to new members of the library as most of them do not know how to get access to the books they want. So it becomes the duty of the library staff to make them familiar with the library procedures failing which such readers will lose time without result. Guidance service is expected to be followed generally in all libraries but particularly in university and college libraries where newly enrolled students of every year need to learn about the use of catalogue, sequence of book arrangement and charging and discharging systems. Availability of indexes of periodical contents also forms an instrument to save the time of the reader.

The reference service also supplies answers to the questions of the readers by providing them information readily available with the librarian, besides referring them to various references and information tools. Adopting quick charging and discharging system is another step towards saving the time of a reader. This enables maximum books being issued and returned in minimum possible time.

To make the guidance and reference service a success, the library staff is supposed to be humble, devoted, helpful, friendly and patient in nature.

6 FIFTH LAW : LIBRARY IS A GROWING ORGANISM

The Fifth and the last Law of Library Science deals with a vital and lasting characteristic of the library and stresses the need of a constant adjustment of our outlook in dealing with it. It invites the attention of library authorities towards the principle that should be followed in planning, organising and governing a social institution like library. The Law says that the library as an institution has all the attributes of a growing organism which takes in new matter, casts off old matter, changes in size and takes new shapes and forms like human beings. Since the library is trinity of books, readers and staff, it is bound to grow in all the three respects. Therefore, the library authorities should be farsighted and broad minded and should plan the library building in such a way as to make it easy to keep pace with the necessary growth in the size of collection, number of readers and the members of staff. Under the instructions of a specialised library architect, the building should be designed in a way that provides for increasing the space as required. The Law also prescribes constant process of weeding out worn and torn materials that

become unnecessary and unserviceable with the passage of time. It also provides for the maintenance and preservation of such materials that require to be transmitted to the posterity.

7 CONCLUSION

In the light of above discussion, I must say without any exaggeration that Five Laws of Library Science are no less important than the back-bone to a human body as they work as five fundamental principles in the directions of making the library a social institution in the real sense. They proved revolutionary in making library service available to one and all without any discrimination in libraries of the world in general and in the Indian library system in particular by changing the old narrow conception 'books for chosen few' to 'books for all'.

With the help of these Laws we can derive postulates, canons and other principles applicable in different branches of library science. These laws also provide guidance in theory and practice of library and information science. Besides their having been useful in the teaching of the different aspects of library science, these laws have also made an impact on development of theory and practice. They have been serving and shall continue to serve as sources of inspiration and guidance in the direction of further improving the qualities of libraries.

This contribution of that great scholar and son of India Dr S R Ranganathan will for ever serve as torch bearer to the profession for which library professionals shall always feel indebted to him.

As we all know that he had dedicated himself to the cause of promotion and improvement of library service, there is no better tribute that could be paid to that great soul than making our contribution for furthering and advancement of that noble cause for which Ranganathan lived. It is with this moral obligation in mind that I have, in the foregoing pages, made an attempt to point out that some of the aspirations of the Second Law of Library Science remain yet to be fulfilled substantially in India and suggested certain measures to be considered in this direction.

SIGNIFICANCE OF FIRST LAW IN QUALITY IMPROVEMENT IN LIBRARIES : A BRIEF ANALYSIS

NARENDRA NATH SHARMA*

0 INTRODUCTION

Five laws of Library Science enunciated by S R Ranganathan are the first fundamental laws in the field of library and information science. These five laws are very simple and covered by 25 words but these provide "Perennial sources of guidance in all library work and service." The laws are known to all who have shown interest in the field of library and information science.

These laws act as a unifying theory for all library practices and services, and provide a set of dynamic guiding principles for the future development of study and teaching, theory and practice of library and information science. The growth and development of different branches of studies and practices of libraries is very much dependent on the laws, and their future development should be quite in relevance with the laws. The effectiveness of the library practices can be tested against the implications of Five Laws of Library Science.[1] They further help in providing dynamic theories for which the subject of Library Science gets the status of an independent subject. The laws are providing boldness and clarity in a striking way, besides being eternal. They serve as the ancient *Sutras*, the comments on which can be given by different persons from time to time and naturally therefore, varieties of interpretations would follow. There is scope for a *prima facie* view (*purbapakshya*), for doubts (*samashya*) and for arguments (*samadhan*), leading to conclusion (*sidhanta*).[2]

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1 MODIFICATIONS IN THE LAWS

During his life time, Ranganathan himself made modifications in the laws, which can be termed as corollaries of the said laws in order to keep up the work and services of documentation. These are:

"Documents are for use
Every reader his document
Every document its reader
Save the time of the reader
A Library is a growing organism."[3]

Thus the laws make a fundamental contribution to the documentation service which is needed to meet the requirements of specialist users and information is to be basically collected from micro-literature. Besides making a solid contribution to the development of library science and documentation, the laws are found to have basic relevance to information science and the development of subjects in the past, in the present and in future also. Professor Bhattacharyya wants to reformulate the laws in view of the present age which is called as the age of knowledge explosion. This age is further characterised by the growth of knowledge, users' demands, application of computer technology and advances in telecommunications and their impact on the society. These have changed the world and its reflections are very much felt in library and information centres.[4] So the laws as reformulated by Professor Bhattacharyya would be :

"Information is for use
"Every information user his/her Information
"Every piece of information its user
"Save the time for information user
"The universe of information is ever growing."[5]

The modifications which are made from time to time reflect the fact that the laws are having complete relevance to the changing world. Here lie the universality and eternal qualities that the laws are inheriting. Nevertheless, the basic laws are still the golden path which can be followed profitably by the libraries and information centres in order to improve their service quality, thereby helping the users in the narrower sense and the society as a whole in the broader sense.

2 QUALITY IMPROVEMENT

The improvement of quality in libraries can be related to the following conditions. Though we cannot have a measuring rod by which the per-

formance quality of the libraries can be measured, yet, following the broad criterion of the satisfaction of the clientele, for whom the libraries are established, the libraries might improve the quality to a greater extent:

(1) The users at large should be benefitted in order to get their information/document.

(2) If proper open access system is introduced with full vigilance from the authority and the shelving order and the cataloguing cards are not disturbed.

(3) The users' time should not be taken while he/she wants either a document or information.

(4) Subject approach, being the main approach of the readers, should be taken into consideration in organising the catalogue with author and title approach.

(5) Journals and other micro-literature being the proper container and carrier of present exploration of knowledge should be made readily available to the users and for this documentation service and information services should be attempted to help the researchers and other specialists.

(6) Proper and unbiased book selection to cater to the neeeds—present and anticipated—should be adhered to in order to keep the proper matching between the users and the documents of their interest.

(7) The day-to-day admininistration of the library should faciliate the users to develop the sense of belonging to the library. The users should always find it homely when they are inside the library.

(8) In case of an academic library, the quality of the same can be judged by how far it is supplementing and complementing the teaching instructions of the institutions. The quality of a public library may be said to have improved if it is able to provide all the presons irrespective of caste, creed, religion and sex, the books on recreation, human development and information. Thus, a public library, besides helping the literates, will have to make provisions for neoliterates, drop outs, and illiterate adults of the society.

(9) The library staff should be able to interprete and disseminate knowledge that is embodied in various reading materials and hence they should always act as 'friend, philosopher and guide' to the users whether freshers or regular users.

(10) The extension service by way of carrying the message of the libraries to the doors of the common people living in society should be vigorously pursued and thus a library can easily supplement the educational instructions.[5]

3 FOUR AGENCIES OF EDUCATION

Traditionally, there are four agencies of education by which people

can be educated in the society. These are

(1) Educational institutions,
(2) Press,
(3) Radio and Television,
(4) Public Library and Museum.

A present day library has included all the traditional services that can be rendered by a single library to a greater extent. Thus a library happens to be a very effective and useful social agency in educating the public.[6]

4 ROLE OF FIRST LAW IN IMPROVING THE QUALITY

This law is significant in the sense that it has revolutionised the use of books, which in ancient and medieval times were denied to the masses. It wants that the information that is contained in different reading materials procured in a library should be used by the people who actually would be benefitted by such use. It, therefore, removed the restrictions prevailing in the society in regard to the use of books. The authors who write books want to communicate their ideas, philosophies, views, interpretations of the values of life etc to the society. Therefore, a library instead of becoming a barrier for such communication, should be an agency of distribution of their thoughts. This is what the First Law emphasises. This law is vital in the organisation and administration of different types of libraries which must try to fulfil the implications of this law, so that the quality of library service is enhanced. Thus a library will be real social centre for education as this law has laid due stress on the use of books by the readers.

In order to cope with the documentation service, this law has been modified. Thus the documents which are capable of disseminating information to the users are also for use. Again in the age of explosion of knowledge, this law takes the implications farther. It demands not only the traditional book which is a thought carrier to be put to uses, but the thought content in the form of abstracting, indexing, reviews, trend report etc should also be made accessible and available for use.[7] The users should have no difficulty in having access to the free flow and use of different types of information. The application of new technology has brought the use of electronic media "for presentation of information". The electronic media has helped the use of the law in preparing the information and in the use of the same.

For improving the quality of the library as demanded by the First Law, the following points should be kept in mind:

41 Location

The implication of the law demands that the library should be located in a central place on the basis of shop analogy. The location of the library no doubt has some impact on the use of books. A centrally located library can attract larger number of users. Specially in Assam, the academic libraries of colleges and universities are not organised keeping in view the implication of this law. Again the users who feel the urgent necessity of some information which is not locally available, would not hesitate to go to library situated in a far-off place. The frequent visits to National Library and other libraries attached with the scientific institutions within the country by the users, from different states of the country is a glaring example before us.

This condition can keep the users to have easy access inside the library. But it has got less implications in quality improvement. A library located far away with more resources and having provision of personalised service will attract more numbers of readers than that of a library which is quite nearer to a user but ill-managed and disorganised.

Near location of library helps the new comers, illiterate adults and aged people for using the library, otherwise the distance would prevent them from the visits.

42 Opening Hours

A library should be kept open for more hours, so that more users may come to the library. When a library is kept open for more working hours, it would suit the timings of different people to visit the library. When the library is kept open during the morning and evening hours, people who are not free during day time can go and use the library. Moreover, academic libraries specially the university library should open before the classes start and should remain open till 10 P M in order to help the students and teachers to use the library. The use of library will be maximum provided it functions during Sundays and holidays as well. But for implementing this, each library must have two shifts of working. There should be budgetry provision for keeping the library open during holidays.

43 Library Furniture (Physical Facilities)

The physical facilities provided in a library are a very effective factor for the use of the library resources. The users are to spend some hours for study inside the library. So the furniture should be quite comfortable so that one feels at home when one is inside the library for reading. While planning the building, the architect, the engineer and the librarian should sit together for preparing the blue print of the building. The librarian's

role in this regard will be to see the functionality of the building for fulfilling the implications of the laws of library science. The specifications needed for different furniture and fittings for the promotion of use of document should be carefully adhered to. For example, the height of the racks should not be more than 6½ feet, so that an average user can take out the books from the upper rows of the racks of the stack room. There should be proper facilities of light, floor should be sound-proof, so that noise could be prevented. Provision of well-cleaned toilet, provision of drinking water and a provision of retiring room with facilities of tea or coffee can help fulfilling the implications of the law.

44 Open Access System

It removes the barrier between the reader and the book. The users can go to the stack room and select the document according to his/her choice and can personally take the interest for selection of books by consulting the catalogues and looking into the racks as guided by the classification system. This system has brought the libraries into the orbit of democratic institutions. It has got a good merit in the sense that readers who are the real users of the library are given democratic rights. The closed access system is a hindrance in the use of the book. So the First Law has respected the natural rights of the users. But this implication has two effects:

(1) It affects the administration as a larger number of staff are to be employed in order to have proper vigilance on the users who enter into the stack-rooms. Misplacement of shelving order, cutting of pages, damaging some of the important books, and stealing of books are some of the evil effects of open access system in a library.

(2) The users should not feel that the treasures in the form of books and magazines, and other reading materials, procured and arranged are for their use alone but also for posterity. Hence it is to be guarded, protected and preserved for future use. The sense of belonging must be developed in the minds of the users. Library users' education if imparted properly and timely may help to attain some amount of gain in this respect. It is indeed sad to note this aspect of the library users.

45 Library Staff

The success of a library very much depends on the services rendered by the library staff. The staff should be quite cordial and humane and should be capable to sell the ideas as marketing agent, should be able to teach the use of books, possess scholarship and professional qualification, besides the executive ability.[8]

Initially, most of the freshers are found to be shy and do not frankly

disclose their ignorance in matters of library technique or in matters of their actual needs. The warmth and affection from the library staff can help win their shyness and they would later be the habitual users of the library. The staff should develop 'work chastity' in the professional field. They should always try to sell the ideas and messages of the library. Personal contact with some of the readers may be considered as an encouragement for the others. Right behaviour with the users by the library staff may be an added attraction for the library. The community intelligence service should be a guiding principle in making proper and constant contact with the readers. Right behaviour will help in dealing the readers psychologically.

But to get best services from the library staff, the society or the administration must make good payments i e salary scale should be quite attractive and other benefits that a service holder gets from time to time, should not be denied. In the state of Assam, salaries of the college library staff are far from satisfactory. The scale enjoyed by the college librarians is lower than that of a UDC's scale. With the result there are qualified people, there are vacancies, but the posts are not filled up.

The First Law stresses the need of major contributions from the library staff for the improvement of the quality of a library.

46 Publicity

Publicity is considered a big tool for any project to make it known to the public about its aims, objectives, functions and services. A publicity wing of a library can help in propagating its significant role in the society. Library being a social institution should carry its messages to the society from time to time and at appropriate levels and intervals. Proper publicity about the stocks and different sections such as rare book section, microfilm section, reference section etc should be made to public and its *Recent Additions List*, should be periodically circulated. A good publicity in different forms can make a library a proper social utility centre. Publicity can convert a non-reader into a habitual reader. Only a user can know whether the library has the provision of indexing and abstracting services through the media of publicity.

47 Extension Service

Most of the libraries in the Western countries help the reader by providing extension service. The philosophy of this service is that the messages contained in the documents and the libraries should reach the doors of the masses. This facilitates the use of books to a greater extent. Though extension service is considered essential in view of the implications of the Third Law, its help can profitably be invoked by the First Law, too. After

all the use of books should be made maximum and in this case, this service, if rendered with all sincerity and seriousness, will have tremendous effects on the use of books. Thus in the improvement of the quality of a library, extension service renders a concrete help and benefit.

This law stresses that books are the uniting cord among the people, irrespective of caste, creed, religion and sex. It aims to educate the masses, dispel the ignorance and give ample opportunities for further self-development of the educated people. It serves as an integral part of our formal education and an eternal centre for non-formal and informal education.[9] "Knowledge for every body" is a slogan of democracy. So the function of the library is not only to collect and preserve the information, but also to promote, distribute and transfer information that is found embodied in various types of reading materials in a library. It delivers goods to the society in matters of providing information, inspiration and intellectual stimulas to the society. For the changed circumstances the position and the work of the librarian have also undergone a phenomenal change. He is today an essential factor in the implementation of an educational plan and for the social and cultural betterment of community. The importance of his role to-day is indisputable and indispensable.[10]

The shifting of burden and load from macro to micro literature has resulted in doing one's own work with more speed and this is to be considered in view of the changed circumstances throughout the world. The First Law is quite hospitable for any changes of library services in matters of 'use'.

Thus, the First Law, if implemented faithfully and with confidence, is quite significant in the quality improvement of a library. The inner voice and proper significance of this law have no doubt brought out a revolution in matters of use of books, but also it can take the revolution farther in quality improvement of a library.

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SIGNIFICANCE OF FIVE LAWS IN QUALITY IMPROVEMENT IN LIBRARIES

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0 ORIGIN OF THE LIBRARY LAWS

Padmashri Dr S R Ranganathan, a sage and a scientist of international repute, propounded for the first time in the histroy of librarianship, a requisite number of theories, canons, principles and laws to give the art and practice of librarianship, a solid and scientific base to categorise it as a discipline of library science based on theories, principles, laws like any other subject of science.

His 'Five Laws of Library Science' though framed in 1928 and presented before an enlightened audience of 1,000 teachers at the First All Asian Educational Conference at Varanasi in December 1930 and later published in the form of a long treatise in book form in 1931, are valid even today, rather their relevance and practical applicability in the field of library science has been increasing day by day ever since their enunciation.

These simple looking/sounding laws have been discussed in detail by Ranganathan in his book, *Five Laws of Library Science*, published in 1931. He gave comprehensive connotation, implication, important application etc of each law in his numerous articles in addition to the lengthy treatise referred to above. Activities both theoretical and practical as performed in various types of libraries, were analysed in the light of Five Laws justifying the validity of each Law.

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01 The Laws and Documentation

Later on during the 1960s when books came to be considered as an obsolete source of latest information as compared to documents containing nacent thought, the term 'books' appearing in the first three laws was substituted by the term 'documents' by Ranganathan in its 2nd edition. Thus the laws were found valid to the demands of documentation.

02 Information Technology and the Laws

During 1980s, when the society is preparing for entering the 21st century, with innovations in the field of information technology marked by unbelievable discoveries and improvements in electronic publication of information (far beyond the capacity of traditional means of literature production), subtle discoveries in the field of telecommunication (reducing time and space to the minimum with improving the quality of communication) need automated system of information organisation, and its retrieval to the users without loss of time. This has necessitated the replacement of the words 'document/book' and 'reader' by the term 'information' and 'users', respectively in the statement of Five Laws, so as to read as follows:

1 Information is for use.
2 Every user his/her information.
3 Every information its user.
4 Save the time of the User.
5 Library is a growing organism.

1 FIVE LAWS—THEIR IMPACT AT THE PHILOSOPHICAL LEVEL

The concept of use of books/documents/information and its subtle connotation at the intellectual level of the First Law is that use of books/documents/information means use of the thought contents of the respective information material. Each library is expected to provide ideal physical facility, surrounding and atmosphere for consultation, reference and use of its reading material, because a library does not become big by the size of its reading material alone, but by its constant use by the readers. Users of libraries who gained name and fame in the world of letters, affirm that a library becomes great on account of the comprehensive nature of the services to its readers and not on account of its vast collections. Tagore, Nehru, Gandhi, Radhakrishnan and other men of letters held the same opinion about quality library service to the readers. A library with large collection but poor in service is of little use to its readers. Thus service to

the library readers/users should be the sacred duty of library staff in every library to satisfy all the laws.

2 HISTORICAL IMPACT ON LIBRARIES

Historically, the First and Second Laws brought a revolution in the concept of library from storage/preservation to usages and from selected elite to general readership. The Third Law laid an emphasis on the use rather than storage part of reading material implying judicious book selection policy suited to the needs of the readers. The Fourth Law aims at pin-pointed documentation/information service so that a general reader and/or specialist research worker gets the desired material within the minimum spell of time and thus is able to devote maximum time to reading and reference which is his primary task.

Collectively, the first four laws aim at socialisation of knowledge in this age of democracy and socialism.

The Fifth Law endows the library with pulsating life and makes it an active rather than a dead organisation. It also invigorates the library to meet the challenges of changing society and its demands, the exponential expansion of knowledge, doubling itself every 5-10 years, and to observe the techniques of information and technology. Thus, we observe that historically the impact of Five Laws at the conceptual and philosophical level has not only been great but these laws have revolutionalised and changed the very concept of the institution of libraries from centres of preservation and storage to functional workshops of knowledge, from personal possession of few affluent elites to centres of mass education, temples of modern age and people's university, wherein all techniques and procedures are centred around the principle of service to reader, users demand and intellectual satisfaction in information retrieval.

3 IMPACT OF FIVE LAWS ON LIBRARY TECHNIQUES AND PROCEDURES—ORGANISATIONAL LEVEL

At the practical level the Five Laws have far reaching implications on quality improvement in each and every activity performed by the library staff, i e technical processing, extension work, library staff, library cooperation, library management and resource sharing etc. Their application and observance in libraries have led to socialising the libraries and formation of library standards for quality improvement in library service, e g:

1 building norms and standards;
2 library furniture/fitting norms including stacks, tables etc;
3 adequate natural ventilation/artificial ventilation norms;
4 principles of book selection;

5 socialising libraries as the temples of present/future days;
6 framing of standard library rules and regulations suited to the needs/requirements of the users;
7 agreements at the various levels from local to international in resource sharing in libraries in which UNESCO played a key role;
8 advent of open access system;
9 classification principles from broad to depth;
10 cataloguing principles from general to analytical;
11 documentation work;
12 indexing;
13 abstracting;
14 information retrieval norms;
15 users information service norms like reference service and reprography etc; and
16 The well organised material applying time saving techniques of information retrieval to serve the demands of the users/readers as the quality of research depends upon the quality of reference service.

4 STAFF NORMS

The growth in knowledge, the number of recorded documents and the ever growing needs of library users are met with through proper library extensions, provision of adequate funds and above all proportionate growth in the library staff according to the library staff formula, their professional training, inservice refresher courses to improve their know-how, granting them proper status and salary because the quality of library services depends upon the quality of library staff. It can be concluded that quality improvement in libraries is totally dependent on the Five Laws of Library Science.

5 IMPACT OF FIVE LAWS ON HUMAN RESOURCE DEVELOPMENT

The modern concept of national development gives top priority to human resource development as all the means of development are directly or indirectly dependent upon the development of human beings, their abilities and capabilities to utilise the present resources and make further discoveries/inventions. The quality of national development depends upon the quality of its citizens (human resources); the quality of human resources of a nation depends upon the quality of their education. Education is a life-long process and its quality is dependent on the quality of its educational institutions and the quality of its library system. The quality of library service is, in turn, governed by the five fundamental laws of library

science. Consequently, the Five Laws of Library Science exercise their impact on the human resource development from local to international level.

6 RIGHT TO KNOW

A revolutioanary extension of the connotation of the Five Laws of Library Science is the grant of privilege to satisfy the basic intellectual needs of every citizen through 'right to know' in addition to 'right to live', a basic right of the every citizen at the physical level as envisaged in the U N Charter. The 'right to live' remains unfulfilled in a drought hit area; similarly, the 'right to know' remains an idle moonshine in an illiterate society surrounded by remote jungle environment. The Five Laws demand equal opportunities of access to knowledge/information at the philosophical level. Their implication is 'education for all' to enable them to exercise the 'right to know'. A study of the advanced nations having high level of literacy shows that a multipurpose integrated library system providing quality library services to the people is imperative alongwith a well planned educational system to achieve 100% literacy and high quality in the sector of human resource development. UNESCO was established to obviate conflicts starting in the minds of men through education and enlightenment and it has been promoting the cause of education and public libraries known as People's University, to fulfil the aims and objects of international peace, brotherhood and coexistence. Nations of the 3rd World are being encouraged by UNESCO and international organisations to improve their literacy rate for better Human Resource Development.

7 NATIONAL EDUCATION POLICY 1986

In the academic library, service to students/research scholars and teachers has to be strengthened and modernised to meet the challenge of National Education Policy 1986. Special efforts are to be made to help the large percentage of dropout students at primary, middle, secondary, college and university levels to join the main stream of education by providing them with necessary reading material expeditiously. Library reading habits will have to be inculcated among children at the school level by catching them young so that they acquire the habit of reading and conrtibute in changing India to a nation of readers.

8 DISTANCE EDUCATION—INCLUDING OPEN UNIVERSITY SYSTEM

India, being the second largest country in human resources, needs all possible systems of education, both formal and nonformal, institutionalis-

ed and self-study programmes. In the class room, on the AIR, TV, through personal contacts, or through correspondence, assisted by a network of libraries etc India is to develop its human resources properly, by providing adequate educational library facilities to its citizens throughout life.

The importance of quality library service to students of distance education through correspondence courses and open university system, cannot be over-emphasized as more than 50% reliance is placed on public library system by them.

91 NATIONAL ADULT EDUCATION PROGRAMME, (NAEP), INTEGRATED RURAL DEVELOPMENT PROGRAMME, (IRDP), 20 POINT AND OTHER DEVELOPMENT PROGRAMMES

The National Adult Education Programme was launched in October, 1978 with the aim of achieving 100% functional literacy in India. The Integerated Rural Development Programme and the 20 Point Programme aim at development of human resources from villages of India. All these development programmes can be achieved in a tangible manner/time with the assistance of an integrated public library system, especially rural library set up catering to the information needs of the rural/adivasi people in the remotest corners of the country. Thus the philosophy behind the Five Laws as stated by Dr S R Ranganathan gives them universal coverage and relevance in the world of library and information science of all times—past, present and the future. It is with this idea in mind that H Coblans calls Ranganathan an apostle of standardisation. He also observes that Ranganathan's books and writings have systematic rigour and are cast in the logical framework or systems. Eminent library scientists agree that the first publication of Dr Ranganathan in the form of Five Laws of Library Science is sufficient to get him an honourable place among the original writers on library and information science in the world.

92 NATIONAL POLICY ON LIBRARY AND INFORMATION SCIENCE

In fact the demands of Five Laws from the national academic library system are proportionate to the challenge of the National Education Policy, 1986. This challenging situation can be met with squarely by framing National Policy on Library and Information Science by the Government of India. In order to fulfil the role of libraries in education in India, the proposed National Policy on Library and Information Science is bound to strengthen and modernise the library service to readers, improve both quantitatively and qualitatively as per norms and standards laid down by the Five Laws of Library Science.

All the policies go hand in hand improving the human resources of the nation to bring it to the level of advance countries of the world. This work of human resource development can be expedited by legislating a National Book Policy so that the reading material is standardised and made available in sufficient quantity not only in English and Hindi but also in other regional languages through original publications and/or translation etc.

The implementation of the above noted three national policies viz National Education Policy 1986, National Policy on Library and Information Science, and National Book Policy is under consideration of the Govercment of India. It will transform India into an educated and enlightened nation restoring to it the esteem and glory that it enjoyed during the Vedic age.

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SIGNIFICANCE OF FIVE LAWS OF LIBRARY SCIENCE IN LIBRARY CATALOGUING

S R GUNJAL*
S L SANGAM**

0 INTRODUCTION

Dr S R Ranganathan has now established his name as one of the greatest library scientists of the world. It is a known fact that he made an enormous contribution to the library science literature. During his life time, he did not leave any aspect of this subject untouched. His significant contribution is recognised the world over. 'Cataloguing' is one of such important subjects on which he has written books and research articles. *Classified Catalogue Code*, his first document on cataloguing, appeared in 1934.

The Five Laws of Library Science are so basic in nature that they have been universally accepted as the fundamental laws. These laws were formulated by him six years prior to the publication of his book *Classified Catalogue Code*. After experimenting their validity in many libraries and discussions with the scholars in the field, he published them in a book entitled *Five Laws of Library Science*, in 1931.

According to Dr S R Ranganathan a library catalogue should be designed so as to:

1 Disclose to every reader his or her *document*,
2 Secure for every *document* its reader,
3 Save the *time* of the reader, and for this purpose,
4 Save the *time* of the staff.

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It is evident that the above objectives of a catalogue are very simple in nature and fully expressed in the light of the Five Laws of Library Science.

1 CANONS OF CATALOGUING

With a view to achieve these objectives to their fullest extent, Dr Ranganathan derived the following *canons of cataloguing* based on the Five Laws:

Canon of Ascertainability,
Canon of Prepotence,
Canon of Individualisation,
Canon of Sought-Heading,
Canon of Context,
Canon of Permanence,
Canon of Currency,
Canon of Consistence.

These canons of cataloguing are the implications of the Five Laws and are specific to the field of cataloguing. In case of a conflict between the canons, an appeal is made to the Five Laws of Library Science to resolve the conflict. Thus, Five Laws serve as judges of a higher court.

2 FIRST LAW AND LIBRARY CATALOGUE

Library profession has designed and developed a number of tools and techniques to maximise the use of documents. One of such tools is 'library catalogue'. It is a popular reference tool for a library collection. It tells whether a library has a document on a given subject or by an author or a title etc. In other words, catalogue strongly advocates that '*the documents are for use.*'

3 SECOND LAW AND LIBRARY CATALOGUE

The Second Law imposes a number of obligations on the library staff. One such obligation is the library catalogue. Majority of the documents are of peculiar nature in their treatment of subject. Readers cannot make out the various subjects hidden in the documents. A document may contain one main subject with its ramifications scattered here and there in the text. In case of ordinary composite book and artificial composite book, neither the title nor the main entry may disclose fully all the contents. Often a reader desires to refer the subsidiary areas treated in the ordinary composite book in preference to the several text books available on the

same subject. Such hidden contents of the composite book must be brought out by cross reference entries/subject analytical entries. Otherwise, the reader may not get his required material in spite of his best efforts as the material is lying inside the pages of some of such documents standing on the shelves of the library. This means that a library catalogue should be fully analytical having necessary cross references for all the subjects treated in the documents. Only then the main objectives of the Second Law 'Every reader his/her document' will be fully achieved.

4 THIRD LAW AND LIBRARY CATALOGUE

The library catalogue plays an important role in getting Every Document its Reader. On many occasions it happens that a reader is more favourably impressed about the usefulness of a document when he refers to its catalogue entry, although its size, get-up and other features might lead him to overlook it while examining on the shelves. This may look strange, but experience shows that it does happen many a time. Besides the general service of the catalogue, there are certain classes of catalogue entries which are specially conducive to the fulfilment of the Third Law. They are 'Series Entry' and 'Subject Cross Reference' entries.

The 'Series Entry' in the catalogue enters a book under the name of the series to which it belongs. It occurs in the alphabetical part of the catalogue. In the sequence of the cards, all the entry cards with the same series as the heading are brought together, so that it discloses at once all the books that are published in the same series. The series entry of the book would naturally make the non-specialist reader to go in for the book with curiosity and eagerness.

The 'Cross Reference' entries in the catalogue are also of immense help in finding a specific reader for the documents. It is found in the classified part of the catalogue that the document will be having a subject as its heading and indicate that the book is placed under different subjects. A document may be cross referred in this manner from several subject headings. So a library catalogue should have all the series and cross reference entries. Hence the Third Law is satisfied as its objectives are fully achieved in this context.

5 FOURTH LAW AND LIBRARY CATALOGUE

Classified arrangement of cards of the entries in the catalogue saves the time of the reader. In such arrangement, a reader finds all the cards arranged together consecutively within a single catalogue tray. In the alphabetical arrangement of entries, the reader will have to turn through all the cards in all the trays of all the catalogue cabinets. Therefore, the Fourth Law calls for (i) Classified arrangement of the cards in the cata-

logue cabinet; and (ii) Analytical entries for composite book in order to save the valuable time of the reader.

In the alphabetical part, the entries are all arranged in one alphabetical sequence, by the name of each subject, author, title, collaborator and series. In the classified part, the entries are arranged in the filiatory sequence of their subjects. To mechanize this filiatory sequence, each subject is represented by an ordinal number. Hence the classified part of the catalogue confirms the advocacy of the Fourth Law, 'Save the time of the reader.'

6 FIFTH LAW AND LIBRARY CATALOGUE

The Fifth Law has an important warning against the inordinate growth of the catalogue in the library. The cataloguing elements in the title page of a document may change. A catalogue code, therefore, should have some potential capacity to accommodate such changes without disturbing the existing rules. Regarding the physical form of the catalogue, books would be continuously added to the library and the respective entry cards will be inserted in the catalogue cabinets. Therefore, the bulk of the catalogue would be naturally increased. It is a continuous growth. So no body could deny the statement that the 'Library Catalogue ever grows.'

7 CONCLUSION

It is evident that the library catalogue is an important tool which fulfils the aims and objectives of the Five Laws of Library Science in their spirit and letters. In the light of the above discussion, any conflict arising amongst the canons of cataloguing can also be solved easily and amicably.

READINGS

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MANAGEMENT BY OBJECTIVES IN A MEDICAL LIBRARY

GYAS UD DIN*

0 INTRODUCTION

Whether some kind of objective approach is employed in the management of a medical library will depend very much on whether management by objectives (MBO) has been introduced throughout the parent organisation. The Institute of Medical Sciences is being developed at Srinagar with the objective of providing facilities for specialised medical care, post-graduate medical education and need-oriented clinical research. The management functions of the Institute become more visibly important as objectives of the Institute become more ambitious and the organisational network established to achieve these becomes large and more complex. Since team work continues to gain momentum in the Institute, MBO was considered valuable to offer a logical and helpful mode of team management. The Institute Library which is being developed as a vital and effective information department has, therefore, preferred to employ MBO system in order to serve the Institute's objectives of patient care, medical education and clinical research in a much effective manner.

1 MAIN CHARACTERISTICS OF MBO SYSTEM

The system envisages that the highest policy makers in the Institute decide what they want to accomplish and communicate this in written form to the second line managers. This communication process continues down through the managerial hierarchy with each individual intimating objectives of the Institute to his subordinates and detailing out his assignment which will help Institute achieve its objectives. The main characteristics of the system may be described as follows:

*Chief Librarian, S K Institute of Medical Sciences, Srinagar (J & K).

1 Overall objectives, targets and priorities are defined for the Institute.
2 The Institute works to accomplish these objectives through specified, concrete and relatively short-term and time-bound achievable 'goals' which are set for and by constituent departments, services, officers and individual staff members.
3 The proposed goals are evaluated vis-a-vis cost efficiency.
4 The proposed goals to be achieved are mutually agreed upon by senior and subordinate officers.
5 The activities necessary to achieve these goals are distributed amongst various 'functional units' to facilitate their accomplishment.
6 There are regular periodic reviews of the achievements of the goals for various functional units, constituent departments and services to review the objective programmes of the Institute as a whole.

The system is thus mainly composed of objectives, motivation and control by setting targets, organising functional units, continuous periodic review of the achievements and staff appraisal. Each of these factors invites discussion as set forth in the subsequent sections.

2 DETERMINING OBJECTIVES

The main objective of the library is to support as well as to stimulate the work of its clientele comprised mainly of students, resident doctors, faculty members, practitioners and researchers. Since the whole purpose of MBO is to maintain a viable link between all kinds of day-to-day library activities and the services available to its clientele, attempts were made to formulate library objectives in terms of existing demands as well as in terms of conscious 'needs'. Keeping in view the resources available and limitations thereof and reviewing the constraints and opportunities, the basic overall library goals were drawn as follows:

1 To acquire a core collection of information material on all major areas of medical practice including essential materials in nursing and allied health professions.
2 To develop, beyond the core collection, the information material reflecting specific interests and needs of the Institute's professional staff.
3 To organise the library's collection in a helpful sequence for maximum use.
4 To ensure maximum accessibility to library's collection by lending, facsimile copying, inter-library loan and congenial physical

facilities.

5 To provide Selective Dissemination of Information (SDI) service based on library's collection in the form of monthly documentation lists.

6 To provide information service based on other local, regional and national information centres.

7 To maintain and improve cost-efficiency of library's operations.

3 TARGET SETTING

It may be observed that most of these goals are not quantifiable. These were, however, recognised to be the means to achieve library's main objective of supporting and stimulating the work of its clientele. The quantifiable goals, thus recognised, are to be accomplished through achievable 'targets' on six monthly basis. The targets are set in a way so that they are neither very optimistic nor pessimistic but realistic and achievable with moderate efforts and initiative. These targets are to be specific events and not as on-going library activities. While activities represent efforts applied over the period of six months, events are specific accomplishments.

The process of target setting starts from within different functional units in which all the members of the unit participate. Having arrived at a concensus of targets vis-a-vis goals in respect of all the functional units, the Chief Librarian discusses the quantifiable targets with the management. Having thus finalised the library goals vis-a-vis time-bound targets with the management, the Chief Librarian distributes these possibly modified targets on unit-wise basis taking one Assistant Librarian and his staff as one functional unit.

It is being observed that there is considerable difficulty in stating clear service targets. To ensure the services offered also is not that easy. The total number of books lent on loan for six month's period cannot match some target. It seems meaningless of circulating a particular number of books in six months. On the other hand, acquisition and technical units established the targets of acquiring and processing a particular number of books in six months, of course with monthly check points. This was accomplished with a fairly reasonable rapidity as compared to the former monthly averages.

4 PERIODIC PERFORMANCE REVIEW

A periodic review of a functional unit's performance against mutually agreed pre-set targets is an essential ingredient to the whole system. The assessment provides useful information regarding establishing targets for the next six months. In case targets could not be achieved, it points out

to the possible weak points in the department and its management. For this purpose a six-monthly assessment programme has been introduced. To facilitate target-setting and overall assessment of work performance of a calender year, three series of forms have been introduced as outlined below.

(a) *G-1 Series* (*Appendices I, Ia and Ib*)

It pertains to the first six months of a calender year. In form *G-1a* targets to be achieved by June 30, as also those proposed to be achieved by December 31, are entered. In form *G-1b* actual achievements vis-a-vis pre-set targets are to be entered at the end of six months work. Form *G-1c* is a true copy of G-1b and is retained by the appraiser for record purposes.

(b) *G-2 Series* (*Appendices II, IIa and IIb*)

It applies to the next six months of the calender year. In form *G-2a* revised targets to be achieved by December 31, as also the projected targets to be achieved by June 30, next year are entered. In form *G-2b* actual achievements vis-a-vis present targets are to be entered at the end of six months. Form *G-2c* is once again a true copy of G-2b and is retained by the appraiser for record.

(c) *G-3 Series*†

This series is being filled at the end of a calender year. In form *G-3a* is entered the self assessment of the appraisee, in form *G-3b* the remarks of the Appraiser/Initiating Officer, in form *G-3c* the remarks of the Reviewing Officer and in form *G-3d* the remarks of the Accepting Officer. G-3 series presents an overall review of the performance of an employee for one calender year alongwith recommendations for career planning and professional training needs.

5 STAFF APPRAISAL

The appraisal is an objective generalization made on the basis of an unbiased observation of the working of an individual and is done in the form of grading the performance in accordance with one of the following four categories:

†Not reproduced, as these are on lines similar to the Assessment Reports prevalent in other departments.

(a) *Poor*

The appraisee has consistently performed poorly during the year under review and has not taken note of the feed-back given to him by the appraiser.

(b) *Below Average*

The appraisee has performed below mutually agreed levels of performance during the year under review but has shown some promise in effecting improvement on the basis of feed-back by his appraiser.

(*c*) *Good*

The appraisee has performed the routine job and special tasks assigned to him to an acceptable level. His on-the-job performance does not have any adverse element.

(*d*) *Outstanding*

The appraisee has demonstrated that in addition to performing the assigned tasks adequately, the appraisee has taken initiative in accepting the responsibility and in identifying areas of improvement and at his own initiative has brought improvement in the interest of the unit.

Since the junior staff of the library shares no direct responsibility and has little involvement in policy making, a straightforward rating system has been designed to suit their style of working. Their assessment is done on quarterly basis against various personality and job traits, namely, Reliability, Honesty and Integrity, Personal Hygiene, Emotional Stability, Punctuality and Regularity, Intelligence, Physical fitness, Knowledge of work, Quality of work, Disposal of work, Diligence, Devotion and Team Spirit. On the basis of these traits a quantitative assessment of the work performance is achieved.

6 OPPORTUNITIES

1 Since most of the medical libraries are parts of large institutions and have to perform in complex corporate systems, MBO provides valuable framework for library planning, resource allocation and coordination for management.
2 It gives support to library's claim for consistent and reasonable increase in its funds necessitated due to continuous increase in the cost of acquiring library material.
3 It encourages assessment of a wide range of potential goals at all

levels of the development of the library and helps in identifying priorities at a given stage.

4 It can provide regular feedback about the relevance of library services to its clientele and their effectiveness.

5 The system helps in increasing the efficiency of staff members, improving their performance, enhancing their work potential, meeting their training needs and planning their career for higher professional assignments.

6 It makes staff participation in decision making possible.

7 PROBLEMS

1 There is always a difficulty in stating some of the service goals in quantifiable terms. There is, therefore, every danger that the non-quantifiable on-going activities in the library, which make it a pleasant service to use, are neglected.

2 Some facilities like number of books issued, enquiries received cannot be fixed as targets because performance in such cases depends on conditions mostly outside the control of the library staff.

3 The Chief Librarian cannot formally plan the entire management process unless non-quantifiable services and other procedures are analysed to determine their effectiveness and need for improvement and change.

4 The standards for most of the professional library services and operations are not available and wherever available they define minimum requirements in broad programme areas only.

5 In potentially creative library conditions staff needs time to think and to interact with colleagues and clientele about comparatively better possible services. This is not very much convenient in MBO system where the atmosphere becomes tightly structured and the thinking and working of staff gets caught up between one dead line to another. There is, therefore, a possibility that the initiative and creativity of the staff gets inhibited.

6 For fair accomplishment of the targets established it was observed that the library staff should feel a sort of personal commitment which cannot be aroused in an environment of fault finding and discouraging organisational climate. It, therefore, invites a significant and honest change in the climate of the organisation and genuine attitude changes in the senior management—a factor very much beyond the influence of library.

7 Library being a part of large parent institution, its working depends enormously on policies and attitudes of management. There is every possibility that other managerial hierarchies might affect its

performance adversely. An honest appraisal of the conditions in which library staff is performing for the accomplishment of their goals, even though it assumes substantial importance, is often neglacted and put aside by management.

8 Various managerial hierarchies have a tendency to assume bureaucratic attitudes since there has always been a diffidence on part of management to accept library as a professional department. This certainly creates inhibitions in the performance of various library operations on a team pattern which is an important ingredient as well as contribution of MBO system. Greater autonomy for the library, therefore, becomes all the more pressing in a complex institution.

8 SOLUTIONS

In order to carry on evaluation process for the existing non-quantifiable library services and procedures, the Chief Librarian may examine the following four classes of evaluation:

1 Effort Evaluation,
2 Process Evaluation,
3 Effectiveness Evaluation, and
4 Impact Evaluation.

81 Effort Evaluation

The Chief Librarian can compare the resources used with the results achieved. For example, in an inter-library loan operation, the resources such as staff time, salaries, may be measured and then compared with the number of inter-library loan transactions.

82 Process Evaluation

The Chief Librarian can evaluate processes to determine whether the procedures used in the performance of a service are efficient and appropriate. For example, if the staff has used two different procedures to determine which library owns a particular journal title, process evaluation can indicate which method is more efficient. The method of consulting a union list of serials for journal title information is certainly more efficient than calling every source in the area.

83 Effectiveness Evaluation

Evaluating programme effectiveness determines whether the service

accomplishes its objectives. For example, an effectiveness evaluation of inter-library loan service might assess whether users receive the material in time for the information to be helpful. If the staff objective is to supply 75% of inter-library loan requests in three weeks, the evaluation can indicate if the objective is being met.

84 Impact Evaluation

It can assess the extent to which accomplished objectives actually meet the requirements of parent institution. This class of evaluation could be used to measure whether library service is improving patient care by making information available that would normally not have been accessible.

In addition to different classes of evaluation, the following types of measurement criteria which represent different techniques of evaluation can be used.

85 User Opinion

The opinion of user is one of the most important measurement criteria from the service point of view. Measurement of user opinion is usually taken after a new programme is launched or when an existing service is reviewed. In either case the Chief Librarian should be prepared for a negative feedback, be willing to balance the negative and positive responses and make alterations in a service that gets poor reviews. The Chief Librarian can use survey questionnaire, suggestion box or interviews with a cross section of library users for collecting his data.

86 Expert Opinion

Although evaluation by expert opinion can probably be used less frequently than other types of evaluations, it may provide the Chief Librarian, the Library Committee and the management with an objective assessment of library services. Expert opinion can probably be more helpful in evaluating a specific programme such as audiovisual services, computerised information services, etc. Although experts can be used in evaluating total library operations, their recommendations may tend to be broad and general.

87 Comparison with other Organisations

Even though the medical libraries vary greatly in size and scope, the Chief of the Library Services can usually identify several institutions with programmes and services similar to his library. While comparing one library with another, only data that are not associated with a particular

institutional situation can be assessed. For example, comparing budget in institutions of similar size and scope might be helpful but comparing titles in the collections would not be appropriate because collections are developed to serve the specific needs of individual institutions.

88 Quantifiable Processes

This type of assessment can measure the completion of a certain number of procedures in a given time. To evaluate an inter-library loan, for instance, the Chief Librarian shall have to identify the individual steps involved in an inter-library loan and measure the time spent on each, as well as the total time and average time per request. The Chief Librarian would find this type of evaluation particularly useful in determining staff requirements in addition to staff performance.

To create an evaluation strategy, the Chief Librarian should measure any of the four evaluation classes by using any one of the appropriate assessment criteria or techniques. The choice of class or criteria would depend on the situation being evaluated and the nature of information required or expected by the Chief Librarian from the evaluation process.

To conclude it may be stated that even though some of the problems were observed to create discouraging conditions, it was noted that the system as a whole helps library staff to organise their day-to-day activities more consistently and effectively to support and stimulate the work of its clientele.

READINGS

1 ODIORNE (George S). Management by objectives—A system of managerial leadership. 1965. New York, Pitman.
2 SELF (P C) and GEBHART (K A). A quality assurance process in health science libraries. *Bull Med Lib Assoc.* 68; July, 1980; 288-92.
3 TAGLIA COZZO (R). Estimating the satisfaction of information users. *Bull Med Lib Assoc.* 65; Apr, 1977; 243-49.
4 NOBLE (Palmela) and WARD (P L). Performance measures and criteria for libraries: Survey and bibliography. 1976. Libraries Research Group.
5 McCLURE (C R) *Ed.* Planning for library services: A guide to utilising planning methods for library management. *Journal of Library Administration.* 2; Summer/Fall/Winter, 1981.
6 KNIGHTLY (J J). Overcoming the criterion problem in the evaluation of library performance. *Spec Lib.* 70; Apr, 1979; 173-83.

APPENDIX I

SPECIMEN FORM

PERFORMANCE APPRAISAL | | | | | Year | G la

HALF YEAR ENDING JUNE 30

PERSONAL DATA :

Name and Employee Code _____

Classification and Code _____

Department and Code _____

GOAL SETTING

To be Achieved by June 30, | | | | | Current Year

To be Achieved by December 31, | | | | | Current Year

The above goals are mutually agreed and shared between the Appraisee and the Appraiser.

Signature of the Appraiser
Date

Appraiser's Signature
Name/Employee's Code
Classification & Code
Department and Code
Date

INSTRUCTIONS : 1. Goals should be defined as events and activities.
2. Goals should not be very optimistic or pessimistic, but realistic and with moderate efforts and initiative.
3. Form G-la, complete in all respects, should reach the manpower development section in the beginning of the year, but in no case later than January 15.

APPENDIX Ia

SPECIMEN FORM

PERFORMANCE APPRAISAL

HALF YEAR ENDING JUNE 30 | | | | | Year

G 1b

PERSONAL DATA :

Name and Employee Code _____

Classification and Code _____

Department and Code _____

GOAL SETTING

To be Achieved by June 30, | | | | | Current Year

To be Achieved by December 31, | | | | | Current Year

The above goals are mutually agreed and shared between the Appraisee and the Appraiser.

Signature of the Appraisee
Date

Appraiser's Signature
Name
Employee Code
Classification and Code
Date

INSTRUCTIONS : 1. While submitting form G-1a to the manpower development section, forms G-1b & G-1c should be retained by the appraiser for subsequent use.

2. Immediately after June 30, the appraisee should carry out self assessment of his/her performance during half year ending June 30, in relation to the present goals. Deviations from present goals should be highlighted giving reasons for better or poor performance.

SELF APPRAISAL

To be made by the appraisee in relation to pre-set goals achievable by June 30 | | | | |
Year

Appraisee
Date

To be recorded by the appraiser regarding specific achievements and failures of the Appraisee.

Appraiser
Date

INSTRUCTION : Form G-1b with self appraisal by the appraisee and brief remarks of the appraiser should reach the manpower development section immediately after June 30, but in no case later than July 15.

APPENDIX Ic

SPECIMEN FORM

PERFORMANCE APPRAISAL

HALF YEAR ENDING JUNE 30

Year

G-1c

PERSONAL DATA :

Name and Employee Code_____

Classification and Code_____

Department and Code_____

GOAL SETTING

To be Achieved by June 30,

Current Year

To be Achieved by December 31,

Current Year

The above goals are mutually agreed and shared between the appraisee and appraiser.

Signature of the Appraisee
Date

Appraiser's Signature
Name
Employee Code
Classification and Code
Department and Code
Date

INSTRUCTIONS : Form G-1c is a true copy of form G-1b.
It should be retained by the appraiser for purposes of record and future reference.

SELF APPRAISAL

To be made by the appraisee in relation to pre-set goals achievable by June 30 | | | | |
Year

Appraisee
Date

REMARKS

To be recorded by the appraiser regarding specific achievement and failures of the Appraisee.

Appraiser
Date

APPENDIX II

SPECIMEN FORM

PERFORMANCE APPRAISAL

HALF YEAR ENDING DEC 31

Year

G-2a

PERSONAL DATA :

Name and Employee Code _____

Classification and Code _____

Department and Code _____

GOAL SETTING

Revised goal to be achieved by December 31 | | | | | |

Current Year

Projected goals to be achieved by June 30 | | | | | |

Next Year

The above goals are mutually agreed and shared between the Appraisee and the Appraiser.

Appraisee's Signature
Date

Appraiser's Signature
Name/Employee's Code
Classification and Code
Department and Code
Date

INSTRUCTIONS : 1. Goals should be defined as events and not activities.
2. Goals should not be very optimistic or pessimistic, but realistic and achievable with moderate efforts and initiative.
3. Form G-2a, complete in all respects, should reach the manpower development section immediately after June 30, but in no case later than July 15.

APPENDIX IIa

SPECIMEN FORM

PERFORMANCE APPRAISAL | | | | | Year

HALF YEAR ENDING DEC 31

G-2b

PERSONAL DATA

Name and Employee Code _____

Classification and Code _____

Department and Code _____

GOAL SETTING

Revised goal to be Achieved by December 31 | | | | Current Year

Projected goals to be Achieved by June 30 | | | | | Next Year

The above goals are mutually agreed and shared between the Appraisee and Appraiser.

Appraisee	Appraiser's Signature
Signature	Name
Date	Employee Code
	Classification and Code
	Department and Code
	Date

INSTRUCTIONS : 1 While submitting form G-2a to the manpower development section form G-2b should be retained by the appraiser for subsequent use.

2. Immediately after December 31 the appraisee should carry out self assessment of his/her performance during half year ending December 31, in relation to the pre-set goals. Deviations from pre-set goals should be highlighted giving reasons for better or poor performance.

SELF APPRAISAL

To be made by the appraisee in relation to pre-set goals
Achievable by December 31 | | | | |
Year

Appraisee
Date

REMARKS

To be recorded by the appraiser regarding specific achievements and failures of the appraisee.

Appraiser
Date

INSTRUCTION : Form G-2b with self appraisal by the appraisee and brief remarks of the appraiser should be returned to the manpower development section as an appendage to the annual performance appraisal report to be submitted immediately after the year is over but in no case later than January 15.

APPENDIX IIb

SPECIMEN FORM

PERFORMANCE APPRAISAL

HALF YEAR ENDING DEC 31

Year

G-2c

PERSONAL DATA

Name and Employee Code _____

Classification and Code _____

Department and Code _____

GOAL SETTING

Revised goal to be achieved by December, 31 | | | | | |

Current Year

Projected goals to be achieved by June, 30 | | | | | |

Next Year

The above goals are mutually agreed and shared between the appraisee and the appraiser

Appraisee's Signature
Date

Appraiser's Signature
Name
Employee Code
Classification and Code
Department and Code
Date

INSTRUCTIONS : Form G-2c is a true copy of form G-2b.
It should be retained by the appraiser for purposes of record and future reference.

SELF APPRAISAL

To be made by the appraisee in relation to pre-set goals achievable by December 31 | | | | |
Year

REMARKS

To be recorded by the appraiser regarding specific achievements and failures of the appraisee.

Appraiser
Date

MECHANISATION OF LIBRARY OPERATIONS WITH SPECIAL REFERENCE TO CLASSIFICATION AND CATALOGUING

SANTOSH SHARMA*
SHAMSHER SINGH*

1 INTRODUCTION

Gone are the days when libraries were considered as storehouses of documents. A modern library is not only being considered as an information centre but also an institution for self-education which imparts education to those who wish to achieve it. Being an information centre, library helps to a greater extent for research and investigation in different areas of universe of knowledge. Information is considered as a basic resource for national development. It is the library which generates the necessary information to feed the various researchers/scientists in different areas. Whether a nation is 'developed', 'developing' or 'under-developed', the libraries play an important role in national development.

2 MODERN CONCEPT OF LIBRARY SERVICES

Earlier the librarian was considered as the caretaker whereas a modern librarian is considered as an information scientist who is pleased to preserve, organise and disseminate the information to the library users.[1] J S Shera has remarked that "library of future should be a true information centre. The library of tomorrow must be functional rather than monumental". He further advocates that "knowledge is the life blood of our civilization and the library of future may be regarded as an instrument and by which its continuing circulation of knowledge is maintained."[2]

In the recent years there has been an increasing recognition among the governments of the developed as well as the developing countries that

*Jammu University Library, Jammu (J & K).

information, i e recorded or communicated knowledge gained by man through experience, observations and experiments is a vital national and international rosource and a prerequisite to the effective pursuit of national policies for economic, scientific, technological and social development. A declared National Policy for Library and Information Services (NPLIS) which implies a strong government interest in information planning would be expected to create the climate most hospitable to the development of an efficient information system in a country. The fundamental premise underlying such a policy is that any economic, social and political system will perform more efficiently, if mechanism exists to ensure that decision makers in various fields at different levels have timely access to relevant information in an appropriate form. A number of countries have carried out extensive studies towards the efficient provision of information services at national level and are continuing their efforts, keenly aware that they still have much to accomplish, so as to be able to satisfy the rapidly expanding demands for information in all fields of human activities.[3]

3 INFORMATION TECHNOLOGY

During the present century, there has been an exponential increase in the volume of recorded knowledge and a revolution in the control and transfer of information by means of electronic technology. The role of science has reached a level of development at which the productivity of a scientist increasingly depends on a streamlined and efficient organisation of scientific activity and the speed with which he is supplied with scientific information. These changes have not only brought the resources specialisation of media, library and information science into a closer working relationship, but have been the impetus for the creation of a new profession, that of new communications.[4]

Developments in computer and communication technology have brought about a new dimension to the programme of information handling. A great variety of machinery with hardware and supporting software has been introduced. The introduction of micro-processor and mini-computers has made things much easier, and it is now within the reach of even small organisations to computerise their needs. All these developments facilitate better services to the users.[5]

4 MECHANISATION OF LIBRARY OPERATIONS

Formerly, mechanisation of library operations was confined to some petty special collection. But now application of computers or other mechanisation techniques in almost all types of libraries has become popular. In India, the automation in libraries has started. Some of the important examples are various libraries attached to Panjab Agricultural University,

Indian Institute of Petroleum (Dehradun), Indian Management Institute (Calcutta), Structural Engineering Research Centre (Roorkee) etc. Today, computers can be applied to different types of operations in almost all types of libraries.

41 Computerised Classification of Books

The computers can also be applied to the process of classification of books. If such a scheme is introduced, then it would be a tremendous time-saving device in various types of libraries.

42 Ranganathan's Ideas

The number of subject groups had to be increased with the increase of subjects. This made the need for the discipline of classification felt. It was found to be more convenient to translate the name of the subject, first into classificatory language and then translate the class number into machine language. Analysis of the name of subject into its basic and isolate terms was found necessary. Ranganathan is of the opinion that it is more economical to use the classificatory language as a bridge language between natural and machine language.[6]

43 U D C and Computer

In an experiment made in India, it could not be possible to use Universal Decimal Classification (UDC) without any modifications for coding the information for computer manipulations. This fact was observed while compiling a directory on computer. It was also noticed that a faceted scheme of classification can produce better results in this direction.[7]

44 Colon Classification and Computer

The various experiments conducted at DRTC, Bangalore are based on freely faceted version of *Colon Classification* (CC) scheme. The following procedure was followed while applying computer for classification of documents:[8]

(i) the various schedules of *CC* are transferred on tape which include the schedules of basic classes, special isolates and common isolates;
(ii) the kernel terms of the document to be classified are fed into the computer;
(iii) while synthesising, the components of a required class number are taken in a sequence in which they should be synthesised manually according to the prescribed principles and postulates; and, finally,
(iv) the computer can assign automatically the appropriate class number to the document.

45 Machine-Readable Cataloguing

MARC (Machine Readable Catalogue) format and ISBD (International Standard Bibliographic Description) are the other two major developments in the field of automated cataloguing and bibliographical description. In 1965, the Library of Congress initiated a project to represent cataloguing data in machine-readable form which has come to be known as MARC project.

Under MARC programme the subscribing libraries receive tapes containing cataloguing information of new books on weekly basis and are also supplied with computer programme to be used locally in printing lists and catalogue cards. Thus, all subscribing libraries can cut down their own input costs considerably. One of the basic objectives of the project was to develop a standardized format for machine-readable bibliographic data and this has been achieved substantially. The MARC format design has been developed with the advise of a number of libraries and Professional Associations.[9] MARC II was also completed with the development of a new format capable of transferring bibliographical data to the receiving libraries. MARC II also meets the standard advantages of any cataloguing system.

46 International Standard Bibliographic Description (ISBD)

International Standard Bibliographic Description (ISBD) has been developed and recommended by the working group of ISBD set up at the International Meeting of Cataloguing Experts at Copenhagen in 1969. It was felt that ISBD would mean radical changes in our cataloguing practice, especially descriptive cataloguing. The ISBD recommendations were published in 1971, exactly ten years after the Paris conference.[10] ISBD was designed primarily as an instrument for the international communication of bibliographical information. Since exchange of this data would eventually be in machine-readable form, the punctuation by which the information should be demarcated, should also be suitable to machine-readable form. The development of AACR 2 meets the ISBD standards and recommendations. AACR 2 is also applicable to machine-readable form.

47 Indian Experiments

A number of operations in this direction were experimented in India. Compilation of union catalogue of various libraries in Calcutta with the punched card equipment was experimented in Indian Statistical Institute, Calcutta in 1964 in collaboration with the data processing unit. Indian Institute of Technology, Kanpur also experimented during the year 1964, for the compilation of union catalogue on IBM 1620 computer. Another

effort was made in Indian National Scientific Documentation Centre (INSDOC), New Delhi for the compilation of Union Catalogue of 89 libraries of Karnataka using an IBM 1620 computer. The experiment was assisted by providing the computer facility by the Delhi School of Economics.[11]

5 CONCLUSION

The application of computers in various library operations has had a considerable effect. The librarian should have the knowledge of the potentialities and limitations of the computer and should not be completely dependent upon outside experts. The use of computers has provided a new task for working librarians in the analysis, planning, implementation and maintenance of the system.[12,13]. Application of computers especially in the operations of classification and cataloguing can help to overcome the limitations of manpower in various types of libraries.

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QUALITY SYNDROME OF LIBRARIANSHIP

A R SETHI*

0 THE SYNDROME OF QUALITY

Quantitative growth is the pursuit of any profession in the making. Only after it has attained a certain level of numerical growth in terms of professional manpower, professional bodies and professional literature that it can afford to pause and ponder if what has been achieved is also qualitative. In case the answer is in affirmative, the onward march of the profession is led by qualitative factors.

The choice of the topic of this year's ILA Conference, 'Quality in Libraries' is, therefore, in tune with the natural development of the library profession. It is both a testimony to the quantitative growth of the profession as well as its resolve to march forward henceforth guided by qualitative considerations. It is hoped that with the conclusion of this Conference, library profession in India would have covered one phase and shall launch itself on the second phase of its incessant journey.

The purpose of this paper is to identify the attributes (the characteristics or the traits) of 'quality', lay down the 'quality tests', and, finally, to subject the various components of librarianship—viz, the library, library education, library R & D, library literature, and library associations—to these tests of quality, in particular context of India.

1 ATTRIBUTES OF QUALITY

Quality is an attribute, a characteristic or a trait, the possession of which invests a thing, a person, or an idea with a sense of superiority. The other attributes of quality are :

(i) *Quality is intangible.* Quality, like value, is imperceptible. Only

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when it manifests itself in a person, a matter, a method, or an idea that it is discernible. But though intangible, its presence is evident and its loss eloquent.

(ii) *Quality is relative/associative.* There is nothing like 'absolute' quality. Quality is associative with time, place, environment, and the people. A quality product or a quality service in one milieu or environment may not necessarily be a quality product or a quality service in another. Similarly, one cannot impose one's own notion of quality on others.

(iii) *Quality has a tendency to deteriorate.* Quality is highly perceptible to the forces of obsolescence. It has a natural tendency to deteriorate with the passage of time, shift in environment, and change in values. Standards are, therefore, evolved not only to maintain the quality, but also revised from time to time to further improve it.

(iv) *Quality and Quantity—A dialectical relationship.* Much is made of the fact that quality tends to go down as the quantity goes up. There is an element of truth in it. But one should not allow oneself to be overwhelmed by this notion and let the quality suffer under the onslaught of quantity. The managerial quality lies in keeping

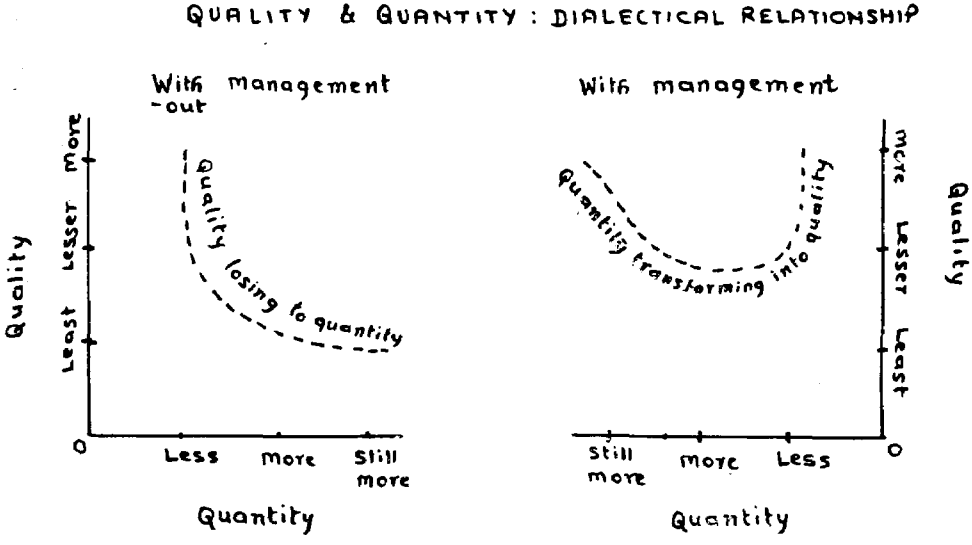


Fig. 1.

quality abreast of quantity, certainly not behind it, and eventually creating conditions in which quantity can transform itself into quality. The relationship between the two is of dialectical nature and not of perpetual antipathy.

(v) *Quality is a seamless whole.* Quality is indivisible. It cannot partly 'be' and partly 'not be'. Either it *is* or it *is not*. Also, it should not be judged in parts.

2 TESTS OF QUALITY

A quality syndrome is characterized by:

(i) a high rate of 'hits'/a low rate of 'miss's';
(ii) a high rate of acceptance/a low rate of rejection;
(iii) a high level of motivation of workforce/a low level of burnout.

A quality product or service meets the standard set for it in its closest proximity; the chance of its missing the target is minimum. As a result of this, it is accepted by the consumer/end-user unquestioningly and demanded again and again; the likelihood of its being rejected is remote. Obviously, such a product or service is the handiwork of a motivated workforce; a workforce afflicted with frustration, unfulfilled wants and unfructified aspirations cannot deliver quality product and quality service.

3 LIBRARIANSHIP : PARAMETERS OF QUALITY

It is against the backdrop of the above-mentioned attributes and tests of quality that we may proceed now to discuss the umbral theme of 'quality librarianship'. This can be done by subjecting the various components of librarianship to the parameters of quality. It may be mentioned here that the attributes and tests of quality, while retaining their basic character, undergo a nomenclature change according to the nature and type of subject or object of study. Each subject/object of study has its own set of parameters, and the same should be evaluated in terms of those parameters only. Librarianship too has its own parameters for evaluation as illustrated in Table 1.

4 LIBRARIANSHIP : THE INDIAN SCENE

That all is not well with the Indian librarianship has been the theme of many a conference and seminar in the country. Each aspect thereof has been thrashed threadbare. Yet the show goes on merrilly. However, the premise that this Conference is the exclusive one on 'Quality' and that it should be able to bring all the issues relating to quality in focus, prompts the author to do some plainspeaking about the functioning and status of various components of librarianship in India. The purpose is not to hurt and wound, but to open the wound for the purpose of cleansing and healing.

Table 1 : Parameters of Quality in Librarianship

Component	*Parameters*
1 Library	
11 Reading material	Best books for the largest number at the least cost (Melvil Dewey) Right book for the right reader at the right time (*Drury*) Every book its reader (Ranganathan)
12 Library techniques	Logical but practical Easy to practise Simple to follow Purposive to the specific library Uniform application
13 Library use	Books are for use (Ranganathan) Every reader his/her book (do) Save the time of the reader (do)
14 Library building, furniture and equipment	Functional Aesthetic Comfortable
15 Library environment	Reading atmosphere
16 Library staff	Academically qualified Professionally trained Uptodate with information Motivated
17 Library Management	Having the capacity to plan organise staff control coordinate lead
2 Library education	Current Relevant Having the potential to develop the skills

Table 1 (*contd. on page* 119)

Table 1 (*contd. from page* 118)

	Component	*Parameters*
3	Library R & D	Relevant Productive Promotes self-reliance
4	Library literature	Thoughtful and imaginative that analyses the past, depicts the present and projects the future Non-repetitive Readable
5	Library associations	That protect and promote the interests of professionals Representative

We start with *book selection*, the primary and basic job of any librarian. But how many librarians actually select the books for their libraries? Is it not a fact that most of them are merely dictated by what is to be procured and from where? On the other extreme is the pernicious trend of opening of 'bookshops' in libraries. What a fall, my professional brethren!

Thanks to Dr Ranganathan, Indian librarians had at one time excelled themselves in *library techniques* of classification and cataloguing. Slowly that lead is slipping out of our hands, and our dependence on foreign techniques, which are more practical than logical but very costly, is becoming more and more desperate.

It is gratifying to note that as compared to the past, the up-coming *library buildings* carry the spectacle of spaciousness and splendour. But that is the farthest they go. The element of *Sundaram* (aesthetics) is grossly missing in them. However, what is more disappointing about them is that they are not being designed keeping in view the climatic conditions of the region. Artificial lighting and air conditioning is being emphasized at the cost of natural sun-light and fresh air. Space-problem is not very acute in India so far; still high-rise towers are being built around. Similarly, while designing furniture, the physical traits and social habits of the library users are seldom taken into consideration.

Library environment is only a microcosm of the bigger social environment. The pollutants, air and noise, and the delinquent tendencies of youth that afflict our society today, affect the library environment, too. Few libraries present the picture of serenity and tranquility that the temples of learning ought to be.

It is ultimately the *library staff* that decides the quality of material and service in a library. And it is here that the libraries seem to be

fighting a losing battle. The intake of neophytes, though much better than before, still consists of drifters and left-overs. The feeling in them of not having 'made it' haunts them throughout their careers and gets reflected in their dealings with library users. Lack of promotional avenues and far from congenial working conditions in the libraries further aggravate the situation.

If staff represents the limbs, the *management* acts as the head, which directs the organisation. The quality of planning, organising, staffing, control and coordination depends upon the decision-making capacity of management. In India, barring some honourable exceptions, it is the small men who have been entrusted with the job of running big libraries. They lack the stamina and the vision for decision-making. But much worse aspect is that they are spoiling the next generation of librarians too with their lack-lustre, insipid and uninspiring performance.

Library education in India has been at par with the best anywhere. However, with the passage of time it is going on the downhill on account of its outdatedness and irrelevance. Living in the ivory-towers as they do, the library science teachers have lost touch with the library practice. The balance between practice and teaching maintained assiduously till 1960s has tilted, undermining the quality of both in the process.

Quality has a tendency to deteriorate, we said in the beginning. It has got to be not only maintained but also improved. ***R & D*** is the tool for it. Library R & D in India is still in its infancy. It is important, therefore, that it should be installed on a firm footing and given the right direction in the beginning itself. Unfortunately, the evidence is to the contrary. Our research is being guided to find answers to problems which are not problems at all ! The real problems remain unattended. In the name of 'empirical research', much effort, time and money is being wasted.

'Repetition' is the by-word for the *library literature* being produced in India today. The post-Ranganathan library literature seems to be going in rounds, without making any headway. At its best, it is getting information science oriented (not based on practical experience, mind it); at its worst, it is ephemeral and monotonous.

There is a proliferation of *library associations* in India today. However, it is the same set of professional bosses who control strings of all. None of them is representative—area, subject or type-wise. The Hindi proverb '*teen Kanauji tehran chooleh*' illustrates the situation perfectly. As far as the primary objective of protecting the interests of library professionals is concerned, there is hardly an instance when these have come to the rescue of any persecuted professional. "We cannot interfere in the internal administrative matters of an organisation", is their usual refrain. One wonders if they intend to interfere only when a professional libra-

rian gets entangled into a street brawl !

In short, hardly any component of librarianship in India comes out with aplomb on the touch-stone of quality. The reason is obvious. Quality is a seamless whole. It is indivisible. Deterioration in the quality of one component sets in motion the cycle of degeneration in others. Conversely, improvement in the quality of one is bound to bring about improvement in the quality of the rest.

5 EPILOGUE

'Productivity' and 'Quality' have recently been declared as the twin flag-bearers of our industrial policy. This declaration has come not a day too early. Only countries having adopted these twin mottos as the corner-stones of their state policy will march ahead into the 21st century with upheld masts. Let not our countrymen say in 2001 that we could have progressed much more if only there was 'quality in libraries.'

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STATISTICAL METHODS AND QUALITY IN LIBRARY SERVICES AND PRODUCTS

J L SARDANA*

1 INTRODUCTION

The functions of the libraries since their establishment have been changing continuously. These changes have occurred for various reasons. Some of the factors which are responsible for such changes are: Spread of education, changes in methods of instruction and learning, eradication of illiteracy, industrialization and industrial revolutions, World Wars, nature of research and shift in emphasis from pure to applied research, change in economic and social conditions, laying more emphasis on economic prosperity which has led to a change from agrarian society to industrial, and finally to a post-industrial society. The post-industrial society is no longer the one producing goods but it concerns more with production of services. These changes have resulted into a complete change in information needs. and information seeking behaviour of the user. Various complexities in information sources, products, and services and use of audio, audio visual, and other media are also the result of these factors. The functions of the library in such a situation have necessitated a changing role by the libraries to Documentation Centre, Information Centre, and finally that of Information Resource Centre in some of the developed nations of the world.

2 USERS' NEEDS

The user or a seeker of information in a traditional library environment was interested earlier in macro documents or the books. Today more than that he is interested in the contents or what ever is contained in these books. He is not, therefore, interested in the container with con-

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tents, and locating, searching his relevant information needs for himself but he is interested primarily in a sifted and filtered information. The information needs are of specific nature and the information sought for is with a view to convert it into knowledge after processing it with his mature mind. Certainly the entire information given to the user cannot be converted into knowledge but if the information supplied to him is useful, most of it is likely to be created and generated into new information and knowledge.

The large mass of data being provided by the librarian to the user is no longer of any significant value to the user. The problem becomes more complex particularly when the quantum of information/knowledge being generated is doubling in about 8-10 years' time. In certain subjects the doubling period, such as the one in chemical sciences, as has been evidenced by *Chemical Abstracts* is about 4 years. The sifting of information and provision of quality based information becomes very significant.

The job of the librarian has, therefore, attained higher dimensions. It has changed from the one who would look after the library as store-house of knowledge to the one who is concerned with management of information. The management of information pre-supposes that the librarian is familiar with the contents and proficient in ways and means of its delivery to the user. He manages the whole business of dissemination of information.

3 PROCESS OF DISSEMINATION OF INFORMATION

The information is disseminated through various channels of communication and dissemination to individual users and groups of users. These channels of dissemination result into library services and products, some of which are: Reference and information service, bibliographical services, current awareness services, SDI, state-of-art reports, technical reports, literature survey reports, digests of information, handbooks, etc. Such of the services which are directed towards the individual and if they possess homogeneity in demand and need in terms of literature can be provided easily. In case the users' interests are not homogeneous and there is a lot of dispersion and variation in the information needs, the provision of service becomes difficult. The homogeneity of the users interests is, therefore, important. Also when the user group is very large the problem becomes again a very complex one and maintenance of quality of a product, service also becomes complex. Thus for an individual and homogeneous information needs of group of users the supply of relevant information with a maximum of recall, accuracy and precision is important and is possible. The process of dissemination of information—its planning, design, and implementation would yield optimum results if systems approach is followed.

The various stages in the process of dissemination can be summed up as the following:

1 Realizing and assessing the information needs of the user,
2 Providing services and the products to meet these needs,
3 Feed-back and evaluating the products, and services since alternatives exist,
4 Research and development activity to undertake changes in the design and the planning of services and products, and
5 Modifying information system, augmenting or starting new system on the basis of research and development.

4 MARKETING OF INFORMATION

The recent years have seen the growth of unprecedented new kind of world market-place for information, its quantum and quality. It is a market-place in which the rising expectations of the user alongwith the change in role of education, research business, etc have greatly intensified the demand for the 'products and services'. The complexity of these demands embraces a whole spectrum of management problems and the whole field can be viewed as information management. The most crucial problem in information management is the contents, its delivery and the quality in services, and products.

The information needed by the user has a cost, price and a value. It costs the producer and supplier of the information and if it is given free to the user, it loses its value to a certain extent. If it is priced its value to the user increases. In addition to the price-value relationship, the user derives satisfaction when the information needed by him, at any point of time, is supplied to him. Therefore, the service or a product which is costing the library has to be cost-effective. The new technology being used by the library/information centre, increases the capital cost of providing the information, and comparatively lowers the recurring cost. It reduces the manpower requirements for the purpose, but expedites the provision of information.

Information is a national resource and being a commodity is now considered to be tradeable. Since it is priced, it is to be managed effectively and delivered efficiently. The supply or delivery has to be done expeditiously. It loses its value if this is not managed effectively.

5 NEED FOR QUALITY

The information having been realised as an important resource for any productive or creative work, its management presupposes the quality in service and product. The concept of quality is commonly in use in

the production engineering and management science. The quality in this context means zero redundancy. It can also be said that the product or the service provided by the library or an information centre is fit for use, or for consumption for pleasure or for creation of new information/ knowledge. The reliability of information, its relevance, accuracy, and precision are important. The relevance of quality increases when the information is priced heavily. Today's users or buyers continue to purchase it with a strong attention to price and at the same time they attach a great value to the quality. This in turn creates repeated demand on the library or information centre because the user gets confidence in the services being provided by the library or the information centre when he gets most needed appropriate information at any point of time or during the period of his work.

The information products and services are now being provided on commercial basis. Information industry or knowledge industry is similar to any other industry. The goal of competition in industry as far as the product's quality is concerned "is to provide products and services into which a quality is designed, built, marketed, and maintained at the most economical cost which allows for full customer satisfaction". This is known as quality control. Similarly, the information-industry has also to establish quality control.

6 STATISTICAL METHODS

The activities briefly mentioned under dissemination of information (in Section 3), to be more effective in relation to the cost, value, and the quality have, besides other pre-requisites, to make use of the statistical methods. The statistics, the so-called science of measurement, is one of the most valuable techniques in achieving the quality in information work. However, the current usage of statistical methods was not easily achieved until 1960s. It is more since 1970s that its need is being felt to a greater degree. Its acceptance has been slow primarily because of the distrust in statistical data without realizing the degree of accuracy and rigourousness of the theoretical foundations behind statistical methods. The methodology makes use of the branch of knowledge known as mathematics. The application of statistical methods requires knowledge of simple arithmetic and algebra by the librarian/information officer. It is no longer a complex branch and its application in library and information studies has also become easier. Thus over the years statistical techniques and methods have become more and more widely used and generally accepted in the information industry.

The significance of application of statistical methods was earlier considered essential. *Firstly*, because the librarian and information officer provide reference and information service and are, therefore, supposed

to be handling sources of information containing data. Some understanding about the statistical data, their methods of collection, presentation, analysis, etc on the part of the librarian is essential since he/she is to provide such data to the user. *Secondly*, with the developments that have taken place in the discipline of library and information science, the research and development in this discipline has also become a prerequisite for effective and efficient service. The use of the statistical methods has, therefore, increased during the preceding decade as mentioned above. The added dimension of need for 'quality in the library services and products' is a recent phenomenon and is gaining added weightage primarily because of the concept of marketing of information, its management with a view to deliver expeditiously, relevant, accurate, precise contents to the user. Such factors entail use of various statistical tools, techniques, and methods such as:

1 Frequency distribution,
2 Graphical presentation,
3 Measures of central tendency,
4 Measures of deviation—standard deviation, the range, etc,
5 Sampling methods and techniques,
6 Probability distributions (Binomial, Poisson, Normal distributions),
7 Test of significance, etc, and
8 Cause and effect analysis—Correlation and regression analysis, etc.

7 CONCLUSION

The application of statistical methods for the quality in services and products while providing information need not necessarily be the best in terms of quality but it means in the realistic sense about the quantum of information and its degree of usefulness, its accuracy, precision, and relevance, to meet the user's needs for a particular purpose. The quality is determined by the customer or the user and not by the producer of a product or the giver of a service. The latter tries to achieve the quality on the basis of feed-back and evaluation studies. It is, therefore, a customer's experience with the product, or services measured against his requirements, which may be stated or unstated one. The purpose of quality measurement is to determine and evaluate the degree or level of the product or service which satisfies the user. The statistical methods help in the above process. In addition to the use of statistical methods, the other factors which help in achieving the quality in product or service are: Continuous review of curricula in the professional education system because of changing and dynamic situation created by use of new technology and other social and economic factors, research and develop-

ment, the job satisfaction, motivation, professional development, etc. The use of techniques and tools of statistical methods lose all significance if some of these factors are ignored.

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METHOD STUDY OF ACQUISITION AND TECHNICAL SECTIONS OF KURUKSHETRA UNIVERSITY LIBRARY, KURUKSHETRA

JANAK RAJ*

1 WHAT OF METHOD STUDY

11 PRODUCTIVITY

"Productivity is the ratio of output to input."[1] In simpler terms it is the arithmetical ratio between the amount produced and the amount of any *resources* used in the course of production. These resources may be land, materials, plant (including machines and tools), and services of men.

Higher productivity can almost always be greatly increased by heavy investment of money in new and improved plant and equipment. As against investing capital in new plant, the use of the techniques of 'work study' improves the use of the existing resources. "In short, higher productivity means that more is produced with the same expenditure of resources . . ."[2]

12 WORK STUDY

For many years 'work study' was widely known as *time and motion study*. Work study aims at approaching the problem of increasing productivity through the systematic analysis of existing operations, processes and work methods with a view to increasing their efficiency. Work study, therefore, usually contributes towards increasing productivity with little or no extra expenditure.

"Work study is a generic term for those techniques, particularly *method study* and *work measurement*, which are used in the examination of human

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work in all its contexts, and which lead systematically to the investigation of all the factors which affect the efficiency and economy of the situation being reviewed, in order to effect economy."[3] Besides several techniques, work study embraces in particular method study and work measurement which can be graphically represented as in Fig. 1.[4]

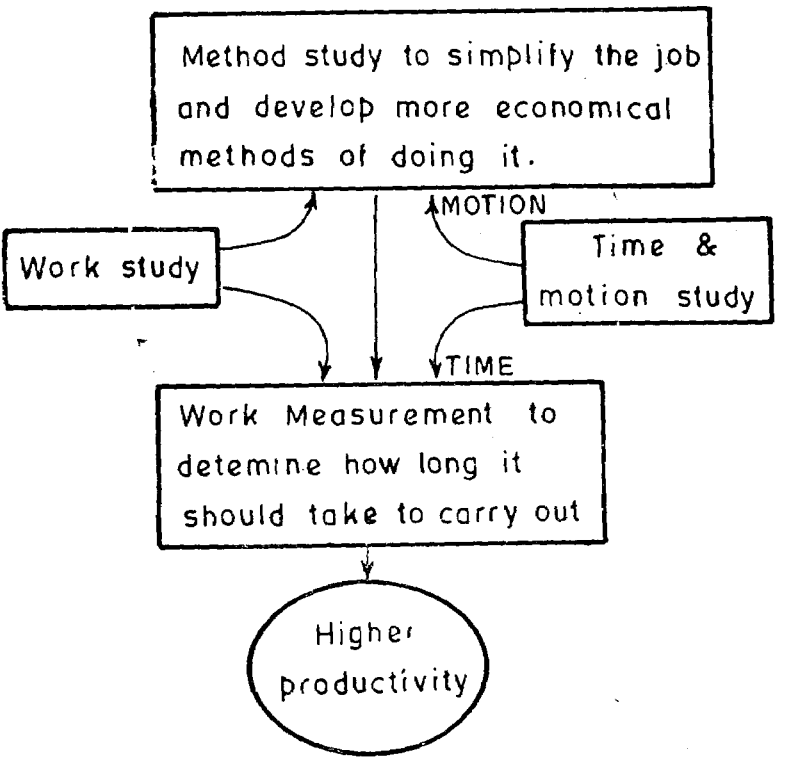


Fig. 1.

There are eight* steps in performing a complete work study, which are select, record, examine, develop, measure, define, install and maintain.

121 *Work Measurement*

"Work measurement is the application of techniques designed to establish the time for a qualified worker to carry out a specified job at a defined level of performance."[5]

*For details, refer to ILO, Geneva, Introduction to Work Study. 3rd (revised) ed. 1981. Bombay, Universal Book Corporation. P 81.

122 *Method Study*

"Method Study is the systematic recording and critical examination of existing and proposed ways of doing work, as a means of developing and applying easier and more effective methods and recording costs."[6]

Method study and work measurement are, therefore, closely linked. The work measurement is mostly concerned with the investigation and reduction of any ineffective time associated with it; and with the subsequent establishment of time standards for the operation when carried out in the improved fashion, as determined by method study.

The term 'method study' is being increasingly used in place of 'motion study', although the latter was intended by its inventor, Frank B Gilbreth, to cover almost exactly the same. *Industrial Engineering Terminology*, published by the American Society of Mechanical Engineers, gives separate definitions for 'method study' and 'motion study', the latter being confined to hand and eye movements at the work place. However, 'motion study' is sometimes used in textbooks with the same meaning as 'method study'.[7]

Objectives of Method Study

"1 The improvement of processes and procedures.
2 The improvement of factory, shop, workplace layout and of the design of plant and equipment.
3 Economy in human effort and reduction of unnecessary fatigue.
4 Improvement in the use of materials, machines and manpower.
5 The development of a better physical working environment."[8]

Basic Procedure of Method Study

The basic procedure of 'method study' contains all the seven steps of 'work study' barring one step, namely, measure which pertains to work measurement. The steps are as follows:

"1 *Select* the work to be studied.
2 *Record* all the relevant factors about the present method by direct observation.
3 *Examine* those facts critically and in ordered sequence, using the technique best suited to the purpose.
4 *Develop* the most practical, economic and effective method, having due regard to all contingent circumstances.
5 *Define* the new method so that it can always be identified.
6 *Install* that method as standard practice.
7 *Maintain* that standard practice by regular routine checks."[9]

2 SCOPE OF THE PRESENT STUDY

The present study is confined to the objectives of method study discussed above only regarding workplace layout and reduction of unnecessary fatigue to the workers of the acquisition and technical sections of the Kurukshetra University Library, Kurukshetra (KULK). The remaining objectives of method study in this case are left untouched simply to confine the length of the study to one paper. So the procedures and procesess were not studied. It remains to be seen if some further economy in the movement of documents and staff could be effected by amending some procedures and processes. So also the study of saving in time and money have been left out of the scope of this study.

3 WHY OF COMBINING ACQUISITION AND TECHNICAL SECTIONS FOR THIS STUDY

It was the detailed study by Tuttle[10] which made the author to think on the lines of making a method study by combining the acquisition and technical sections. Giving a brief history of the proposition she says that "... the trend to merge acquisitions, cataloguing, serials handling and binding under one head began in the thirties."[11] Referring to the various conferences and studies made by Coney,[12] Cohen,[13] Winter,[14] Margret Brown,[15] Logsdon,[16] and McAnally[17] right from 1934 onwards, she states that "In 1954, Tauber's *Technical Services in Libraries*, the first textbook devoted exclusively to the field, was published; and in 1956, acquisition and catalog librarians locked the concept into place by voting to join in a single division, the Resources and Technical Services Division (RTSD), which would represent them in the reorganised ALA."[18] "The only alternative discussed in the literature was the joining of cataloguing and bibliography into one division." This proposition was made by Swank[19], who summed up as follows:

> "Our present departmental structure divides the responsibility for a single library function, the organisation of books for use. Cataloguing is allied with acquisition, bibliography with reference."[20]

As pointed out by McAnally[21] in 1952 the technical services divisional organisation had been widely accepted but had not been evaluated adequately. For evaluation, the ALA got two surveys done by Bella Shachtman[22] in 1955 and Richard Dougherty[23] in 1967. It is very likely that the publication of 1955 survey, verifying the widespread use of the technical services unit, may have influced the vote which united acquisitions and cataloguing in the new Resources and Technical Services Division.

31 Shachtman Report

Of devices for coordination among technical service units, the Committee found that—

"Libraries with formal technical services division were slightly better in securing coordination by forwarding searching information from order to cataloguing, utilizing multiple copy order forms, notifying the appropriate unit of volumes ready for binding, and effecting savings in cataloguing by substituting the use of reference tools. Libraries with no formal technical services unit were slightly better in utilizing a single form to process a title, centralizing the preparation of the physical volume, exploiting the use of additional copies of catalog cards, effecting savings in cataloguing through the use of library prepared bibliographies, and centralizing records."[24]

The Shachtman report concludes by recommending further study in relation to "(1) a standard multiple-copy order form to meet the needs of many libraries; (2) written policy statements defining the scope and functions of each library's technical services; (3) the efficiency of present organisational and functional patterns in carrying out the library's policy; (4) the review of personnel utilization; (5) further coordination of searching and cataloguing procedures; (6) the most effective degree of technical services centralization; (7) review of forms, including the usefulness of a single form to serve throughout processing; (8) the usefulness of preliminary cataloguing; (9) the practicality of omissions or limitations in cataloguing; and (10) possibilities for reducing the number of files by both combination and elimination."[25] In fact, the report presents hoards of processes and procedures needing study applying method study.

32 Dougherty Report

In the report, "Evidence of some activity designed to improve utilization of personnel was found, and more activity was reported by libraries in reorganising the work functions, those receiving the most attention being pre-cataloguing, pre-order searching, serials work and photo-reproduction. The first two represent bibliographic searching, perhaps the most sensitive area of concern in attempts to avoid duplication of effort between acquisition and cataloguing units."[26] A new element permeating these activities in this report, was the possibility of using electronic data processing techniques.

33 Gains of Coordination

—Though the functions in the acquisition and cataloguing sections are

not identical, yet some commonness is there. So "...the advantages of *assembly-line approach* to acquiring and processing a title can be exploited...an overall view can provide a better working layout for staff and equipment. Coordinated consideration of the files used throughout the technical services allows more emphasis to be placed on the permanent files and less on those of temporary use, and encourages multiple use of single files,"[27] according to Tuttle.

—Expensive and less used tools can be shared among the technical service units, and their physical placement can be planned to serve all users.

—Publications of limited or temporary usefulness can be given limited attention through coordination in selecting, acquiring and cataloguing.

—At the time of placing order if bibliographic details are searched by the acquisition section that are sufficient to obtain the title and other details are completed by the cataloguer, when the title is received it will result in some saving even at the cost of some limited amount of unwanted duplication by avoiding costly long search of bibliographic details.

—By coordinating the acquisition and cataloguing of monographs, duplication in bibliographic searching can be avoided. A process form designed in a manner which includes information concerning routing, selection, searching, cataloguing, and processing, providing that information as located about a title, should travel with the book as it passes through various processing operations. This cooperative gathering of bibliographic information for catalogue is possible in a well-coordinated technical service operation. Shachtman[28] had designed such a process form.

Feedback of information from cataloguing to the ordering, say, call numbers for record in the accession record is also required. More so, some errors made by one unit and later detected by another can be corrected at an early date and in a more friendly way as the errors are taken as belonging to the same section responsible for the total processing. A general tendency of the staff of the two different sections to fix the blame elsewhere for any lapse is minimised.

The above discussion provides an ample justification for combining the two sections or at least to better coordinate the functions of these two sections if not all the technical services are put under one head.

4 DATA OF ACQUISITION AND TECHNICAL SECTION OF KULK

41 Acquisition

Books are received on approval and against specific orders. As regards

functions, besides placing orders, books are physically received in the section. Below are the steps that are followed in case of ordering and receipt separately for books received on approval and against order :

411 *Ordering of Documents*

On approval—Steps	*Against order—Steps*
(a) Physical receipt of books.	(a) Receipt of recommendations.
(b) Preparation of Book Order Slips (BOS).	(b) Preparation of BOS.
(c) Alphabetising the BOS.	(c) Alphabetising the BOS.
(d) Duplication checking from 4 sequences:	(d) Duplication checking from 4 sequences:
(i) BOS of acquired stock,	(i) BOS of acquired stock,
(ii) Order tray,	(ii) Order tray,
(iii) Pending on approval,	(iii) Pending on approval,
(iv) BOS in process with accessionist.	(iv) BOS in process with accessionist.
(e) Return of duplicates	(e) Deletion of duplicates already in stock.
(f) Placing of retained books in specified shelves.	(f) Preparation of purchase order.
(g) Preparation of purchase order.	(g) Merging of BOS in the following sequence. On order.
(h) Merging of BOS in the sequence—on order.	
(i) Typing of order.	(h) Typing of order.
(j) Scrutiny and affixing of initials, by the Sec. I/c.	(i) Scrutiny and affixing of initials by the Section Incharge (I/c).
(k) For signatures of the Librarian to the Stenographer	(j) For signatures of the Librarian to the Stenographer.
(l) Stenographer to the Librarian.	(k) Stenographer to the Librarian.
(m) Librarian to the Stenographer.	(l) Librarian to the Stenographer.
(n) Stenographer to the Despatcher.	(m) Stenographer to the Despatcher.
(o) Despatched.	(n) Despatched.
(i) a copy to the Supplier	(i) a copy to the Supplier
(ii) a copy to the recommending chairman.	(ii) a copy to the recommending chairman.

412 *Receipt of Documents*

On approval—Steps

(a) Receipt of bills by the Stenographer.
(b) Bills are put up to the Librarian.
(c) Bills from the Librarian to the Stenographer.
(d) Bills from Stenographer to the Diarist.
(e) The bills from the Diarist to the Section I/c Acquisition.
(f) The bills from the I/c to the AL concerned.
(g) Taking the books from the specified shelves.
(h) Tellying the details in bills with books.
(i) Taking out BOS from sequence and placing in books.
(j) Submission of books with BOS and bills to the Asstt. Accessionist.
(k) Physical checking of the books.
(l) Price verification.
(m) Stamp affixation.
(n) Accessioning.
(o) BOS taken out and Acc. No. written on them.
(p) BOS sent to the respective Asstt.
(q) BOS merged in the main sequence of BOS.
(r) Shifting of books to the book-shelf for books awaiting processing in the technical section.

Against order—steps

(a) Receipt of bills by the Stenographer.
(b) Bills are put up to the Librarian.
(c) Bill from the Librarian to the Stenographer.
(d) Bills from Stenographer to the Diarist.
(e) The bills from the Diarist to the Section I/c Acquisition.
(f) The bills from the I/c to the AL concerned.
(g) Unpacking of bundles.
(h) Sending of books to the Section I/c.
(i) Sorting them Asstt. wise by the I/c.
(j) Sending books to the respective AL by the I/c.
(k) Tellying of books with the bills.
(l) Taking out BOS and inserting in the books.
(m) Sending to Asstt. Accessionist.
(n) Physical checking of books.
(o) Price verification.
(p) Arranging books according to bills.
(q) Accessioning, stamping.
(r) BOS are taken out and Accession No. written on them.
(s) BOS are returned to the respective Asstt. L.
(t) BOS are filed in the main

sequence of BOS.

(u) Label pasting.

(v) Shifting of books to the book-shelf meant for books awaiting processing in the technical section.

Some of the minor steps have been deliberately left out which neither require the movement of documents nor of the staff to the next point of operation (poo). In other words, some of the operations done on the seat itself/poo have not been minutely listed as they are irrelevant for the present study. Such details become relevant only if the study of processes and procedures forms part of the method study.

413 *Existing Workplace Layout of Acquisition Section* (Fig. 2)

After recording the steps and the existing workplace layout of the acquisition section, now to study the distance a document travels before it goes out of the section and the distance the staff has to travel for that purpose, four string diagrams will be made—two each for books received on approval and against purchase order.

414 *Movement of a Document* (Fig. 3)

(a) *Books on approval.* The numbers shown in the string diagram stand for the same poo as shown in Fig. 2. Out of poo 4, 5 and 6, only 4 had been chosen for calculation of distance of movement. For the present calculations, it is immaterial whether one book moves or a group of books move together.

(b) *Books Against Order.* The movement of document against order is shown in Fig. 4.

415 *Movement of Staff*

(a) *Books on approval.* Movement of staff for books on approval is shown in Fig. 5. Workplace layout of the two adjoining offices is given in Fig. 6.

(b) *Books against order.* Movement of staff for books against order is shown in Fig. 7.

NOTE: Purchase Order goes to the typist only if the titles are more than 4 to 5, otherwise the order is prepared by hand.

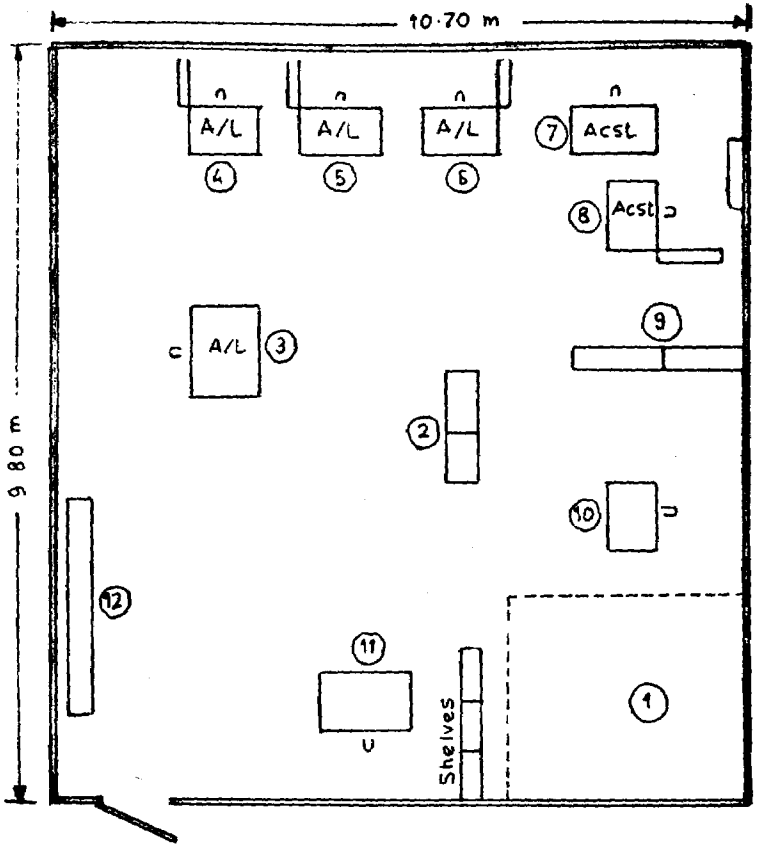


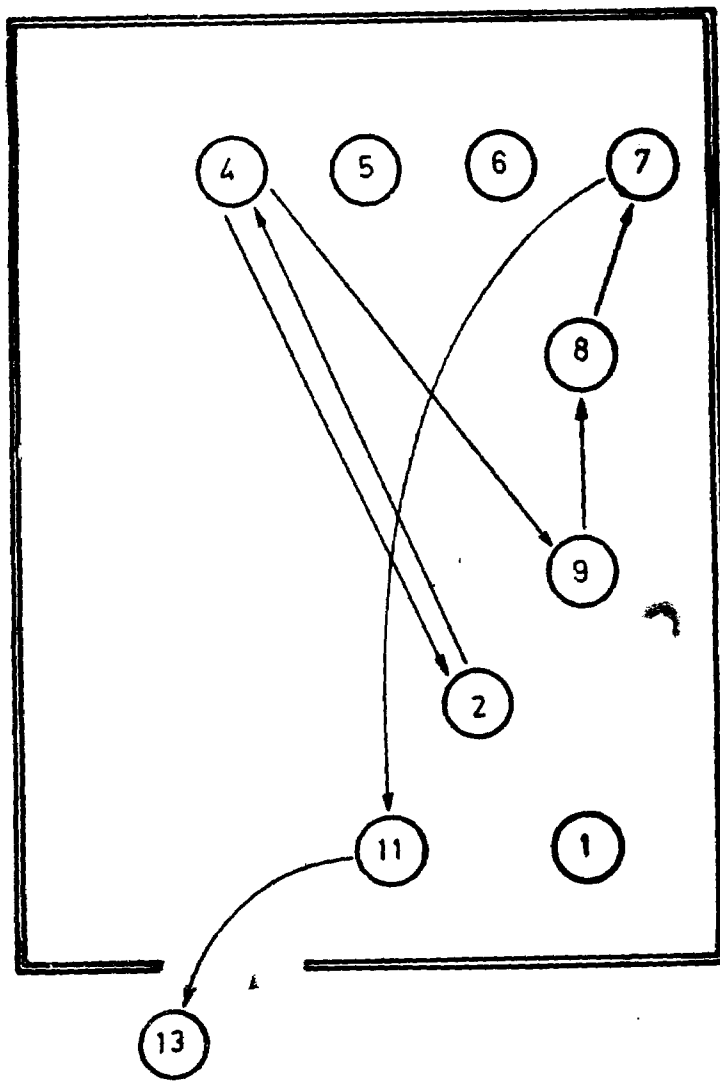
Fig. 2. Existing workplace layout of acquisition section.

1 Unpacking space. 2 Books received on approval.
3 Asstt. Libn. I/C. 4 Scs., Commerce, Management.
5 Humanities, Languages Generalia, Indology.
6 Social Sciences 7 Accessionist.
8 Asstt Acst. (with bibliographical tools and catalogues).
9 Books received against order. 10 Typist.
11 Cleaner for pasting. 12 Book order slips of acquired stock.

Remark. Keeping in view the length of the paper string diagrams of the staff movement to the poo 24, 25, and 26 from poo 3 have not been included here, though distances as worked out are included in the calculations of Figures 5 and 7.

42 Technical Section

Books are classified and catalogued here along with their label writing. Binding section is also located here.



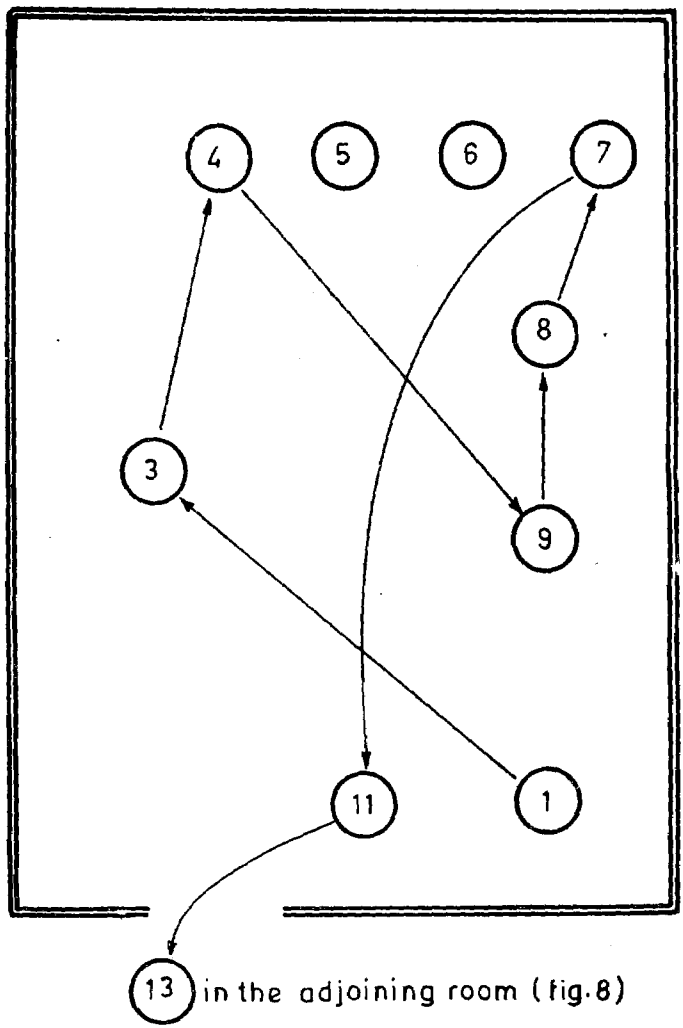
Poo	m
4- 2 =	5.80
2- 4 =	5.80
4- 9 =	8.70
9- 8 =	2.70
8- 7 =	1.00
7-11 =	7.80
11-13 =	14.60
Total	45.80

Fig. 3. Movement of documents on approval (string diagram).

421 *Steps of Classification and Cataloguing*

1 Books after pasting of labels etc in the acquisition section are brought here and placed on a bookshelf (13)* lying by the side of the classifiers.

*Numbers given within parentheses indicate the points of operation as shown in Figure 8 showing layout of the section.



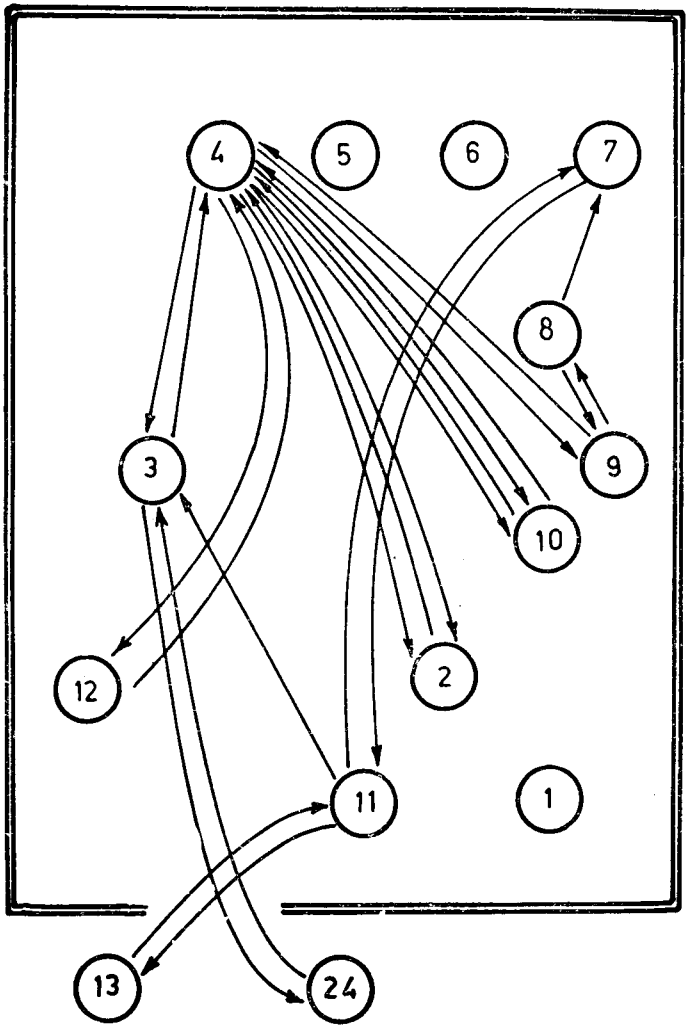
Poo	m
1- 3 =	7.00
3- 4 =	2.30
4- 9 =	8.70
9- 8 =	2.70
8- 7 =	1.00
7-11 =	7.80
11-13 =	15.00
Total	44.50

Fig. 4. Movement of documents against order (string room).

2 Classifiers themselves take the books on predecided subjects allotted to them from the shelf and take them to their respective tables (14, 15, 16).

3 Recent publications, documents belonging to multi-volume set or series or such documents which are considered likely to be already in stock are checked both with the alphabetical unprocessed and the processed official catalogues.

4 For those books already found in the catalogue the same class number is taken and written on the new book with the added copy/volume number. The same copy/volume number is added to the entry of the official catalogue against the new accession number.



Poo	m
4-12 =	5.30
12- 4 =	5.30
4- 2 =	5.80
2- 4 =	5.80
10- 4 =	7.50
4-10 =	7.50
10- 4 =	7.50
4-10 =	7.50
4- 3 =	2.30
3- 4 =	2.30
11- 3 =	4.00
3-24 =	29.50
24-11 =	25.50
24-25 =	11.50
25-24 =	11.50
24-26 =	2.50
24-25 =	11.50
25-24 =	11.50
24-26 =	2.50
26- 3 =	27.00
3- 4 =	2.30
4- 2 =	5.80
2- 4 =	5.80
4- 9 =	8.70
9- 4 =	8.70
8- 9 =	2.70
9- 8 =	2.70
8- 7 =	1.00
11- 7 =	7.80
7-11 =	7.80
11-13 =	15.00
Total	262.10

Fig. 5. Movement of staff for books on approval (string diagram).

5 The books not already in stock are classified by the respective AL according to the 6th edition of the Colon Classification.

6 Main entry is prepared by the same classifier according to the 5th edition of the Classified Catalogue Code.

7 The main entry is filled alphabetically by the same classifier in the official unprocessed catalogue (21).

8 The books are passed on for label writing (19).

9 The books are sent out for display as new arrivals and finally on to the stack area.

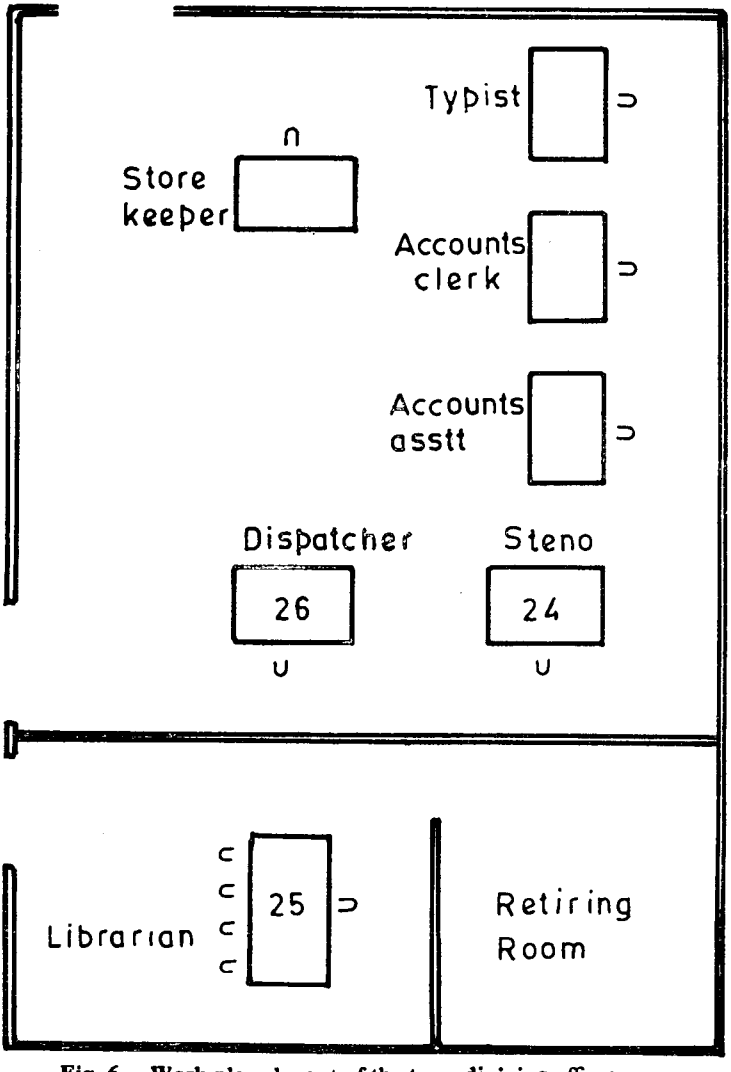


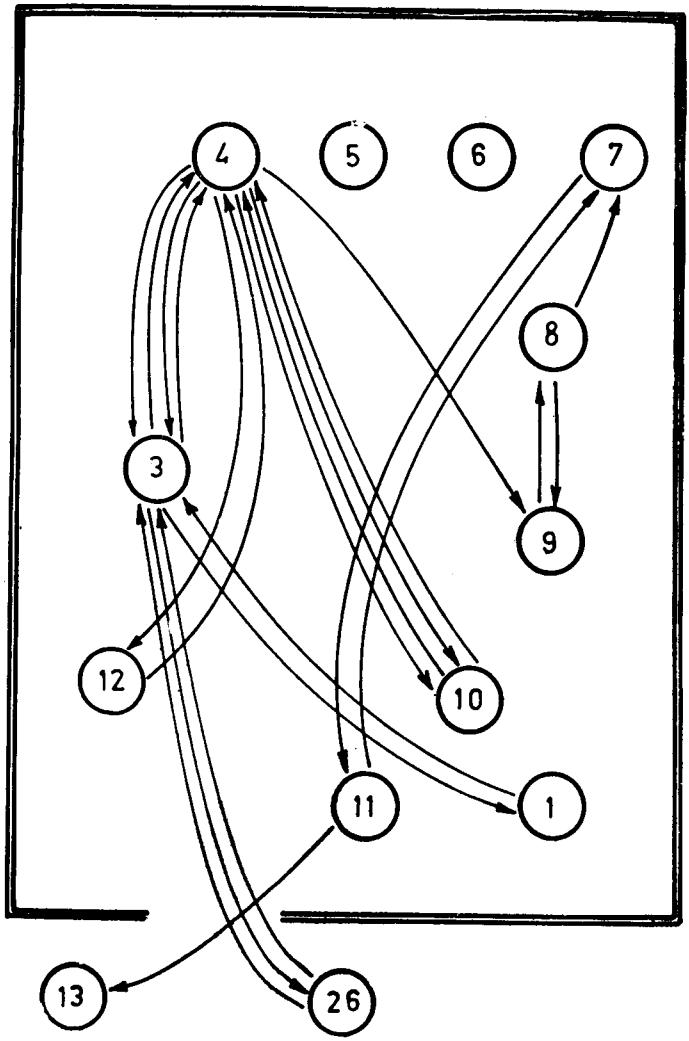
Fig. 6. Work place layout of the two adjoining offices.

10 Typists (18a and 18b) take out main entries from the unprocessed catalogue (21).

11 Typists prepare added entries and send them to the I/C (17).

12 I/C (17) after checking the added entries sends them to the card filers (23a and 23b).

13 Card filers first arrange their respective cards on their tables and later merge the shelf-list entries in the processed catalogue-official (22) and the remaining entries both main and added in the public catalogue.



Poo	m
24-25	11.50
25-24	11.50
24-26	2.50
26- 3	27.00
4- 3	2.30
3- 4	2.30
4-12	5.30
12- 4	5.30
10- 4	7.50
4-10	7.50
10- 4	7.50
4-10	7.50
4- 3	2.30
3-24	29.50
24-25	11.50
25-24	11.50
24-26	2.50
24-25	11.50
25-24	11.50
24-26	2.50
26- 3	27.00
3- 1	7.00
1- 3	7.00
3- 4	2.30
4- 9	8.70
8- 9	2.70
9- 8	2.70
8- 7	1.00
11- 7	7.80
7-11	7.80
11-13	15.00
Total	269.50

Fig. 7. Movement of staff for books against order.

422 *Existing Work Place Layout of Technical Section*

The existing work place layout of the technical section will follow the string diagrams which will depict the movement of document and catalogue cards (Figure 9) and the movement of staff (Figure 10) in processing a document,

423 *Movement of Document and Catalogue Cards—String Diagram*

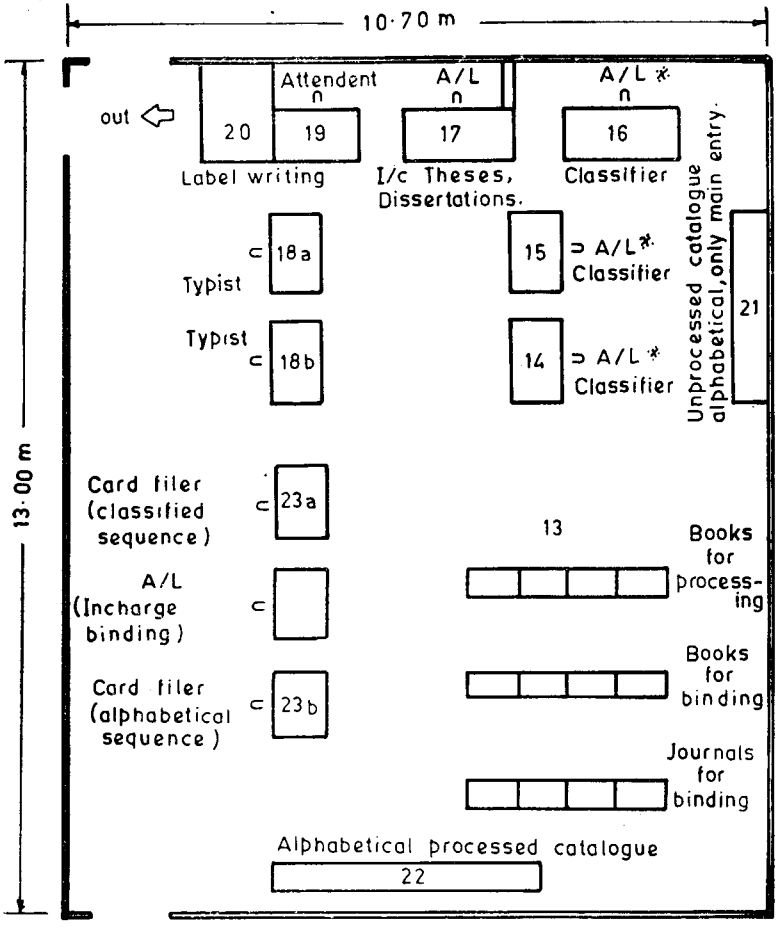


Fig. 8. Existing work place layout of technical section.

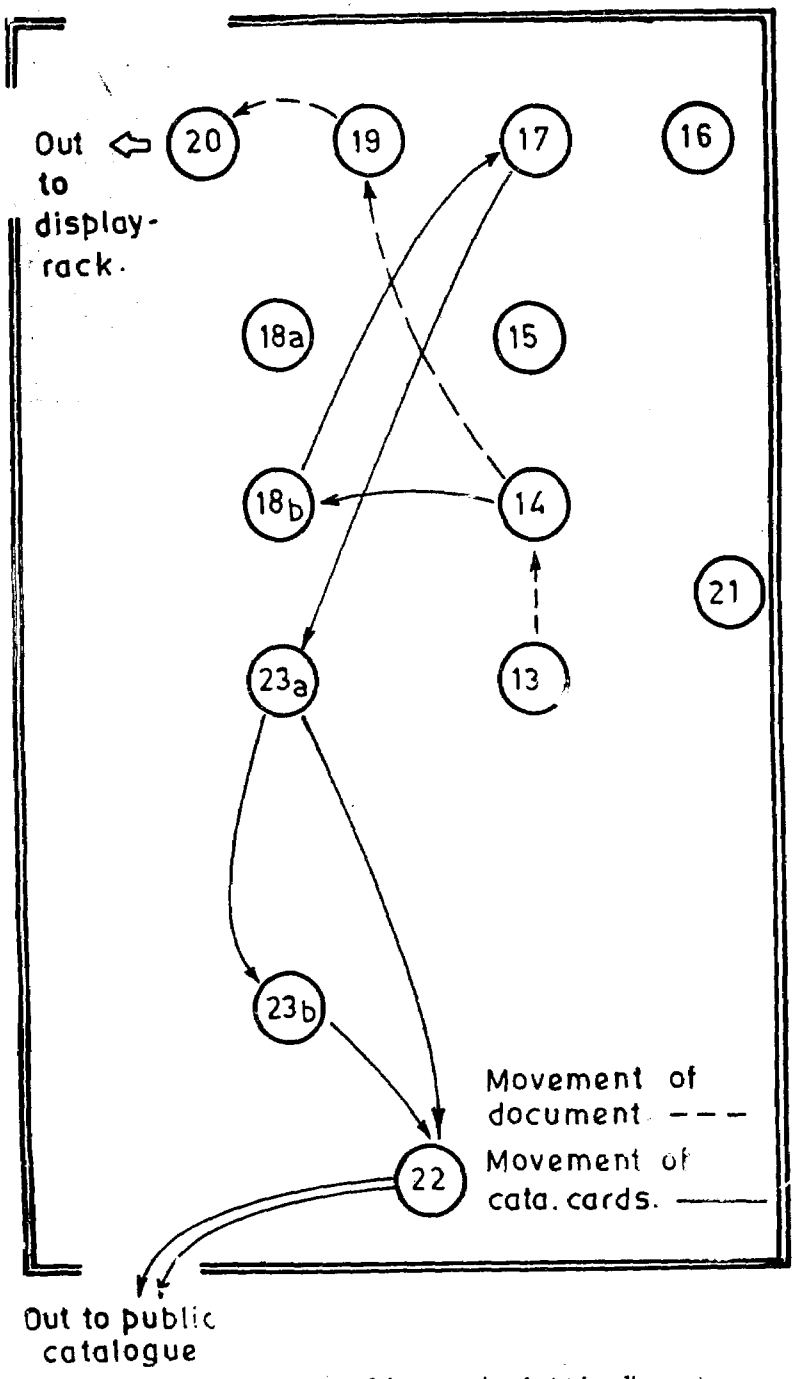
*14—Social Sciences, 15-Humanities, Languages, Indology and Generalia, 16-Sciences, Commerce and Management.

424 *Movement of Staff—String Diagram*

NOTE : (It was chosen to show the movement of only one AL at (14) excluding others at (15, 16 and 17). Typist at (18b) assigned to (14) was chosen leaving the one at (18a)).

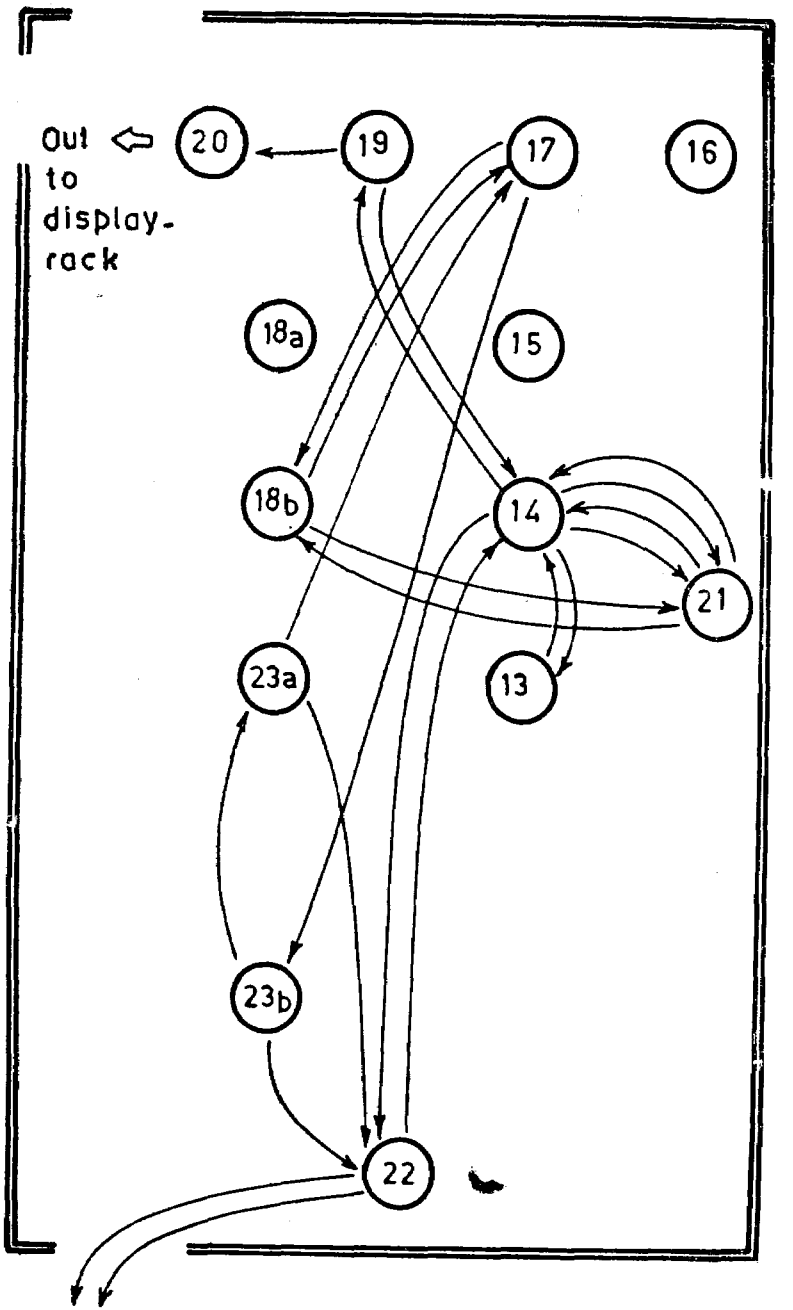
43 TRAVELLING DISTANCE OF A DOCUMENT AND STAFF

From Figures 3 to 7 and 9 to 10 we get the distance that a document or staff travels for the processing of a document, which is as under.



Poo	m
13 -14	= 2.70
14 -19	= 5.70
19 -20	= 1.00
14 -18b	= 6.80
18b-17	= 5.60
17 -23a	= 7.40
23a-23b	= 2.70
23b-22	= 4.80
23a-22	= 6.70
Total	43.40

Fig. 9. Movement of document/cards (string diagram).



Poo		m
19 -14	=	5.70
14 -19	=	5.70
14 -21	=	3.30
21 -14	=	3.30
18b-21	=	8.80
21 -18b	=	8.80
18b-17	=	5.60
17 -18b	=	5.60
23a-17	=	7.40
17 -23b	=	10.10
23b-23a	=	2.70
23a-22	=	6.70
23b-22	=	4.80
Total		109.40

Fig. 10. Movement of staff (string diagram).

431 *Document Received Against Order*

Acquisition section		
Document	44.50 metres	(Figure 4)
Staff	269.50 ,,	(Figure 7)
Technical Section		
Document	43.40 ,,	(Figure 9)
Staff	109.10 ,,	(Figure 10)
Total	466.50 ,,	

432 *Document Received on Approval*

Acquisition		
Document	45.80 metres	(Figure 3)
Staff	262.10 ,,	(Figure 5)
Technical section		
Document	43.40 ,,	(Figure 9)
Staff	109.40 ,,	(Figure 10)
Total	460.40 ,,	

5 PROPOSED WORK PLAN

For achieving better coordination between the acquisition and technical sections, it is proposed to interchange the accommodation of binding section with acquisition section. With this change the workplace of acquisition section and technical section is combined and the proposed workplace layout is depicted in Fig. 11.

51 Proposed Layout of Workplace

The serial numbers of the poo are the same as shown in Figures 3 and 8. Here poo 13 has been split up as 13a and 13b. Documents waiting for technical processing on sciences, commerce, management and theses/dissertations assigned to poo 14 and 17 are proposed to be placed on poo 13b and documents on languages, humanities, Indian studies and social sciences assigned to poo 15 and 16 are thus placed on 13a. Here again, poo 4 and 14 have been chosen for the present study leaving 5, 6, 15 and 16 as similar jobs are performed at these points. Similarly, out of the poo 18a and 18b, 18b has been chosen to measure distances. The selection of poo 4, 14 and 18b out of the other poos is only random. To study the

distance a document and its cards would travel in the proposed layout of the workplace, the string diagram is given in Fig. 12.

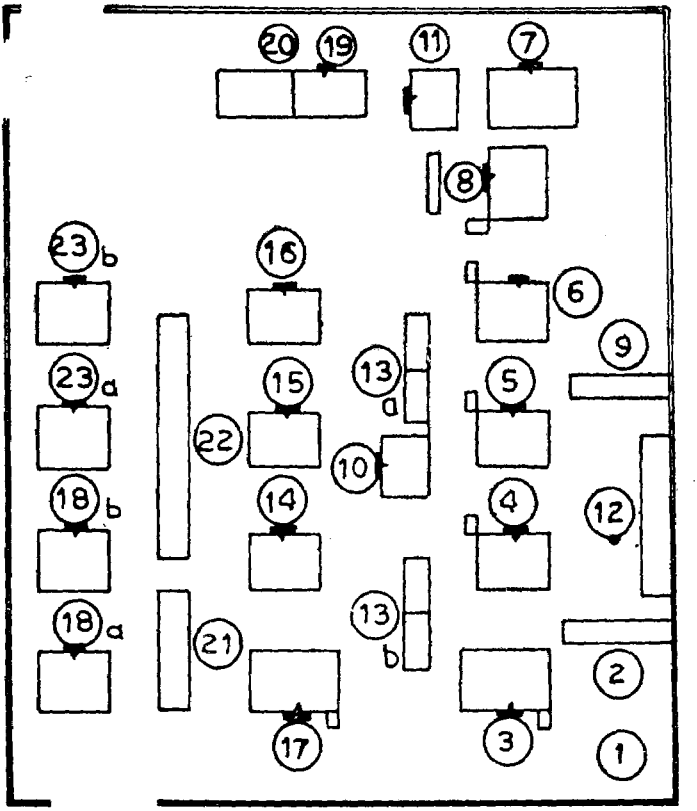


Fig. 11. Proposed layout of workplace

512 *Document and Catalogue Cards Movement in Proposed Layout of Workplace*

From Figure 12 we get the distances as under:

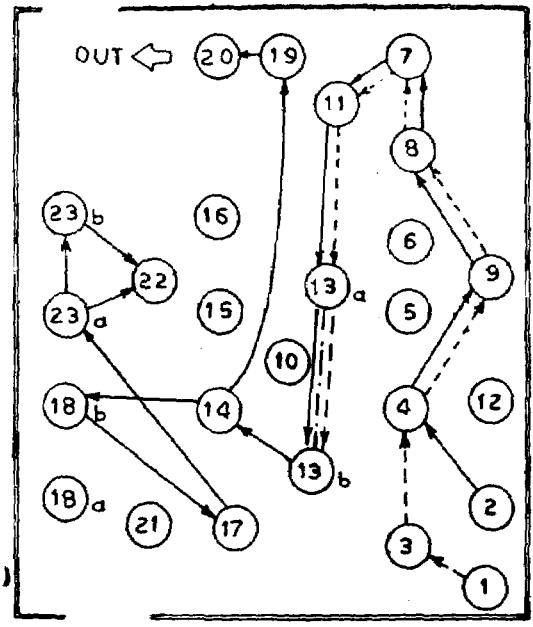
Acquisition—against order	= 23.70 m
Technical processing	= 39.00 m
Total	62.70 m
Acquisition—on approval	= 21.80 m
Technical processing	= 39.00 m
Total	60.80 m

TECH PROC

POO.		m
13b - 14	=	8·10
14 - 19	=	8 70
19 - 20	=	6 50
14 - 18	=	3 50
18b - 17	=	4 70
17 - 23a	=	6·20
23a - 23b	=	2·00
23b - 22	=	3 20
23a - 22	=	2·10
Total	=	39 00

ACQ -AGAINST ORDER(-----)

POO		m
1 - 3	=	1·50
3 - 4	=	3·00
4 - 9	=	3 40
9 - 8	=	3 60
8 - 7	=	2 00
7 - 11	=	1·60
11 - 13	=	8·60
Total	=	23·70



ACQ ON APPROVAL (———)

POO		m
2 - 4	=	2·60
4 - 9	=	3 40
9 - 8	=	3·60
8 - 7	=	2 00
7 - 11	=	1 60
11 - 13b	=	8·60
Total	=	21·80

Fig. 12. Documents and catalogue cards movement in proposed layout of workplace.

513 *Staff Movement in Proposed Layout of Workplace*

From Figure 13 we get the distances the staff travel as under:

Acquisition—against order	= 177.10 m
Technical processing	= 109.10 m
Total	286.20 m

It is clear from Section 43 that the difference in the distances either in case of a document received on approval or the one received against

TECH. PROC.		ACQ. AG. ORDER	
14 - 13	= 2·70	24 - 25	= 11·50
13 - 14	= 2·70	25 - 24	= 11·50
14 - 22	= 9·30	24 - 26	= 2·50
22 - 14	= 9·30	26 - 3	= 11·00
14 - 21	= 3·30	4 - 3	= 3·00
21 - 14	= 3·30	3 - 4	= 3·00
19 - 14	= 5·70	4 - 12	= 2·00
14 - 19	= 5·70	12 - 4	= 2·00
14 - 21	= 3·30	10 - 4	= 2·30
21 - 14	= 3·30	4 - 10	= 2·30
18b - 21	= 8·80	10 - 4	= 2·30
21 - 18b	= 8·80	4 - 10	= 2·30
18b - 17	= 5·60	4 - 3	= 3·00
17 - 18b	= 5·60	3 - 24	= 13·50
23a - 17	= 7·40	24 - 25	= 11·50
17 - 23b	= 10·10	25 - 24	= 11·50
23b - 23a	= 2·70	24 - 26	= 2·50
23a - 22	= 6·70	26 - 3	= 11·50
23b - 22	= 4·80	3 - 1	= 1·50
Total	= 109·10	1 - 3	= 1·50
		3 - 4	= 3·00
		4 - 9	= 3·40
24 - 25	= 11·50	9 - 4	= 3·40
25 - 24	= 11·50	8 - 9	= 3·60
24 - 26	= 2·50	9 - 8	= 3·60
		8 - 7	= 2·00
		7 - 8	= 2·00
		11 - 7	= 1·60
		7 - 11	= 1·60
		11 - 13b	= 8·50
		13b - 11	= 8·50
		Total	= 177·10

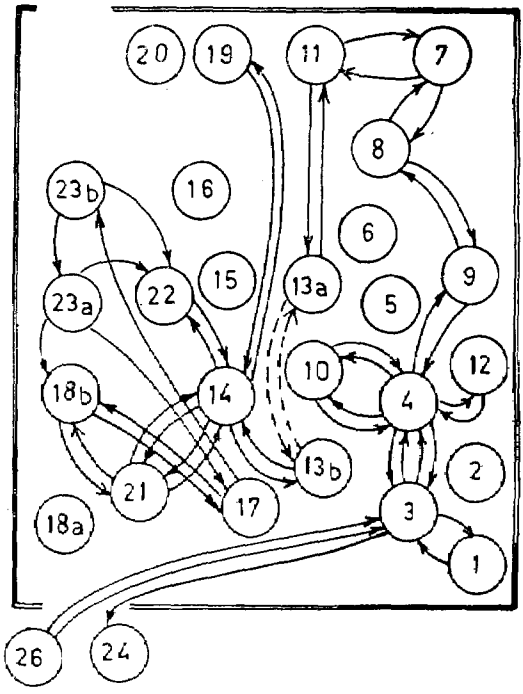


FIG 13 Staff movement in proposed layout of work place

order is negligible. The same is true of the distance the staffs travel in both the cases. So the string diagram for the documents received on approval was not prepared as the results would be more or less the same.

6 SAVING

In the existing layout of the workplace of acquisition and technical sections the total distance a document or staff travels, comes to 468.50 m

in case of a document received against order (Sec. 431), whereas in the proposed layout it is reduced to 286.20 m. Thus, there is a net saving of 200.30 m. This saving of travelling time for a document and fatigue to the staff in walking more may be further shrinked if some processes and procedures are so amended that redundant movements are avoided or at least minimised. This needs a detailed study whereby even saving in time and money can also be worked out.

7 CONCLUSION

In India work studies in libraries are not very common. The author knows of only one detailed study made at Jawaharlal Nehru University Library, New Delhi a few years ago. Such studies for university libraries can be conducted with the help of faculty and students of the Departments of Management on the respective campuses. Work study should form part of the curriculum of Master of Library and Information Science (MLIS) course in order to impart training in this area. In the beginning faculty to teach such a course may be better drawn from the Department of Management of the university on part-time basis till sufficient number of personnel are trained with this specialisation who can later on take up the teaching work in the Departments of Library and Information Science in the universities. The students of MLIS or M Phil can be assigned topics to conduct such studies for their dissertations in such departments where such a course is offered.

With the introduction of computets in more libraries in the near future in India, knowledge of library personnel in the techniques of work study will have added importance to save computer time which is very costly.

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1 INTERNATIONAL LABOUR OFFICE (Geneva). Introduction to work study. 3rd rev. ed. 1983. Bombay, Universal Book Corporation. P 4.
2 *Ibid.* P 5.
3 *Ibid.* P 29.
4 *Ibid.* P 34.
5 *Ibid.* P 33.
6 *Ibid.* P 79.
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QUALITATIVE IMPROVEMENT IN LIBRARY SERVICES THROUGH USERS' STUDY

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0 CONCEPT OF LIBRARY

According to Dr Ranganathan, a library is "a public institution or establishment charged with the care of a collection of books, the duty of making them accessible to those who require the use of them and the task of converting every person in its neighbourhood into a habitual library goer and reader of books." With the changing time, the concept and use of library has changed manifold. The library is not merely a store-house, wherein books are collected and lent for use. The libraries have much more responsibility in the modern society. It is a social institution, serving the society for the cause of its social, cultural, intellectual and physical upliftment. Communication of knowledge has become very inportant for growth and development of a modern society. Knowledge itself has become very complex. It is difficult for an individual to get aware of all the developments in his own field without the help of libraries. Now-a-days, with the development of audio-visual aids and other means of mass communication, several other means of communication such as micro film, tape records etc have come in. Yet the importance of books cannot be undermined. The libraries are concerned with all types of means of communication.

1 BASIC FUNCTIONS OF A LIBRARY

1 Organization of collection and dissemination of information.
2 Proper use of leisure of its clientele.
3 Self education.
4 Advancement of culture.
5 Preservation of recorded knowledge for posterity.

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Social, political and prevailing economic conditions play an important role in the growth and development of libraries. As per the need of the present day and as a matter of policy libraries are established within every organization. Libraries are attached to almost all offices/organizations either to support the basic objective of the parent organization or to serve as part of the cultural activity for the staff working in the organization for their reading and entertainment purpose. However, the main objective of the establishment of such library is to support the need of its parent body, or the community it serves. Libraries usually render the following services to achieve such objectives:

(i) lending service,
(ii) instruction and assistance in use of the library/documents,
(iii) reference and information service,
(iv) bibliographic and documentation services,
(v) inter-library-loan,
(vi) circulation of list of addition in the library,
(vii) reprographic services.

The above mentioned services are not necessarily rendered by all types of libraries. The libraries choose the services based on requirement vis-a-vis resources in terms of priority.

There are numerous academic, public and special libraries attached to various organizations in India. Many of them have sufficient funds and adequate resources in terms of documents, equipment, building and staff. One may question:

1 Whether these resources are utilized to the optimum extent?
2 Whether the clientele are satisfied with the library services?
3 Whether the clientele have some specific requirement and expect some extra services and facilities in the library?
4 What are the ways and means by which the library may become more meaningful to its clientele.

2 NEED FOR EVALUATION OF LIBRARY SERVICES

The survival of an organization depends upon the utility of its services to the community it serves. It is thus necessary to take into account its users' needs. Changes must be introduced so that it may not become obsolete. Library services must be based on management principles and 'users' study'. Changing needs of its readers are usually not recognized by the library authorities. Services must be evaluated from users point of view to recognize the relationship between the reader and the librarian. Through 'users survey' it may evaluate present needs and facilities and

may bring changes in services for future in the light of feedback given by users.

Library services need to be evaluated from time to time. Evaluation is a means to determine as to how far the objectives laid down for the library are fulfilled. It is a measure to rate the efficiency of the library. Evaluation also reveals as to what has to be done in order to improve the working of the library. The authorities may like to know:

1 How is the library working to achieve its goal/objective?
2 What are the users getting for the money spent on the library?
3 What is the expenditure on various services rendered by the library?
4 What is the use of the services rendered by the library?

The evaluation of the services will help in the reorganization of services, i e extension or reduction of certain library services. The following procedures may be appropriate for such evaluation:

1 application of standards based on average,
2 comparison of library statistics with some other libraries of the same status,
3 interpretation of library statistics over a period of time,
4 library surveys.

3 LIBRARY SURVEY

'Library survey' provides a frank evaluation of the services of a library by an outside agency so that library services can be streamlined/stimulated. Library survey is a systematic collection of data concerning libraries, their activities, operation, staff, use and users at a given time and period.

31 Purpose and Uses of Library Survey

Survey is an important means by which the modern society keeps itself informed. It is a way to bring under control the complex problems of larger society. Management of small libraries is possible without recourse to any scientific method. Now, libraries are numerous and large in staff, stock, and amenities. In this age of information explosion needs of users have become complex and access to the information has become difficult. Rapid changes have taken place in library operations in recent past. The increasing complexity in library's organizational structure and expansion in activities make it more important for libraries to evaluate its services. 'Library survey' provides necessary feedback and suggests certain ways or means through which the objective can be met in a better way. Some of the questions which a 'Library survey' can answer are :

1 What is the impact of publicity on library services ?
2 Whether more foreign language books are required to be purchased in the library ?
3 What information is needed by the users from abstracting and indexing services, etc ?

Efficiency is very important for libraries. It has to prove itself an important part of the society it serves. If a librarian wants to divert funds from existing service to a new one in order to bring changes, the pros and cons must be known to him. This is very essential for sound decision making. Statistics are always more convincing than theoretical arguments.

There is another valid reason for evaluation and survey of library services. It stems from our anxiety to know whether we are working in a right perspective. A public librarian may like to know whether his users are satisfied with the collection and services. A university librarian would like to know whether his special collections are sufficient and helpful for its research workers.

Survey is thus a systematic and objective enquiry. The following aspects of the libraries are amenable to survey techniques':

1 income and expenditure,
2 stock,
3 building and equipment,
4 management and technical processing,
5 staff,
6 use of libraries.

32 Users' Survey

Survey of library has been often motivated so as to improve its functioning. One of the most important subsidiary uses of survey is for evaluation and planning of library services. Measuring the quality of services is probably the most difficult task, even more difficult than to measure the quality of hospital services, school services or social welfare programmes. For a hospital, minimum number of deaths per hundred patient admitted may be a yard stick to measure its efficiency and service. Schools may use their result statistics to rate their efficiency. Likewise, the number of academic publications may be taken as a good performance measure for the university faculty, but in our profession measures of internal library operations are taken as indication of library effectiveness.

In science we have certain techniques to measure the quality of an item. In the absence of perfect techniques however, the opinion of experts in the field are accepted, viz for quality of a chemical we may consult

a chemist. But, then, if we want to know how well the hospital, public transport, social welfare agency or library is working and serving the society, we have to look into the extent of services rendered to users. Therefore, for evaluation of the quality of library services users are the most important factor. Out of three essential components of library, i e documents, staff and users, users are the most important component.

33 Purpose of Users Survey

A library acquires and organises recorded knowledge with the help of its qualified professional staff. It establishes link between the two factors, i e the users and the information. New ways and means of thorough and early pin-pointed information retrieval systems are coming up day by day to smoothen the process of dissemination of knowledge.

Knowledge is expanding so fast that no person/library can keep pace with it. Today, no library can claim to be self-sufficient. Economic considerations are another factor. Therefore, a library has to delimit its services as per the need of the community. Information regarding the users need and uses may serve as a sole guiding factor in assessing the nature and size of the collection of the library and also in redefining the purpose of the library. The role of users in information retrieval systems has been recognized in recent past. A number of studies on different catagories of users have been conducted in the foreign countries[1,3,4,5,6]. A few studies have been undertaken in India as well. D N Wood[6] has described the methodology for conducting 'users survey'. A systems analysis approach to the methodology involves the operational steps as given in Fig. 1, for the 'users study'.

The author carried out such a study of Laxmibai Nagar Branch of Delhi Public Library in 1973 to find out the characteristics, use-pattern and purpose of use of the users of that library. This survey was conducted to answer the following questions:

1 What is the background of the users?
2 How many people utilize the information resources of the library?
3 In what capacity do these individuals use the library?
4 Where do the users come from and how frequently they utilize the collection?
5 To what extent do these individuals rely on the library as against other libraries in Delhi?
6 What are the areas of interest of the individuals of the community to which the library is serving?

The survey was conducted through a questionnaire and personal interview method. It was found that the majority of users (in the age group

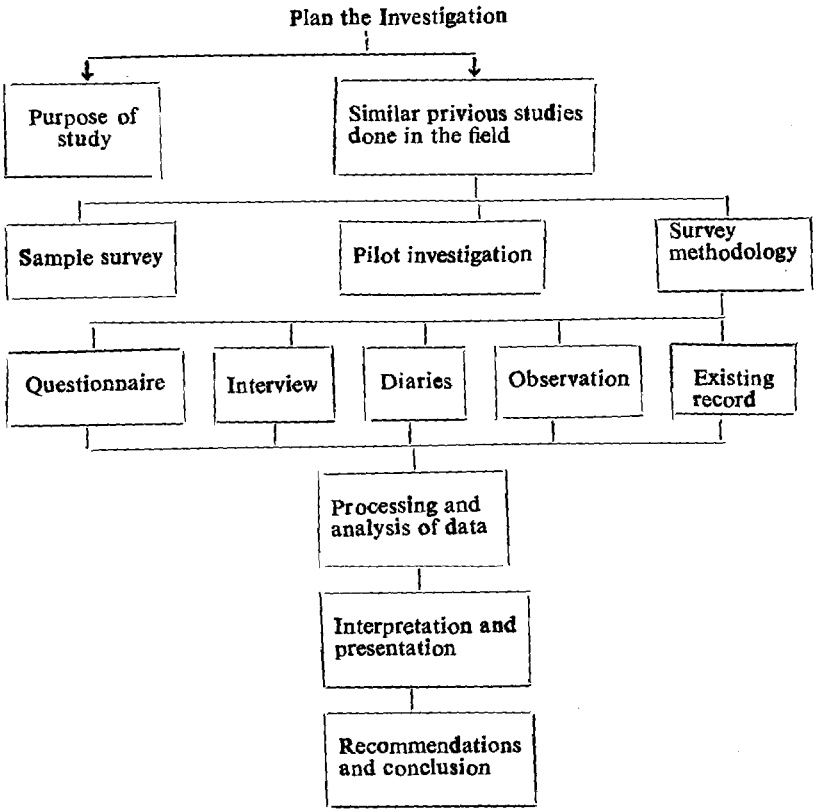


Fig. 1. Users Survey: Systems analysis approach.

of 18-30) were connected with the academic world. Male members were the frequent visitors to the library. Most liked and read language was English and most used books were non-fiction books. Majority of them visited the library once a week for an average 30 minutes time. Most of the persons were satisfied with the library services.

On the basis of the study a few suggestions were made for consideration of the authorities for future planning and development in respect of opening hours, building, collection and services. Thus knowledge of users need is prerequisite to successful planning and operation of information service. Although 'users survey' may not reveal 100% scientific views as complexity of information seeking behaviour of human being is involved, yet this system helps along with other methods of library service evaluation enumerated above. In a country like India, having diversity of people, diversity of needs, and meagre resources, conducting 'users survey' and assessing users need is more necessary in order to have optimum utilization of library resources.

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PROCEDURES TO BE FOLLOWED IN DESIGNING THE NEW LIBRARY SYSTEM

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1 INTRODUCTION

Every library, whether it be academic, public, or special requires a framework of systems to guide it in its day-to-day operations. Many resources may be combined for the effective operation of a system. But the most important component is people—the people who operate the system and the people who use its output. Unless the system has the support of its operators, it will not work as intended. And even when it has user support, it will collapse if it fails to satisfy the needs of its users. The men and women who design our library systems must design them for achieving the desired objectives. Every library/information scientist in a library employs systems to carry out library's objectives. And within each system there are sets of subsystems. In order to become the true learning centre, every type of library must learn to deal with a changing environment effectively and efficiently. To accomplish the making of decisions in an uncertain environment, the library's framework of systems must be remodeled, redefined, or tailored on an ongoing basis. At the time of designing of the new library system, we must continue to ask "what are we trying to accomplish"?. Only when this question is answered will a systems design effort make sense.

2 SYSTEMS AND SYSTEMS ANALYSIS

"A system can be defined as a net-work of interrelated procedures that are joined together to perform an activity or to accomplish a specific objective." System can also be defined as "an assemblage of objects united by some form of regular interaction or interdependence."

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The system analysis approach to a problem differs from a trial-and-error approach. The trial-and-error approach involves identifying a number of potential solutions to the problem and then testing each randomly until one alternative appears to provide an acceptable solution. In the system analysis approach, all influences and constraints are identified and evaluated in terms of their impact on the various 'decision points' in the system. A decision point is that point in a system at which some person or automatic mechanism must react to input data and make a decision.

The systems analysis has also been defined as "a formal procedure for examining a complex process or organisation, reducing it to its component parts, and relating these parts to each other and to the unit as a whole in accordance with an agreed upon performance criterion".

3 SYSTEMS ANALYST

It would appear desirable for a library to have on its admtnistrative staff at least one full-time officer whose responsibility is that of improving the library's systems and procedures and constantly modifying processes and procedures as demands or requirements placed on the organization change. In the case of the one-man library it would be left to the librarian alone to acquire the requisite managerial skills. On the other hand, the medium- to large-sized library organizations might well think in terms of full-time staff specialists. In our country, in most of the libraries the responsibilities of the systems analyst are performed by the library personnel working in the library and in certain situations renowned library scientists are invited for improvement of the library systems.

The systems analyst is a methods person who can start with a complex problem, break it down logically, and identify the reasonable solutions. The analyst can study an ailing system and come up with superior alternatives. Or, given some number of objectives, the analyst can devise systematic means of attaining them. The systems analyst views a systems situation in terms of its scope, objectives and the organizational framework.

For example, the scope of a systems project is the range of the project. In other words, the range is the area or the breadth that the study will encompass. It is important that a systems analyst completely understands the information that is used in the new proposed system. The systems analyst in the library also performs the following functions:

(i) Assisting management in the review and evaluation of operations and services to meet the established goals of the library.
(ii) Designing and implementing in cooperation with supervisory staff new or improved operating systems for increasing effectiveness,

strengthening operating or management controls, and expediting performance of routine work.

(iii) Conducting training programmes for staff management in the regular application of systems study techniques to daily operating problems and in the capabilities and use of the computer in operations and library services.

(iv) Keeping abreast of new developments in data processing, together with associated equipment, and their application in library operations.

Library systems analysis, evaluation, and design will be ineffectual unless done by persons who are trained or formally educated in librarianship. We are ourselves supposed to perform the functions of a systems analyst of the library.

4 SYSTEM CHANGE AND CONVERSION ALTERNATIVES

Here we are concerned with the three of the more common alternatives open to a library with regard to changes in its systems.

(i) *When no change is required.* This alternative is usually chosen when the cost of a new or modified system will exceed the benefits. Sometimes it also happens that powerful forces within the library management are unable to agree on the desirability of a new system. There are also so many factors which are responsible for choosing the no-change alternative.

(ii) *When change is required.* In this change, the existing system is completely replaced with some other system. This method stops the use of the old system and simultaneously puts the new system into operation.

(iii) *When both existing and proposed systems operate.* This is called *parallel changeover* method in which both the existing system and the proposed system operate simultaneously until the new system has proven its reliability. It may be used when replacing a manual system with a computerised system.

5 AREA UNDER STUDY

When we are going for the systems study, it may involve only a small functional area in one department, or it may involve the entire library system. There may be five levels comprising the area under study. This is only one possible approach to define the area under study and one should tailor it to fit a library system.

(i) *Level one*

At this level we have a problem that involves the entire library system i e all its divisions and locations.

(ii) *Level two*

At this level we have a problem that involves one division of the library.

(iii) *Level three*

At this level we have a problem that involves departmental interaction within a library.

(iv) *Level four*

At this level we have a problem that involves the functions within one department. The activity to be studied is easily defined and understood.

(v) *Level five*

At this level we have a problem that involves one specific problem within one functional sphere of a department.

We must be conscious of the level which a study will affect because the nature of the objectives and tasks will be different for each level. We should always be aware of the scope of the 'area under study.'

6 DESIGNING THE NEW LIBRARY SYSTEM

In order to design the new library system, we follow the following steps:

A Carry out the feasibility study.
B Define the problem.
C Prepare an outline of the systems study.
D Obtain background information and understand interactions.
E Understand existing system.
F Define the new system requirements.
G Designe the new system.
H Undertake the cost comparison.
I Present the system to the library management.
J Installation, follow-up, and re-evaluation.

We will describe each of these steps separately and also relate them to each other, to show how together they form a carefully ordered approach.

61 Feasibility Study

A feasibility study may or may not be performed, depending upon the size of the study, the cost involved in the new system, and the speed with which management requires the new system. The feasibility study is a planning method that stresses a 'look before you leap' approach to any important project.

We undertake a feasibility study with the objective of determining the possibility or probability of improving an existing system at a reasonable cost. It also can be used by management as a tool to evaluate the feasibility and probable cost of developing a new system which may not have been needed in the past, but which is now required to deal effectively with the changing demands of the library environment. A feasibility study group may recommend an analysis of the present library procedures or it may recommend project abandonment.

It is very important to conduct the feasibility study prior to any commitment to a large or long-term investment or change. The impact of proposed major changes must be weighed carefully because there is usually a great deal at stake. The feasibility study offers management the opportunity to deal with contingencies in advance.

A feasibility study can be viewed as a mini-systems study because it is preliminary to and smaller than a full systems study. Feasibility study can be expanded to a full systems study if the estimated benefits are sufficient to warrant the systems study. If the feasibility study is expanded to a full systems study, we will be expected to carry out the steps from B-J as mentioned above. These are the steps that explain, in detail, the procedures to be followed through a completion of a systems study.

The feasibility study is documented in a written report. It is the medium by which we tell the library management what the problem is, what we have found to be its causes and what we have to offer in the way of recommendations. The feasibility report should:

(i) Define the problem in such a way that it clearly demonstrates our understanding of the problem.
(ii) Clearly describe the subject and scope. List the areas included or excluded.
(iii) State the objectives and whether they were met or not. Are the objectives technically feasible ? Are they economically feasible ? And are they operationally feasible ? Will the objectives, if met, result in a solution ?
(iv) List all of the economic cost comparisons and benefits.

(v) State recommendations clearly. Explain the logic behind the recommendations.

If library management accepts the recommendations, then we should proceed to carry them out. We should drop the whole project if we have recmmended against further study and if the management agrees with us.

Now if the management accepts the recommendations, then wes hould follow the following step-by-step approach for conducting a full systems study. These steps depict the overall development of the system design process. These steps or phases are to be from B-J.

62 Define the Problem

In this phase we should define a problem. Where problems come from, how to define them, and how to present the findings to the management. If we have to be successful in our work, we should always start by defining the problem at hand prior to working toward its solutions.

The word problem is defined as "a question proposed for solution or consideration." A library finds out it has a problem only when things start going wrong. No one knows the problem exists until something fails or someone brings the problem to the attention of management. It is an old saying that a problem defined is half solved. In systems work one learns the truth and value of this saying many times over.

There are so many sources from where the problem can be received, it may involve a verbal message given to us or it may be submitted on a written form.

Let us suppose that we as an analyst have detected the symptoms of a problem and are ready to begin the all-important phase of concise problem definition. In this phase we must define three important things. First, define the 'subject'. The subject is the topic or central theme of the problem study. When the subject is clearly defined, we automatically have a title for the problem definition report. For example, the subject of a problem definition study might be 'Indexing system complaints'. Second, define the 'scope'. The scope is the area or range that the study will encompass. For example, if the subject is 'Indexing system complaints', then the scope should include only the relevant activities that seem to be involved. It should not be allowed to wander into other unrelated complaints. Third, define the 'objectives'. The objectives are things we will be trying to accomplish. In our example, the subject is 'Indexing systems complaints'. The scope includes indexing systems-related complaints only. The objectives must express exactly what things we intend to accomplish in the problem definition study. The objectives in our 'Indexing systems complaints' study might be retrieving of relevant information at the right time in the least possible time.

Now we have to prepare the problem definition report. The report outline will vary with the situation, but in general it should contain the following:

(i) Introduce the problem: subject, scope, objectives.
(ii) Explain any modifications to the original plan.
(iii) Indicate which areas of library were included or excluded and describe the level of detail pursued in the study.
(iv) Clearly define the problem.
(v) State which objectives were met and which ones were not, and why not.
(vi) Make recommendations.
(vii) Use any charts, graphs, pictures or layouts required.

63 Prepare an Outline of the Systems Study

Before we take full systems study, a detailed plan of action must be prepared. The primary purpose of the systems study outline is to aid in organizing the study into its major sections. The sections to be used are determined from the subject, scope and objectives set forth in the problem definition phase.

64 Obtain Background Information and Understand Interactions

No department or function within the library system should be taken into isolation. Rather, it must interact with and serve other departments of the library system. An understanding of these interactions will guide us in designing appropriate system.

As already mentioned, the area under study must be clearly defined. One should attempt to determine the library system levels affected by the study in order to properly set the objectives and scope.

Interactions between departments are very important for us to observe.

65 Understanding Existing System

We must thoroughly understand the existing system before designing an improved version. The objective of this phase of the systems study is a complete understanding of the present operations of the area under study.

We should first learn how the existing system came into being. How was the system designed and installed? By whom? Did it just evolve? Is it someone's pet, or folly? Will anyone try to justify or defend the existing system, and thus slow up the change to a new system? What were some of the conditions that influenced the design of the system? Are

they relevant now? These are the questions that we should try to answer for understanding the reasons behind the old systems detailed operations.

The most important tool for gathering data is the personal interview. Systems interviewing is simply talking with people in order to find out how things operate now, and how they might like to see things operate in the future. Interviewing should be used throughout the systems study because it usually produces the most up-to-date information of all the sources available to us. Usually, the questions are asked about the existing system on the following lines.

For the *operations* in the existing system we should:

(i) determine what is done, who does it, when it is done, how it gets done, where it gets started, and why; and
(ii) determine how much time it takes.

For the *inputs* of the existing system in the area under study, we should determine:

(i) when and how is input received; and
(ii) from where and from whom it is received.

For the *outputs* of the existing system from the area under study, we should determine the following:

(i) what information is transmitted and what is the destination of that output;
(ii) how is the output compiled, filed out, stored, reproduced, checked; and
(iii) how is the output controlled to ensure that it is accurate, complete, timely, and only delivered to appropriate personnel.

For the *computer* or related equipment of the existing system in the area under study, we should determine the following:

(i) identification and description of the computer and its related equipment;
(ii) a list of the applications being run on the computer that pertain to the area under study; and
(iii) workload: amount of work, and the time required to do it.

The summary on the existing system should also be prepared. This summary should include everything of importance learnt during this phase of the study. In general, what is needed here is something which can be referred to later for data when defining the systems requirements and designing the new system.

66 Define the New Systems Requirements

In this phase we are supposed to assemble all the requirements which are to be needed in the new system. The object of defining the new system requirements is to assemble an overall picture of the inputs, outputs, operations and resources required by the system to meet the present and future needs of the library.

In this phase of systems study, there is usually a problem definition, a feasibility study report, an outline, some general information on the area under study and an understanding of the existing system. Now all of this information should be taken together. The first objective is to define what the new system must be able to do.

67 Designing the New Library System

In this phase we proceed from the *what* of the new system to the *how* i e we move from the agreed definition of systems objectives and requirements to the detailed system design which is to be implemented. To improve things we usually must have clear concepts of where things stand at present and what the objectives and requirements are for the future. We can then pull all of our ideas together into a design that will accomplish our purposes. After we have performed these preparatory steps, the actual technical design can take place.

By the time we are ready to begin designing the new system, certain items should already be established. There should be a problem definition, general background information on the area under study, a feeling for the interactions within the area under study and with other areas, a good understanding of the current system, and a set of requirements for the new system. Systems design is a highly creative process which can be greatly faciliated by the following:

(i) strong problem definition;
(ii) pictorial description of the existing system;
(iii) set of requirements of the new system.

By definition, design means to map out, to plan, or to arrange the parts into a whole which satisfies the objectives involved Systems design is mainly concerned with the coordination of activities, job procedures, and equipment utilization in order to achieve library's objectives. The designer at this phase should know already whether the new proposed system is going to be maximizing something, optimizing something or satisficing something. To maximize is to get the highest possible degree of use out of the system without regard to other systems. To optimize is to get the most favourable degree of use out of a system taking into

account all other systems. To satisfice is to choose a particular level of performance for which to strive and for which management is willing to settle.

The pattern of systems design follows an iterative technique. Systems design is a creative process in which we iterate through various activities or job procedures, one at a time, mentally tracing though the entire system. We, as the analyst, should keep the following two very important points in mind:

(i) solve one problem at a time. We should not let our mind get clogged with too many problems at the same time;
(ii) our new system must conform to the overall objectives and goals of the area under study and the library itself.

The *first logical step* in designing a system is to define the problem accurately (this should be done already). Many problems never get solved because they are not defined correctly.

The *second step* is to assemble the facts which seem to pertain to the problem. We should examine our feasibility study, problem definition, outline, general information, interaction between areas, understanding of the existing system, and the new system requirements. The object is to have all of these facts in our mind so that we can put them together in a better design than the original system.

The *third step* is to think. We can use vertical thinking or lateral thinking. Vertical thinking starts with the most promising method of approaching the problem and proceeds from that point to a solution. Lateral thinking explores all of the different ways of looking at the system.

68 Cost Comparisons

Now we have to prepare an economic cost comparison between the current system and the proposed new system. First, we have to estimate the projected useful life of the proposed new system. This is the common basis by which the old and new systems can be compared. We should estimate a reasonable life span of our proposed new system since no system lasts for ever. It might collapse with advances in computer technology or due to some other reason. Second, we should calculate the proposed new system's operating costs during the projected useful life of the system. Third, we should calculate the present system operating costs over the same projected useful life. In this way an accurate cost comparison can be made between the present and proposed systems. It is likely that the present system will not be able to function over the projected useful life of the new system. Estimate when the current system

will fail to operate adequately or when it might collapse completely. Fourth, we should compare both operating costs (present and proposed) over the projected useful life of the new system.

691 Presenting the System to the Library Management

We, as the systems analyst, have the responsibility for presenting the systems proposal to the library management in a clear and objective manner, but with enthusiasm for the benefits that will be derived from its use. We must realize that in the final presentation an idea is being sold to management, not a product. A system is an abstract idea. Management usually has a desire to improve the library's systems. We should mentally ask many questions in relation to presenting the new system to the management of the area under study. Has management had any previous experience with our systems studies, and was that experience favourable? Does management have a need for this specific new system? Is management aware of the need? Is management able to implement the changes called for in the new system? At the end of the presentation, we should try to get management to agree to implement the new system. We should try to get management to say, yes, they want the system.

692 Installation, Follow-up, and Re-evaluation

After the new systems is accepted by the management, the implementation process begins. Our responsibility should not end with the completion of the design phase of the systems study. The installation of the newly designed system should also be done by us. We should coordinate and correlate the various factors entering into the implementing of a new system, such as staff training, new equipment and new facilities, so that the installation may proceed according to a realistic time schedule. For example, the installation of a computer-based circulation system could involve coordinating the preparation and procurement of machine-readable identification cards, punched cards for books, data collection devices, computer programmes, and new computer-produced forms such as overdue and recall notices.

There are three possible ways in which a system may be installed: (a) all at once on a crash programme basis with little, if any, break in service during the transition, (b) simultaneously as a parallel programme with both the old and the new system being concurrent for a pre-determined time, and (c) step by step on a piecemeal basis where portions of the new system are implemented within the old system. The size and nature of the new system will have considerable bearing on what installation approach we may take. For example, it may be possible to implement a punched-

card circulation system step by step. The preparation and insertion of the punched cards in the books may be accomplished on a piecemeal basis, i e as books circulate punched cards could be made up and then inserted when the books are returned. When a sizable portion of the active collection has been covered, the switch over to the punched card system could then be made. The simultaneous type of installation, although expensive, may be feasible where assurance that a new system will perform as accurately as the old is desired. This would be particularly true in accounting operations where the new system's tallies should correspond with those produced under the old system. The all at-once approach may be used if a new operation is not considered complex, such as the use of photocopying machines to reproduce catalogue cards. The programme could be operational almost immediately after the card stock is available, the copier installed and the staff trained.

Systems Follow-up

During the follow-up phase we determine how good the system design really is by observing the actual operation of the installed system. We find out if the operating personnel are using the new system with its formal procedures, or if the operating personnel have started their own informal procedures. Many observations are required during follow-up. Library management wants to know if the objectives of the new system are being accomplished. We, during the follow-up, should make sure that all parts of the new system are actually operating and that minor activities or operations have not been overlooked. The operating personnel should be observed to be sure they have not reverted back to the old system. Operating costs should be examined to see if they are in line with the estimates and whether the facilities are really adequate, for example, equipment, space, number of operating personnel, and so forth.

Re-evaluation

The work on any given project does not cease when the new system becomes operational. The primary reason for re-evaluation of the system after it has been installed is to make whatever changes are needed for the refinement and improvement of the new system. It may be necessary to redesign some portions of the system, and revise some of the original recommendations.

We have considered each of the above steps or phases separately. They are, of course, related to each other by the dependence of each step on the successful completion of the preceding one. Furthermore, the steps have been designed to provide checkpoints where decisions can be made as to whether or not it is worthwhile to continue the project.

7 CONCLUSION

In conclusion I must say that we should design such library systems by which right information is furnished to the right people, at the right time, and at the right cost. In order to have high quality library service, our library system should provide information that is constant, accurate, timely, economically feasible and relevant. These characteristics cater to the needs of the library in which the system is used.

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AUTOMATION IN CIRCULATION CONTROL OF SPECIAL LIBRARIES SYSTEM : A PERSPECTIVE STUDY

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In the modern age everyone knows the importance of library. It is needless to mention how libraries have played a major role for the modernization of the world. 'Necessity is the mother of invention', in the same manner various types of libraries have come into existence. But latest trend in this country is special libraries. Over 3 million documents are published every year in the field of science and technology alone, which doubles as per estimates in every 5 years. To handle this enormous amount of information library has to continuously search for faster, efficient and more accurate devices for processing it. This process is known as 'automation'.

In simple term 'automation' refers to the processing of some routine clerical functions in the library with the assistance of computers or semi-automatic equipment.

In the space age, computer technology is the most sophisticated technology ever invented by the man. Simply the term 'computer' can logically be applied to any calculating device. But generally it refers to electronic computers. A computer uses electronic elements based on measurable states. It has an internal storage for storing both programme and data being processed by the programme. Let us see the basic structure of computer.

Computer receives information (input). It processes this information in some way according to a set of precise instructions in Central Processing Unit (CPU) and then it presents the results in a useful form (output).

The central processing unit has to store the information in a 'memory'

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(before it can carry out any processing operations). Two kinds of information have to be input, (i) the programme, and (ii) the data.

The 'programme' is the set of instructions which instruct the computer, how to solve a given problem. The 'data' is the information on which these instructions are to operate.

The three physical units of the computer, i e Input, CPU and Output together are referred to as 'Hardware'. The various types of instructions given to the computer are referred to as 'Software'. Thus hardware and software together form the part of a computer system.

We have seen what computer is, now let us think the various characteristics of a special library. In simple term special library is a product of the twentieth century. It is directly related to the scientific/technological research and industrial development. Many early libraries were specialized only because they contained manuscripts relating to limited scholarship of the age. But now they are based to perform functions on the social needs of their organizations. The entire work is directed towards supporting the activities of the organization to which they are attached, not only by providing books, journals and general information, but by making available specialized information on particular subject fields to the research staff.

We have seen what computer is, and the characteristics of special libraries. Now let us think how the computer will be useful in the library. Actually each and every library activity is inter-related. No activity is separated which we can see from Figure 1.

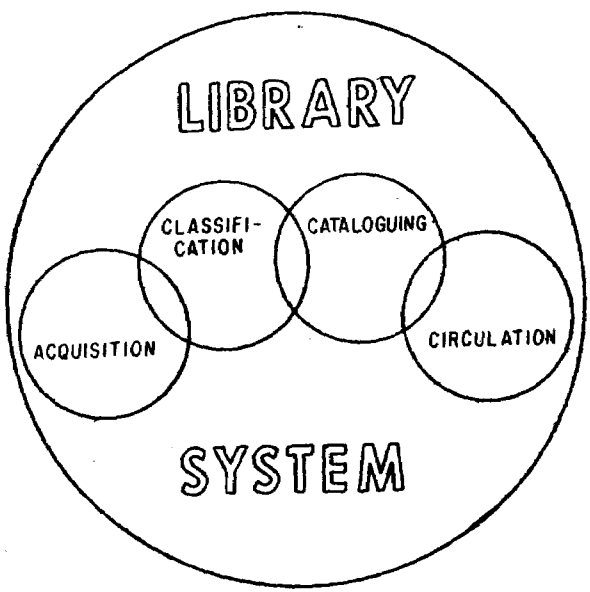


Fig. 1

But let us think how computers will be useful in the circulation system. Any small or medium sized library can now afford to have mini or micro-computers with 32 KB or 64 KB memories. The system generated by micro-computers with different programmes can rapidly show the records of books, periodicals and other documents, its location and condition, charged or discharged. It lists all materials in circulation and prepares notices. All theoretical aspects of possible use of micro-computers here present the feasible approach for small special libraries which can save their readers' precious time and furnish micro-information with minimum labour.

The microcomputer having terminals, keyboard, monitors, printers, floppy disk (which is comparatively new storage device which has about 80 tracks on which information is stored, giving a capacity of between 2,50,000 and 5,00,000 characters (equivalent to 3,000 to 6,000 fully punched cards) and other storage devices. These are hardwares readily available in the markets and various brands having excellent performances. Problems arise only to obtain the software programmes, but programmers and other consultants in India are also readily available.

Visual Display Unit (VDU)

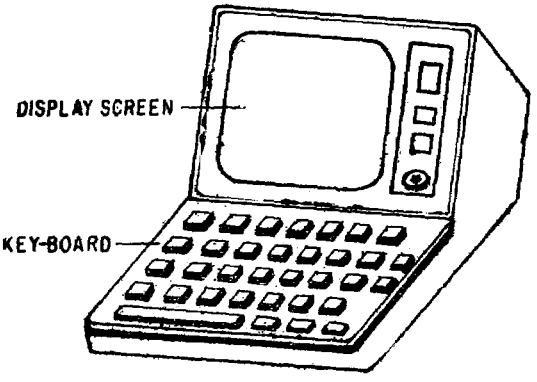


Fig. 2

VDU is an useful equipment for output of the microcomputer (see Figure 2). We can make programme with the help of analyst according to our requirements of circulation system. Computer gives useful information regarding circulation, e g

(1) it indicates which library document is out and who has it;
(2) it indicates issued and possible return date;
(3) it helps to search out for missing documents;
(4) it allows for reservation of library material;
(5) it helps to maintain records of overdue books and to issue reminders; and

(6) it facilitates recall of charged out material perior to its due date.

Thus once a computer has been given a piece of information it is always capable of 'remembering' it at any time. In this sense we can consider it superior to a human being. It can always access any piece of information (data) that it has in store, and this data can be reproduced at any time exactly in the original form.

CONCLUSION

The future of automated libraries in the developed/developing countries seem to be very promising and it can be hoped that more and more libraries will adopt automatic systems in the future, sooner or later. The 4th Generation of Computer, i e microcomputer system with their low costs and multifarious service capabilities have made possible for even small libraries to provide better services to the users.

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CRITERIA FOR EVALUATING THE QUALITY OF LIBRARY COLLECTION

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0 INTRODUCTION

The fundamental principle of librarianship is that 'Books are for use'. It will be a waste of time, energy and money, if the readers cannot get the desired information in the library. The resources of a modern library are records of human thought and experience in the form of books, periodicals, manuscripts, maps, pictorial reproduction, motion pictures, filmstrips, phonograph records etc, all designed for use. It is the duty of every member of the library staff to promote the use of library resources. If the librarian fails in his duty, he fails as a librarian, and the library also ceases to function. The real value of a library is judged neither by its enormous collection nor by its magnificient building, but by its usefulness to the readers. The effective functioning and maintaining quality in the library mainly depends on two factors: (i) the quality in the collection which serves as main source of information, and (ii) efficient trained personnel who serve the readers. Therefore, the collection of library being intended for use must be evaluated from time to time with certain criterion. Regarding the collection evaluation, a number of studies have been made viz, Mc-Grath[1], Magrill[2], Rice[3], Ravichandra Rao,[4] etc.

1 REASONS FOR COLLECTION EVALUATION

1.1 To find out whether the information that is available in the library is meeting the specific needs of readers.

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1.2 To check and revise the aquisition policy.

1.3 To justify budget demands and to devise a budget allocation formula.

1.4 To show the affiliation body that the institution possesses the necessary materials to support instruction/research in a certain subject field or at a certain academic level.

1.5 To demonstrate how the library contributes to the development of the parent body.

1.6 To present the valuable evidence that the library administration is sensitive to the library's assigned purposes to the special interest of its potential users, and to the limitation of its resources.

1.7 To compare its resources and efficiency of the staff with other neighbouring libraries.

1.8 To augment the resources and improve the efficiency of library staff.

2 CRITERIA FOR COLLECTION EVALUATION

The common criteria for collection evaluation are described below.

21 Collecting the Statistics

Compilation of statistics serves as the most useful source to measure the quality of the collection. The following methods can be used for this purpose.

(i) *Straight Counting*

Counting the number of volumes available in the library, i e reference book, text books, bound periodicals, current periodicals and other non-print materials, will show the balance in the collection. These can be classified according to CC, DDC or UDG and separately counted as per the sub divisions. These two types of statistics would show the correlation between the size of the library and quality.

(ii) *New Additions*

Direct or subjectwise counting the new additions will show the annual growth of the resources. These figures can be compared with last few years figures and resources development can be assessed.

(iii) *Per-capita*

Whole collection and annually added volumes may be divided on per-capita basis viz, books per student, per teacher etc.

(iv) *Counting the Requests*

Requests made by the readers for the reading materials can be recorded and divided into subject and monthwise. This reveals the materials which are available in the library.

(v) *Request for Inter-Library Loan*

Counting the requests received from the other libraries for inter-library loan will show quality or strength of the collection.

(vi) *Circulation of Material*

The daily statistics of the documents issued to the readers can be counted and compared with monthly and yearly statistics. Another point to note is that how many times a particular document has been issued, by counting the issue dates from due date slips sticked to the book. The quality of the collection can be easily recognised.

(vii) *In-House Use of Materials*

Each document added to the library should have a separate slip on which reader should be instructed to put date and sign upon the use of every document. These dates and signature may be counted at a fixed interval and that will reveal the quality of each document.

(viii) *Expenditure on Collection*

Counting the total monetary value of the collection and expenditure by type of documents viz, books periodicals, reports etc. The subject-wise expenditure and per capita expenditure will also reveal the quality in the collection.

(ix) *Cost-Benefit Analysis*

Total cost of procuring and maintaining a document divided by the number of times it is used will reveal the worth of each document.

The advantages of these methods are that they are: (i) easy to compile; (ii) easy to understand; and (iii) easy to compare. The disadvantages are: (i) mere collection of data will not measure the quality; (ii) the distinction between titles and volumes is very difficult; (iii) counting the accuracy of non-print materials is difficult; and (iv) inconsistency in the data will be a great problem.

3 CHECKING LIST

Following are the sources which help to check the resources of the

library.

31 Library Catalogue

Taking the catalogues of important libraries attached to different specialised institutions and comparing them with the library collection. This will show the subject strength in the collection.

32 Special Subject Bibliographies

Special subject bibliographies include lists published by: (i) professional, technical and learned societies; (ii) guides to subject literature and reference sources; and (iii) comprehensive or seletcive bibliographies in subject areas. These serve as useful source to check the quality of the collection.

33 Standard Catalogues

Collection can be evaluated by the outstanding book sellers, publishers, professional Associations, list of the best book of the year, prize winners and book lists etc.

34 Collection of Periodicals

The engineering and medical college libraries are facing many problems in allocating the required budget for acquisition of journals. Budgetary requirements for journals are usually far more than what is required for books. These problems can be tackled most efficiently and effectively by applying Bradfords[5] Law. His law states that "if scientific journals are arranged in order of decreasing productivity of articles on a given subject, they may be divided into a nucleus of periodicals more particularly devoted to subject and several groups or zones containing the same number of articles as the nucleus, when the zones will be as 1: n: n . . .". In other words if the top n periodicals contribute 33.33% of the total number of articles on a given subject, the next n^2 periodicals contribute only 33.33% of the literature (i e 33.33%) is scattered in n^3 periodicals. Thus, it is suggested that a proper quantitative analysis to determine the core collection of periodicals on a given subject may be carried out to assist a decision to be taken on the selection of documents.

35 Citation Analysis

Citation analysis consists in counting the number of times a document is cited in the foot notes, references, bibliographies of significant works. The use of citation analysis in collection evaluation is based on the assumption that citation patterns reflect use patterns and that frequently

cited items are likely to be more valuable to a library collection than those that have been cited rarely.

Advantages of checking lists are: (i) a good number of specialised lists are easily available and it is easy to check the collection, (ii) most of the lists are compiled by competent professional librarians and subject specialists, hence we can rely on them. Disadvantages of checking lists are: (i) published list soon becomes out-dated and is not updated immediately; (ii) published lists are not being prepared by keeping in view the interest or needs of a particular library reader community; and (iii) lists are not of standard quality.

4 COLLECTING USER OPINIONS

Users opinions may be obtained with the help of interview or questionnaire methods regarding the quality of the library collection.

41 Opinions of the Research Scholars

Research scholars are more familiar with the existing literature in a subject field and they are aware of the source of the literature, so same may be acquired and added to the collection.

42 Opinions of the Faculty Members

The opinions of the faculty in the academic institution may be collected to evaluate the quality in the collection.

43 Students and General Public

Opinions of the students and general public (users) are the main source in the academic and public libraries to evaluate the quality of the library collection.

44 Opinions of the Library Staff

Librarian and his professional colleagues are often consulted in the collection evaluation. Particularly the staff working in reference and circulation section is consulted because they are in direct contact with the readers.

5 USEFULNESS OF COLLECTION EVALUATION

1 Strength and weakness of the collection can be easily assessed.
2 Helps to find out how old is the collection.
3 Helps to identify an appropriate item to the particular group of users.

4 Provides whether existing collection does match the teaching or research programmes to be supported by the library.
5 Is helpful to find out the availability of the percentage of the library materials wanted by users.

6 CONCLUSION

The above approach to the criteria for evaluating the quality of library collection is only an attempt towards a total systems approach. The evaluation framework is neither purely quantitative nor purely qualitative. It is a combination of both which is desirable in such a sort of situation. We fully understand that this paper still requires further structuring, so that the procedure could be made operational.

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EFFECTIVENESS IN BOOK COLLECTION : SOME CONTRIBUTING FACTORS

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0 INTRODUCTION

It is a well-known fact that, barring a few libraries, the financial resources of the others have always been lower than even the bare minimum needs. So far too many business and public institutions have not realised the importance of libraries, and the academic and research institutions have largely failed to give their libraries the right place. Besides some real difficulties on the part of managements to provide finance, their indifferent attitude is the most important single factor for the hopeless financial conditions of our libraries.

No one, in an institution, is expected to be more familiar with the diversified and complicated publishing sources than the librarian. Whether directly responsible or not, a librarian's role in book selection is more important than that of any one else involved in the process. The management or even the persons closely associated with a librarian in this function may not recognise the importance of his role in keeping track of and selecting appropriate publications. Management's indifferent attitude to their library and the librarian has created in many an institution such a situation that the library is not only failing to perform its true function but is wasting financial and human resources. Imagination is the only way to realise the irreparable loss to scholarship resulting from such situations. If efforts are made to create the best possible collections under a set of given conditions, hopefully, the persons at the top would become more appreciative and responsive.

The objective of improving library collections with the same financial resources can greatly be achieved by:

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(i) judiciously extending the coverage of publishing sources;
(ii) improving selection and selection procedures; and
(iii) adopting suitable acquisition techniques.

It is not being suggested here that a library can provide all the required material with the same financial resources by following the improvement methods outlined here. A library has to sacrifice some of its requirements if the financial resources are not sufficient to cover all the needs. Whether the financial resources to meet all the needs of a library are sufficient or not has no relationship with the use of given financial resources and the techniques to acquire most suitable material and, therefore, would be kept out of this discussion. The primary concern as stated earlier is to discuss the ways to improve upon the acquisition programme assuming that financial resources remain the same.

1 PUBLISHING SOURCES

The major sources of published material as a media for dissemination of knowledge are—commercial publishers, government agencies, and institutions promoting academic advancement.

11 Commercial Publishing Houses

The publications emanating from commercial publishing houses do not create much of a problem. The catalogues and lists issued by the book trade, although not always of high quality, are generally available. For, it is in the interest of commercial publishers to give a wide publicity to their products and try to cover the target market to the maximum extent. They adopt a variety of publicity media and distribution channels to promote the sale of their books.

12 Government Agencies

Government publications pose a different and difficult problem. The nature of these publications is varied, and sources diverse, due to the complicated organisation of government and frequent changes in the inter-relationship of its various agencies. It is obvious that the nature and contents of the publications correspond to the nature and functions of the issuing agencies. However, we may broadly categorise the government publications under the following heads—administrative reports; statistical reports; commission or committee reports; research reports; bills, acts, laws, codes, etc.; law reports, digests, etc.; records of proceedings; rules and regulations; informative publications; propaganda literature; periodicals; maps and charts; lists and bibliographies.

Many librarians and scholars intentionally or unintentionally do not come across much of the government publications and the majority of them will have little idea how to lay their hands on the material they need. There should be no doubt about the value of government publications. Perhaps the foremost reason that many of us hesitate to handle them is how to locate what we need from the great mass of material produced by government and its various agencies. One way to know about government publications is to understand thoroughly the organisational set-up of the government and then decide or rather guess where to apply for what. But we can hardly expect this method to be useful. The organisation of government is so complicated and there are so many frequent changes in the inter-relationship of various organs, that it is quite difficult to keep track of it. Without a fair knowledge of the material which is being published and which has been published, this class of treasure will remain hidden. The pre-requisite for full use of government publications is an efficient bibliographical service to give libraries and individuals exact and helpful information. It is most unfortunate that India is lagging far behind in providing such tools with the result that users are left in ignorance with regard to the availability of many important publications.

13 Learned Institutions

An institution—whether a university, an academic or a specialized institute, an association, or a society—comes into existence for the achievement of certain well-defined aims and objectives. Publications of an organization are the by-products of its activities over a period of time. Such publications broadly fall in line with the objectives of the agency who is responsible for their intellectual production. They include research reports; papers and proceedings; bibliographies; bulletins; pamphlets; directories; lectures; annual reports; periodicals, etc. The coverage of institutional publications is so vast that taken together the output of published material covers almost all disciplines of the universe of knowledge, and almost all known forms. The quality of these publications is usually of high standard. The publications issued by academic and research organizations are generally free from profit motive. The intellectual and financial input is proportionately much higher than the returns expected through sales. In most cases the publications are either considerably low priced or made available free of charge. Each category of publications results from a particular group of academic activities. A clear understanding of various categories of institutional publications is essential to appreciate their full value.

Publications flowing from the learned institutions pose no less a problem than the government publications. Most of the institutes do

not have publication divisions and hardly any effort is made to get them distributed widely. One possible reason of this lacuna could be that sale of books is a specialized job that requires separate organisation and distribution channels. It may not be economical to organize a publication division, having the limited output, which is true in most cases. Second, the sale of publications is not usually a lucrative source of revenue to academic institutions. However, in some cases, there is a growing tendency, among institutions, to finance their publications or to get them published of their own, and to arrange the distribution through well-known and well-organised booksellers. This solution may not be applicable for publications which are either unpriced or nominally priced.

In the absence of pointed efforts on the part of the institutions to get their publications reach the desiring persons, the only way left to the librarians is to approach individually and directly the institutions and seek the material. A necessary prerequisite then is that they should know in what sphere of knowledge an institution is active and what it has published. If this information is available, it would help not only to procure the already published material, but also give a fair idea about the objectives of an institution and the nature of the material that could be expected in the near future. A complete introduction of this type can help in the acquisition of material as well as lay foundation of a continuous relationship among the institutions engaged in similar activities.

14 Keeping Track of Published Material

Coming to the problem of keeping track of published material, the mere fact that the book-trade itself is interested to sell to the libraries is no reason for considering it well-covered. Firstly, the publishers and wholesalers are interested to feed information mostly to large libraries. Secondly, their main source for compiling the mailing lists is the names provided by their representatives. The main job of their representatives is to contact the book-sellers, and only a little portion of their time is spent on visiting libraries and they are, naturally, large ones. As indicated earlier, one has to make specific efforts to know about the publications of research institutions. It is important to approach the maximum possible number of appropriate publishing sources active in the areas of interest of a library. For this, a library has to decide its own coverage and approach. It requires a well thought out and clearly defined scope. Initially, a library may compile a selective list of commercial, government, and research institutions to be approached for information about their publications. The record may be kept in any form as convenient and suitable for the needs of a library.

There may be some difficulties in the initial stages of identification of relevant organisations. But once the familiarity is gained with the nature of publications emanating from a particular organisation, it may be comparatively easy to sort out the useful material.

2 SELECTION OF MATERIAL

Material selection is the most important and critical stage in building and improving library collections. This is the stage where a librarian has to seek the cooperation of willing and unwilling subjects specialists. Sometimes it may not be that easy to make the specialists agree to some of the basic principles of book selection. By the nature of their position as subject specialists and generally having a tendency to ignore many of the contributing factors to evaluate the purchase of a document, they consider their decisions to be absolutely correct and final. Invariably they tend to evaluate a publication as an independent entity without relating it to the overall library collections and objectives of the institution. It does not mean that the librarian should either fully take over such responsibility or start teaching specialists the principles of book selection. It is a combination of mutual trust and understanding by the librarian and his specialists of their own roles in the selection of material and the importance of team work.

21 Responsibility for Book Selection

In academic and research institutions the activities are generally grouped by subject areas. In many institutions there are library committees charged with varying responsibilities and powers, ranging from policy-making and advisory functions to the actual administration of the library. In most cases the library committees are not represented by all subject areas. It is not the purpose here to go into the pros and cons of having library committees or their responsibilities and powers, but to emphasise that they do exist and have varying powers and interests in library affairs.

Depending upon the organisational set-up, as the library is concerned, the selection can be done by the following:

1 Library committee.
2 Individual specialists.
3 Department or area heads.
4 Librarian.

The practice of authorising a library committee to select material or authorise purchases is a most undesirable way of building library collec-

tions and spending library funds. By the very nature of its composition, it is hardly possible for a group of individuals forming the committee either to devote that much time or to give due consideration to the areas not represented on the library committee. Moreover, if a library committee is the sole authority to authorise the purchase of each and every book, then many important purchases may have to wait until the committee meets. Another problem may be to hold the books received on approval.

The book selection done by individual specialists independent of group responsibility has its own drawbacks. The system may work in small institution, but in larger organisations the library may find it unmanageable to feed each and every member of the faculty with the selection sources and to do the follow-up. If a trade catalogue is routed to each and every member of the faculty and research staff, it may be months together before the routing is completed. It may not be surprising if a trade catalogue is lost in the process, wasting the time spent by those members who have already done the selection.

If the ultimate responsibility of book selection by the faculty and research staff could be placed with the department or area heads, who in turn extend full cooperation to the librarian, the book selection function could be made both smooth and effective. In this case the librarian will be dealing directly and only with the department or area heads, as far as regular book selection is concerned. It may be left to the heads to further route the book selection sources to the members of their departments or areas and set their own procedures so as to ensure quick circulation and fast return. The heads by virtue of their position and direct control over the members of their areas are in a position to enforce a suitable procedure for book selection. It should be left to them to review the overall selection for their areas or rely upon the selection of individual members. It may be pointed out that the regular book selection should not include individual requests and suggestions by the members of faculty, research staff, students and, if applicable, by other employees of the institution. Irrespective of the consideration whether the librarian or someone else is vested with the powers to accept or reject such individual requests, it is the duty of the librarian to encourage and invite suggestions, from all users of the library. Unless the regular book selection is supplemented by individual suggestions, the library collections can hardly be expected to be truly representative.

The need to authorise librarians to buy certain types of reference and general material is being recognised more and more. The most common procedure is to allot a specific amount from which the librarian can buy reference and other material not falling directly into any one of the specified subject areas. The foremost danger of entirely depending upon faculty is the development of unbalanced collections. Some areas may

become much more strong in quality and quantity at the cost of other areas. Even in institutions where each area is allotted fixed funds, there can never be any control over quality. Except for certain types of institutions, such as schools and colleges, the allotment of fixed funds to subject areas is an unhealthy practice and requires serious investigation.

There are individuals, among the group of persons representing different areas, who are much more active and take their job of book selection more seriously than their counterparts. The quantity and quality of book selection by all specialists can hardly match. Some are considerate and particular to avoid much of the material the contents of which they feel have already been covered by the publications available in the library. They are aware of library collections in their areas and constantly keep in touch with the material of their interest. In case of doubt they may even take the trouble of going through the reviews or comparing an item under consideration with the book they may recall is on the same topic and is already in the library. They do not spend their quota of funds on recommending material which has not anything new to offer. In short, whatever their approach is, they try to buy the maximum knowledge with the limited resources available to them. Whereas the other type may consider book selection just a routine job which has been thrust upon them. Moreover, there may be very good researchers and teachers, who acquainted with the significant publications in their fields, are sure to be asking for the latest titles, but they pay no attention to more remote material. Perhaps, they do not have the time to keep track of such remote material.

The librarian should limit to supplement the selections by area heads by adding only those titles which are important and are left apparently because of overlapping interests or are on the topics on which material has been asked for but of which the library has very little. The librarian may go further in cases of selections, done by those heads who are by nature indifferent to the job or who just send the book selection sources back without taking the trouble to use their pencil. The librarian should never get irritated over the attitude of such heads and should always thank them for whatever cooperation he is getting. The further cooperation can be won by mutual understanding and regard rather than by approaching through management. The most important thing to keep in mind while supplementing is that there is always a subject specialist who knows the subject better than the librarian himself. In case of doubt and before taking decision about any expensive material, the librarian should make a point to refer such publication to the subject specialist for his advice. It would help the librarian reach suitable decision.

3 ACQUISITION OF MATERIAL

Regular inflow of proper book selection sources and the judicious selection of material by all concerned is of little avail unless the selected material is acquired and organised for use in the minimum possible time. For efficient acquisition of material, the selection of efficient vendors and hitting upon the right vendor or source of supply is most important. Some of the reasons for poor supply could be wrong distribution of orders, lack of proper follow-up, inability of the library to shake up the vendors for better performance, and depending on only a couple of vendors.

31 Selecting Sources of Supply

It is always better to acquire the publications as early as possible. This can be achieved to a great extent by hitting the right source of supply the first time rather than trying from one source to another. Some titles may be difficult to acquire and it may be imminent to repeat the efforts but in the majority of cases a judicious decision about the source of supply can save time and money. It is advisable to directly order to the issuing agencies publications emanating from academic and research institutions and professional associations, unless there is some definite arrangement with the vendors which would ensure them a reasonable return on their services. Such publications are generally low priced and low discounted. Sometimes the discount available to a bookseller may not even cover the shipment charges. The government publications are another area where a majority of the booksellers, including those having agencies fail to provide satisfactory service due to the lack of incentive or their own inefficiency or because of the inefficiency of issuing and distributing agencies of government publications. A library will do much better in the area of government publications if it does not depend upon any particular vendor but exploits the best available sources.

32 Rush Buying

Mention may be made to the practice of buying books near the end of the financial year to spend the remaining budget. This is the time when a lot of undesirable material finds its way to the libraries, and repeated year after year makes the library collections poorly balanced. Booksellers generally wait for this season and get well prepared to make the best use of rush buying by the libraries. Anxious to spend the funds, the librarians, mostly accompanied by their advisors, visit book-stores and select from whatever is offered by the booksellers during this special season. A librarian must avoid to purchase what is being offered and instead should

acquire what is needed. If a librarian can avoid waiting for the year end and can properly spread the actual requirements over the year, making sufficient allowance to acquire the properly selected material, it will channel the available resources to build best possible collection.

33 Complimentary Publications

A library can significantly save by exploring the possibility of getting complimentary publications. Particularly on the requests of academic and research institutions, some government agencies may agree to supply a complimentary copy each of their priced and unpriced publications. Many organisations consider requests for adding the names of libraries to their mailing lists for free publications. It may be fruitful if the order is made starting with a request for a complimentary copy with a suggestion to be billed if that is not possible. Many a time the results are unexpectedly encouraging. The receipt of complimentary copies should be properly acknowledged. A record of institutions acceeding to such requests should be maintained for future reference.

4 CONCLUSION

Keeping track of right material, judicious selection, and an efficient acquisition programme is not that simple as it may appear. Each phase has its own inherent problems which may change shapes given different libraries. In this process of building library collections a librarian has to deal with management, specialists, readers, the book-trade and his own colleagues. In addition, he has to use his judgement in book selection sources and acquisition of publications A librarian's understanding of a particular problem and right judgement can play a big role in the improvement of library collections.

INFORMATION SOURCES IN CHEMICAL LITERATURE : AN EVALUATION

V S GEETHA RANI*

0 INTRODUCTION

Libraries are considered as catalysts in the process of continuous community development in all its facets. There was a time when users and research output were a few in number; it was quite easy to evaluate the resources of a library in the light of the aims and objectives of parent organisation. But that time is over now; the recent phenomenon, namely 'information explosion' or 'information deluge' has opened up problems for information seekers and information centres in the field of science and technology. Now-a-days, libraries, especially academic libraries are becoming manifold, complex and specialised with the rapid growth of research. Knowledge explosion on the one hand, non-elastic budget just opposed to the escalating cost of documents and crazy race for research on the other hand demand either partial or complete evaluation of the resources of any library so as to measure its adequacy, effectiveness, usefulness and up-to-dateness etc from time to time.

Library literature reveals that a number of studies have been conducted in the developed countries in the field of collection evaluation, especially in the academic libraries. However, such attempts in this direction, especially in the university libraries in India, are a few in number. To the investigator's knowledge, no such attempt has been made in Kerala in this field.

1 OBJECTIVES

The objective of the study is to evaluate the information sources in chemical literature in the Kerala University Library and Department of

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Chemistry Library so as to measure its adequacy in relation to the objectives of Kerala University such as learning, teaching, research etc.

2 METHODOLOGY

Three methods are adopted for the study—surveying through direct observation, surveying through users' opinion and surveying through check list. It was in order to get the broadest possible corroboration of the survey's findings that these three methods were used together.

3 ANALYSIS OF THE DATA AND FINDINGS

The analysis of the data collected by using the techniques, like direct observation, questionnaire and check list method brings to light fruitful results. The major findings evolved from the study are grouped under three heads, viz 'subject interest', 'user needs' and 'adequacy of the collection'.

31 Areas of Subject Interest

The data reveals that 45.35% of chemists were interested in the subject area of organic chemistry and chemists interested in analytical chemistry were least (2.66%). Physical chemistry and inorganic chemistry were given more or less equal preference by the users, 25% each. Majority of the Ph D scholars are interested in the specialised areas like physical, organic, photo-chemistry, heterocyclic compounds, transition metal chemistry etc.

32 User Needs

Irrespective of the type of users, majority of the clientele prefer to use text books/monographs and their second preference is current periodicals.

Ph D scholars and teachers in chemistry constitute the single largest group of users of periodicals. *Journal of American Chemical Society* is the most favourite journal to the users of chemical literature. The journals preferred second and third by them are *Indian Journal of Chemistry* and *Indian Journal of Chemical Society*, respectively. Only a negligible percentage (1.33%) of users prefer to read foreign periodicals in languages other than English.

Patents and standards are generally under-used. These materials are used only by teachers and Ph D scholars in chemistry. Teachers, M Phil students and Ph D scholars are the extensive users of theses/dissertations.

Irrespective of the type of users, all the clientele of chemical literature make use of reference books for their learning, teaching and research purposes. But latest editions and titles relevant to the users' needs are lacking.

Ph D scholars and teachers are the largest number of users of indexing and abstracting periodicals. This may be due to the fact that the rest of the population is not aware of or does not require them for their study.

Users of non-book materials are below the desirable minimum. It is a fact that non-book materials are not yet popular in our libraries. Consequently, they are not exploited even in situations where they are available.

33 Adequacy of Collection

Based on the findings arrived at from direct observation, users opinion and check lists etc the existing collection in chemical literature in KUL* and DCL** is evaluated in relation to its objectives.

The general trend of the students is seen to be centred around text books which are the basic requirements for their curricular needs. Research scholars and teachers too stated that these are one of the important sources for them. By examining the collection of text books with check lists and observation, it is found that only 65% of them are available in the library. Though the catalogue reveals the existence of most of the text books in the syllabi, the books are not seen on the shelves for a variety of reasons. The main reasons for this may be the following :

(i) only a few copies of recommended books are available to meet the demands of a large number of users, and
(ii) misplacement of books by users inadvertantly or deliberately.

It is estimated that the library has a moderate collection of prescribed text books in chemistry. But latest editions are almost lacking and the number of copies of old editions that forms the collection is inadequate to cater to the demands of the users.

Except the *Journal of Institution of Chemists* all the 30 journals are extensively used. But these journals are inadequate for Ph D scholars, M Phil students and teachers in chemistry. Users have suggested that a few more journals are to be subscribed by the library. The late arrival of current periodicals is a problem faced by researchers.

The majority of the users are of the opinion that the collection of

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**Department of Chemistry Library

conference proceedings and dissertations/theses is partially adequate.

Reference books are found to be moderately adequate. These are completely adequate for B Sc and M Sc students and partially adequate for other groups of population. There is a richer collection of handbooks and treatises compared to the encyclopaedias and dictionaries. Indexing and abstracting periodicals are almost inadequate.

4 SUGGESTIONS

The findings of the study have very wide implications for University authorities and librarians on the one hand and users on the other. It must be clear to everybody that an academic library assisting higher education programmes joins the parent organisation, the University in the development of individuals in such a way that it would help the development of a society at large. Considering this crucial point, the following suggestions are made in order to improve the existing situation of the collection in the KUL and DCL, so as to fulfil its objectives:

(i) Books are found to be preferred extensively by graduates and post-graduates in chemistry. But these are not available in sufficient number on par with the proportion of the users. So, multiple copies of books recommended in the syllabi should be procured.

(ii) The spurt of activity in furthering scientific knowledge in general and chemistry in particular puts forth increasingly new publications, making the existing literature obsolete at a quick rate. Hence, the library should pay attention to refurbish its collections by the exposition of current and latest editions as and when they are published.

(iii) Patents and standards are considered important primary sources for chemists, especially for researchers. But these are under-used. So, in order to accelerate their use they should be properly organised and latest ones should be displayed.

(iv) The reference collection should be improved by the addition of materials in the specialised areas like physical, organic, heterocyclic chemistry, photochemistry etc and the addition of latest editions.

(v) There are signs that the printed world is gradually changing into 'paperless society' and that the use of microforms of literature should be encouraged. For this, identification, location and acquisition of these materials should be accelerated.

(vi) In order to get an overall idea of the holdings of chemistry collection in the KUL and DCL, a union catalogue may be prepared.

(vii) It is suggested that a periodical evaluation, for example, once in five years can be conducted in each branch of knowledge, so as to have a proper and healthy development of the collection.

5 CONCLUSION

The present resources of the Kerala University Library and Department of Chemistry Library in the field of chemical literature are almost inadequate to meet the demands of the users. Hence, it is very essential to enhance or refurbish the collection to the extent possible within the constraints of funds, besides others, in the university library system.

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PATHFINDERS : A WAY TO IMPROVE THE QUALITY OF LIBRARY SERVICES

N SATISH*
MOHD TAHER**
C P RAMASHESH***

0 INTRODUCTION

Effective use of the library services/resources depends upon the extent of the user/document interaction that takes place in the library. It is said to be good if the interaction is more, and poor if the interaction is less. Two important factors are involved here: firstly, systematic collection development; and secondly, the user must know how to use the library. Both the factors demand equal weightage. One without the other diminishes the effectiveness and efficiency of the library usage. However good be the library collection, it will be mere a store house if the user is unable to make effective use of library collection.

A survey of the library literature and experiences in most of the libraries reveals that collection building is given more importance than educating its users. This has resulted in non-use or misuse of resources in most of the libraries. It was only in recent times that some professional libraries recognised the need for educating the users and developed several techniques for carrying out this activity. Regarding the importance of this instruction, Grogan[1] remarks, "They [Reference Librarians] would give first priority to instruction in the use of library, [which is] defined by the ALA as the provision of 'guidance and direction in the pursuit of information' rather than providing information itself." Grove[2] equally shares this idea and states, "begin teaching students the principles of bibliographic procedure as part of the required curriculum, so they

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will not remain forever dependent on the costly and inefficient services of the reference librarian."

There are several methods by which a user can be informed of the ways and means of using the library resources. Library Pathfinder is one such technique.

1 NEED FOR LIBRARY PATHFINDER

The attitudes of the library users towards proper utilization of the library resources vary significantly. Some of the users recognize their need and ask for the information, others manage with whatever information they get on their own. Those who demand assistance generally ask question of varying types, viz directional, ready reference, search and library instruction.* The first three can be readily answered with the help of reference collection. Regarding the fourth, Stevens *et al*[3] state that "questions that call for instructional answers are numerous and time consuming for librarians, but rewarding in the sense that, after question is answered the user is better able to respond to questions of similar types." This view is not as simple as it sounds, for instance all the library staff may not possess the necessary skill to satisfy the queries of the users; even if they possess such skill, they may not have time to answer numerous queries of recurring nature. There are even situations where the user is burdened with lot of unorganized reference materials.

Regarding those who do not ask for assistance, Thompson and Stevens[4] observe that "Students frequently failed to develop their topics well because they were unable to define their topics adequately and because they did not use reference sources of sufficient depth The Reader's Guide and general encyclopaedias were all too often the only sources of information." In either of the cases the Pathfinders are considered to be the possible solution.

Pathfinders owe their origin to the Intrex/Model Library Project at M I T funded by the Council of Library Resources. The main objective of the project was to evaluate new ideas and equipments in a situation where the users provided constant feedback of the library resources and services. It was felt that as the library grows, user's approach to the use of materials too changes significantly. It was in this context that the library Pathfinders were developed.

Stevens *et al*[5] have aptly described Pathfinders as "a kind of map to the resources of the library. It is an information locator for the library user whose search for recorded materials on a subject of interest is just beginning. A compact guide to the basic services of information specific

*Library instruction means search methodology for collection of data.

to the users immediate needs, it is a step by step instructional tool that will, if followed, place before the user those items that the most skilled reference librarian would suggest as basic to an initial investigation of the topic."

It is clear from the above description that Pathfinders are meant for beginners/freshers who have just begun their academic/research work. It is self-instruction guide that helps the users to know the materials to be consulted for their academic/research work. They are not an end in themselves but are means to the actual resources that a user would like to consult for his study. They are information handouts either catalogued or distributed to the users. They help the users to know various types of reference materials available on the topic of their interest. They are indispensable reference tools listing relevant sources to guide the users to both general and specific information.

2 FORMAT AND CONTENT

The format of the Pathfinder is flexible, but once a format is adopted the same should be continued for uniformity. The M I T Pathfinder was a thick card of $8\frac{1}{2}''$ by $11''$ printed on either side of the card in two columns. The Pathfinder is mentioned on top right hand corner of the card. The general arrangement of its contents are as follows:

(1) Scope, which consists of precise definition of the topic;

(2) Introduction to the topic, which comprises of tool(s) that briefly discusses the general outline of the topic. General or subject encyclopaedias are often cited under this section. Full details should be provided to the lead source—for instance, volume number of the encyclopaedia, relevant page numbers etc;

(3) Subject description used for the books dealing with the topic are listed next. The phrase normally used here is "Books dealing with . . . are listed in the subject catalogue, look for . . . ". The subject headings used for describing the topic are mentioned in this section. The highly relevant descriptors are given first followed by the related ones, general subject headings are listed in the end. This enables the reader to know both specific and general books available on the topic he is interested;

(4) Classics. In almost all the branches of the knowledge, some books are treated as classics to the entire collection. These titles are listed next. Normally 6-10 of such books are mentioned. Each title is identified by the call number, location description etc.

(5) Handbooks, encyclopaedias, and encyclopaedic dictionaries follow the important books published on the subject. The legend normally used is "Encyclopaedias and handbooks which contain information on . . . are . . . ". Relevant page numbers where the topic is discussed should be

mentioned.

(6) Bibliographies, handbooks, and encyclopaedias are followed by the listing of the bibliographies published on the topic. Its scope is normally exhaustive, so as to enable the user to get wide range of references;

(7) Indexing and Abstracting journal relevant to the topic have to be provided. The legend normally reads, "journal articles and other literature on . . . are listed primarily in these guides . . ." It would be advantageous if the subject headings used for the topic in these secondary sources are mentioned alongwith the reference tools;

(8) A short list of primary journals core to the topic of the Pathfinder are mentioned. These core journals include articles which are highly relevant to the subject matter of the topic;

(9) List of conference proceedings, state-of-the-art reports, government publications are listed in the end. Other academic/research institutions which contain good number of relevant books/documents on the topic may also be mentioned. This information enables the user for further consultation. (A specimen of library Pathfinder "American fiction-post-war" is given in Appendix-I.)

The user knows about the availability of the Pathfinders from the card catalogue, where Pathfinder topics are entered under relevant subject heading. The descriptive part of the card reads the legend, "for literature searching use library Pathfinder (specify the number if any) . . . request at library counter or reference desk. A library Pathfinder will help to locate published information in a specific field."

3 RESOURCE SHARING

Spiraling inflation on the one hand and steady decline in funding lead to the development of new area in the librarianship known as cooperation/ resource sharing. To satisfy the information needs of the users, with the limited resources, new services were developed, viz Inter-library loan, Cooperative acquisition of books, journals etc, provision of xerox copies, exchange of duplicate/missing issues of journals etc. However, one field that is conspicuous by its absence is cooperation in the area of reference service. Stevens *et al*[6] state "Although many forms of cooperation exist, a review of library activities shows that few have concentrated on reference work. In fact no notice appears in the literature of a system for sharing the methodology for identical or similar literature search." Although more than a decade has passed since Stevens *et al* made the above statement, nothing significant can be noticed in this area. Reference service is still predominantly restricted to one library only.

Model Library Project initiated by the MIT was first to experiment the concept of cooperation in the area of reference service. Pathfinders

compiled at M I T were distributed to other libraries with a little modification. Columns relating to the name of the library, call number, location of the books, were left vacant in the Pathfinder. Upon the receipt of the Pathfinders, the receiving libraries added their name, relevant call numbers and location details, to the Pathfinders. This practice later developed into a cooperative programme. The libraries that received Pathfinders added their own titles to the Pathfinder master using the style and guidelines followed by the M I T and contributed to the shared reference activity.

The staff of the M I T Model Library Project performed three functions in this cooperative venture:

(1) to act as clearing house for the supply of potential topics selected by tl e cooperating libraries;
(2) to edit and prepare submitted compilations for publication as oversized printed masters; and
(3) to act as a central distribution point supplying printed masters without call numbers to the cooperating institutions.

This cooperative venture had met with limited success, mainly due to lack of finance and shortage of mapower in compiling large number of Pathfinders. To overcome these defects, the Model Library Project at the end of its funding period in 1972, entered into contractual agreement with Addison-Weseley Publishing Co to continue and enhance the distribution of the Pathfinders. Even this commercial venture was a failure and ultimately in the mid-1975, this project was abandoned. Since then not much progress has been made in this area.

One can say with great degree of optimism that this cooperative venture still has got a promising future. What is required from the professional librarians is that its defects or drawbacks be properly analysed, different methods for its successful operation be developed and the best solution be adopted. The main factors to be given due importance for its successful operation are:

(1) Choosing right type of the libraries. Proper care should be taken while selecting the libraries for the cooperative network. Libraries with similar or related objectives when grouped together have high degree of success. For instance, all the medical colleges in a region can form an effective network for the purpose of cooperation. Likewise Leather Industry, Defence Research, Literary Research etc, can form their own networks for the purpose of cooperation.

(2) Once the type of libraries have been chosen, the next task is that of choosing a centralized agency that can carry out this work most efficiently. It is suggested that a library with good collection, sound finance, and

sufficient technical staff may be chosen as central agency. Such agency should act as a clearing house for the receipt and distribution of the Pathfinders. In order to maintain high degree of uniformity and standards, the agency has to provide detailed guidelines to the cooperating libraries regarding the format and contents of the Pathfinders. It also has to maintain and distribute centralized registry of Pathfinders to its contributing libraries.

(3) The third factor is that of determining the topics to be selected for the Pathfinder compilation. Briefing about the topic selection, Stevens *et al.*[7] state, "The objective has been to seek high utility and current parlance in the topics since Pathfinders that would help the most people would, at the same time, provide the best test and be the most help to the library's reference staff." The topic to be chosen should be, as far as possible, the one for which there is a lot of demand from the users. For instance, in literary research, the present trend is towards modernism, post-modernism, twentieth century literary criticism etc. There is no point in compiling Pathfinders for Victorian or Elizebethan literature. In science and technology, this factor has to be given more importance as the concepts and theories change at short intervals. Objectives of the organization, list of research theses, research in progress greatly aid in the topic identification.

4 CONSTRAINTS

The major areas of concern in the Pathfinder compilation are as follows:

(1) Pathfinder compilation takes great deal of the librarian's time. It is said that it is a substantive task and normally takes about 7-10 hours for compiling a single topic. This problem becomes more acute in small and understaffed libraries. However, if we look at the other aspect of this concept, i e the time it saves, we can say that the efforts and time required for such compilation can be easily justified. Warner[8] states: "The concept of Pathfinders may be hard to sell to an overworked staff. Once the project is underway, however, benefits to staff and patrons alike will be evident—time saved, hightened awareness of reference tools, creative achievements, increased interaction between staff and patrons and great public relations." This problem can be solved to some extent if the library science students are assigned the compilation task as a part of their reference service assignments. Compilations of similar topics also greatly facilitate in the task.

(2) The second area of concern is that of updating the Pathfinders at regular intervals. The Fifth Law of Library Science states that the "Library is a growing organism". With the passage of time, new reference tools are added to the library collections. These additions should find their place in the Pathfinder. The intervals should be neither too short to burden the library staff nor too long to make it obsolete. Any change in subject des-

criptors, call numbers and location details should be duly recorded in the Pathfinders.

(3) As Pathfinder compilation entails enormous efforts and time of the library staff, the duplication of Pathfinder compilation should be avoided. Proper communication and perfect coordination among the cooperating libraries is essential, if duplication of efforts has to be avoided. The central agency has a major role to play in this respect.

5 UTILITY

The advantages derived from Library Pathfinders are as follows:

1 It is a basic guide of reference tools to the user's immediate research needs. Traditional services like CAS Bulletin, Indexing bulletin, bibliographies help the users to know about nascent information. Pathfinders help the readers to know various types of reference materials available in the library and also facilitate them to understand when to use particular reference tool for getting required information. They enable the users to develop their own search strategies.

2 It increases the knowledge and skill of the users in finding out by themselves the required information.

3 The Pathfinder compilation is a sort of inservice training for the professional staff. It helps them to know more about their own reference sources.

4 Pathfinder's compilation is a useful teaching aid for the students of library science. It provides practical training for the students to learn more of reference service, than any classroom teaching can offer. It equips the students not only with appropriate search strategies but makes them aware of reference tools available on that particular topic in depth.

5 It saves the time of reference librarian as he will not be bothered time and again with queries of recurring nature.

6 Pathfinders are effective book selection tools. It reveals the weaknesses of the library collection, thereby enabling the librarian to acquire those tools, if finance permit.

6 CONCLUSION

We have seen Pathfinder as an effective tool for educating the user in better utilization of library resources. However, it is unfortunate that its potential value is not fully and properly exploited by the library staff. It is noticed that acquisition and documentation services are given more importance than educating the users. Cooperation in the reference

service, particularly in Pathfinder compilation, is still in an embryonic stage. It is suggested that professional librarians should realize its potential value and start compiling Pathfinders in the areas where the demand for such compilations is high. If this activity is done on co-operative basis, the time and efforts of the staff can be enormously saved.

Pathfinder has thus a promising future for boosting and increasing the quality of the library services, provided its value is properly understood and necessary efforts are made for such compilations.

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APPENDIX-I

SPECIMEN LIBRARY PATHFINDER : "AMERICAN FICTION—POST WAR"

1 TITLE—AMERICAN FICTION (POST WAR)

2 SCOPE—The forty years since World War II have been extremely active one, for American novelists. There has been tremendous increase in book-reading public in market for fiction in writers and in literary criticism. These authors/critics who became prominent in this period will be the major approach of this list.

3 An introduction to this topic appears in . . .

R 813.54092 A 51	Helterman, J and R. Layman, American novelists since World War II. Detroit, Gale, 1978 (this biographical tool provides a list of references for further study)

4 Books dealing with *American Fiction* are listed in the subject catalogue. Look for

American Fiction 20th Century (highly relevant)
American Literature. 20th Century. Individual Authors. (relevant) Fiction (General).

5 Encyclopaedias and Handbooks which contain information on American Fiction are:

R 810.9016 A 51	*American Literary scholarship: An annual,* Durhan, Duke University Press, Vol. 2; 1963.
R 810.03 A 51	*Amercan Writers : A collection of literary biographies.* New York, Charles Scribner's Sons, 4 Vols. 1974.
R 810.503 C 76	*Contemporary Authors : A biobibliographical guide to current writers in fiction, general fiction . . .* Detroit, Gale, Vol. 1; 1967.
R 813.509 D 59	*Directory of American poets and fiction writers 1983-84* ed. New York, Poets and Writers, 1983. 219 P.

R 810.03 F 85 — Freeman, William : *Dictionary of fictional characters*. Boston, The writer, 1973. 579 P.

R 810.03 H 32 — Hart, James D : *Oxford Companion to American literature*, 5th edition. New York, OUP, 1983. 896 P.

R 810.03 R 28 — *The Readers encyclopaedia of American literature by* Max J Herzberg. London, Methuen, 1962. 1200 P.

R 809.3 S 52 — Seymour.—Smith, Martin *Ed. Novels and Novelists : A guide to the world of fiction.* New York, St. Martin's Press. 1980. 288 P.

R 808.83092 V 78 — Vinson, James. *Ed. Novelists and prose writers.* London, Macmillan 1979. 1367 P (Great Writers of English Language).

R 808.83092 V 78a — Vinson, James. *Ed. Contemporary novelists.* 3rd ed. New York, St. Martin's Press, 1982. 750 P (Contemporary Writers of English Language).

R 820.016 X 39 — *Year's work in English studies.* London, John Murray, Vol. 1.

6 Bibliographies which contain material on *American fiction* include:

(a) *Most Relevant*

R 813.016 C 65 — Coan, Otis W. and Richard G. Lillard : *America in fiction : annotated list of Novels that interpret aspects of life in the U.S., Canada and Mexico.* 5th ed. Palo Alto, Pacific Books, 1967. 232 P.

R 813.5407 F — *Fiction, 1876-1983 : A bibliography of U.S. editions.* New York, Bowker, 1983. 2 Vols.

R 813.09 G 38 — Gerstenberger, Donna and George Hendrick : *The American Novel 1789-1959 : A checklist of 20th century criticism.* Denver, Alan Awallow. 1961. 333 P.

R 813.54092 A 51 — Helterman. Jeftrey and Richard Layman, *Ed. American novelists since World War II.* Detroit, Gale, 1978. (Dictionary of literary biography, Vol. 2). 55 P.

R 813.5016 N 52 — Nevius, Blake : *The American novel : Sinclair Lewis to the Present.* New York, Appleton. 1970. 126 P.

R 813.016 W 43 — Weixlmann, Joe : *American short fiction criticism and scholarships, 1959-1977* a checklist. Chicago, Swallow. 1982. 625 P.

(b) *Relevant*

R 810.016 B 63 — Blanck, Jacob : *Bibliography of American Literature.* New Haven. Yale Univ. Press. 7 Vols. 1955-83.

R 810.016 L 43 a — Leary, Lewis : *Articles on American literature.* Dunham, Duke University Press. 3 Vols. 1954-1979.

R 810.016 N 71 — Nilon, Charles H : *Bibliography of bibliographies in American literature.* New York. Bowker, 1970. 483 P.

Nyren, C. Dorothy *et al. Eds* : *Modern American Literature*-4th ed. N. Y. Frederick Ungar. Vol. 1-4. 1969-1976.

R 810.9 S 75 — Spiller, Robert E. *et al. Eds. Literary history of the US* : *Bibliography.* 4th Rev. ed. New York, Macmillan. 1974. 1466 P.

(c) *General*

R 813.509 A 32 — Adelman, Irving and Rita Dworkin. *The contemporary novel : A checklist of critical literature on the British and American novel since 1945.* Metuchen, The Scarecrow Press. 1972. 614 P.

R 809.3931 B 78 — Boyd, George N. and L. A. Boyd. *Religion in contemporary fiction : Criticism from 1945 to the present.* San Antonio, Trinity University Press. 1973. 99 P.

R 823.0932 C 97 — Gupta, Brijin K. *Indian English fiction 1800-1970. An annotated bibliography.* Metuchen, The Scarecrow Press. 1973. 296 P.

R 810.016 L 77 — *Literary writings in America : A bibliography.* Millwood, KTO Press. 1977. 8 Vols.

R 016.8 F 44 — *Fiction Catalog.* 10th ed. New York, Wilson. 1981. 803 P.

R 820.016 N 21 — Naqvi, Rafiq Ahmad : *Indian response to literature in English* (British, American and Indo-Anglian) : *An annotated bibliography.* Gurgaon, Indian Documentation Service, 1974. 191 P.

R 809.04 P 88 — Pownall, David E. *Articles on twentieth century literature : An annotated bibliography. 1954-1970.* New York, Kraus, 1973. 8 Volumes.

R 810.016 S 69 — Somer, John and B. E. Cooper : *American and British literature 1945-1975 : An annotated bibliography of contemporary scholarship.* Lawrence, The Regents Press. 1980. 326 P.

R 8093 T 54 — Thurston, Jarvis *et al. Short fiction criticism : A checklist of interpretation since 1925 of stories and novelettes (American, British, continental) 1800-1958.* Denvor, Alan Swallow. 1960. 215 P.

7 Journal articles and other literature on *American fiction* are listed primarily in these guides.

Periodical Section — *Abstracts of English Studies* Vol. 1; 1958.

R 820.0126 M 68 — *Annual bibliography of English language and literature.* London, Modern Humanities Research Association, Vol. 1.

R 800.16 M 68 a — *MLA International bibliography of books and articles on the modern languages and literatures.* New York, Modern Languages Association, Vol. 1.

R 808.83 S 55 — *Short story index : An index to stories in collections and periodicals.* New York, Wilson. Vol. 1; 1953.

8 Journals that contain articles relevant to American fiction (Post War) are :

(1) *Modern fiction Studies.*
(2) *Studies in American Fiction.*
(3) *Studies in Short Fiction.*
(4) *Critique Studies in Modern Fiction.*

QUALITY IMPROVEMENT IN DISSERTATION INFORMATION IN INDIA

O K CHOUDHRY*

0 INTRODUCTION

World has been divided into two, haves and havenots or developed and underdeveloped. The former has of course superiority over the latter and plays a dominant role in an international order. The developed world has achieved the ways and means of better society which underdeveloped countries are still in the process of achieving. It is only by trial and error that better means of prosperity are achieved. This trial and error in the refined language is called research. Research is done in laboratories, industrial establishments, research institutes, universities etc. This research, when narrated, takes the form of dissertations, research reports and research articles etc. Fundamental research is done and accepted in universities as the requirements for obtaining doctorate, or post-doctorate degrees. This is narrated in the form of dissertation. In *Websters Third New International Dictionary* the word 'dissertation' is defined as "a substantial paper that is submitted to the faculty of a university by a candidate for an advanced degree that is typically based on independent research and that if acceptable usually gives evidence of the candidate's mastery both of his own subject and of scholarly method."

Research is also done in research institutes, industrial establishments in the form of survey etc. This takes the form of Research Project Report.

Information is defined as "some thing received or obtained through informing as: (a) knowledge communicated by others or obtained from investigation, study or instruction, (b) knowledge of a particular event or situation."

Advanced and developed society has recognized the need of research in natural sciences which leads to betterment of life. Every advancment in

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natural sciences leads to advancement of social sciences also. Therefore, next to scientific research in India emphasis has been given to social science research. The research in India is being uplifted by the government's interest taken to establish the research institutes and also by giving monetary assistance in the form of grants and scholarships to research scholars as well as to research project directors not only for conducting the research but also for publication of research reports, dissertations etc.

This upliftment and progress of research has resulted in the increase of research literature. The flood of literature has necessiated that some control be provided so as to make precise and timely recall of the information. It becomes the professional and moral duty of the librarian that some infrastructure may be created in order to provide bibliographical control over the dissertations, so that users research requirements may be met with the minimum of response time. This is possible when best efforts are made at input level to make the retrieval easy at output level.

1 DISSERTATIONS INFORMATION CENTRE

To introduce quality improvement in dissertation and research information is not an easy task. To disseminate the dissertation, it is required to be acquired for compilation of the information.

Each and every copy of the book and journals published in India are to be deposited in National Library under the Copyright Act. But there is no such law for the dissertations and research reports, to be deposited at a central point. These are not published documents which we can procure by telephoning the bookseller or publisher. One has to approach the scholar or university/institution to acquire the dissertation and research reports. So it becomes necessary that the scholar may be given some incentive in the form of monetary assistance so that he may be encouraged to deposit a copy of his dissertation to the Dissertation Information Centre. The incentive will motivate the scholar himself to approach the Centre and thus minimize the efforts of the Centre to identify, locate and approach the scholar/research community scattered all over India.

The acquisition policy of the Documentation Centre also requires that effort should be made to procure dissertations not only from Indian universities but also from foreign universities, of course only for topics concerned with India. It would be appreciated that research done by project directors etc, whether that is for the attainment of university degrees or not, should also be acquired in the 'Dissertation Information Centre'. Regular research reports released by various research institutes should also be procured. All bibliographical tools providing the bibliographical information of dissertations should also be procured. An eye should be kept upon the *University News* announcing the scholars being

awarded the doctorate and post-doctorate degrees.

Mere procurement and preservation of research documents has no significance in the achievement of the objective of the Dissertation Information Centre. In the existing situation librarians are considered as an active force in programmes of national development. They make a significant contribution to educational advancement, cultural enrichment, scientific and technological advancement and socio-economic progress of a nation. Their functions have changed, the emphasis is now on the information function. They not only provide the source of information but also very often provide the information itself. In order to perform these functions effectively and efficiently, librarians/documentalists/information officers today essentially need to know what research has already been done, where it is available and how it can be obtained and made available to the user.

Aspiration of higher education has led to increase in the number of universities which provide facilities for higher education and research, the findings of which result in the form of dissertations etc. The number of dissertations has increased to such an extent that without any bibliographical control it may lead to duplication of research and consequently in waste of time, energy and money of research workers.

Currently, the bibliographical control of dissertations in India is being provided through:

1 *Bibliography of Doctoral Dissertations* accepted by Indian Universities 1857-1970 (humanities, social sciences and science). This cumulation is also being supplemented with annual volumes 1971-1979/80 by the Association of Indian Universities.
2 *University News* (W) New Delhi, Association of Indian Universities. 1963.
3 *Theses in SSDC.* New Delhi, NASSDOC, ICSSR, 1983.
4 *Indian Dissertation Abstract* (Q) New Delhi, Indian Council of Social Science Research and Association of Indian Universities. 1973.
5 Dissertation Acquired (List of latest dissertations acquired) *In* ICSSR *Newsletter* (Q) New Delhi, ICSSR. 1978.
6 Subject catalogue (card form) at National Social Science Documentation Centre, Indian Council of Social Science Research, New Delhi.

The acquisition of dissertations and research reports is already being done at NASSDOC, ICSSR. The scholars are paid Rs. 400 per dissertation as an incentive. The abstract of dissertations is also published in *Indian Dissertation Abstracts*. These documents are not only processed according to Dewey Decimal Classification but specific alphabetical sub-

ject approach is also provided to these documents. These are available for consultation only at the Centre, and not available on inter-library loan. Since these are in typed forms there is a great risk of wear and tear. Photo-copies of only a chapter or two are provided at Centre. But in the long run even this may not be possible when the delicate typed copy may wear out. Microfilming has been thought out as the solution which is durable and can also be multiplied and requires minimum of space. But microfilming has its one disadvantages. Since the scholar deposits the third or fourth typed copy the typescript, which is already dim, and when microfilmed dimness increases to the extent that some times it is not readable by the scholar on the microfilm reader. Microfilming should therefore be done only of the good typescript copy of the dissertation. Microfilm is portable and also easy for multiplication of photocopies. Reader-cum-printer can also provide the solution to some extent as a substitute for photocopying or duplicating the information required. It also relieves the strain upon eyes.

2 SUGGESTIONS

1 Dissertation Information Centre (DIC) should be established in India.
2 Dissertations should be acquired not only from Indian universities but also from foreign universities on topics concerned with India.
3 To acquire dissertations concerned with India from foreign universities the following tools may be consulted from time to time:

(i) *Dissertation Abstracts International.*
(ii) *Doctoral Dissertation on Asia* (The most comprehensive current source of bibliographical data about newly completed theses on Asia).

4 Universities in India should make and deposit the microfilms of retrospective dissertations at Dissertation Information Centre. (NASSDOC had started acquiring dissertations since 1974 only and no efforts are made to procure retrospective copies.)
5 A copyright Act should be introduced to make it obligatory on the part of scholars to deposit a copy of their dissertation with the DIC.
6 Monetary assistance should be provided to the scholars not only for sale of a copy of dissertation but also for using latest technique for the production of a copy to provide equally good print for third or fourth copy. This will facilitate to produce much better readable microfilm.
7 Comprehensive bibliographical control should be provided over the dissertation and research project reports supplemented by indexing and abstracting journals of dissertations. Bibliographical details of

latest dissertations should also be included in *Indian National Bibliography.*

3 CONCLUSION

Man's thoughts and observations recorded in research documents will thus find a place in Dissertation Information Centre (DIC). Information has become the essential basis for the progress of human civilization and society. This has been recognised in most of the countries by scientists, engineers, administrators and those working for the socio-economic development. Necessary information infrastructures are being created to utilize fully the information accumulated at the national level and to be able to participate in World Information Systems. Effective and efficient Dissertation Information Centre (DIC) thus created at national level in India would certainly be able to coordinate and participate at international level in the World Dissertation Information System.

QUALITY IN LIBRARIES : A STUDY OF COLLECTION MAINTENANCE IN SELECT UNIVERSITY LIBRARIES IN HYDERABAD

V VISHWA MOHAN*
J YADAGIRI REDDY*
MADHAV SHASTRI**

0 INTRODUCTION

In exhibiting the quality of libraries, collection maintenance is as important as collection building and organisation. Though a very good collection is built up, if it is not meticulously maintained, it gets impoverished and irritates the users, in turn making them feel dissatisfied about the services.

It has been observed in Hyderabad in particular and other places in general, that most of the libraries have built up good collection, but a section of serious users is most disappointed and the libraries are termed to be unhelpful in meeting their literary and information needs. Because they find that either the document required is not available due to various reasons, or the portion of the document of their interest is removed from the document.

At present, collection maintenance is very important in view of the factors such as difficulties and delays in procurement of out-of-print documents and foreign publications; prevalence of feeble inter-library cooperation—even then, if the other library is of the same kind, it would be difficult in borrowing the desired document on inter-library loan facility; above all, hike in the prices of the documents. Therefore, for all practical purposes, to render effective services there is a dire need for

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effective organisation and maintenance of the existing library collection.

Though collection maintenance is the job of the library staff, a fair amount of responsibility lies even on the users. This is because, it is the users who cause a lot of damage to the physical form, sequence and existence of the documents in libraries. Such vandalism is universal, even in the developed country like United States of America there is occurrence of vandalism and crime in libraries.[1] In a developing country like India such undesirable practices may be quite common because of various social, economic and cultural factors. But, prevalence of vandalism in university libraries is deplorable.

The present study has been conducted to find out the rate of damage caused to the physical form, sequence and existence of documents in university libraries and to determine the ratio of responsibility towards such damage between library staff and the users. It also seeks to find out how best the collection can be maintained in the libraries.

1 METHODOLOGY

The study is based on personal observation over a number of years, besides interviewing librarians of the select libraries and users, and physical verification of documents taking a random sample.

11 METHODS/PROCEDURES FOLLOWED

(i) *Selection of Libraries.* This was done on the basis of status, size of collection and users. Three university libraries, namely, (i) Osmania University (Central) Library (OUL); (ii) Andhra Pradesh Agricultural University (General) Library (AUL); and (iii) University of Hyderabad (Golden Threshold) Library (GTL) were selected for the study.

(ii) *Sample.* A random sample of about 500 books from each type of collection (i e General stacks, text-book, reference and periodical collections) from each library was physically verified. In order to make the sample survey purely objective without prejudiced selection of individual documents, all the documents on one or two shelves from each rack were taken.

(iii) *Interview.* The persons interviewed were some close friends and officials who were and are members of the libraries and the librarians of the select university libraries. The interviews were informal and friendly. Therefore, we could unearth some shocking facts.

(iv) *Factors of the Study.* In the context of this study, maintenance factors such as building design, spraying of chemicals, etc were not taken. Because, the factors studied were damage caused to documents by the users and negligence of staff towards physical form, sequence and existence of the documents which are also important factors. Maintenance should

not simply mean cleaning and binding. It also means ensuring both the physical condition of the documents and their order is intact. Therefore, the study was restricted to the following factors:-

(a) *Mutilation.* Documents with missing/torn pages.
(b) *Mishandling.* Documents with damaged spine, loose leaves, folded pages and scribbled pages.
(c) *Misplacement/Misfiling.* Document placed at an improper location other than its exact location. Here in this study the term misplacement is used to mean both misplacement and misfiling.
(d) *Uncleanliness.* Documents with accumulation of dust and with fungus infection and webs of insects.
(e) *Binding.* Documents with lost covers and loose leaves because of high rate of usage but still in demand.
(f) *Weeding out.* Documents with heavily accumulated dust and not consulted/borrowed for more than 10 years and those with brittle and largely damaged pages, either by its longevity or damage by insects and users.
(g) *Loss of books.* For this purpose, the statements of librarians and users were taken and this generally includes theft and cost recovered ones.

In order to facilitate the study degrees of damages caused were evolved. Table 1 represents the same.

2 OUL/AUL/GTL: A BRIEF COMPARATIVE ACCOUNT

21 OUL

Though established in 1918, but the present building and set up were declared open by Dr S Radhakrishnan in 1963. It is a general university library housing documents in almost all fields of knowledge. The total collection numbers about 4,48,000 consisting of monographs numbering 4,00,000 and about 48,000 bound volumes of journals. It serves about 9,300 users.

22 AUL (CENTRAL LIBRARY)

With the reorganisation of the Library system, the central library was formed in 1980. The AUL is a special university library. Therefore, it houses specialised/comprehensive collection on Agriculture and related fields. The total collection numbers 71,000 comprising monographs numbering about 60,000 and 11,000 bound volumes of periodicals. It serves about 1200 users.

Table 1 : The Degrees of Mutilation, Misfiling, etc

Kind of Damage	*Order '0'*	*Order '1'*	*Order '2'*	*Order '3'*	*Final Order*
Mutilation on the basis of No. of pages lost	50 and above	25-50	10-25	4-10	Rest
Misplacement at the level of each succeeding digit in DC Class Nos. (e g placing book with DC No. *300* in *500* taken as Order '0')	*300-500*	*333-323*	*333-334*	*333.1-333.2*	Rest
Mishandling	without cover and with loose leaves	Loose leaves	Folded pages, underlining and scribbling, etc.	—	—
Dusty	With fungus infection and webs of insects	Heavy dust	—	—	—

23 GTL

Established in 1976, GTL is also a general university library, but houses documents on few fields which are instituted at Golden Threshold. The total collection is about 92,900 consisting of 84,900 monographs and 8,000 bound volumes of periodicals. It serves 680 users.

The details regarding collection, etc of the libraries are given in Table 2.

3 ANALYSIS

The study is basically based on personal observations and information/ opinions expressed by and collected from friends who happen to be potential and regular users of libraries. In order to back the same by facts and to verify whether they were subjective, physical verification of documents was conducted in addition to collection of some opinions and facts from the librarians themselves.

Table 2 : Particulars of the Libraries

Name of the University Library	*Date of Establishment*	*Collection*				*Total*	*Users*	*Staff of maintenance*
		Stacks	*Text-books*	*Reference books*	*Bound volumes of periodicals*			
OUL	1963	3,85,000	10,000	5,000	47,800	4,48,000	9,300	1 Deputy Librarian 3 Lib Assts (M A + BLISc) 12 Book bearers (with IX Class)
AUL	1980	55,972	2,000 (Book-Bank)	2,000	11,028	71,000	1,200	1 Asst Librarian (B A + DLSc) 2 Record Assts (SSLC/

								SSC) 1 Shelf Asst (CLSc) 2 Attenders (VIII Class)
GTL	1976	76,000	680 (variable)	8,900	8,000	92,900	680	1 Professional Asst (M A + BLISc) 1 Semi- Professional (B A + BLISc) 8 Lib Attendants (CLSc)

The physical verification of documents has resulted in the data shown in Table 3.

Since the random sample does not fully ensure precision in any case, generalisation is avoided. As mentioned earlier the following inferences are mostly based on information collected from persons and observation backed by the data collected by physical verification of documents in order to find out whether there are any instances of the factors studied in this paper.

31 Mutilation

As per observations and information collected there is a fairly high rate of mutilation of important documents/portions of a document, and the data collected also gives an idea of extent of mutilation in all the libraries studied. In OUL out of 94 total mutilated documents from 2,000 documents verified about 8 were found falling under mutilation of order '0'. The most deplorable instance is in Library Science collection itself, 2 documents were found belonging to order '0'. The rate is rather high in case of science periodicals. The other instance was in AUL where the Assistant Librarian concerned retrieved razor blades from the shelves. In case of GTL the rate of mutilation was too less. This is because of the social, economic and cultural background and limited number of the student/user community. And at the same time the GTL exhibits the mutilated documents as soon as it comes to the notice of the library staff and also sends it to the department concerned where the students would be instructed and warned by the teachers.

It is observed that most of the students of OUL in particular and other universities in general come from rural areas and their social, economic and cultural backgrounds are different. Apart from this, majority of users are not enlightened towards the value of libraries during their previous levels of education. Unfortunately, even at the university level they are not enlightened in this direction. Binwal and Karisiddappa state that "User education in India has yet to find a place in our academic institutions".[2]

Besides the above, comparatively high rate of mutilation and other practices in OUL is also because of the age of the Library, large number of users served and also the size of the collection. Whatever may be the reasons, mutilation of documents can be termed as knowledge assasination. Therefore, there is a need to check this in libraries, for which the library staff must be active ensuring vigilance and promote photocopying, etc to save the recorded knowledge.

32 Mishandling

There are a number of instances of the users mishandling documents

Table 3 : The Data Relating to Various Aspects of the Condition of Collection in Number of Volumes for Every 500 Volumes in Each Category

Name of the Library	*No. of volumes mutilated*				*No. of volumes mishandled*				*No. of volumes misplaced/misfiled*				*No. of volumes unclean/dusty*				*No. of volumes which require binding*				*No. of volumes to be weeded out*				*Percentage** of loss of books*
	ST	TB	Ref.	Per.	ST	TB	Ref.	Per.	ST	TB	Ref.	Per.	ST	TB	Ref.	Per.	ST	TB	Ref.	Per.	ST	TB	Ref.	Per.	
OUL	26	22	30	16 (94)†	98	66	82	6 (252)	105	42	100	233 (480)	178	142	97	150 (567)	45	18	22	— (85)	10	4	25	— (39)	1
AUL*	17	—	5	8 (30)	69	—	20	5 (94)	32	—	70	18 (120)	170	—	155	127 (452)	21	—	5	— (26)	—	—	5	— (5)	± 2
GTL*	2	—	5	3 (10)	16	—	22	3 (41)	35	—	28	18 (81)	320	—	108	298 (726)	—	—	3	— (3)	—	—	—	— (—)	1

ST = Stacks (General Collection other than TB, Ref. & Per. Collections)
TB = Text-book collection
Ref. = Reference Collection
Per. = Periodical collection (bound volumes of back issues of journals)

*AUL and GTL do not have substantial collection of text books. ‡There are few books kept aside as collection under book bank or reserve collection which are variable and are put to circulation and use in different ways.

**As the number of lost books cannot be found out easily with simple surveys under each category, % of loss of books for the total collection was taken from the librarians who ascertained it from stock verification.

†Figures in parentheses represent the total of ST, TB, Ref and Per Collections.

through such undesirable practices as underlining some of the sentences, scribbling, etc and rough handling while reading a document and retrieving the same from shelves. This ultimately causes considerable damage to the documents. Therefore, there is a need to check such practices in the libraries.

33 Misplacement

As far as misplacement is concerned both library staff concerned and users are equally responsible. Because, some of the staff in the libraries are not qualified and careful in arranging the documents efficiently. In addition, while filing a document the staff member may have to take into account both the documents of either side of the document to be filed. Most of the times the users deliberately misplace documents by hiding them at some location. Some times they misfile document unconsciously because of ignorance. There lies the responsibility on experienced users of the libraries to bring this to the notice of the staff whenever they come across such documents and possibly they can also guide their co-users, because a misplaced document is a lost document though temporarily.

The data in Table 3 clearly shows that there is high rate of misplacement in the libraries. In OUL out of 480 documents (from 2,000 studied) about 20 documents fell under misplacement of order '0' and about 30 under order '1', 50 under order '2', etc. There is a high rate of misplacement in periodicals

In GTL about 35 books from the stacks were found behind the bound volumes of periodicals deliberately hidden by the users.

34 Unclean/Dusty Volumes

There is high rate of negligence towards dusting the documents. In spite of unhelpful building aspects and library location, regular dusting is very essential for healthy condition of the books. Some of the books verified had webs of some insects. In AUL there is an instance of the maintenance staff refusing to dust the documents. This was because their job description was faulty. Therefore, in such cases there is a need to have detailed job description, besides qualification and commitment requirements. In some cases, there is a need to change service conditions, etc. In order to ensure dusting, binding and weeding out of volumes, maintenance activity must be planned in a regular and phased manner.

35 Binding

Mishandled books of order '0' warrant binding. There are instances of books in very bad condition. These require regular identification and selection for immediate binding.

36 Weeding Out

The AUL and GTL are recently established libraries. Therefore, except in case of outdated reference documents and some monographs, there is less need of weeding out at present. But OUL, which is comparatively an old library, needs weeding out of documents in all the categories except periodicals.

37 Loss of Books

Loss of books is not an exception to Indian libraries only. Lincoln[3] quotes from *Library Journal* a reference of 10,000 books stolen by a Los Angeles Library staffer himself.

It is heard from friends and found from stock verification and raids conducted by librarians that there is considerable loss of books, either by theft or users repaying the cost of books because of losing the books borrowed or due to some other reasons.

It is told that in some libraries the watchmen at the exit are tempted by all means to encourage theft. The librarian of AUL reports that he recovered about 35 books by conducting a raid on M Sc (Agr) student's house. There are organised thefts by the students, he added. In OUL there was a instance of bulky volume of reference book stolen on instalment basis.

On the whole, it is inferred that collection maintenance in terms of ensuring intact condition of number of documents procured, physical form and sequence of the documents on the shelves is the responsibility of all the connected, viz staff, users and the top management. The top management should realise the value and significance and intensity of the needs of the libraries and with due consideration and necessary data, should plan and programme the library activities. They should devote proper attention to the development and maintenance of libraries and provide all necessary requisites.

4 REMEDIAL MEASURES SUGGESTED

(a) Provision of libraries and library facility in schools and local information centres[4] in the society to develop library morals and culture, right from one's childhood.
(b) Developing high quality and attractive user education programmes projecting the nobility and value of library documents.
(c) Introducing compulsory library orientation programmes at degree and post-graduation level.
(d) Utilising mass media for user education.
(e) Enlightening and educating administrators towards the significance of libraries and gravity of library's needs.

(f) Recruitment of educated, qualified and committed staff for proper maintenance and ensuring checking at exit points.

(g) Motivating staff at all levels in conformity with Maslow's[5] theory of motivation, by all means, to ensure full involvement and active participation of staff.

(h) Recruitment of sufficient number of staff as per standard staffiing patterns such as the one recommended by UGC.

(i) Formulating functional penal code for library crimes.

(j) Enforcing equal penalties/punishments for all violators of library rules, etc uniformly.

(k) Taking appropriate security measures such as closed circuit TV, electronic theft detectors, and rigorous vigilance to minimise mutilation and theft. As Dr Ranganathan said, "at busy hours every member of every section other than reference section and the counter section works as a member of the shelf section one hour in the day. It gives them the only opportunity to come into active touch with that most sacred event, viz the establishment of contact between the reader and books . . ."[6] In fact it is the most essential task, because it results in user guidance and also ensures vigilance thereby protection to the documents.

(l) Developing of well-programmed and phased maintenance work with true spirits for successful execution of the job and sticking to the programme and time schedule.

(m) Vacuum cleaning and fumigation must be done regularly.

(n) Weeding out of documents for creation of space and save other documents from the insects of the infected one.

(o) Spraying of necessary chemicals for preservation/protection of documents at regular intervals. And care must be taken not to spray such chemicals which are likely to cause damage in the long run.

(p) Regular shelf reading must be done by competent staff to avoid and detect misplacement of documents.

(q) Relabelling and mutilation and soiling of the pages at the time of binding and photocopying must be taken care of.

(r) Within the maintenance section there must be a separate unit consisting of one or two persons to look after the collection and its buoyancy. They may also set aside out-of-print and rare books from time to time from the general collection for microfilming and for separate maintenance.

(s) Procuring standard editions of books.

(t) Providing photocopying facility at further reduced rates.

5 CONCLUSION

As Joginder Kaushal, Director, Correspondence Courses, Punjabi

University, Patiala, rightly said in a recent meeting "The knowledge contained in books is life blood of master spirit, as for blood transfusion, the collected/donated blood needs meticulous care and preservation, similarly the life blood of master spirit also needs intensive care."

Though printing technology solved many problems of knowledge transfer and preservation, even then, as far as an individual library is concerned it has its own limitations in procurement, storage and dissemination of information. Therefore, preservation and care of collection is a crucial task in libraries, which must be equally shared by all the concerned—administrators, staff of the library and users.

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QUALITY OF BOOK COLLECTION IN COLLEGE LIBRARIES

M BAVAKUTTY*

0 INTRODUCTION

This study was conducted with the objective of assessing the quality of book collection of the libraries of the arts and science colleges in India. The data required were collected through questionnaires administered to representative samples of 51 college librarians (17 government and 34 private), 404 students and 123 teachers.

Of the three elements—collection, building and staff—which together make a library, the most important in its influence on the success or failure of the whole is perhaps the library collection. The book collection of the colleges studied ranged between 2,260 and 53,994. Average number of volumes available was 16,667. Fiftynine per cent of the colleges possessed less than the average. Separate averages of the government and private colleges were 14,853 and 17,574, respectively. Books available per student in the college libraries ranged between 3 and 43. The average was just 13. The average number of volumes added in a college library per year was 1,080.

1 ADEQUACY OF BOOK COLLECTION

Students of representative colleges were asked whether the book collections of their libraries were adequate to meet their requirements. In all, only 55 per cent of the students reported that the book collection of their libraries was adequate to their requirements. The government and the private college break-up of this was 37 per cent and 64 per cent, respectively. And the course-wise break-up was post-graduate 32 per cent, degree 58 per cent and pre-degree 57 per cent.

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Teachers of the representative colleges were also asked to express their views on the adequacy of the book collection of the libraries to meet the requirements of teaching, as well as post-graduate and undergraduate students. Only 47 per cent of the teachers were of the view that the book collection of the college libraries was adequate to meet the requirements of teaching. The government and the private college break-up of this was 40 per cent and 50 per cent, respectively. The proportion of teachers who were of the opinion that the book collection of the libraries was adequate to meet the requirements of post-graduate students was just 21 per cent. Fourteen per cent of the teachers in the government colleges and 26 per cent in the private colleges held this view. But, according to 71 per cent each of the government and the private college teachers, the book collections of their libraries were adequate for the requirements of undergraduate students.

The college librarians were also asked to express their free and frank opinion about the adequacy of book collection of the college libraries to meet the requirements of teachers as well as students of post-graduate, degree and pre-degree courses. Only 43 per cent of the librarians reported that the book collections were adequate to meet the requirements of teachers. The government and the private college break-up of this was 53 per cent and 38 per cent, respectively. With regard to post-graduate courses only 39 per cent of them were of the view that the book collections were adequate. The government and the private college break-up of this was 30 per cent and 44 per cent, respectively. Just 43 per cent of the librarians held the view that the book collections of the colleges were adequate for degree courses. The government and the private college break-up of this was 69 per cent and 32 per cent, respectively. Seventyone per cent of the government and 44 per cent of the private college librarians reported that the book collection was adequate for pre-degree course. In all, 53 per cent of the librarians expressed this view.

The librarians of private colleges were of the view that the book collections of their colleges were not adequate to meet the requirements of teachers as well as students of post-graduate, degree and pre-degree courses. On the other hand, majority of the librarians of the government colleges reported that the book collections of the government colleges were adequate enough to meet the requirements of teachers and students studying for degree and pre-degree courses. This claim seems to be very exaggerated in the light of the views expressed by the students and teachers of the government colleges.

2 AVAILABILITY OF BOOKS

The students were also asked to indicate how often they found that a

book needed for their study was not available in the college libraries. In all, 36 per cent of the students reported that books required for their study were 'very often' or 'often' not available in the college libraries. The break-up of this according to courses is post-graduate 44 per cent; degree 36 per cent; and pre-degree 34 per cent. And the government and the private college break-up is 44 per cent and 32 per cent, respectively. On the other hand, only 17 per cent of the students expressed negatively to the question whether books required by them were not available in the college libraries. The break-up of this according to courses of study was post-graduate 6 per cent; degree 16 per cent; pre-degree 22 per cent. The government and private college break-up of this was 16 per cent and 17 per cent, respectively.

These factors lead us to conclude that a good number of books required by the students were not available in the college libraries. The position appears to be worse in the government colleges in comparison to the private colleges. A large proportion of post-graduate students made complaints about the non-availability of books they needed for their study. While the proportions of this in respect of degree and pre-degree students were less, they were nevertheless highly significant.

Table 1 gives the details of the answers provided by the teachers to a

Table 1: Non-availability of Books Required by the Teachers

Frequency	*Government Colleges*		*Private Colleges*		*Total*	
	No.	*%*	*No.*	*%*	*No.*	*%*
Very Often	9	22	12	15	21	17
Often	11	26	11	14	22	18
Sometimes	17	40	48	59	65	53
Not often	5	12	6	8	11	9
Never	—	—	3	4	3	3
Total	42	100	80	100	122	100

question relating to the non-availability of books required by them. In all, 35 per cent of the teachers reported that books required for their teaching were 'very often' or 'often' not available in the colleges. The government and the private college break-up of this was 48 per cent and 29 per cent, respectively. On the other hand, only 12 per cent of the teachers expressed negatively to the question whether books required by them were not available in the college libraries. Twelve per cent each of

the government and the private college teachers expressed this view. This indicates that a large number of teachers have complaints about the non-availability of books required by them from the college libraries.

The data collected through the questionnaires from the students, teachers and librarians regarding the adequacy of book collection was cross checked by verifying the availability of books prescribed in the syllabi of selected subjects in the representative college libraries. It was verified whether the books prescribed in the syllabi of B A (Economics), B A (English Literature) and B Sc (Chemistry) were available in the college libraries. Only 21 titles (53 per cent) out of 40 titles prescribed for B A (Economics) were available in the college libraries. The break-up of this according to the government and the private colleges was 43 per cent and 58 per cent, respectively. Out of the 27 books prescribed for B A (English Literature), 21 (78 per cent) books, on average, were found available in the libraries. Availability of books on English Literature in the government and the private colleges was 59 per cent and 89 per cent, respectively. Seventytwo per cent of the books prescribed for B Sc (Chemistry) were available in the college libraries. The government and the private college break-up of this was 76 per cent and 69 per cent, respectively. In all, 66 per cent of the books prescribed in the syllabi of B A (Economics), B A (English Literature), and B Sc (Chemistry) were available in the college libraries. The government and the private college break-up of this was 57 per cent and 70 per cent, respectively. These figures show that sufficient number of text-books are not available in college libraries. However, in comparison private colleges possessed more text books than the government colleges. And availability of text-books in social science was less than in literature and science subjects.

3 CONCLUSION

Majority of the students as well as teachers reported that most of the books required by them are often not available in the college libraries. This establishes that the college libraries are ill-equipped in respect of standard books required for study and teaching.

Sixty-three per cent of the students and 60 per cent of the teachers in the government colleges, against 36 per cent of the students and 50 per cent of the teachers in the private colleges reported that the book collection of their libraries is not adequate to meet their requirements. This indicates that although the government colleges possess more volumes per student, the quality of book collection seems to be weak in comparison to the private colleges.

53 per cent of the teachers and 57 per cent of the librarians hold the view that the book collections of the college libraries are not adequate

to meet the requirements of teachers. This means that large majority of the college libraries lack standard books necessary to keep the teachers abreast with the latest development on various subjects. This had been confirmed by the personal examination of the book collections of the colleges studied.

The availability of text-books prescribed in the syllabi of even degree courses is meagre in the college libraries in our country. Still, it is strange to note that 58 per cent of the undergraduate students and 71 per cent of the teachers of the colleges reported that the book collections of their libraries were adequate to meet the requirements of undergraduates. This indicates that the majority of the undergraduate students as well as teachers who teach them, seldom use the college libraries for their study and teaching. Hence they hold this view. Probably the present method of teaching, one way talk and dictation of notes might have prevented students to make effective use of the college library facilities and resources. Unless the teaching method is completely changed from class-room-centred to library-centred, one cannot expect much improvement in the present set-up of college libraries and attitude of students towards them.

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RESOURCE SHARING : LINKAGES AT THE NATIONAL LEVEL

KALPANA DASGUPTA*

1 INTRODUCTION

It is difficult to write anything on resource sharing without mentioning the very important theoretical concept of resource sharing given by Professor Allen Kent. He defines resource sharing as follows:

> "The term 'resource' applies to anything, person or action to which one turns for aid in time of need. When the term is used alone, it is not necessarily seen as implying reciprocity. The word 'sharing' entails apportioning, allotting or contributing something that is owned to benefit others. 'Resource sharing' in its most positive aspects entails reciprocity, implying a partnership in which each member has something useful to contribute to others and which each is willing and able to make available when needed.
> It has been said that inflation and budget reductions are the primary forces that lead to resource sharing in libraries. But these are not the forces that make resource sharing work : they are only pressures that force consideration of problems and opportunities. The only approach that permits resource sharing to work is that which entails having resources to share, having a willingness to share them, and a plan for accomplishing resource sharing—otherwise the concept is an empty one since help cannot be provided as needed".[1]

While keeping his ideas intact, we have to take the fundamental step of understanding what should be shared. In this article, I, therefore, would discuss the major areas of resource sharing in the Indian context at the national level.

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Library resource sharing has been a very favourite area of discussion in seminars and conferences. Unfortunately, most of these discussions remain at the discussion level only and very little is done in practice. In the Indian context within a diverse federal system resource sharing cannot be done at one level only. Different facets of one resource sharing activity will have to be tackled as individual problems. For example, the resource sharing activity of preparation of union catalogues will have to be dealt both at the national level as well as at the state level. The same activity will have to be divided on the basis of the type of material also. This is mainly because there are specialised organisations for different subjects and area studies both at the national as well as at the state levels.

In this paper I would like to discuss the major linkages that one envisages at the national level for resource sharing purposes. As mentioned earlier, for any kind of resource sharing in a country as large and as diverse as India, activities will have to be linked to bring about a national workable system There are various types of resource sharing which have been discussed very often. Out of these, the one activity which is more or less being practised on a regular basis by almost all libraries is the inter-library loan. This activity has been in vogue for quite sometime and therefore some kind of a system has been worked out for this both at the national as well as the state levels. I would not really venture to repeat this in my paper. The five major areas which I will discuss in my paper are:

1 Resource sharing in acquisition,
2 Centralised cataloguing,
3 National Union Catalogue,
4 Computerised network for resource sharing, and
5 Resource sharing in preservation of library materials.

Out of these five activities, the first and the fourth have been discussed very often. The fourth one for the past ten years has been repeatedly discussed in the most utopian fashion by almost all professionals at different seminars. The second has also been discussed but none of these discussions have led to any concrete change in the haphazard working of Indian libraries as far as processing is concerned. The third and the fifth are still in a very fluid stage in India. The union catalogues of periodicals of science and technology and the social sciences have been compiled by the INSDOC and the National Social Science Documentation Centre. Both these efforts are commendable but as far as bibliographic control of books and other materials is concerned, India presently strikes a nil from all points of view. We are totally unaware of the collection of our next door neighbour whichever the library may be. This ignorance leads to blissful duplication in acquisition as well as considerable inefficiency in reference service. As far as resource sharing in preservation of library material is

concerned we again draw a total blank in the Indian context. If we devide the country into five workable zones, we will be able to come across a very large number of libraries in different states which have priceless reading materials, both manuscripts and books in printed form which need to be preserved for the future. Moreover, private collections also have to be taken into consideration. Very little has so far been done for preservation of such material either at the national level or at the state level.

With this background, I would like to pose the problems as they are now and suggest future plans which will be open to discussion in the house.

2 RESOURCE SHARING IN ACQUISITION

In this area of resource sharing, one has to reassess the traditional collection development goal and be realistic about the present conditions. Actually, resource sharing does not absolve any library from continuing to purchase materials for its clientele. On the contrary, each participating library is obliged to understand and respond to user requirements better than before. Therefore, the major issue for acquisition is to identify for purchase those materials which are likely to be frequently used. Since usually the cost of borrowing material is less than the cost of acquiring, processing and storing a book, it is necessary to understand which material should be borrowed and which should be purchased. Therefore, when we realistically look at the present conditions in the libraries specially in Indian context one will have to look at this problem not so much at the national level but more at the state or local level. I say this because for large libraries like the National Library, the libraries of national importance and the national scientific libraries, it is very difficult to stop acquiring certain kinds of materials because another library purchased the same. The dependence of users on large libraries will hardly change over the years. Moreover, geographic distances also matter in this context. But it is at the local level that one can very sincerely hope to organise resource sharing in acquisition. For example, if one large library such as the National Library acquires material of very expensive and specialised nature, local libraries with similar specialisations may very well divert readers to the nearest large library. Since one of the major factors for resource sharing is the shrinking budget on the one hand and the spiralling expense in purchasing material on the other hand, this effort may be worthwhile to give a trial.

It is also observed that research institutions of subject specialisations are mushrooming in most cities of India. Without casting aspersions on the efforts of scholars and subject specialists, I must point out that these institutions often do a lot of work which are basically duplications rather than primary efforts. All these institutes invariably have a specialised

library. In Delhi alone, within one mile radius one finds three to four libraries collecting similar kind of materials for research work which have very little variations. Since time and money are the major factors for consideration, local resource sharing may be tried in these institutions also.

3 CENTRALISED CATALOGUING

As mentioned earlier the processing systems in Indian libraries are still the most diverse in every respect. We have no standardization in any of the activities of processing. Though standardization has been very often discussed and spoken about in very many seminars, no two libraries in India have a common system of cataloguing or a common classification system. We make all kinds of deviations from the original catalogue code and the classification schemes to suit our purpose. Under the name of 'local variation' we seem to change the processing systems according to our own wish. This leads to the lack of co-ordination and cooperation between libraries. With the growing consciousness regarding the possibility of computerised network system the need for standardization becomes even more necessary. The National Library plans to switch over to the use of AACR II as its cataloguing system in the very near future. We will continue to use the 16th-19th edition of Dewey Decimal Classification and 10th edition of Library Congress Subject Heading in the National Library which will help us to be with the international standards of processing very shortly. The computerised format for processing in the National Library will be the UNIMARC format which will be used once the computerised system takes the necessary course in the Library. These efforts may very well prove to be the foundation of a centralised cataloguing system for Indian libraries. At this juncture, I may hope that National Library with its large collection could be used for developing such a system.

4 NATIONAL UNION CATALOGUE

I have already stated that very little has been done in the preparation of union catalogue of books, monographs and other such materials available in different libraries in India. Since the national union catalogue is an essential bibliographic source for verification, description and identification of material in the country, a comprehensive national union catalogue will help in resource sharing and acquisition programme by: (a) avoiding duplication of purchase, and (b) filling the lacunae on a national basis. This effort will have to be tackled at the national level with linkages at the state level. The Indian sub-continent may be divided on the basis of zones, namely north, west, east, central and the south for the sake of convenience as well as proper organisation while executing the work.

Libraries have to be identified in those states which have collections of

the pre-19th century and post-19th century material. Zonal offices should be set up with senior professionals for supervising and coordinating the work of different units in different zones.

As far as the scope of the union catalogue is concerned, there are two ways in which it could be compiled:

1 Since it is an Indian 'National Union Catalogue', all material pertaining to 'India' written in India or abroad and preserved in major Indian libraries will be included in the catalogue (all language material inclusive).
2 The second alternative is a catalogue of all material available in the major libraries in the different zones.

To bring about comprehensiveness in the catalogue the second alternative will naturally have to be considered. But in the Indian context the feasibility of the project will have to be seriously taken into consideration. The period under consideration will be as follows: All materials published before 1867 and materials published between 1867 to 1954. For materials published after 1954 the *Indian National Bibliography* may be taken as the most pertinent source of information. This break-up is mainly for the first alternative, the rationale being the landmarks of the Press and Registration Act of 1867 and the Delivery of Books Act of 1954. As far as the second alternative is concerned, the coverage will be obviously very very vast and I would pose this to the august group for discussion regarding its feasibility. However, this large venture will be worthwhile in actual readers' service when we can make our computerised network system workable.

5 COMPUTERISED NETWORK FOR RESOURCE SHARING

Computerised network system has been the topic of many discussions at different seminars throughout the world. In Indian condition, computerised network system is still at a very theoretical and academic level. To realise this objective, librarians and library administrators will have to communicate in their own terms with computer specialists and network designers. Computerisation has been very sporadic in India. Automation is now operating mainly in specialised libraries catering to the development of science and technology. Some university libraries have now started working on the possibilities of computerised information system. If a general model has to be considered in the Indian context, two goals have to be met, i e more service within the same time or in less time and preferably within the same cost as the conventional methods of bibliographic access. To achieve at least these two goals, the country will have to be divided on the basis of zones and major libraries will have to do their

home work for a standardized format. The data bases so produced will have to be inter-changeable so that the collection of major libraries can be utilised by readers from different parts of the country. As mentioned previously, not only is bibliographic control lacking but there has been no effort to bring about any standardized format for developing a network system. Though, I am told that in this day and age of advanced technology, all hardwares can be utilised for building a network, Indian technological infrastructure is not yet developed enough for this sophisticated work. Keeping all this in mind, I think we should initially do our home work for a standardized format both for processing as well as for machine-readable format for input purpose. All the three heads of centralised cataloguing, national union catalogue and computerised information system are very closely connected both technologically as well as professionally in this matter.

6 RESOURCE SHARING IN PRESERVATION OF LIBRARY MATERIALS

Preservation of India's cultural heritage is one of the major tasks of the National Library. But I would go ahead to say that shared responsibility of this task would bring about much better results. This is one area of resource sharing which has not really been taken into consideration very seriously. For preservation purposes, one has to deal with the issue on two separate lines:

1 Preservation of the existing material in its original format.
2 Preservation of the material for posterity in another format, namely, microforms.

Since we accept mortality of everything in this world, we have to accept that reading materials in whichever form cannot last for ever. Therefore, libraries must accept this and make necessary arrangements for the second method of preservation. It is in this area that resource sharing will be most needed. In this area of resource sharing we have to consider sharing of resources as far as personnel is concerned more than in the other areas. Specialisation in preservation methods is still not a part of library science curricula in India. Therefore, this work is now done by a different set of people who have the necessary training. Since resource sharing does not only mean sharing of reading material but also sharing of personnel, libraries will have to take the help of specialised people from different organisations for this activity. The National Library along with major libraries of national importance and national subject libraries have to come together to work out a plan for resource sharing for preservation purpose. Preservation of reading material will have to be divided

into different types of materials also. A historical time schedule will have to be prepared not only to locate materials published during a particular period of time but also to ascertain the urgency for preservation of the material. I am making this distinction mainly because different types of materials, manuscripts, books, journals and newspapers, all have a particular life time. They also differ in quality as far as the original document is concerned. For example, paper quality has deteriorated tremendously over the past fifty years. I am told by experts that a lot of material published in India from 1920s and 1930s onwards till 1960s are on very bad paper.

As far as the second activity is concerned, i e preparation of another format, resource sharing is inevitable because no library in India is self-sufficient in old research material. The National Library naturally has the largest collection in most subject areas. But we have to bring comprehensiveness in our collection as the repository of India's cultural heritage by a well-planned exchange programme between libraries with old and valuable collections. We have also to fill in our gaps by mutual exchange. This plan for collaboration will also have to be prepared by taking major libraries into consideration.

7 CONCLUSION

I have tried to place before this august gathering the reassessed view of the present position in resource sharing at the national level. Some of the future plans and possibilities have also been presented here. On the basis of this, I would hope that the Seminar would recommend concrete suggestions for making these linkages actually workable. Though each library is expected to deal with the needs of its clientele well and within a particular time schedule, there are certain areas where dependence is inevitable. It is in these areas that we have to bring about a system which will actually work. Utopian theoretical ideas based on results of technologically more advanced countries, will not help us. We have to work out our own system of national resource sharing, keeping in mind our constraints as well as our advantages.

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SCIENTISTS' APPROACHES TO SOURCES OF INFORMATION : AN ANALYSIS

R SHALINI*

0 INTRODUCTION

The study of information needs and uses is a rational activity when viewed as a means to an end, i e as a means to improve the overall performance of the scientific information systems and thus the quality of research. The recent upsurge of interest in the study of behavioural aspects of the scientific and technical communication and information flow has two distrinct sources:[1]

(1) In a theoretical one, it is concerned with the development of communication research.
(2) In a practical one, it is concerned with the policy makers in the scientific organization and information services.

The recent trend towards National Information System and World Science Information System has made the need for such studies even more significant. The NATIS Guidelines and the UNISIST Information Policy have clearly indicated the significance of such studies and their impact on scientific and technological development and hence of overall national development. As a result, it is developing into a scientific discipline and has now become a recognised area of activity.

1 PRESENT STUDY

The present study is an attempt to analyse the information using behaviour of the scientists. Specifically, the objectives of the present study are :

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(i) To obtain a general picture of the role and position of each of the sources of information in the scientific communication system serving the scientists community.
(ii) To seek the opinion of the scientists regarding the usefulness or otherwise of the various sources of information.
(iii) To identify the various attributes of these sources which characterise their usefulness or otherwise.

2 METHODOLOGY

The study of scientific information use has no methodology it can call uniquely its own. Information use is a behaviour and data collected on any behaviour has to be by: (1) asking people about it, may be through questionnaire or interview or any other, (2) observing its occurrence viz participant observation etc, or (3) examining its resultant products like books, papers, etc. For the purposes of the present study the questionnaire method was followed. A detailed questionnaire was prepared, eliciting information on various aspects of the different sources of information. This questionnaire was administered to a sample population of scientists.

3 SAMPLE

For the purposes of the present study scientists i e teachers and research workers working in the five departments viz, Physics, Chemistry, Biochemistry, Botany and Zoology of the University of Mysore were chosen as the sample group. A total of 120 respondents were considered. Since the questionnaire was administered personally, fortunately a near 100% response was possible.

4 PERIODICALS AS A SOURCE OF INFORMATION

An almost total dependence on periodicals by the scientists is observed. Scientists seem to be satisfied with the periodicals as they rate it to be efficient (very efficient 47% to 62%, moderately efficient 37% to 47%). None of the scientists, with the exception of 2 chemists, deem it to be 'not so efficient'.

Scientists identified the 'technical quality' and the 'existence of Editor-Referee system' as the two important attributes contributing to the usefulness of the 'journal' as a source of information. This suggests the value judgement criteria exercised by the scientists while choosing a channel for information use. Further, scientists appear to give significant weightage to the 'good presentation' criterion. Interestingly, none of the scientists seems to value the 'provision of the feed back' feature of the periodicals. Accessibility factor also does not appear to be very

important as only around 10% of the scientists (Zoology 20%) consider it to be of relevance.

When opinion was sought as to the limitations of the periodical as a source of information, scientists considered 'scattering of information'; 'innumerable number' and 'cost' as the features which delimit the usefulness of periodicals. Scientists' allegations are not surprising, since it is generally considered that the periodicals have contributed as much or probably more than any other category of materials for the so-called information explosion. Scattering phenomenon of the periodicals literature has been universally accepted and also established particularly after Bradford's demonstration in his famous *Law of Scattering*.

The Editor-Referee system has come in for severe criticism in the past. Hence scientists' opinion in this matter was also sought. Interestingly, a small minority (3% to 6%) only consider it to be a farce whereas majority of them (53.5% to 91.7%) consider it to be a quality controlling mechanism and others (6% to 25%) as a means to minimise errors. The small minority of scientists who view the system as a farce do so because they feel that 'Refereeing is not objective', 'Biased and prejudiced view point of Referees', 'Referees take their ideas and claim it as their own'.

The phenomenon of inflation of the cost of periodicals as a limitation can be justified as it makes it difficult for the information system serving the scientists to acquire all the periodicals needed in their research work.

4 CONFERENCE PUBLICATIONS

Conference publications are not one of the frequently used sources of information as indicated by the rank obtained and the percentage of use. The scientific community studied, seems to be divided in their opinion about the quality of the Conference publication as only half of the scientific community considers conference deliberations to be inferior in quality to periodical articles.

Majority of that segment of scientific community which considers conference publications to be inferior in quality, attributes it to the absence of the Refereeing system and then to a limited extent to the accessibility problem. This is clearly again a case for the validity of Refereeing system in scientific communication.

The other half of the scientific community which considers conference publication as not of inferior quality, attributes the credit to the conference publication in view of the fact that it is one of the most important source giving information about on-going research. They have supported their low use of conference publications in the light of the fact that they would have used the conference publications if they were as easily accessible as periodicals. This suggests that the accessibility of

a channel is also one of the important criteria for its use as a source of information.

5 THESES AND DISSERTATIONS

Theses and dissertations are not one of the most used sources of information. However, a large majority of the scientists have made use of theses and dissertations at one time or another in the course of their research work, primarily to get background information on a topic and secondarily as a source of references as they are appended with exhaustive bibliographies and finally for their originality.

According to the academicians surveyed, the major limitation of theses and dissertations is their accessibility problem, followed by the fact that they are not listed in abstracting and indexing journals. This is hardly surprising as most of the theses and dissertations submitted to the universities are not published at all. This supports the view that 'Accessibility of a channel' and its use as a source of information are correlated.

6 TECHNICAL REPORTS

Technical reports are one of the least used sources of information. Comparatively, physicists and zoologists make considerable use of these types of literature. Speedy communication and the length of Technical Reports are identified as their important advantages by the academicians surveyed. Accessibility problem seems to be the serious limitation of them.

7 PATENTS

The present survey suggests that patents are the least used of all sources of information. It is not used by biologists and its use is negligible among physicists. However, relatively more use is made by chemists and biochemists. It is generally accepted that patents are the most neglected of all sources of scientific and technological information, even in the fields like chemical technology and chemical engineering where their importance is more. Thus it may be relevant to consider here what B H Flower has to say in this regard: "It seems reasonable to assume that either their scientific worth for the academicians is small or that the scientific laymen find them difficult to use. It would appear that there is little to be gained by major abstracting and indexing journals increasing their coverage of the patent literature until more is known about its usefulness."[3]

8 BOOKS

Books constitute the third important source of information for the university scientists studied. They use books mainly for teaching purposes rather than for research as majority of them consider books as teaching instruments. This is not surprising as majority of the university scientists are required to teach. The bibliographies included in books act as a useful source of references. The scientists have also identified simple description and good presentation as other important features of the books.

The scientists studied agreed with the generally held view that books, particularly in the field of science and technology, contain outdated information. The other limitation cited by the scientists is that books try to be as comprehensive as possible with the result that they contain only broader aspects of a subject.

91 ABSTRACTING AND INDEXING JOURNALS

Abstracting and indexing journals are second only to periodicals in their importance to scientists as revealed by this study. The scientists studied make rather extensive use of this type of literature. Their use is not limited to well-established international omnibus abstracting and indexing journals but extends over to specialised and local services also. This behaviour of the scientists suggests that they are convinced of the usefulness and necessity of these services.

The major advantage of abstracting and indexing journal as recognised by the scientists is that 'it is a useful "Current Awareness tool" '. Some of them feel that the main advantage of abstracting and indexing journals is their comprehensive coverage of the literature.

A surprising finding is that a few scientists seem to appreciate the availability of different types of indexes as a useful feature of the abstracting and indexing journals.

The two significant criticisms levelled against abstracting and indexing journals are 'Abstracts are more of descriptive nature than informative' and, secondly, 'the complicated indexes that they give'. The percentage of scientists regarding indexes as complicated in nature is quite high particularly among chemists. This finding raises a very significant question as to the rationale and relevance of providing various types of indexes, particularly in view of the five types of indexes provided by *Chemical Abstracts* and *Biological Abstracts*. It is interesting to note that more physicists are satisfied with the indexes available in *Physics Abstract* enve though *Physics Abstract* does not provide any subject indexes in its issues. Also generally physicists are satisfied with the abstracting and indexing services available in their field. Contrastingly,

quite a high percentage of the chemists are not satisfied.

Variation can be observed among scientists belonging to different discipline in their degree of use of A/I services. For example, chemists depend more heavily on A/I services than other scientists. This may be due to the availability of a very well-established popular comprehensive service in *Chemical Abstracts*.

92 REVIEWS

An important finding of this study is almost universal use of reviews for various information use activities. It is one of the fourth most used sources of information and more than half of the scientists use reviews frequently. A considerable number of scientists have considered the reviews as satisfactory.

The analysis of the purposes for which these reviews are used revealed the following: Use of reviews as a current awareness tool seems to be limited, from the point of view of the scientists surveyed. However, scientists make extensive use of reviews for the purpose of tracing the trend of development in their field. The percentage of scientists using reviews for this purpose is very high among biochemists (75%) whereas in other disciplines it ranges between 40% to 50%. Scientists also use reviews for keeping themselves uptodate in related areas.

93 SUMMARY OF FINDINGS

1 The extensive use of published sources of information by scientists conforms to the generally held opinion that pure scientists are literature dependent—a finding which was first indicated by Herner and later supported by findings of other surveys. Even though scientists' reliance on published channels is pronounced, the informal means of communication appears to play a minor but significant role in their research work, particularly at the idea generation stage and also for obtaining specific data. However, for empirical information they rely greatly on published literature. This behaviour is an illustration of the 'Principle of least effort' that is, scientists follow those paths in seeking and obtaining informotion that place smallest amount of strain and effort on them. Thus, the more commonly available types of information such as those dealing with procedures, techniques, materials and apparatus etc are generally obtained by informal means like querying colleagues etc.

2 The study brings out that scientists generally exercise two value judgement criteria, viz 'perceived technical quality' and 'easy accessibility' of a channel for information use.

3 The literature searching activities of the scientists studied reveal a familiar pattern of scientists approaching secondary sources of informa-

tion (A/I journals and *Current Contents*) first, to collect references which lead them to the primary sources of information.

4 The literature use pattern of the Indian scientists studied tend to conform to the universal finding of many surveys 'the present system of scientific communication depends almost entirely on the periodical literature'. The other sources of information used are abstracting/indexing journals, books and reviews in that order. The use of other primary sources of information like conference publications, theses and dissertations, technical reports and patents may be said to be almost minimum. This finding corresponds to two of the channel rating studies, one by APA[4] and the other by Wuest[5] in which journals were given the top most rank. Further, the results are also similar to the inferences drawn by Gilmore, Wood and Hamitton[6] who stated that 'academic workers make considerably more use of formal channels, particularly scientific journals and abstracting and indexing publications than do their colleagues in industrial organizations. A similar conclusion was given by Amsdon.[7]

Only three sources, periodicals, abstracting and indexing journals and books received rank first, within these three periodicals received highest number of 1st preferential votes (60%), followed by A/I journals (25%). Surprisingly, conference publications got 3rd and below ranks. The other sources getting the 2nd order of preference are reviews and theses and dissertations. Patents are the least used source of information. Only biochemists and chemists make use of Patents to a limited extent.

The study establishes an obvious relationship between the accessibility factor and the use of sources. This finding has an important implications for selection and acquisition policies of libraries. What is made available by the libraries is normally used by the clientele in spite of the individual efforts to have access to literature through other means. Policies regarding selection and acquisition need to be carefully formulated as it decisively affects the information needs and uses of clientele and their performance consequently.

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SERVICES OF PERIODICAL SECTION IN KAKATIYA UNIVERSITY LIBRARY : A SURVEY

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0 INTRODUCTION

The Post-graduate Centre was established at Warangal under Osmania University on 10th March, 1967 from the academic year 1967-68. This was upgraded into Kakatiya University on the 19th August, 1976 with 10 departments. Now, it is with 14 departments and 5 constituent colleges located in the town.

A new building for the library with a total plinth area of 24,948 sq ft was constructed in the year 1983 and all the departmental libraries were centralized. The following brief profile of the library is given.

Working Hours: 8.00 a.m to 8.00 p.m.
(Monday to Saturday)
Yearly Budget: Rs. 5.2 lakhs
Stock of books: 65,000
Stock of bound volumes of periodicals: 9,000
Research periodicals subscribed: 350
Newspapers subscribed: 20
Magazines subscribed: 80
Total staff: 20
Membership: 1,150

Library has always remained the vital and vibrating part of research and higher studies. Particularly, the periodical section in a university library plays a vital role to carry out the objectives of its parental institution. This section is the backbone of the library where the latest

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information is available. Periodicals include journals, bulletins, transactions, proceedings or similar works.

When the periodical section is regarded as the nerve centre of a university library, it should be provided with standard periodicals, convenient arrangement for easy location, equipment, furniture, lighting, dynamic personnel and other facilities including technical processes like classification, cataloguing, abstracting and indexing services, reprographic and documentation methods.

The main purpose of this paper is to:

(i) know about the services provided in periodical section of Kakatiya University Library;
(ii) know the problems being faced by the users and assess their needs through a questionnaire;
(iii) assess the quality of periodical section about the collection, standards, arrangement of current issues and bound volumes; and
(iv) find out ways and means to solve the users problems and increase the efficiency of the section.

The information about the article was collected through a survey undertaken using a questionnaire. Some of the information is added on the basis of case study and personal experiences of the author. Really, survey is a huge task. This survey covers all the categories of users such as Professors, Readers, Lecturers, M Phil/Ph D scholars, P G students in all faculties. The total number of respondents is 45.

The discussion below is based upon the consolidated and analysed data collected through formal and informal channels. The suggestions are also given after the data analysis as well as at the end of this paper.

1 ANALYSIS OF DATA

11 Adequacy of Periodicals

Table 1: Adequacy of Periodicals—Users' Satisfaction

	No. of Respondents	*Percentage*
Highly satisfied	1	2.23
Satisfied	25	55.55
Not satisfied	19	42.22

When it was enquired about the satisfaction of the respondents with regard to the number of the journals acquired by the library, 55.55% of the total respondents replied that they were satisfied. Thls is followed by about 42.22% of respondents 'not satisfied' and 2.23% of respondents highly satisfied which is very insignificant.

The above analysis reveals that more than half of the users of the periodical section of the library are satisfied.

It is here suggested that more journals are to be acquired. Particularly in Science Faculty, a lot of foreign journals are to beacquired by enhancing the budget to meet the requirements of the users and avoid their migration to R R Labs, and other Laboratories in Hyderabad. It is also suggested that *Chemical Abstracts* must be procured to vanish bias among the users when the *Biological Abstracts* is subscribed.

12 Standard of Periodicals

Table 2: Standard of Periodicals—Users' Satisfaction

	No. of Respondents	*Percentage*
Satisfied	31	68.88
Not satisfied	14	31.12

When it was enquired about the satisfaction of the respondents with regard to the quality and standard of the periodicals acquired by the library, 68.88% of the respondents replied that they were satisfied. This is followed by 31.12% of 'not satisfied' respondents. The above analysis reveals that more than half of the readers are satisfied.

The following reasons are given by the respondents for lack of quality in standard of the periodicals:

(i) foreign journals are not subscribed;
(ii) purchase of specific subject-wise journals is not being followed;
(iii) financial stringency; and
(iv) lack of standard, quality, literary criticism and research type of journals in some fields.

In view of the above facts and figures, it is advised to have specific subject-wise journals including foreign ones.

13 Acquisition of Journals—Users' Approaches

Tabe 3: Users' Approaches for Acquiring the Journals of their Choice

	No. of Respondents	*Percentage*
Head of the Department	6	13.33
Library Committee	2	4 45
Librarian	17	37.78
Any other	8	7.78
None	12	26.66

It was also enquired of users about their approach or complaint for acquiring the journals as desired by them. It was revealed on enquiry that 37.78% of the users approached the Librarian, 13.33% the concerned Head of the Department who recommend the titles of the journals before purchasing of journals and 7.78% of respondents approached the Librarian as well as the Head of the Department. Only 4.45% of the readers approached the Library Committee members which is very insignificant. It is due to not knowing the library committee members by the readers. 26.66% of the users have not approached any one of them, they are dissatisfied with the quality.

On enquiry, the readers said that if they approach the Librarian, he directs to the Head of the Department. The version of the Heads is that they have already proposed to purchase, but due to lack of funds, some journals are deleted from the list. Totally, there was no good response from anybody else, they added.

14 Current Issues of Periodicals

Table 4: Arrangement of Current Issues of Preiodicals

	No. of Respondents	*Percentage*
Acquainted	40	88.88
Not acquainted	2	4.45
No reply	3	6.67

Regarding the acquaintance with the arrangement made by the library for retrieval of current issues, 88.88% of the respondents gave positive replies, i e they are acquainted with the arrangements. Only 4.45% of the respondents gave a negative response which is insignificant. 6.67% of the users did not answer. On the whole the arrangement is good, but orientation has to be conducted in this regard.

15 Back Volumes of Periodicals

Table 5: Arrangement of Back Volumes of Periodicals

	No. of Respondents	*Percentage*
Acquainted	28	62.22
Not acquainted	12	26.66
No reply	5	11.12

With regard to the arrangement of back volumes, 62.22% of the patrons declared their acquaintance and 26.66% of the clientele were not acquainted with the present method of arrangement of back volumes.

It is clear that the arrangement of back volumes is the same as that of current journals, but it is surprising that there is a variation among users with regard to acquaintance between the arrangements made for current issues and back volumes of periodicals.

Therefore, it is strongly recommended to conduct orientation programme at the beginning of the academic year to acquaint the users fully with the arrangements.

Further, it was also enquired about their problems in locating journals of their choice. Only 40% of the users gave different reasons, of which main reasons are as follows:

(i) titles are not written on the spines of the bound volumes;
(ii) misplaced journals are not being replaced; and
(iii) specific subject-wise arrangement is not followed.

Moreover, they have also suggested the following ways and means to overcome their problems and to improve the existing system:

(i) regular rearrangement is required for misplaced volumes;
(ii) titles should be written on the spines of the bound volumes legibly;
(iii) a good University Librarian with academic background has to be appointed; and
(iv) service oriented staff has to be posted.

16 Staff Assistance

Table 6: Assistance from Staff in Locating Current Issues

	No. of Respondents	*Percentage*
Yes	33	73.33
No	8	17.77
No reply	4	8.90

Table 7: Assistance from Staff in Locating Bound Volumes

	No. of Respondents	*Percentage*
Yes	31	68.89
No	11	24.45
No reply	3	6.66

Table 8: Assistance from Staff for General Information

	No. of Respondents	*Percentage*
Yes	28	62.23
No	8	17.77
No reply	9	20.00

Tables 6-8 reveal that on an average 68.14% of the total readers got assistance from the library. Only 20% of the users said that they did not get any kind of assistance from the library staff.

It was also enquired about the reasons for not getting assistance from the library staff. Some of the readers said that the staff is not available punctually. Some readers said that even if they asked, the library staff is not able to reply. Some of the readers said that the staff gets angry if any query is made to them, so they use to keep quiet.

It is here advised to open a section called 'Readers' Advisory Service' at the earliest.

2 SUGGESTIONS

In view of the above analysis based on users' response on various

aspects of library services, listed in Tables 1-8, the following suggestions are made for implementation in the Kakatiya University Library:

1 A good and young librarian with outstanding abilities should be appointed.
2 Xerox facility should be provided.
3 'Readers' Advisory Service' section should be opened.
4 Some more journals including foreign ought to be acquired.
5 *Chemical Abstracts* should be subscribed; and
6 Library timings should be extended up to 10.00 p.m.

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MOTIVATION: RELATIONSHIP BETWEEN NEED FULFILMENT AND JOB PERFORMANCE

BHOOSHAN LAL*

0 PROLOGUE

An individual continually experiences needs and wants which impel him to action. If he is deprived of a particular need, a stats of tension is caused and his behaviour is directed toward reducing, diverting, or eliminating the tension (McFarland, 1974). Due to such action a series of cues may be set up, within the individual or from the environment, which may help him evaluate the impact of his behaviour. As a result of this assessment, the individual may either reinforce the intensity of his drives and the direction of his energy, or discourage him from his course of action, and redirect his effort (Steer and Porter, 1975). When the individual is driven either to attain some goal or to avoid some undesirable consequences, a state of motivation is evidenced (Siegel, 1969). Motivation thus relates to ". . . how behaviour gets started, is energized, is sustained, is directed, is stopped, and what kind of objective reaction is present in the organism while all this is going on" (Jones, 1955 : viii).

1 NEED HIERARCHY

Industrial psychologists, concerned with the issue of motivation, have extensively used the Maslow's 'need hierarchy.' Maslow(1954) propounded that an individual has a basic set of needs which he strives to fulfill. He suggested that there are five need categories ordered in terms of their prepotency:

1 Physiological needs refer to needs for food, water, shelter etc.

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2 Safety needs concern a secured environment—one that is free of threats, fear etc.
3 Belonging needs relate to individual's desire to be accepted by others; desire for affection and caring relationships.
4 Esteem needs. This set af needs include the needs for achievement, status, recognition, appreciation, and prestige.
5 Self-actualization needs. This is the need to realize one's potentialities for continued self-development. The individual strives toward the full realization of unique characteristics and potentialities.

The physiological and safety needs are basic needs for survival of an individual and are termed as lower-order needs. The belonging, esteem, and self-actualization needs are psychological and sociological in nature and are conditioned by culture, society, and the personality of the individual.

Maslow distinguished five need categories by referring to some of the needs as deficiency needs, and others as growth needs. "Needs for safety, the feeling of belonging, love and respect (from others) are all clearly deficits" (Maslow, 1955 : 10). The growth needs incorporate self-respect, achievement, and self-actualization. Relative gratification of a given need submerges it and 'activates' the next higher need in hierarchy.

These five need categories represent priority level; an individual tends to satisfy the first before satisfying the second, and so on. At any given time certain needs are stronger than others, and those that are initially important must be satisfied before the other needs serve as motivators.

The need network of most people is very complex, with a number of needs affecting the behaviour at any one time. The strength of any particular need is determined by its position in the hierarchy, and the extent to which lower-order needs have been satisfied. In general, Maslowian model depicts a dynamic, step-by-step, causal process of motivation, in which behaviour is governed by a continuously changing set of important needs.

2 A TENTATIVE FRAMEWORK

An individual joins library system with a set of needs. He spends a large portion of his waking hours within the system. He builds his life styles and value systems around the library for which he works. If the library system provides conducive climate for the satisfaction of his needs, the individual works effectively. Where the system does not provide these opportunities, the individual will subordinate the goals of the library to the satisfaction of his own needs. The initiation of such action will have direct impact on the job performance, the attitudes, and

the current motivational state of the individual.

Examination of the past literature shows a reliance on performance outcomes as surrogate measures of motivation (Terborg and Miller, 1978). Inkson (1978) reports that self-esteem exercises a significant moderating effect on correlations between performance and intrinsic motivation. Significant correlation has been found between self-actualization and high performance (Bennett, 1977). Haire *et al.* (1963) report that physiological and security needs are well met at USA and England and that managers and professional employees seek higher-order needs. Contrary to Haire *et al* (1963) findings, Singh and Wherry (1963) suggest that factory workers in India give priority to security, earnings and personal benefits—all lower-order needs. The autonomy and self-auctalization needs of librarians have been reported to be least satisfied (Wahaba and Clemence, 1973). Haire (1956), Smith (1955), and Viteles (1953) suggest that physical or security needs are generally satisfied but not the higher-order needs like social, esteem, or self-actualization needs.

Most published research on 'need hierarchy' has taken the form of 'cross-sectional' research. It has attempted to show differences in the importance of various needs among groups of individuals at various organizational levels. Also, it has been reported that satisfaction of needs varies from level to level in an organization. Argyris (1957) suggests that higher an individual in an organization the more opportunities he has to satisfy his higher-order needs. Porter (1961) investigated bottom and middle management levels and concluded that greatest differences in the frequency of need fulfilment deficiencies between bottom and middle management positions occurred in esteem, security and autonomy need areas. These needs were significantly more often satisfied in the middle than in bottom management level. He further suggests that higher order psychological needs were relatively the least satisfied in both bottom and middle management level. In second study, Porter (1962) reports that self-actualization and autonomy needs were consistently regarded as least satisfied at all management levels. Porter (1961) concluded that the management position within the organization was important in determining the extent of psychological need fulfilment. Based on Porter's assumption it is hypothesized that: "The fulfilment of security, social, esteem, autonomy, and self-actualization needs will vary significantly at various job levels in library system."

3 RESEARCH METHOD

31 The Sample

The sample for the present investigation was drawn from academic,

special, and public libraries. The instruments were administered to 400 library personnel, out of which 79.5% responded. The sample comprised:

Librarian/Deputy Librarian	(Top management)—13.21%
Assistant Librarian	(Middle management)—21.38%
Professional Assistants/Library Assistants	(Lower management)—65.41%

32 Instruments Used

Porter (1961) developed the Need Satisfaction Questionnaire (NSQ). The NSQ has 13 items designed to provide information about five motivational need classes, which were derived from Maslow's (1954) need hierarchy. The five need categories are:

1 Security needs. These include needs for security, stability, and absence from pain, threat, or illness.
2 Social needs, These needs are concerned with social relationship of people. People want to belong, be loved, and accepted by others.
3 Esteem needs. These needs refer to self-respect, self-esteem, and esteem for others.
4 Autonomy needs. Autonomy relates to the degree to which the job gives the worker independence and discretion in settling goals, in thought and action.
5 Self-actualization needs. These include needs for self-fulfilment, or realization of one's potential. The self-actualizing person may be described as one who has increased acceptance of self and others, increased problem solving ability, increased detachment, and desire for privacy, etc.

The instrument has multiple choice scale and respondent was asked to indicate for each time:

(a) How much of the characteristics is there now connected with your level/position?
(b) How much of the characteristics do you think should be connected with your level/position?

Thus the typical item would look like this in the questionnaire:

(a) How much is there now ? (Max.) 1 2 3 4 5 (Min.)
(b) How much should there be ? (Max.) 1 2 3 4 5 (Min.)

Porter (1961) has defined need fulfilment as the difference between how much there should be and how much is there now (Part (b) minus part (a)). The direction of the scoring was reversed i e, 5 would mean the least. The test and retest validity of the NSQ, after an interval of one month, was found to range between .69 and .73.

Performance Appraisal. This instrument, developed by Bose (1976), was used to evaluate performance of the respondents by their superiors. The instrument contains twelve attributes, with a multiple choice Likert type scale. The overall score ranges between 12 and 60. Test and retest reliability, after an interval, was found to range between .60 and .62.

4 RESULTS

To determine variations, if any, in the need fulfilment, at three job levels in library system, the intercorrelations were computed with the break up of the sample into top—, middle—, and lower-management levels. The intercorrelations between psychological needs and the criterion variable job performance is preasented in Table 1.

Table 1 : Intercorrelation Between Psychological needs and Job Performance

Need category	*Job level*	*Coefficient of Correlation*
Security needs	TM	— .601**
	MM	— .360**
	LM	— .276**
Social needs	TM	— .576**
	MM	— .416**
	LM	— .324**
Esteem needs	TM	— .415**
	MM	— .571**
	LM	— .410**
Autonomy needs	TM	— .164
	MM	— .230
	LM	— .180*
Self-actualization	TM	— .407
	MM	.097
	LM	.73

**Significant at $p < .01$ level of significance.
*Significant at $p < .05$ level of significance.
TM—top management; MM—middle management: LM—lower management.

There appears to be a systematic trend in the satisfaction of security and social needs. The degree and the extent of satisfaction not only varies at three job levels, but also the relative need fulfilment deficiency shows downward trend. Since the level of significance is $p < .01$, it can be inferred that these needs are well met. The results confirm findings of Haire *et al.* (1963), but partially reject the observations made by Singh and Wherry (1963). Contrary to the findings of Porter (1961), these needs are more fulfilled at the top management level in library system. In conformity with Porter (1961), the esteem needs are significantly more satisfied at middle management level ($r = -.571$) than in the top-, and bottom-management levels. The extent of fulfilment of esteem needs at top management ($r = .415$) and lower management levels ($r = -.410$) shows insignificant difference.

Porter (1962) reports that higher-order needs like self-actualization and autonomy needs were consistently regarded as the least fulfilled needs at all levels of management. The study under report observed that only top management level in the library system perceived self-actualization needs fulfilled ($r = -.407$; $p < .01$). This need is relatively least satisfied at both middle and lower management levels in the library system. However, the degree of perceived satisfaction of autonomy need is observed significant at only $p < .05$ level of significance at lower management level in the library system. This finding is contrary to the observations made by Porter (1962), Wahaba and Clemence (1973) who suggest that the autonomy and self-actualization needs of librarians are the least satisfied

5 DISCUSSION

Motives are the expressions of a person's needs; hence they are personal and internal. Needs are concerned with the types of incentives or goals that people strive to attain in order to be satisfied and perform well. Some needs are physiological, others are related to psychological and social values. A felt need triggers tension which stimulates individual behaviour toward relieving the tension. Unless the part played by each motive is recognized, it is difficult to understand individual behaviour in a library system.

The findings pertaining to the relationship between need fulfilment and job performance reveal that the Indian library system has been relatively successful in satisfying the security, social, and esteem needs. Security needs are largely based on fear and are avoidance-oriented. "The feeling involves being able to hold on to what one has, being sure that one will be able to fare as well in the future as in the past. Conversely, insecurity is a haunting fear that 'things may not last,' that one may lose what one now has."[4] (Morgan and King, 1966 : 234). In the Indian context security is an accepted fact that almost everybody is

secured on job.

Libraries are the information processing system. The activities that take place in the provision and use of library services are highly susceptible to interaction with things external to the system (Bhooshan Lal and Kaushik, 1985). The nature of work itself demands that people should socialize and interact with each other and the users, which may perhaps be the reason for their effectiveness and fulfilment of social needs (Bhooshan Lal, 1984).

There is universal tendency to belong and be accepted by the people. It is with this view that an individual contends for meaningful interpersonal relationship, and strives for esteem, with and from others. Based on this assumption, the analysis of data reveals esteem needs perceived, at all levels in the library system, seem to be fully met.

The job characteristics give employees some control over their affairs, which appears to be fundamental in building a sense of resposibility in workers. Although they are willing to work within the broad constraints of an organization, they also insist on a degree of freedom. In a work situation "autonomy/discretion alone is sufficient to account for positive attitudinal results" (Cummings *et al.* 1975 : 58). Autonomy provides greater role for workers in setting their own goals. The absence of autonomy leads to job dissatisfaction and low productivity. Insignificant or no correlation may be perhaps due to the fact that the library personnel have no control over their affairs.

Human nature has an inherent capacity to realize itself. It requires proper set of circumstances in order for it to emerge, but these circumstances are not readily available to all. Empirical evidence suggests that management position in the organization is important in determining the extent of need fulfilment of higher order needs. In line with Argyris (1957), perhaps top management level in the library system has more opportunities to satisfy their self-actualization needs. Persons occupying higher positions may have a continued desire for self-fulfilment.

The variation in the need fulfilment at various job levels perhaps relates to the fact people have much in common, but each person in the world is also individually different. These differences affect the importance of different needs and outcomes. Also needs change as stages of development of people change (Hall and Nougaim, 1968). Hall (1976) believes that the energizing force of behaviour shifts over a person's work life. A need for identity (security, existence) is followed by a need for intimacy (social relatedness), then need for generativity (ego, self-actualization, growth), and finally a need for integrity (relatedness, ego).

6 CONLUSION

An energizing force within the individual drives him to behave in a

certain way. An individual continuously experiences needs. Since needs/ drives are infinite in number, an individual has opportunities for assigning values, priorities as to which needs he should attempt to satisfy. No two persons are alike in terms of needs and wants. Large differences among people in what they need and value make documentation of complete and internally consistent list of factors almost impossible. It, however, does not mean that the concept of need is not useful in dealing with behaviour in library system. It can serve to help a considerable amount of goal-directed behaviour that occurs in library system.

Due to changing distribution of need priorities library system will be required to change their ways of operations to meet the changes in needs. Individual profiles, which illustrate the personal characteristics that typify a person oriented toward certain needs, can be constructed to compare personal characteristics of people. In managing men, it is important to be aware of multiple need loyalties and to motivate them so that their interests and those of the library are integrated in a balanced fashion. Burling (1950) has suggested that "you can't hire a hand" which means that an employer must hire the entire person, with his total being.

Thus libraries attempting to motivate increased productivity should be careful to relate to the needs of workers so that energy source of workers' behaviour is fully tapped.

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PERSONNEL AND QUALITY OF LIBRARY SERVICES

M R CHANDRAN*
T SUBRAMANYAM**

0 INTRODUCTION

Periodical 'self-appraisal' of the performance of its professionals in annual forums of professional bodies is, though usual, a necessary and useful feature. The present theme of 'quality in libraries' is one such discussion. Since library is a service institution, the measures for quality in service always demand improvement. As the set goals are always qualitative and not quantitative, there will always be scope for improvement and adaptation.

Libraries always exist as a sub-system in the total system of an organisation or institution. Hence, the functioning of libraries depends upon the environment in which they exist. To be explicit, flourishing of libraries and library services depends upon the values attached to them by the public. In India, the number of literate population and the quantity of publications produced in the country available for the larger public, speak of some of the inherent constraints of library facility. When the environment of library sub-system is such, what can be the position of the library professionals who form only one of the components of the library system. In this background the role of library personnel in the improvement of quality in library services is to be viewed. But, the library scene and position of library professionals is not all that gloomy, thanks to the dynamic and dedicated leadership emerging from the library movement in the country. But much remains to be done by the professionals to improve the quality in library services, of course, with the support of the public and government.

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The objective of this paper is to make us recapitulate the existing conditions and examine how to improve the quality of the personnel to perform more efficiently, towards realising the objectives of libraries and thus justify themselves of their genuine demands for better salaries and parity in status with personnel in other professions.

1 LIBRARY EDUCATION

Library schools are the source of supply of library personnel. Thus, library schools play an important role in shaping the library personnel. At present, there are nearly fifty five library schools offering Bachelors Course in Library and Information Science producing nearly 1,500 Degree holders every year, and nearly 150 Master's degree holders in Library and Information Science are produced in the country from 15 departments in the universities.

There is a general charge that there is proliferation of library schools without necessary infrastructural facilities including full-time teaching staff, causing dilution of standards. This is not the case with library schools and library education alone, but it is equally true of other schools of education and educational system existing in the country. There are no library manpower demand studies, but there is unemployment and underemployment among library science graduates and post-graduates. Again, it is the same with graduates and post-graduates in other disciplines. But, in view of the size of the population of our country and number of schools and colleges to be opened to achieve high literacy rate, there is scope for larger employment of librarians in the country.

It is not within the scope of this paper to discuss the content of library science courses, but it may be in order to emphasise that the library science teachers should imbibe in the students the values and joys of library service and stress the need to equip themselves during their service, to be efficient workers and fulfil their obligation to enhance the dignity of the profession.

Students covering all the disciplines should be taken in library science courses, so that there will not be dearth of candidates in particular branches of knowledge, for example, students from mathematics, physics, chemistry are in short supply in library science courses. Library schools should equip to teach computer application to students to enable them to cope with the growing use of computers in library service and library operations.

2 RECRUITMENT

The employers have to select the library personnel after carefully planned written test followed by a personal interview, assessing the candi-

date's attitude to library service and his/her knowledge of books. If any other considerations work, it reflects on the quality of the service they render in libraries and mediocrity takes place in the class of library personnel. In big libraries, especially in university libraries, candidates with different subject background covering all branches of knowledge have to be selected. Otherwise, it is not possible to serve the clientele with required efficiency.

3 LEVELS OF LIBRARY PERSONNEL

There are different levels of library personnel, sometimes working in independent positions and sometimes working as assistants in big libraries with qualification starting from undergraduate with Certificate in Library Science, graduate/post-graduate with Bachelor of Library Science, and a post-graduate with a Master's Degree in Library Science. It is natural that qualification always has its effect on the quality of service rendered by library personnel. Hence, every library professional should acquire atleast a besic degree with Degree in Library Science to be a full-fledged library professional, to understand and practise the basics of library science. Qualifications, position and salary have a bearing on the quality of service rendered.

4 FACTORS AFFECTING THE PERFORMANCE OF LIBRARY PERSONNEL

As already mentioned, the quality of library education one receives, the qualifications one possesses, and organizational environment under which one works have a significant effect on the quality of the personnel. Besides, the following socio-psychological factors affect the quality of the library personnel.

41 Status

Any discussion on personnel will not be without the issues of status and salary. Librarians do not carry any social status with them, as teachers, doctors, lawyers, etc do. This is one of the reasons that the profession does not attract meritorious candidates.

42 Salary

Till recently salary was also not good. Thanks to the efforts of our leaders, comparatively better pay scales are now available, particularly in college and university libraries.

43 Promotions

The scope for promotions is also very less, unless one improves his qualification and goes for a new service. A person joining a university library at the most becomes an Assistant Librarian and so no supernumerary posts are created for senior staff. Merit versus seniority is also a case for frustration in promotions.

44 Repetitive Jobs, and Lack of Job Specifications

A number of jobs in the libraries are repetitive and call for less intelligence. This creates monotony in the work and affects the morale of the staff. There is no clear job specification. Non-professional jobs have to be attended by professional staff. This aspect is a source of dissatisfaction with the job. To avoid this monotony of work, staff need to be shifted periodically to new areas of work.

45 Personal Growth

First the job is less challenging, and has thus less scope for personal growth, and sense of achievement. This aspect is a source of job dissatisfaction.

46 Inter-personal Relations

Relations between the superiors and junior staff should have understanding. But due to lack of job specifications or overlapping of duties some strains in the personal relations are caused. This results in low morale and low productivity.

47 Control and Supervision

Lack of necessary control and supervision over staff leads to disincentive and causes dissatisfaction in work.

5 FACTORS THAT IMPROVE THE PERFORMANCE OF THE PERSONNEL

(a) *Work Itself.* The job content or 'work itself' is main source of motivation and job satisfaction. Hence, proper 'work it-self' makes the staff self-motivative.

(b) *In-service Training.* In-service training orient staff for job appreciation and better performance. In-service training programme includes

the job training, internal seminars, refresher courses and off-the-job training. Staff should be deputed to participate in conferences, to mingle with other professionals and to feel the professionalism.

(c) *Control and Supervision.* The Chief Librarian should provide right control and supervision of work which will boost the morale of the staff and help improve the quality of the performance.

(d) *Participative Management.* The administration of the Chief Librarian should give an opportunity to his/her staff to offer their opinions in the decision making process of library policies. This makes the staff feel responsible and effective in work.

(e) *Staff Meetings.* Periodical staff meetings to discuss the technical problems in the day-to-day work help improve the understanding among the staff and give feeling of participation in library administration.

6 RELEVANCE OF MANAGEMENT THEORIES

The above discussion conforms to the motivation theories offered by management specialists like Maslow and Herzberg. These theories are applicable in library conditions also. It should be understood that job-environment or job-context or 'hygiene-factors' are the sources of job-dissatisfaction. Herzberg's 'hygiene factors' are status, salary, security, working conditions, interpersonal relations, institutional policies and administration and supervision. The sources of job-satisfaction are 'motivators' propounded by Herzberg. They are achievement, recognition, work-itself, responsbility and personal growth. Only these motivational factors help in the improvement of quality of the performance of the personnel.

The following points are to be taken note of to improve the quality of library personnel:

(a) Selection and recruitment of the personnel should be systematic and not circumstantial.
(b) Employees to be provided with

—job specifications and unique responsibilities;
—opportunity to exhibit their productivity to others; and
—opportunity to merge self-actualization with normal responsibilities.

(c) Pay and other benefits to commensurate with qualifications and experience.
(d) Control and supervision as much as is necessary.

(e) To give appreciation and recognition whenever and whereever it is due.
(f) Create an environment conducive to work as well as for the development of good personal relationships.

In the words of McGregor: "The essential task of management is to arrange organizational conditions and methods of operations, so the people can achieve their own goals best by directing their own efforts towards organisational objectives."

7 CONCLUSION

Finally, to improve their general performance, the professionals should always remember and practise the following:

1 should keep abreast with the growing universe of knowledge in general and Library and Information Science in particular, lest they become obsolescent;
2 should seize whatever opportunity comes in their way and exhibit their talent and in turn win recognition;
3 should improve their communicative ability to reach and impress larger public;
4 should maintain good public relations with their clientele, demonstrating their abilities and thus boost the morale of the profession and of themselves; and
5 lastly, should remember that the status of the profession depends upon their performance and hence work hard and dedicatedly to keep the profession high among other professions.

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PRODUCTIVITY ORIENTED PERSONNEL MANAGEMENT IN ACADEMIC LIBRARIES

N SURYANARAYANA*

0 INTRODUCTION

Any organization can efficiently work only when its personnel understand their duties and responsibilities thoroughly and willingly extend support and cooperation to the managing authorities in achieving the organization's objectives. This is especially true of service units like library and information centres.

In nutshell to idealize the gamut of library services the librarian should strive to bring together all the forces of excellence in his staff to build a bridge between published information stocked in the library and its users, over which millions of information seekers can cross the ocean of information perpetually and eternally. In achieving this ideal situation, if the librarian himself stands as a model to his staff by not falling a prey to attain name and fame, what else the profession of librarianship would require to ennoble itself.

Throughout the article a large university library is kept in view with a purpose to devise means to develop improved relationship among the library staff and their service to user under the guidance of library manager through motivation, direction and effective utilization of time and skill and its overall function as a tool for effective control of library practice about their work etc.

Management techniques which optimise productivity level in library services through administrating its staffs are dealt in this article. A personal management plan is designed to suit multi-media libraries. A performance evaluation form to evaluate the library staff is suggested at the end.

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The following 15 techniques are dealt with in this article :

1 Absenteeism,
2 Accountability,
3 Communication,
4 Courtesy,
5 Creativity and brainstorming,
6 Delegation,
7 Human relation,
8 Integrity,
91 Job assignment,
92 Motivation,
93 Performance standards,
94 Policy-making,
95 Supervisor and supervision,
96 Team work, and
97 Training.

1 ABSENTEEISM

Absenteeism without notice is a curse to public servicing units like libraries and information centres and worst deterrent to productivity. Even frequent absenting from the allotted seat also damages the productivity. In case of frequent absenteeism without notice strict administrative action should be initiated in time so that the rest of the staff is not influenced by the menacing habit. In case of the staff moving frequently from seat by way of habit or due to the nature of work, a practice of leaving a chit on his seat indicating his whereabouts within the library or outside should be practised so that those who have connected work with him/her can establish contact by phone or personal contact.

Sometimes poor working conditions, monotony, fatigue, organization's attitude towards leave may be the cause of absenteeism. In such conditions attempt to enrich the job, providing motivation, introducing leave encashment or instituting reward for presenteeism may be introduced.

2 ACCOUNTABILITY

Each library staff member should be accountable to one superior. Line of authority and responsibility should be so as to make each staff member report to single superior regarding the work and become accountable to that person for proper work performance. Accountability should be based on accurate task assignment, staff selection, adequate facilities, equipment and appropriate delegation of authority.

Productivity of a staff member suffers if he is to report to more than

one authority which puts the staff in conflict due to dual accountability. The staff member who is not really awakened to dedicated services may sometimes take advantage by misleading both the authorities by doing nothing worthwhile. Therefore, the task of measuring the productivity of service by establishing a performance standard is needed. In activities where it is not possible to perceive the productivity the effects resulting from the activity should be closely observed over a long period of time.

3 COMMUNICATION

Providing for good communication within the staff is essential for good personnel management. The librarian must communicate with staff members and in turn provide for avenues of communication both between and among them and with the management. The librarian must ensure that the communication is healthy, harmonious and directed towards greater efficiency and output of the library staff with informative and directive, clear, concise, easily understandable and reasonable statements. They should relate to the problems and tasks with which the staff member is familiar.

The principle of integrity in communication among library staff needs particular attention because superiors often send messages by-passing subordinates with eagerness to contact the ultimate employee directly. It is a most harmful practice which afflicts staff with misunderstandings.

Library being a service unit has occasions to receive pleasant as well as unpleasant news. An atmosphere to communicate constructive criticism from one and all should be entertained which provides a chance to improve the understanding and productivity.

Inter-personnel and Inter-sectional communication can be improved by holding meetings of individual sections and all sections together once in a month to provide a chance to fully communicate and voice their genuine grievances or suggestions. Showing authority in communication creates resistance to direction and interferes with effective supervision. So the communication should be in a cordial and friendly way.

In policy making decision of the library services suggestions from users as well as the entire staff should be encouraged to be communicated. Communication with the staff should be as simple as possible. Informative and directive statements must be clear, concise, easily understandable and reasonable. They should be associated to the problems and work with which he is familiar. Policy changes should always be communicated in writing.

In nutshell, all the library staff should have clear and unambiguous approach/attitudes through the means of communication channel which can be measured through the increase in their performance standards (see Sec. 11). The nature and method of communication from top to

bottom should be in the manner which can change a bad worker into a good worker.

Communication network among the library staff through intercoms should be planned to guide the users from one section to another section of the library.

Communication to users for easy use of libraries through guiding display boards should be developed to make self-service possible. For example, a permanent printed informative guide about how to use catalogue can be displayed near the catalogue cabinet.

4 COURTESY

In activities where the staff comes in contact with the users the element of courteous behaviour is essential especially at issue counters, reference desks, and book stacks. The incourteous staff's behaviour towards users may result in the defeat of objectives of library by developing ill-feeling between the staff and users which is a worst symptom damaging the library staff's image as a whole. Therefore, the library should be staffed by persons who are known for their courtesy, good behaviour, and having special aptitude to serve the users with a smile. At times the rush of users at selected peak hours (as in academic libraries) may disturb the balance of mind of the staff and irritate them. Knowing such peak hours the librarian should provide adequate staff to serve the users at rush hour.

5 CREATIVITY AND BRAINSTORMING

Productivity can be increased in each library by finding out the activities which can be dropped without affecting the service effectiveness and the activities which can be started afresh to increase the resources utility of the library. Sometimes some activities can be simultaneously performed by several units without duplicating.

Each library will have different activities based on its functions and aims and goals. Several innovative ideas can be implemented by encouraging the library staff to contribute their productive ideas from their actual on the job experience.

Most organizations take very little advantage of natural creativity of the average person. Almost every person has some creative ability inherent in him. But the chief of the library is usually tied down to a system that suppresses any creativity which he may possess, while great benefits may be gained by increasing the creative potential of a few outstanding individuals. Creativity thrives on an understanding that every one in a group, from the junior most member to the leader, has some knowledge or experience to enrich the library by his productive ideas.

Brainstorming is a method by which a group of 7 or 8 persons, get together to find a solution to a problem. The first and basic stage of brainstorming session is to have people come up with any idea that occur to them and unusual ideas are specially welcomed. The participants are encouraged to break away from traditional approach to a problem.

This type of technique to generate productive ideas, may be employed in the libraries on occasions on which the entire staff is invited to participate. It is only with practice that ideas flow free. The libraries can derive benefit with the problem of cost and benefits using such a system.

There are three major forced relationship techniques: 1, the catalogue technique; 2, the listing technique; and 3, the focus technique. Each depends upon a mechanical or arbitrary association being placed upon two dissimilar ideas, solution or problems.

In the catalogue technique the group comes together where a library handbook is opened to a page. A paragraph is selected for instance, the second paragraph on the left-hand page. The idea or the concept that is discussed in that paragraph is recorded. The book is closed, reopened at random and the second paragraph on the left-hand page is noted and the content recorded. Then the two ideas that appeared on the two pages are discussed. What pattern, what ideas does this particular combination generate?

The listing technique uses a list drawn up by some one who does not know the purpose of the list. The person drawing up the list is given several items to be included in the list and is told to select additional items. Each item on the list is considered by the group in relationship to every other item on the list in the same manner as in catalogue method, except that the listing has been generated by one person.

In the focus-object technique, there is a group of pre-planned ideas or concepts instead. The best is paired with a series of randomly selected items. The random items might be selected from a dictionary or handbook. The resulting pairs are discussed by the group.

These three techniques might be useful in the library if they are applied judiciously in terms of public service activities. The techniques might generate new concepts for dealing with users and new services that might be closer to what patrons need.

6 DELEGATION

Commensurate with the quality and quantity of delegated work and ensuing power, authority nature depends on the productivity of the library as a whole. Concentrated efforts in training the junior level staff in handling advanced work not only improves the productivity but also affords the seniors to unload themselves with the routine work and provides the time to devote to higher level work of planning. It also prepares juniors

in growing to handle senior level of jobs for which they gradually become eligible through promotion. It also makes the juniors elated with the self-esteem.

By delegating responsibility to the members of clerical staff in repetitive routines, the staff gets encouraged to participate in identifying problems and suggesting possible solution. Thus the librarian can safely delegate power and fully utilize personal expertise to solve problems, extend work simplifications, improve workflow, and perfect coordination.

7 HUMAN RELATION

It is a proven fact that 90% of all failures in leadership are failures in human relations. The feeling of every person to become important and to get self esteem is natural. An optimistic approach and thinking among the library staff towards one another should be able to release to their energy and to raise spirit to render the library service with a sense of responsibility and societal obligation.

The management should question themselves as follows. If the answers to them are of negative nature it calls for an attempt to improve the human relations:

1 To what extent does the management satisfy the personal needs and aspirations of individuals who are part of the organization?
2 Does the management have an informal atmosphere?
3 Do the employees feel that the people in their management are a nice group of people to be with?
4 Does the organization give credit to people who use their initiative, individuality and imagination?
5 Do people have a feeling of belongingness?
6 To what extent can employees carry through a complete assignment and get the satisfaction that comes from a completed job?
7 Do they have feeling of partnership with the organization?
8 Do they have a feeling that they are being consulted?

8 INTEGRITY

Integrity demands from an employee to be trustworthy and morally sound. Integrity is essential in the librarian as he exercises authority, power and as he cannot be closely supervised. His actions affect his entire staff and users. It goes beyond honesty in money and material matters and in the use of them as these form the foundations of service units like libraries. The superiors should be kept well-informated by the librarian of state of affairs adhering always to the factual and truthful representation reflecting the strength of character in life and act to the tune of ethical standards of our society.

Integrity is a virtue which is difficult to evaluate in library staff and as such requires close supervision as regards their attitude towards use of time, their dealings with coworkers, their dependability in handling assignments, their sincerity etc.

91 JOB ASSIGNMENT

Among different kinds of work in the library, there are types of works requiring only semi-professional and clerical personnel. When working routines are established and understood, members of the clerical staff can assume responsibility for the satisfactory completion of their assignments and should be motivated to work independently. By delegating responsibility in this way and by maintaining open lines of communication, the staff is encouraged to participate in identifying problems and suggesting possible solutions.

Productivity can be increased by correctly assigning work according to capability it requires from its worker. The following norms can be kept as guidelines to assign work, so that work assignment results in optimum utilization of talents at all levels:

1 No work should be done by a more senior or skilled officer than the actual mechanics and value of the work demand except in emergency.

2. No work should be done the value of which cannot be both clearly demonstrated to the persons performing it and also recognized by the users.

3 No work should be done in more detail than its purpose makes necessary nor the same work be done twice for different purposes. For example, by making carbon copies in the first instance itself, it may be possible to avoid duplicating of some kind of work in libraries.

4 All staff members should be encouraged to consider and report on their work in the light of these maxims. This recommendation should result in cutting down all perceived unnecessary processes.

5 Provide assignments that lead, through successful completion, to a feeling of accomplishment and a sense of contributing/ belonging.

6 Ensure that assignment makes effective use of employees' skills and talents while at the same time the staff are afforded an opportunity to develop new skills and growth to adopt new technology.

7 Keep assignments within the scope. Avoid too many simultaneous tasks.

8 Make schedules tight but realistic; permit adequate time to do the job effectively.

9 Provide employees with the necessary resources to do the job effectively.

10 Use the most capable people far the creative jobs, such as documentation services of library.

11 Provide particularly creative people with high job assignments, minimizing boring, repetitive and trivial tasks.

92 MOTIVATION

Productivity is directly related to motivation. Many of the library activities being repetitive, routine work developes in the worker a kind of drudgery, fatigue, distaste, dullness. So, the people working on such kinds of jobs need motivation.

The librarian should endeavour to inspire his staff to bring out their professional competence, by mixing up with them without inhibitions and amply demonstrate to them that he admires contribution of good productive ideas. He should avoid actions which create fear in them and radiate love which may serve as an incentive for a truely dedicated worker. Instead of saying 'I' he should say 'We' and show what is wrong instead of who is wrong and at the same time should show how to do.

To know what motivates people to consistently grow productive in general, and people who work in routine repititive jobs is the more difficult task ? But the supervisor, due to his experience of working with his people for a long time by observing and analysing their psychological nature, behaviour, mental growth in looking at things in broader perseptive, approach to work, interests and disinterests, likes and dislikes, should be able to judge as to what a particular person values more and what motivates him to become more productive. To enhance productivity, the librarian must approach each staff member as an individual who will respond to different incentives. This means the manager must take into consideration many separate qualities and attributes of the individual staff members' background, education, sense of values and beliefs, and then determine what type of incentive will stimulate that individual in positive way. Some of the motivating schemes are: 1, Principle of praise; 2, Principle of participation; 3, Incentives; 4, Privileges; 5, Pride; 6, Independence; 7, Awards and rewards; 8, Deputation; 9, Promotions (conditional); 10, Foreign travel opportunities and higher education facilities; 11, Appreciation; 12, Principle of fairness; 13, Principle of initiative; 14, Principle of consideration; and 15, Principle of security.

On assuring the personal nature and approach of the library staff to work some of the above principles can be applied to motivate people specially those engaged is routine and repititive jobs.

The principle of praise. Give credit for what people perform and a sincere praise miraculously releases energy. So management has to use praise as a tool of motivation to increase the productivity. The praise should be judiciously used for it is impossible to praise every one for

everything constantly. Praise should not be done for personal benefits and should not be by way of flattery.

Principle of participation. "In all kinds of libraries there is a growing pressure from staff for participation in policy decisions as well as other management affairs which particularly affect them." Participation can be considered as a strong tool of motivation for it leads to create better relationship with and among employees. Various committees, societies, clubs concerned with the day-to-day library activities and social and cultural affairs of the employees can be created for which the office bearers or members can be elected or nominated from the staff.

Incentives. In the whole cross-section of library staff, there will be some members who get motivated by incentives in cash, kind, security or steadiness of employment etc.

Privileges. A hard and disciplined worker can be motivated to do his best by considering him for extra privileges (judiciously weighed) without hurting his coworkers' feelings. For example, permission to leave office early or allow him to come late to office. This kind of privileges should be denied to the so-called bad worker and should be made to understand that he does not deserve it because of his/her attitude to his/her work.

Principle of pride. Most people continue to have a desire to enjoy a sense of pride in their work, and the job they do can provide this worthwhile feeling. It can be utilized very effectively as a motivating technique.

Independence. Some people love independence in their work environment. They can contribute more when close supervision is not done than under close supervision. Such people should be assigned with the work, the nature of which does not require close supervision, for example giving reminders to non-receipt of periodicals, filing catalogue cards in catalogue cabinet etc.

Awards and Rewards. Constant encouragement and pat on the back publicly recognized by awarding a staff member for his best piece of work, has no parallel in productivity improving methods.

Deputations. Some staff members get motivated by getting deputed to participate in seminars, conferences, workshop in the field of their interest which enables them to share the latest professional activities.

Promotion (conditional). While adopting time scale promotion policy, the staff should become eligible by painstaking contribution for the development of library and library services. They should not take promotion as granted for them whether they work hard or not.

Foreign travel opportunity and higher education. Some of the staff members get so crazy for going abroad for higher studies or just for sight seeing that they become prepared to do work to any extent by which they get their wish fulfilled. Such staff members should be identified to get the objectives of the library fulfilled by deputing them to go abroad on condition to return and upgrade the library activities.

Appreciation. Man by nature expects appreciation for a job well done. Every one likes to feel important and the feeling is a significant aspect of motivation how a person feels about an accomplishment. It has a great deal to do with efficiency in productivity. So the librarian should emphasize those factors in work which provide the staff to taste recognition for work, attitude and dedication. Thus an employee can be inspired to improve the overall productivity.

93 PERFORMANCE STANDARDS

For each and every library and information service activity, performance standards can be established per day, per week and per year. The standard can be constructed to apply to many crucial factors such as quantity, time, cost and quality. In technical services, for example, standard of performance can relate to quantity of materials to be catalogued or processed, in circulation to the number of items circulated; in reference, the number of questions answered per day, per hour. In case of clerical and other supporting staff the standards of performance can be typing speed, or specification regarding quality and quantity of production to be delivered by equipment—for example photocopying and microfilming.

Once the work is measured in a given unit and a specific span of time, the supervisor can tell what his real staffing requirements are. An outstanding worker can be identified as well as the worker whose output is below an acceptable standard can be singled out.

Measurement is particularly helpful in judging a new employee who should, after given enough time, 'comes upto the level.' By discovering the output during the probationary period, the below par operator should be given chance to improve his standard.

Measurements provide an acceptable standard. Information relating to the output of at least five or six people who are considered acceptable workers can give the supervisor some idea of what the standards for work output should be.

The standard must be acceptable to management and readily attainable by the average employee on the job. With this information a supervisor can plan the work. He can know how many people with what specific skills he needs at any given time. Table 1 gives an example of laying standards for work performance.

Table 1 The Performance Standard

Activity	*Per year*	*Per week*	*Per day*	*Per hour*	*Per item* (min.)
		Books			
Selected and ordered	4,061	90	18	3.5	16.6
Catalogued and classified	2,736	61	12	2.4	27.7
Completely processed (excluding selection)—					
Ordering only	1,631	36	7.25	1.5	47.9
Issued to members	1,484	330	66	13.0	4.55
Obtained on inter-library loan	3,026	67	13.5	2.7	22.3
		Cards			
Typed	42,761	953	190.5	38	1.67
Sorted and filed	96,874	2.53	430.5	86	0.6
		Journals			
Scanned for items of interest	6,131	136	27	5.5	11
Circulated, un-controlled systems	79,875	1,775	355	71	0.85
Circulated, controlled systems	54,562	1,213	242.5	48.3	1.24
		Articles			
Abstracted	3,487	77	15.5	3	18.85
Selection of typing time	2,261	50	10	2	29.9
		Reference Service			
Questions (answered)					
Minor	5,519	129	25	5	12.15
Major	184	4	0.8	0.16	.88 (hours)

From the performance standards the accountability of the staff can be made clear to them and they should be asked to improve their performance.

94 POLICY—MAKING

Policies are most useful in decision making. Once a policy or guideline on various matters is laid down, decision-making on frequently occurring problems becomes quite easy[2]. Possibility of delegating power to lower levels for decision making can be examined. "A procedure is quite different from a policy in that it documents the best way to execute a specific activity or duty. Policies are guides whereas procedures are step-by-step details of execution. Procedures tell how best to do a certain task, they leave little room for individual judgement."

Overall policy statements provide the basis for orderly thoughtful change. Once stated, they further assist and enable long-range management planning. They award crisis management which responds to problems only as they occur. They help in productively operating the library within one framework and direct towards achievement of a set of objectives.

Policy statements assist in establishment of performance goals and in priorities determination.

Consistency and efficiency of operations depends on existence of a sound body of policies.

The policy body protects the information service in matters where its position is questioned.

95 SUPERVISORS AND SUPERVISION

A supervisor by definition is a preson with vision, functional expertise with well-marked ability to motivate assistants to convert the resources entrusted to him into the best possible results and the ability to get the things done through the exercise of supervisory skills.

Three basic supports for promoting the supervisory skill are: (i) communication, (ii) learning, and (iii) listening. Management needs to be strengthened by : (a) self-efforts, and (b) attention from the boss; where any of these elements are lacking supervision can not be effective. Consequently, morale, motivation and productivity will suffer. There is little use in deploring the attitude of the staff.

Supervisory staff should keep moving around the staff working area, specially book-stacks, periodical management section to check that time is not wasted by library staff in gossipping by gathering together. The duties of supervisor in regard to his responsibilities to higher management and downward responsibilities to subordinates and in relation to office work (administrative) can be objectively defined and kept-up. The

supervisors can set an example to their juniors in maintaining punctuality and discipline in work which is the best means to productivity in work. The effective supervisory techniques most likely to lead to high productivity in libraries are:[4]

1 Make a genuine effort to understand subordinates: know their strengths and weaknesses, their primary sources of motivation and their career goals.

2 Effectively integrate the abilities of all individuals within the library.

3 Match individuals to the jobs for which they are best suited.

4 Let the staff demonstrate their capabilities and grow professionally; help subordinates prepare themselves for jobs to which they aspire.

5 Manage by expectation; set high standards and high expectations and encourage subordinates to achieve them.

6 Keep subordinates occupied with work but avoide excessively loading with work.

7 Be available to subordinates through an open door policy.

8 Provide feedback on performance; recognize and regard achievement; cite mistakes fairly and tactfully.

9 Make a special effort to help subordinates who are indifferent in certain aspects of their jobs.

10 Represent equitably all subordinates and their work to higher management—whenever possible, have the person who originated a unique idea or did an outstanding job be the one to brief management.

11 Be sensitive to factors that cause employees dissatisfaction and frustration; get to the root of such factors and resolve conflicts in a timely manner.

12 Maintain an effective flow of 2-way communication.

96 TEAM WORK

Organising into efficient groups to work as team with mutual cooperation and support among themselves is a must for improving productivity in libraries. Attempts from one and all in the team to avoid confrontation and eagerness to settle matters amiably and peacefully among themselves should be encouraged. Besides, it is necessary to ensure coordination among the various operating units of the library as much as within each unit itself.

The principle of team work contributes to increased productivity by providing a framework in management philosophy and conduct from which to develop a sense of sincerity of purpose through coopration and common cause and basis for a continuity of efforts towards fulfilment of objectives. Noble sentiments like loyalty, sincerity, self-discipline,

sacrifice, dedication, involvement, perseverance should be developed and fostered for each individual for the sake of entire group.

The Japanese model of team work can be emulated. An individual in Japan identifies himself completely with the group. He takes pride in working for the group. He is well aware that he is a member of a team. He is not so much concerned with credit for himself personally as with the success of the team as a whole. All this would contribute to enforce coordination in the library and to reduce friction between units to the minimum and thus result in higher productivity.

97 TRAINING

Professional knowledge acquired through academic qualification gets outdated and outmoded due to continuous development through improving techniques to suit the contemporary world. So to keep oneself up-to-date and to stay abreast with latest developments, for certain qualified people a continuous education is necessary. This can be achieved by holding training for persons periodically. The purpose of training is continuous improvement in the performance of whatever one does.

The functions and activities of library are growing and diversifying as fast as other disciplines. By meeting this growing demand and significant developments, the library attains productivity. To keep up productivity continuous training is a must.

98 A PERSONNEL MANAGEMENT PLAN

The librarian can develop a scheme of orientation procedure and later in-service training for all new employees in library as is done with all professional courses like medicine, law, engineering etc. In developing such internship training specific goals, aims and objectives to attain should be delineated and specific means to attain them from personal point should be created.

981 Designing the Personnel Menagement Structure

A personnel management plan can be divided into two-fold activities. The first activity is personnel management process under which comes the execution of the functions of recruitment of personnel, enriching their professional competence and their management. The second activity is the management responsibility to those activities that are involved in supervising and directing the total operation. Management has the basic responsibility for preparing the plan, designing system to carry it out, and then supervising and controlling the system.

Hicks and Tillin[1] have represented in a flow chart the entire planning procedure for a personnel management plan (Fig. 1).

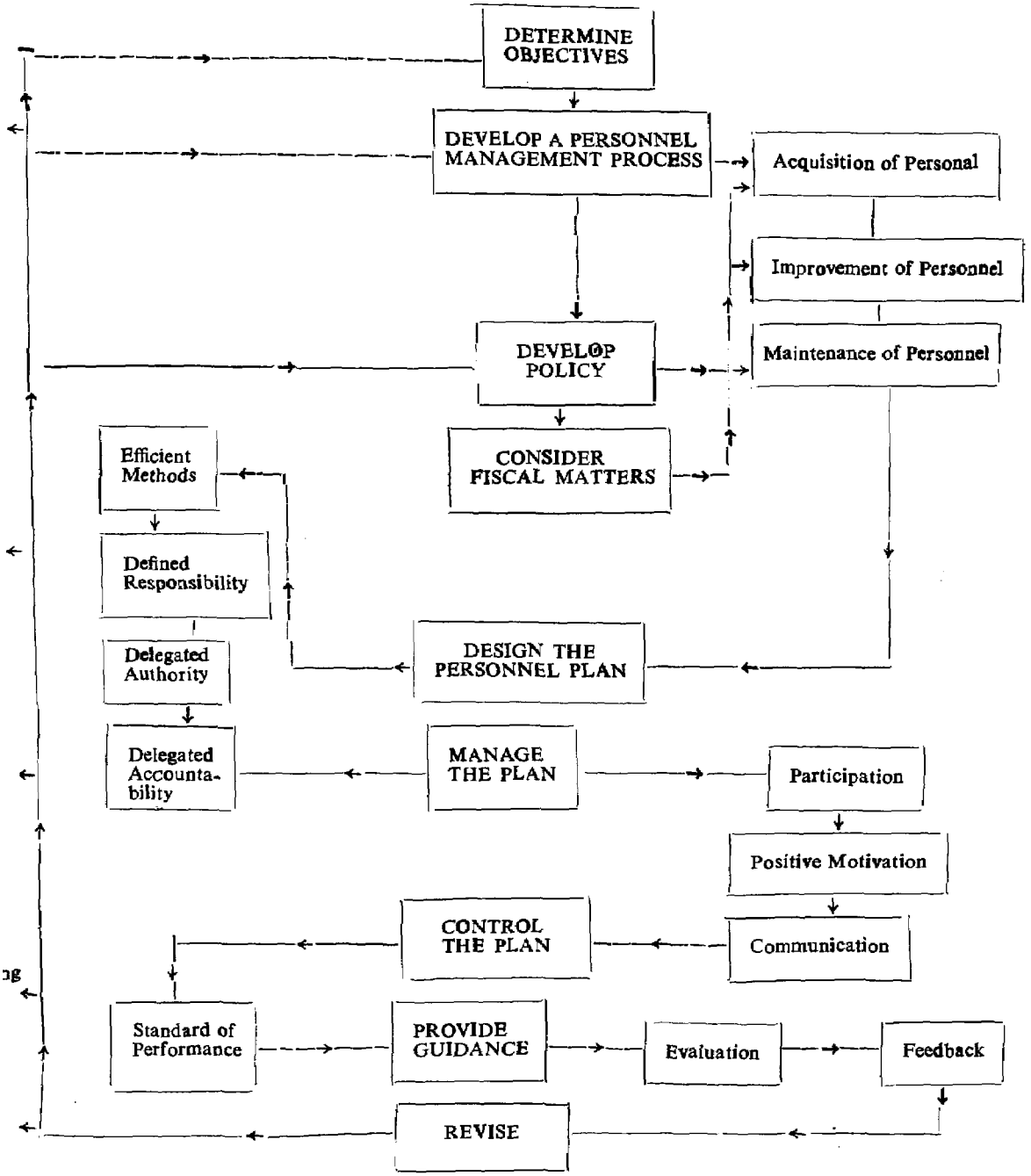


Fig. 1. Flowchart of the planning procedure for a personnel management plan.

Having developed a working structure to carry out the plan the librarian should attempt to organize the assignment of duties to each member of the staff having personnel management responsibilities in two stages so that working efficiency of the total staff is optimized: (i) overall working function of personnel management; and (ii) the delegation of responsibility, authority and accountability for fulfilment of these functions.

The basic principle of 'span of control' plays a significant role in delegating the power and authority alongwith responsibility to perform duties effectively, which in turn depends on the size of the library and the extent of personnel management function assigned.

The personnel management plan should structure the organization, so that each staff member reports to one superior only and is accountable soley to that person for the job performed. The librarian should be responsible and accountable for the performance of all personnel within the library and to attain the objectives of the library.

99 PARTICIPATORY MANAGEMENT

The pressure from library staff appears to be growing in demanding their participation in planning and policy decision aspects of management. Such a management style will certainly improve morale among staff members generally and encourage their dedication to involve them for excellence in overall management. "Participatory management is based upon the belief that staff members will more readily exercise self-direction and self-control in the service of an action plan containing objectives to which they are personally committed. And where there is a personal commitment to objectives as a result of participation in their development, there will also be a higher degree of motivation towards their achievement."

By employing this principle the relationship among the staff will improve and an easier acceptance of policies and supervision will result as the staff themselves have participated in their formulation. Cooperation and enthusiasm are encouraged and a feeling of security and imporatance developed, which leads to a greater feeling of responsibility, involvement and motivation.

991 PERFORMANCE EVALUATION CRITERION OF LIBRARY STAFF

Checking the rating level:

A = Outstanding,
B = Good,
C = Normal,
D = Below-normal, requires training.

Factors

1 Accuracy of work,
2 Throughness in handling details,
3 Quantity of work,
4 Output under stress,
5 Time spent productively,
6 Knowledge of job,
7 Knowledge of departmental goals and policies,
8 Courtesy and helpfulness with patrons,
9 Relations with fellow workers,
10 House-keeping work area etc,
11 Self-improvement (eagerness to advance within department),
12 Appearance,
13 Vitality, energy,
14 Learning ability,
15 Adaptability (ability to accept new ideas),
16 Attitude towards criticism,
17 Decision making,
18 Resourcefulness (ingenuity),
19 Regularity in attendance,
20 Punctuality (on duty, promptly keeps appointments),
21 Poise and self-control,
22 Disposition (temperament),
23 Leadership,
24 Organization of work,
25 Skill in training,
26 Evaluating personnel,
27 Professional interest and activities,
28 Application of professional knowledge, and
29 Awareness of community.

992 Summary of Performance Evaluation

Supervisors are to list in the form given below the factors which are rated 'C' or 'D' or which need improvement. Indicate action being undertaken by supervisor and staff member to improve the factor concerned and when that action is to be completed.

Factor (*Name*	*Rating*	*Action agreed upon*	*Date to be completed*

1 What areas of the job assignment and in what traits does this staff member excel?

2 Has this staff member any special abilities or skills not being used on present job?

3 Do you have any definite recommendations, such as placing or taking off probation; transfer; termination; merit increase; evaluation of the job itself; etc.

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QUALITIES AND SKILLS OF LIBRARY PERSONNEL IN INFORMATION SERVICE

P K PATIL*
C P RAMASESH**

The growth of information service in libraries in all its manifestations has completely transformed the role of library personnel in society. No longer the library personnel are merely concerned with time-honoured crafts, such as acquiring documents, processing them by classification and cataloguing, and making appropriate arrangements to deliver documents when required. The library personnel are required to undertake more positive activity of dissemination of knowledge and information. The effectiveness of the information service is largely dependent upon trained and efficient library staff who are engaged in various activities of the library. Thus, the library personnel require the most thorough acquaintance with the learning process in the individual as well as social process of communication.

In any scheme of development, the first and the foremost factor to be considered is the acquaintance with the contemporary issues connected with the field of information and document delivery system. It is evident that a large number of people in all walks of life are in need of more timely and assured access to information. In order to meet the demands, a variety of technologies and other equally important measures are employed so that quality, user convenience, speed and currency are maintained to improve the quality of library and information service.

Without going into details, generally speaking, in a large number of libraries and information centres, the following categories of library personnel are required:

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(a) Professionals,
(b) Specialists,
(c) Managerial, and
(d) Non-professionals.

Especially among the specialists, we need technical and computer staff who can handle computerised information processing and retrieval which has assumed importance in the present day handling of information and information technology.

Although hardware and software are prerequisite for the conducive working of the computerised information retrieval, one important cause for its failure in practice is neglect of humanware. The distinction between the engineering design of operational and information systems is derived from the complexity of human organisations. Machines perform in fairly predictable ways and the relationship among the components in the engineered system is of less complex nature. Communication networks in human organisations involve all manners of behavioural characteristics of people and an infinite variety of constantly changing relationships. The information system designer must be aware of the underlying principles of organisational behaviour and communications. Human aspects are all pervasive and play a vital role at all stages of system development and operation. The major issues involved are described below.

The involvement of the user is a critical human factor in order to overcome psychological barriers. If the users are involved to a great extent they begin to feel as if it is their own system, acceptance is faster and deeper. The psychological consideration 'noise' can also be reduced to some extent both at the source and sink of the information communication. To establish a good rapport, it is necessary that the attitudes of users are also understood and adjusted. The adjustment to their attitudes helps in effective exploitation of library personnel. In brief the attitudes are:

—maintaining secrecy of the individual user;
—allowing the user to retain his privacy in library:
—providing adequate comfort;
—creating freedom of atmosphere while using books, furniture and equipment; and
—developing friendliness for fruitful discussions.

Professional education plays a vital role. Added to this continuing education while working is a prerequisite condition. Profession requires specialized knowledge and often long and intensive preparation including learning of skills and methods as well as understanding of the scientific,

historical and scholarly principles underlying such skills and methods.

The librarians or information communicators must have a clear conception of the system of his concern, adequate knowledge of the appropriate modes of thinking about the concerned system, and adequate knowledge of the techniques of computer retrieval to realise the goals of information centres, and the necessary skills to apply that knowledge.

From the point of quality of the personnel in order to cope up with the changing needs of the information seeking community, the following are the essential ingredients:

(i) a thorough knowledge of the information sources,—both printed and institutional sources;
(ii) effective and swifter communication techniques by the use of suitable medias; and
(iii) the ability which is innate and cultivated to develop personal relationships.

To be precise, professional ethics and professional knowledge are the fulcrum of the library personnel activities. Effective welcoming is an art and individualistic. What is needed is a close psychological approach which depicts by appearance a sense of friendliness and affection. This approach is associated with a 'smile'. Mere personal beauty and fashionable clothes do not have much to do with one's human relation. It is not tricks, it is just honest creation of human atmosphere so that people feel friendly.

The attitudes of library personnel are equally important as those of the library users. They have a direct role to play in escalating the quality of information service. The prominent attitudes that are most needed are: the contentment, confidence, punctuality, resistability and non-mobility.

Imparting information and knowledge stands on the ability of the personnel to make the user understand the perspective. By knowing what the user has understood and what he does, the professionals must suggest alternatives in simplified and most appealing manner. While suggesting, friendliness is more desirable than meekness.

Good behaviour and knowledge in the opinion of the public afford the professionals a good number of opportunities to exhibit their abilities and thereby gain satisfaction. Ability to get along with people, pleasing them and techniques of tracking information are the sources of reputation. Penny Cowell quotes the words of Melvil Dewey:

"A great librarian must have a clear head, a strong hand, and above all, a great heart"

Effective personnel administration and management is the result of

cooperation and attention. According to Laird, friendly manner gets attention and cooperation that are beyond purchase. The work must be got done by encouragement and honest appreciation.

Competence and its achievement refers to the limits of the subject field. No one can master all the subject areas. This holds good for the types of services and types of information systems, too. Knowledge is ever-expanding and ungraspable. Ungraspable in the sense that all that is of a subject field cannot be known or remembered. Up-to-dateness is important. Up-to-dateness in a specific field of subject and methods of information handling is the desired phenomenon.

Taking the responsibility of getting the work done in the most efficient and effective way should be the attitude of librarians concerned with modern management technique. Responsibility goads the administrator or the personnel who are empowered to administer at sub-system level to involve in the work situation both physically and intellectually. Decision and action taken must be seen, heard and reflected upon to have a clear picture of the effectiveness and demerits. Conformity with regard to the task achieved is as important as the planning of the task and resource allocation. For conformity in library work situation, one has to depend on two things: the expression of satisfaction of the users and the employees. There should be clear feed-back of information from both the sides. In fact, it is reciprocal and mutually dependent.

Out of the three library components, information, personnel and information users, it is the personnel aspect that effectively bridges the gulf between the other two components resulting in quick and pertinent information dissemination. What is most appreciated is the plasant human contact which is more than information need in many cases. Today, all in all, human relation is the most important and core science in the broad curriculum of information service.

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QUALITY IMPROVEMENT IN LIBRARY STAFF

R S SAXENA

1 INTRODUCTION

Among the three constituents of a library namely, books, readers and staff, it is the staff that occupies the position of the base upon which the structure of the library stands and which plays a pivotal role in the smooth running of a library. The quality and performance of library staff can thus make or mar the reputation of a library. This is all the more true in the present day libraries, where more and more emphasis is given on getting the library material put to maximum active use soon after its acquisition prior to its getting stale or outdated as well as upon the conservation of energy and research potential of the library users in fruitless material search among the vast collections of the libraries.

2 COMPETENCE AND SPECIALISATION

For doing full justice to their jobs the library personnel particularly the librarians and assistant librarians must be academically and professionally well qualified and their professional qualifications should be adequate enough so as to make them capable of discharging their professional duties, such as Book Selection, Reference Service, Current Awareness Service, Selective Dissemination of Information Service and Documentation and Bibliographical Services, properly and efficiently. No doubt academic qualification is desirable but professional knowledge and competence is essential for the library personnel. The professional knowledge and competence can only be achieved by the theoretical knowledge backed with practical experience. No librarian of a university or research organisation should be recruited without adequate practical knowledge and experience of atleast 3 to 5 years of standard libraries of similar nature

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and as far as possible a good background of the subject specialization should be preferred for recruitments in speciased libraries. Thus the librarian should be jack of all trades but master of one i e of his professional subject.

21 Maintenance of Proper Standards of Teaching

In order to equip the library personnel with sound professional knowledge coupled with good practical background all library and information science schools must maintain proper standards of teaching and keepo n revising their syllabi after every three to five years so as to incorporate in their syllabi the modern developments in the field of library and information science. An accrediting agency on the pattern of USA and UK should be set up in the country for evaluating and screening the teaching programmes of all library science schools of the country and pressurise the library science schools for maintenance of proper standards of teaching as recommended by the accrediting agency. Such institutions who do not conform to proper teaching standards should not be allowed to run library science courses and produce in bulk halfbaked librarians who eventually by their poor performance bring disgrace to the profession and lower down its prestige in the eyes of the community and academic circle. The ILA in collaboration with the UGC must set up such accrediting agency without further delay. A code of conduct and professional ethics as in the case of medical profession should be drafted by the Indian Library Association and each member of the profession be asked to adhere to this code of conduct and the erring professionals should be reprehended and blacklisted as well as debarred from the membership of the Library Association. For tonining up the morale of library personnel such a professional code of ethics is most desirable. Besides this, lectures on moral and spirtitual teaching should also be arranged from time to time in library science schools during the training period of library personnel.

3 GENTLEMANLY QUALITIES

A librarian should act as a guide, friend and philosopher for the library visitors. This is possible only when he is endowed, besides academic and professional qualifications, with the qualities of a gentleman which require a mentally and physically sound person to be most polite and courteous in his dealings with all persons coming in his contact irrespective of their social status or mental attainments. Courtesy and politeness costs nothing but wins the hearts of others. The library personnel should therefore never lose temper with the clientele and develop the habit of being soft spoken to everyone coming in their contact, They should try to be always in a cheerful mood and keep others who meet them in good humour. The

personality and behaviour of the librarians should be such that people should feel delighted in meeting them and talking to them. The behaviour and manner of talking of the library personnel in the words of great Poet Tulsi Das should be:—

"तुलसी मीठे वचन से सुख उपजे चहुं ओर,
वशीकरण यह मंत्र है, तज दे वचन कठोर"

"कागा किसका क्या हर लेता, कोयल किसको क्या दे देती
केवल मीठे बोल सुनाकर, सबके मन को हर लेती ॥

4 HONESTY AND INTEGRITY

Since the duties of the library personnel, specially those of the senior staff, require frequent dealings with financial transactions and the *maya* (money) which has got the maximum corrupting influence upon a person, the library staff must be very careful and alert in handling and dealing with money matters and always keep their records straight and uptodate. For this the library personnel must be very honest and straightforward in their dealings with others. A high degree of integrity in matters such as book ordering, acquisition of library books, equipment, furniture and fittings and binding of books and journals is essential on the part of library personnel. Besides this, the staff should perform their duty of taking good care of the book stock and their preservation, with utmost vigilance and integrity and should show no laxity in this regard. The library staff should also remember that they must be honest to themselves and honest to God and they should not be merely honest but also appear to be honest in the eyes of others. For this, besides their personal honesty which is a must, they should also keep their records clean and uptodate. There should be a proper system of checking and rechecking of library records and account books, and no purchases should be made in contravention to the institution's existing rules and regulations and purchase procedures. Sample checking of all records including stock taking of books should be done by the top personnel individually at frequent intervals. The library staff must be truthful and its integrity should not be of a doubtful nature.

5 MOTIVATION

The library staff should be enthusiastic and bubling with new ideas, zeal and urge for forward march. The spirit of complacent attitude and inertia on the part of library personnel is suicidal both for the rise of individuals as well as the betterment of the institution served by them.

The library staff should develop an inquisitive mind and be always in search of new ideas, new techniques, new technology which may improve the efficiency of the library and provide better service to clientele. It is the spirit of inertia in the library profession particularly in India and its not gladly and willingly accepting new ideas and innovations in libraries that affects the image of library among the public and the due recognition which the profession expects and deserves in the public eye is not coming forth. A progressive outlook with keen desire for adopting new techniques, new tools and recent devices should be developed among the librarians for meeting the changing social and economic needs of the society. The old, outdated and outmoded ideas and conception about libraries should be modified, changed and recast from time to time according to the changing needs of the society like the saying of the poet Tennyson :

> "The old order changeth yielding place to new. And God fulfils himself in many ways. Lest one good custom should corrupt the world."

Library profession should also believe in decency and novelty in the library organistion and administration.

6 SPIRIT OF SERVICE

Library is basically a service oriented institution in which the urge for mental food of one and all is satisfied by providing the right book at the right time in the right manner, through the zealous efforts of the library staff and who also acts as a promoter in the use of books. In order to do full justice to this arduous job a spirit of social service and complete dedication to the job is essential. Unless the librarian puts his heart and soul in the job and serves the library clientele with missionary zeal, sacrificing his individual interests and rising above petty personal matters, he can not render public service and earn the good-will of the public. Like a good social worker the library personnel should not fall victim to the smaller ego and jealousy as well as the habit of leg pulling of his colleagues. The qualities of a good social worker as given by the poet Tulsi Das must be imbibed by the library profession:

> "राग रोष, ममता, मद मानू, जन सपने इनके बस होयो"
>
> "प्रिय भाषी, शीतल हृदय, संयम सरल उदार
> जो जन इस जगत में, तो से सबकर प्यार"
>
> "सबके प्रिय, सबके हितकारी, दुख सुख सरिसा प्रशंसा गारी,
> कहें सत्य, प्रिय बचन विचारी, जागत सोवत सरन तुम्हारी ॥"

7 CONCLUSION

In order to raise the image of the library profession among the public eye and save it from devaluation as done recently by the Pay Commissions of the various states, the library personnel should awake, rise and gear up the system both at learning and at personal conduct level. An accrediting agency for evaluating the teacling programmes of various library science schools should be created and all institutions should be asked to adhere to the teaching standards laid by such agency. The profession should start doing real public service by putting their heart and soul in their jobs and avoid wasting their time in idle gossips and quarrelling among themselves on account of personal jealousies and rivalries created due to smaller ego. Necessary integrity of character and the capacity to rise above petty personal matters should be developed among the members of the profession. A professional code of ethics like the medical profession should be drafted by the ILA and all professionals must act accordingly The erring professionals should be reprehended and blacklisted by the parent professional body i e ILA. The library personnel should work with missionary spirit, zeal and enthusiasm and inculcate the habit of adopting new techniques and policies forging new tools for meeting the changing social needs of the society.

ROLE OF THE STAFF OF THE PERIODICALS SECTION OF A LIBRARY IN PROMOTING THE USE OF PERIODICALS

ALEXANDER ABRAHAM*

1 IMPORTANCE OF PERIODICALS

Periodicals are the vehicles of the current output of knowledge in the various subject fields. Despite the advent of several other media like reports, conference proceedings, standards, patents and so on, periodicals still have a prominent position as the most important medium for the communication of current knowledge. They are, therefore, important to keep researchers and others informed of the current developments in their respective areas of specialisation. Their importance in university and research libraries and also in college libraries where post-graduate courses and research programmes are offered cannot be overemphasised. Public libraries also are increasingly assuming academic and research functions in the modern context and periodicals tend to constitute an important section of their collections too.

Unfortunately full use of the periodical literature is not being made by the clientele of our libraries. Obviously, the availability of periodicals in a library is an essential condition for their use by its clientele. It is not possible for many libraries to satisfy this condition in full measure due to the ever increasing prices of periodicals and the budget not being able to keep pace with this increase. It is estimated that the rate of increase in the subscription rate of periodicals ranges from 15 to 20 percent annually. Unless the budget is also correspondingly enhanced, the inevitable consequence would be a cut in the number of periodicals. When this happens from year to year, the confidence of the clientele in the library making available the essential materials required by them is adversely

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affected and this in turn leads to an apathy on their part for the library and their reduced use of it. The librarian and his staff, particularly the staff of the periodicals section, have a responsibility to take all necessary steps for ensuring that the policy making authorities of the library adopt a generous and realistic policy regarding financial support to the library so that such a situation does not arise. Special efforts on their part in this direction are likely to yield encouraging results.

Another reason for the under-utilisation of periodicals is that our teaching methods do not lay emphasis on library use. They are in fact a deterrent to the use of literature other than a few prescribed textbooks by students. While the library staff can perhaps do little to change the teaching methods, they can certainly do much to educate the clientele regarding the importance of periodicals and other holdings of the library and to provide encouragement and incentives for using them.

The non-use of periodicals, whatever the reasons may be, deprives our students and others of the opportunity to be exposed to the current trends and developments in the areas of their specialisation and this is a serious deficiency in their educational equipment. Therefore, it is necessary that serious attention should be paid to the maximum use of periodicals available in each library by its clientele.

2 ROLE OF PERIODICALS SECTION

Even with all the constraints that are there at present, the Head and the staff of the periodicals section of a library can make significant contributions to the better use of periodicals. Some of the steps to be taken towards this end are described below.

21 However much the staff may try, there is bound to be a gap between the needs of a library and the financial resources available. Therefore, the staff should be reconciled to the inevitability of managing with reduced fund. This makes it imperative for them to pay very careful attention to the selection of periodicals. The limited periodicals budget available should be utilised for procuring the most relevant periodicals. This means that the staff of the periodicals section should make themselves conversant with the subject interest and topics of research of the clientele of the library, and the periodicals which are most important from this angle should be selected and ordered.

22 Many libraries are remiss in the matter of ordering periodicals in time. As is well-known, the subscriptions of periodicals have to be paid in advance and, only on receipt of the subscriptions, will the publishers register the order. The staff should be alert about remitting the subscriptions and getting the orders registered in time. Late remittance of subscriptions may often result in the initial number of a periodical not being received at all as generally only a limited number of copies of learned

periodicals are brought out and they go out of print very soon.

The staff should also be constantly vigilant about the prompt receipt in the library of the periodicals ordered. If particular issues of a periodical are not received when they are due, timely reminders should be sent. Whereever possible and if funds permit, procurement of periodicals by air mail is highly desirable. A list of the periodicals that each library user is interested in, should be made available to him so that he may be on the look out for their receipt in the library and make it a point to read them when received. The library clientele should, through the attitude and action of the periodicals staff, develop the confidence that the periodicals that they need would be made available by the library not longer than the minimum time required.

23 The organisation of 'current awareness services' by the periodicals section would be helpful in enhancing the use of periodicals in libraries. The following services of this type can be attempted by a library:

(i) Preparation of a weekly or fortnightly list of various issues of the periodicals received by the library and dirtributing them to the clientele. This will keep them informed of the arrival in the library of different issues of periodicals and encourage them to read.

(ii) Photocopies of the contents pages of periodicals on a subject basis, if prepared and sent to the clientele, will give them an idea of the contents of the periodicals and help them to know the articles of interest to them. This would attract them straight to the articles and enable them to avoid waste of time in searching for the articles of interest to them.

(iii) The library should also make it a point to subscribe for commercial current awareness services like *Current Contents* in various subject areas published by institutions and organisations like the Institute of Scientific Information, Philadelphia.

24 The library should make it a point to subscribe for indexing and abstracting periodicals which cover the periodicals received in the library. By perusing these secondary sources of information, the readers will get information, with considerable saving of time, of the articles of interest to them which they can trace in the original periodicals and read. Some of the articles that they come to know about from the indexing and abstracting journals may be published in journals not received in the library. The periodicals staff should help them to gain access to such articles by helping them to procure the reprints or their xerox or photocopies or by getting down the periodicals themselves on inter-library loan. The availability in the library of union catalogues showing the location of the periodicals containing such articles would facilitate such

services and therefore all available union catalogues should be procured and form part of the collection of the library.

25 The volumes of periodicals of which all issues have been received should be bound and kept in the library without loss of time. The staff of the periodicals section should ensure that before the binding is done, the title page, contents and index are received and bound along with volume. The index to a periodical is of great help to the readers in the precise location of their information in a volume. If periodicals are kept for a long time in loose numbers without being bound, there is the danger of some numbers being lost and the volume remaining incomplete with reduced usefulness.

Some periodicals issue cumulative indices covering several volumes, say 10, 20 or 50 and so on. Such compilations are great time saving devices helping readers to locate articles of interest to them scattered in several volumes, with the utmost expedition. The periodicals staff should be on the look out for such cumulative indices, if published, and procure them. Their availability is a further means of stepping up the use of those volumes which contain articles of interest to readers.

26 Another step that is helpful in enhancing the use of periodicals is the provision of *SDI* service. The staff should prepare what are called readers' profiles indicating their areas of interest. They should compile lists of articles matching the interests of readers and make them available to them. Such lists which would cover current as well as retrospective articles in the area of interest of each reader would form the basis for purposeful reading of the periodicals concerned by the readers.

27 The current issues of periodicals received in the periodicals section should be displayed in a helpful classified order and in as attractive and inviting a manner as possible. The displayed racks for displaying the periodicals should be suitably designed and should be attractive in appearance. There should not be any difficulty for the readers to locate the periodicals of interest to them. The current numbers of a volume should be kept together, pending their binding, to facilitate easy consultation.

28 Periodicals are generally not issued to readers by libraries for fear of their getting lost. However, some libraries practise internal circulation by routing the issues of periodicals to those interested in them. This is particularly for the benefit of busy personnel in an organisation who may not be able to visit the libraries and read the periodicals. Although there are some disadvantages in such circulation, it would help in the periodicals being read by such personnel and therefore, despite the controversy around, it is a step that can be regarded as promoting the use of periodicals.

291 In a research organisation or a university, there will be various departments of research and teaching. The question as to whether there should be centralised library service or decentralised library service with

each department having its own library is a moot issue. From the point of view of better use of periodicals and other literature, a centralised set-up would appear to be more desirable because in this system, the various readers would get exposed to periodicals on related subjects which opportunity they would not have in a decentralised set-up. The wide scattering of information required by a researcher in the modern context of increasing inter-disciplinary study and research and the consequent need for them to consult a wide variety of sources, lends furher strength to the desirability of a centralised set-up.

292 The services of the periodicals section should be backed up by a strong reprographic unit located in close proximity to it. This is necessary to make available copies of articles required by readers of the library and also for making available copies to other libraries which request for them. The reprographic unit should have all modern duplicating equipments and also equipments like microfilm/fiche readers and readers-cum-printers.

293 It would be highly desirable for the staff of the periodicals section to peruse the contents of the periodicals occasionally so that if they come across articles of interest to particular users, their attention can be invited to them. Needless to say that their attitude and demeanour should be such as would provide incentive to the clientele to frequently visit the periodicals section and to use the periodicals.

3 CONCLUSION

The above are some of the steps which would go a long way in ensuring the proper use of periodicals by library clientele. What is most important is that the staff of the periodicals section should be fully involved in their work, both intellectually and emotionally, and function as real agents bringing the readers and the periodicals of interest to them into contact with each other in a most expeditious and precise manner.

THE CHANGING ASPECTS OF PERSONNEL ADMINISTRATION

N GANESAN*

0 INTRODUCTION

We have seen during the last two decades a variety of influences affecting the attitudes of people at work. There have been higher expectations from a more highly educational work force; there have been new management tools like the computer; we can distinguish changes in views about authority, and a shift in the work ethics. Perhaps even more important than the changes themselves have been the rates of change. For management the task must be to create a climate in which change can take place efficiently and effectively. A taxing task it is, for, our libraries reflect the traditional bureaucratic mode: division of labour, specialisation, emphasis on procedures; in short a structure which is organised to maintain a stable and persistent set of relationships among the network of people involved.

Yet, if we consider the last two decades of library activities in the field of personnel management, it does not do to be critical or to philosophise airily. Instead, it is important to be pragmatic. Libraries are developed and maintained by people to serve the needs of other people, so librarians can ill-afford to be dismissive of, or arrogant about the theory and practice of personnel management.

In many libraries the traditional functions of personnel management are carried out partly by library's controlling body and partly by the top levels of library management.

It has not been common to employ an officer solely concerned with personnel matters. More frequently the Chief librarian or his deputy has to deal with the requirements of selection and even training of staff alongwith his other responsibilities.

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The traditional functions of 'personnel' encompass a range of activities from manpower planning through legislation, wages, welfare, and industrial relations to training and education of staff. We must not forget that the librarian's policy in one area will have repercussions in another. Librarians have inherited largely autocratic style of leadership which tends to go hand in hand with fixed function, hierachical systems and library managers' policy, in the field of personnel probably no different from that of managers in other fields. But like other occupations, librarianship and information work has to reconsider what it is that makes people work well and to decide how best to utilise the ideas put forward by the specialists. To keep in touch with current developments in legislature, social thought, the findings of the behavioural sciences, and trade union practice is quite a tall order, but this is what managers will have to do in any work organisation, in the last decades of the 20th century.

What does the enquirer into personnel 'first' find in a library? On the one hand he soon becomes aware of a group of people whose subtle interrelationship rests on social, personal and organisational functions, which he will only slowly uncover. Then, on the other hand he will realise that these relationships are structural by the formal codes of all kinds, which may derive from the law of the land, from the controlling organisation, or from the library itself. And so we have two aspects of people at work which will serve to fashion our account—the 'network of people' and the 'web of rules'.

1 THE NETWORK OF PEOPLE

As soon as one thinks of the network of people that is the library, the crucial issues are plain. Communication, for example the flow of inforation, instruction and ideas within the library system, requires careful management, and undoubtedly people will need training in the essentials of good communication. People management now has very many varied qualities from those of over twenty years ago.

11 Manpower Planning

Manpower planning is the working out of ways to satisfy the short term and long term staffing need of the library, and to ensure that the staff are used effectively. Manpower planning requires that some person or group of persons has a total view of the organisation. Librarians, however, could work towards a practice that obtains in many commercial enterprises namely, a bottom up approach, where departmental managers account for the operations and service of their departments, and its targets. This approach could be expected to influence to some

measure the nature of staff establishment of the library. Perhaps one of the most difficult points for personnel managers is hidden in the last sentence in the words : 'to some measure'. The conflicts that are likely to enlist between the needs of an individual and the needs of the organisation are many and various and merit a more detailed discussion. So the 'bottom up' approach, though attractive, is far more difficult to obtain than it might appear. What is central to manpower planning is of course the nature of the work to be done, the sort of jobs and the type of people needed to do them. The nature of work done in libraries is subject to change. A staff establishment that was appropriate and nicely balanced to maintain the service in the 1960s will have to be reviewed when new technologies or new procedures are introduced. For the individual library manager to ensure that the right number of people with the right number of skills are available at the right time, is a problem difficult enough. Each library has its own special problems.

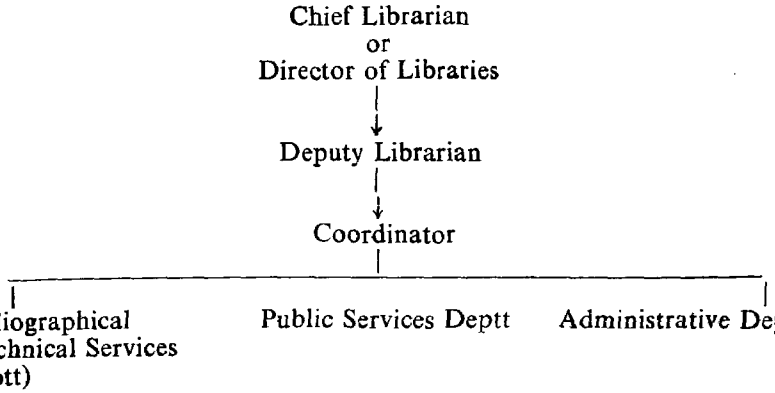
2 THE FOUR COMPONENTS OF AN ORGANISATION

One thing which has been repeatedly revealed from studies on organisations and how they work is the fact that change in any one part of the organisation will have a significant effect on the other parts. Leavitt has developed this idea and has conceived the organisation as consisting of four parts or components:

—*the structure*, that is to say, the authority system, the communication process, and so on;
—*the task*, in other words, the purpose, the product or the service characteristic of the organisation;
—*the technology*, including not only the equipment used, but also the processes;
—*the people* part.

The interaction between these four components can be illustrated as follows. There have been a number of changes in the technology of libraries in the last 20 years. Using 'technology' in Leavitt's sense we can see that this can include cataloguing and classification systems or order procedures. As soon as a change in any of these procedures is planned, there should follow some consideration of the effects of these changes on the people part as well. It is important to recognise that a library system is only likely to thrive if the four components, as identified by Leavitt are recognised as wholly interdependent. So the network of people and the web of rules must be seen in relationship to not only to each other but also in relation to the library's structure, to its task and to its technology.

The major change during the last twenty years has been from the high pyramid style to what may be termed the plateau style. The first can be illustrated like this:



In the plateau of management structure, authority and responsibility are pushed further inside.

Accompanying this change is the assumption that professionals can and will contribute to the management and development of library service. However, this raises questions about one of the major concerns of personnel management—education and training.

3 TRAINING STAFF AND DEVELOPING THEIR POTENTIALITIES

Each library has to consider the various levels of training that are necessary to ensure that the services offered are the best possible. There is a long tradition of in-service training in libraries, which has been mainly concerned with developing basic skills such as enquiry desk techniques. The idea of induction of training for new recruits has been around for a long time too, but it needs to go beyond the sole method of a new qualified assistant sitting down with the staff manual for two hours.

There are many large library systems in universities, polytechnics and local authorities which now allocate several days to intensive orientation of new professional staff, while other libraries spread the content of such training among several half day sessions extending over several weeks.

31 Development Training

We can conveniently group various levels of training together as 'development,' We speak of 'professional development', 'staff development', 'management development' and 'organisation development'.

Professional Development is a familiar tpye of training. In the past it was limited to release from work to attend to conference and to the circulation of professional journals to junior staff. It is now common to find qualified staff attending seminar, workshops, and courses outside libraries. They may also take part in the training of other staff in their own department. Professional development is now seen to include making contributions to the professional literature. It is indeed very important that practising librarians recount their ideas and their methods in print so as to inform their colleagues.

Staff Development overlaps with professional development, but is always organisation-centered. Frequently it involves such matters as day release from work, in order to do some formal studying, or for some a longer period of sabbatical leave for the same purpose. Sabbatical leave may also be given in order that a librarian may pursue some project demand appropriate to increasing the knowledge and skill of the staff, towards raising the general standard of competence within the organisation.

Management Development tries to ensure that effective managers will be available to cope with the present and future needs of the library. One example of management development is the training of senior staff to develop skills in the design and application programmes for computers. In general, the management development is concerned with improving the abilities of the existing managers and with ensuring that the management succession within the service is provided for. It is often criticised for its tendency to instill certain approaches as the 'approved' mode of behaviour, rather than really offering opportunities for self-development.

Organisation Development. Its main drive is educational and to create a situation in the organisation, whereby its structure, procedures and techniques may 'unfreeze' and then to consider what changes may be desirable and possible. It focusses mainly on the 'people part' of the organisation, for only if the staff change, can the organisation hope to develop.

Librarians themselves, however, have been slow to recognise the essential nature of skills in the management of libraries. Part of the training responsibility of any library is to provide a library for the staff. Twenty yeras ago, such staff libraries would have contained a fair number of copies of basic texts on librarianship, for many staff members would still have been studying part-time in order to get professional qualification. Since then changes in education and training of libraries would have affected this essential training resource. Perhaps it is true if some one analysed the contents of staff libraries in order to identify just what are

the current concerns of practising libraries.

One undoubted concern among libraries is the problem of maintaining standards in a period of economic recession. This in itself makes considerable demands upon the 'people part' of the library, for if morale is low due to external causes, something will have to be done internally to ensure that the service does not suffer any more than is absolutely necessary.

4 THE WEB OF RULES

The web of rules stretches inside any library which make the way along various threads that lead from the centre of the web outwards to the point of attachment. One such thread can be said to be attached to a support labelled 'Parliament' and the thread is called legislation. A group of threads which we can call 'industrial relations' lead in various directions to support such elements as the 'trade union movement' or the organisation of which the library is a part. Other threads which are labelled 'conditions of service' may also be attached to the controlling organisation, while yet others may stop short at the office of the Director of the Library.

Legislation. Legislation which regulates employment will affect all aspects of management, and certainly shape such personnel responsibilities as conditions of service, salaries and industrial relations.

Industrial Relations. Industrial relations include wages and salaries, the maintenance of salary structures, efficiency, agreements, merit ratings, incentive schemes, even if librarians do not always use these terms to describe them. Many of the organisations which control libraries define such matters in great detail, while libraries find that this then does not accord well with the objective and operations of the library service.

Some of the methods used in industrial disputes have served to sound some librarians in their dealing with unions, for there was no tradition of unionism in libraries, and libraries have become cautious in their approach to grievances, disputes and redundancies. Many more librarians nowadays are committed to the idea that joint consultation, participation, and good communication are part of the package of good management and they expect to develop reasonable ways of dealing with workers' satisfaction and grievances. One thing is clear at least: managers urgently need training to develop their experience and practice of negotiation techniques. The success of industrial relations depends on informed people working together to protect the whole range of interests.

Condition of Service. The various strands that comprise the conditions of work in any organisation can be woven together to create a satisfied

work force. Expectations have changed considerably in the last twenty years. Good conditions of service are not the same as they were 20 years ago. Together with various amenities the conditions of service attached to any job are what the employer offers to the employees in order to make the work attractive, or at least palatable. Rules relating to such matters as annual leave, compassionate leave, hours of work, sick pay and so on are invariably set out in a detailed published document, which is often the result of lengthy discussion and negotiation between trade unions and the employing body. In British public libraries, for example, there is a Local Government Conditions of Service Advisory Board. It issues a handbook on employee relations which extends the advice available from documents produced by the National Joint Council.

5 CONCLUSION

Ours is an occupation permeated by rules, cataloguing rules, filing rules, procedure manuals and so on. Although the rules change from time to time, they are integral and necessary to the well-organised library collection. But it is unfortunate that if the accuracy and consistency that we need to maintain in our work with materials encourages us to see rules applied to people as requiring the same approach. In using the image of the web of rules in personnel management, we should remember that webs are spun (by people in this case) and should be treated carefully and intelligently, or else destroyed and new threads spun.

In conclusion I wish to state that the identifiable functions of personnel management do merit detailed discussion, but such discussion tends to become the monopoly of 'experts'. This in turn makes the individual employer and employee think that specialists can solve the problems associated with personnel management. It is vital that each employee takes a more thoughtful look both at the 'network of people' and the 'web of rules' and see how they affect his personal needs, his ambitions, his drives so that he can work towards a realistic understanding of what it means to be in a network. It may be that a trained personnel officer can help to encourage such an understanding. It may be that all library services should set up training sessions on the role of trade unions in library management. It may be that libraries need managers more than they need librarians. One thing is certain when we deal with people we will find no easy answer that will suit most people. It is this, which, in the future will require more collaboration and positive people management.

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THE ROLE OF THE LIBRARY IN THE ACADEMIC INSTITUTION

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0 INTRODUCTION

Scientists approach their problems through the framing of hypothesis and innovative experimentation to test them. Equally important to the scientist is knowledge of what is already known in his subject area. This knowledge is especially crucial for the technologist for his practical effectiveness.

In this paper, I propose to explore the role the library plays in the provision of knowledge so that the researchers can carry out their investigation effectively. The library plays a vital role in the information chain, both as archival repositories and by active dissemination of information to readers.

An essential part of a library's service is the building and maintenance of an organized collection of printed materials. In addition, many libraries have collections of microfilms, photographs, films, slides and sound recordings, non-book materials, plastic or metal tapes and discs, computer tapes and programmes.

The library offers access to these collections and provides the services of trained staff to facilitate their use to meet the research, educational or recreational needs ot its users.

1 OBJECTIVES OF LIBRARY

1 To serve the needs of the academic community.
2 To provide reference materials at appropriate levels.
3 To provide study areas for users.

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4 To provide a lending service appropriate to the different types of users.
5 To provide an active information service.
6 To provide staff to conduct literature searches on behalf of the research team.
7 To give the user quick access to accurate information over the whole range of human knowledge.

2 FUNCTIONS OF LIBRARY

1 The acquisition of publications relevant to their users by purchase or exchange or loan or photocopy from another library in response to demand from a user, when purchase is not practicable.
2 The storage of the items acquired so that they can be retrieved for use.
3 Provision of study facilities so that users can work with items found in the collection. This may involve suitable equipment to use microform or audiovisual publications.
4 Guidance to the users on the use of the collections, acquiring material from other libraries, using catalogues and indexes of material and help with foreign language material.
5 Conservation of material by repairing damage arising from use, atmospheric pollution or insects.

3 SERVICES TO LIBRARY USERS IN THE ACADEMIC INSTITUTION

Academic Institution

It includes universities, university colleges and all other institutions forming part of or associated with institutions of higher education. The academic library is the library of an academic institution. The fundamental role of this type of library is educational.

The major functions of an academic library are: (i) to provide facilities to support the teaching, learning and research activities of its parent organization; and (ii) to provide a service of reference and lending material appropriate to the needs of the staff and the students of the institution.

We can, therefore, see that an academic library provides an absolutely fundamental service which affects the whole institution and without which the institution would cease to function as a centre for teaching and research.

Services to Library Users

The user services mean here the facilities provided by a library for the use of books and the dissemination of information. The librarian has a responsibility to provide this service in the most convenient place for his members and then to make sure that the facilities provided are used.

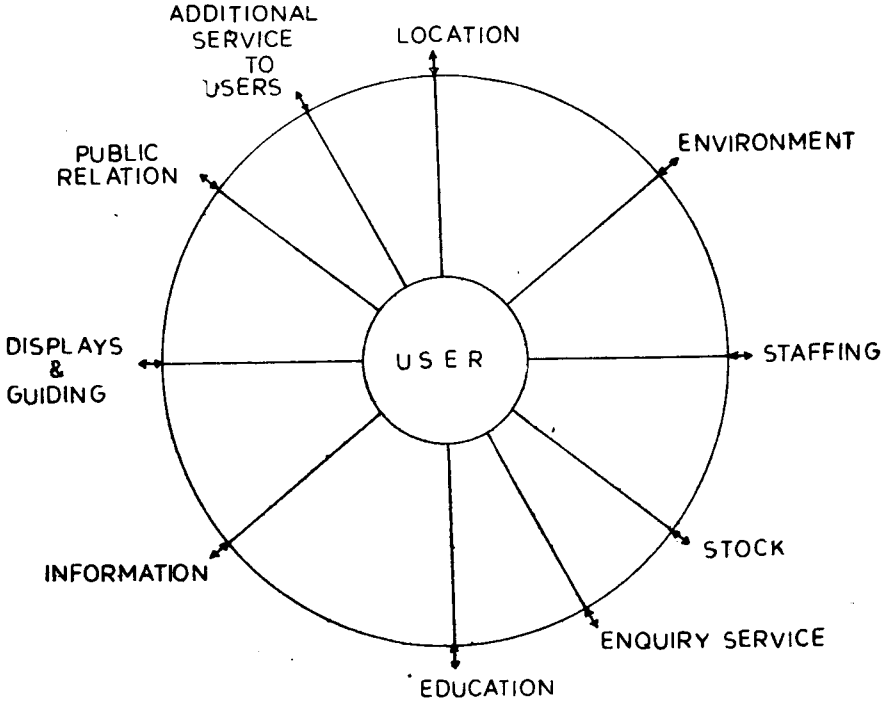


Fig. 1. The user and the service.

The user has expectations of quality service and the librarian must design the service to accomodate them. The services provided to library users are the following:

Location

Library services are offered through a diverse range of outlets (Fig. 1). The location of library is very important in providing service to the community. Often, an academic institution has departmental libraries supported by a central library.

Environment

The environment of the library is also important for users. We should

keep this in view when planning the layout of a library i e lighting, heating and ventilation, entrance area, stacks, leisure and study areas and lectures and committee rooms etc. A clean and well-lighted library offers an inviting atmosphere to the users and provides good working conditions for staff. The library should have a space for formal and informal discussions.

Staffing

The effectiveness of any library service depends to a large extent upon the manner in which the staff and their duties are organized. Once a library is open, its development is to a large degree subject to the ability and enthusiam of its staff. Professional staff in all types of libraries is to be drawn from a wide range of subject backgrounds. The library must be adequately funded to recruit qualified manpower.

Information Sources

The published sources are grouped into three categories described below.

Primary Sources

These are original publications by researchers. They include journal articles, research reports, theses and dissertations.

Secondary Sources

These usually include material written by authors who have not had direct observation or participation in the events described. They include textbooks, encyclopaedias, bibliographies, abstracting and indexing tools etc.

Tertiary Sources

They provide a constant review of the subject. The reviews are based on primary and secondary sources and usually give an up-to-date review of the state-of-the art of the subject. They include research review journals, annual reviews, progress, handbooks and year books etc.

Additional Materials and Services

Newspapers

These are ultimately used for clipping services.

Theses

The library tries to obtain a copy of the theses accepted by the institute for the award of the Doctor's Degree. These are made available for reference and study.

Books

Some of the latest additions to the library are put up for display periodically. Similarly dust covers of attractive titles are also exhibited for the benefit of regular visitors of the library.

Periodicals

The latest issues of different periodicals are kept on a separate display rack for a couple of days or so after which they are sent to their respective places on the racks.

Inquiry Service

It is an essential user service and provides the cornerstone to the efficient use of the library. Besides, there is a reference desk, usually loeated near the catalogue which offers special help to users to specific questions.

User Education

The library should provide training to users in the use of catalogues, bibliographiès, reference books etc.

Information Services

The main aim of the information service is to enable the users to identify and obtain the use of relevant sources of information. Some of the services offered to the users are:

Current Awareness Service

To enable users to be aware of new relevant information without specifically searching for it i e *current content lists, intelligence bulletins, SDI* etc.

Retrospective Searching

To enable users to identify information which has been published over

a period of time. This might be done by searching Catalogues and indexes prepared for a particular collection of printed publications.

Referral Service

The information unit may refer the users to an appropriate source for answers to specific questions.

Display and Guiding Services

The physical location of a library has often been considered the best form of display to attract users to the service. The purpose of the display is to stimulate interest in books and reading and to make the library environment more attractive and more welcoming. It also attracts non-members and encourages them to join the library.

Public Relations

Public relations begin from the assistant at the counter and run through the efficient charging and discharging of materials. The librarians will have specific responsibilities for formal public relation, presenting the library's case at committees, talking to residents groups etc. The best form of public relations is a satisfied user.

Additional Services to Library Users

1 *Reprographic Service*

The library should offer reprographic facilities in the form of photo-copy, microform and xerox copies. It should supply the photo-copies of articles from books and periodicals to research scholars and faculty members.

2 *Translation Service*

A limited provision of supplying translations of literature from foreign languages should be available within the library to the research workers.

3 *Inter-Library Loan Service*

Publications which are not available in the library and which are not likely to be purchased may be borrowed from other libraries. This service is limited usually to the faculty members and research scholars. While applying for such inter-library loans the requistitioner should provide full bibliographical information about the publication, wherever possible.

4 *Departmental Loan*

Each department or section thereof is given a block loan of 150 or 200 books of which more than one copy is normally available in the central library. The departments/sections may be requested to make the books available to the readers in their departmental libraries.

4 THE ROLE OF THE LIBRARY IN THE ACADEMIC INSTITUTION

The role of a library in the process of conducting research is that of providing the researcher with easy access to required information by providing assistance in bibliographic searches, providing the necessary information retrieval devices such as catalogues, indexes, abstracts and bibliographies, teaching the users on the most effective provision of current awareness services. The library must be provided with adequate resources like funds, manpower, books and other learning material, building and equipment. Unless these resources are adequately provided, it will not be possible for the library to provide quality service to its members.

No library is likely to be self-sufficient. But within the context of library cooperation, the library should be able to obtain any required information from other libraries within the country, the region or internationally.

5 CONCLUSION

Undoubtedly the library is the home of that knowledge which is kept in the form of books, reports, conference proceedings, journals etc. Quality library service is essential without which research and growth of knowledge cannot be effectively undertaken. It is the business of the library to organize such resources and the users must understand how such resources are organized. For without that it is not going to be possible for them to effectively utilize those resources. The library must then take up the challenge of instructing all the users on the literature organization and use. The library plays a central role in the research process, so it must be adequately funded to be able to buy the resources and recruit qualified personnel.

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COST EFFECTIVENESS OF LIBRARY AND INFORMATION SERVICES—A CASE STUDY OF MARINE BIOLOGICAL CENTRE OF ANNAMALAI UNIVERSITY

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0 INTRODUCTION

It is obvious that no university can develop a standard research unit without a strong library at its centre. Building a well-equipped and well-manned library calls for huge investment. Realising the fact that information and knowledge issuing from research constitute the basic ingredient in economic growth and prosperity, UGC gives emphasis to the expansion of research facilities and resources in universities. A study of the channelisation of the funds and the benefits of the library is required for future planning and decision making.

Nowadays the investments made on libraries are growing heavily and hence the cost study of the library services is felt imperative. Such a study must consider the benefit of the library services. Though it is impossible to calculate the benefits in terms of cash, it is possible to ascertain them in terms of: (i) performance, i e the extent to which the library resources are meeting the demands of the clientele; and (ii) impact or outcome, i e the ultimate effects of the utilised services on the social well-being of the individual user or group of users including reading level, skills acquired, economic and social mobility, productivity, creativity and alienation.[1]

An evaluation of cost effectiveness is a study of the extent to which available resources are so allocated that the maximum possible return is

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achieved for the investment made. It is the identification and evaluation of resources used or estimated which have been used for the implementation of activities, programmes, projects or production of output. Briefly, it studies the relationship between the level of performance (effectiveness) and the cost involved in achieving it.

The cost of an information service can be measured in terms of input of funds resources. Under cost, it is necessary to consider both the costs that are relatively fixed, for example, the cost of building and furniture, and the costs that are relatively variable such as the cost of books, journals, reprints and library service. The benefit of an information system may be measured in terms of the use of institutional resources used in the process of providing institutional outputs during a given time or period.

1 STATEMENT OF THE PROBLEM

In keeping with the recommendation of the UGC, a research unit was established in 1963 in Annamalai University for estuarine and marine biological research. In order to support the scholars in their pursuit of research, library facilities are strengthened. Being a centre of advanced study, and a unique one of its kind in the southern region, its Library receives fund from various sources. As it has passed two decades of development, it is felt necessary to study the efficient functioning of the Library in meeting the information needs of the researchers. It has a specialised collection on the thrust areas of research. The present stock of the Library is nearly 10,000 volumes. It subscribes 50 international journals and 45 journals are received on exchange basis.

The study mainly aims at measuring the effectiveness of the library services with the existing resources. The effectiveness of service refers to:

(1) Accessibility of materials, viz

   (a) Ratio of services requested to services available.
   (b) Ratio of holdings to total user population.

(2) Utilisation of the services, viz

   (a) Ratio of a given service to total number of users.
   (b) Ratio of documents circulated to total number of users.

(3) Impact of the services.

Outcomes are in terms of the effects and impact of library services and the benefits these confer, viz number of publications and production of theses. Existing resources refer to:

(i) Provision of funds.
(ii) Library Staff.
(iii) Availability of books, journals and other services.

2 OBJECTIVES OF THE STUDY

The study attempts to investigate into the following aspects:

(1) To analyse the growth in total cost of the library services, number of users, cost per user, number of books, theses awarded and research publications.
(2) To examine the cost structure and changes in it over years.
(3) To relate the expenditure in relation to the number of users.
(4) To assess whether the library resources and services are used effectively.
(5) To measure the usage and outcome (effects) of the library services.

3 METHOD OF STUDY

Information regarding cost components of the library services, number of users (including M Sc, M Phil, Ph D scholars and staff members) and number of books and journals purchased for the period 1966-67 to 1985-86 are collected from the Annual Budgets, Annual Reports, Year Book of the Library and other related documents of the Library. In order to examine the effective use of the Library, primary data is collected from a stratified random sample of 40 respondents including 10 M Sc students, 10 M Phil and 10 Ph D scholars and 10 staff members out of 40 M Sc students, 25 M Phil and 17 Ph D scholars and 17 staff members, respectively. A personal investigation is made by using a well-structured questionnaire containing information relating to: (1) General information, (2) Personal collection, (3) Use of library services, and (4) Number of research publications, for the year 1985-86.

As there is variation in the cost structure and outcome due to the introduction of M Phil course in 1978-79, the period of study is divided into two unequal parts, viz

Phase I—Covering twelve years from 1966-67 to 1977-78.
Phase II—Covering eight years from 1978-79 to 1985-86.

4 RESULTS AND DISCUSSION

41 Growth Analysis

The Library receives funds regularly from two sources, University and

UGC fund and occasionally it gets financial assistance from DOD (Department of Ocean Development, Government of India). Whatever received is spent on purchasing books, journals and reprints and for organising library services. So the funds received and the fixed cost (interest and depreciation on library building and furniture) constitute the total cost of the Library. Cost per user represents total cost divided by the total number of users.

Table 1: Input-Output Structure of the Library

Year	*Total Cost* (Rs.)	*Cost Per User* (Rs.)	*No. of Books Purchased*	*Theses Awarded*	*Research Publications*	*Total No. of Users*
	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
			Phase I			
1966-67	28,000	558	120	16	16	35
1967-68	29,000	615	140	24	14	52
1968-69	29,000	1,179	53	35	12	48
1969-70	46,000	1,306	63	33	25	39
1970-71	47,000	1,421	120	26	13	36
1971-72	54,000	1,667	78	21	14	38
1972-73	55,000	933	87	22	33	33
1973-74	56,000	1,553	74	20	19	60
1974-75	88,500	1,563	165	34	39	57
1975-76	98,500	1,670	201	49	50	63
1976-77	88,500	1,105	279	44	79	63
1977-78	89,000	800	294	36	14	81
Mean	59,080	1,197.5	137	30	27	50
S.D.	24,703	399	77	10	19	14
C.V.(%)	41.8	33.3	56	34	72	27

Table 1 (*contd. on page* 260)

Table 1 (*contd. from page* 259)

	(1)	(2)	(3)	(4)	(5)	(6)
			Phase-II			
1978-79	90,000	1,343	320	51	92	67
1979-80	91,000	1,655	81	40	64	55
1980-81	1,26,500	1,775	69	48	24	71
1981-82	1,27,000	1,380	67	49	18	92
1982-83	1,27,250	1,016	117	55	19	125
1983-84	1,32,500	1,467	92	61	37	90
1984-85	1,33,000	1,267	129	75	79	105
1985-86	1,33,500	1,343	82	67	18	99
Mean	1,20,000	1,407	120	56	44	88
S.D.	17,292	236	84	11	23	25
C.V(%)	14.39	16.8	70	20	53	28

SOURCE : Computed from secondary data.

The data shown in Table 1 reveal that the cost is continuously rising over the period under review. But there are fluctuations in the number of users, the number of books purchased, theses awarded, research publications and cost per user.

Except the number of books purchased, the other variables in Table 1 have higher average values in Phase II than in Phase I. Regarding variation in each variable over the years, they are less pronounced in Phase II, except for the number of books purchased. In order to compare the nature of change over years for each variable in the two phases seperately, trend lines are fitted by the method of least squares. The results are given below:

1 Total Cost

$= 59,080 + 6748t$ Phase I

$= 1,20,100 + 6342t$ Phase II

2 No. of Users

= 50	+ 3.2t	Phase I
= 88	+ 6.7t	Phase II

3 No. of Books

= 137	+ 16t	Phase I
= 120	− 16t	Phase II

4 Theses Awarded

= 30	+ 2t	Phase I
= 56	+ 4t	Phase II

5 Research Publications

= 27	+ 3t	Phase I
= 44	− 5t	Phase II

6 Cost Per user

= 1,197	+ 73t	Phase I
= 1,407	− 39t	Phase II

From this it is inferred that the average annual increase in the total cost is higher in Phase I and it has its reflection on the higher rate of increase in the cost per user, number of books purchased and research publications. But the lesser annual increase in the total cost and the higher annual increase in the number of users in Phase II results in a decline in the cost per user, number of books purchased and the research publications.

42 Cost Structure of the Library

Cost structure of the Library refers to the input components. Of all the input components, journal has the major share ranging from 43 per cent to 68 per cent in the first phase and in the second phase it decreases from 67 per cent to 59 per cent as revealed in Table 2.

Books rank second in the total cost, which decreases from 40 per cent to 12 per cent in Phase I but increases from 12 percent to 20 percent in Phase II. Regarding fixed cost it has a share around 15 per cent. The service cost has the smallest share of 5 per cent. The constant share of the fixed cost reflects the fact that provision is not made for the expansion of the library building. Journals have got prime importance in the cost structure in both the phases of library development as revealed from its mean values. The variation in the share of book cost is the highest in both the periods while it is the least for journals.

Table 2: Cost Structure

(in Rs)

Year	*Fixed Cost*	*Book Cost*	*Journal Cost*	*Service Cost*	*Total Cost*
			Phase-I		
1966-67	3,000 (10.7)	11,250 (40.0)	12,500 (44.6)	1,250 (4.5)	28,000 (100)
1967-68	4,000 (13.3)	11,250 (38.7)	12,500 (43.1)	1,250 (4.4)	29,000 (100)
1968-69	4,500 (15.3)	5,250 (17.8)	18,500 (62.7)	1,250 (4.2)	29,500 (100)
1969-70	6,000 (13.1)	13,000 (28.3)	25,000 (54.3)	2,000 (4.3)	46,300 (100)
1970-71	7,000 (14.9)	12,000 (25.5)	26,000 (55.3)	2,000 (6.1)	47,000 (100)
1971-72	9,000 (16.7)	12,450 (23.1)	30,300 (56.1)	2,250 (4.1)	54,000 (100)
1972-73	11,000 (20.0)	10,750 (19.5)	32,000 (58.2)	2,250 (2.3)	55,000 (100)
1973-74	11,000 (17.9)	10,250 (18.3)	32,500 (58.1)	2,250 (5.7)	56,000 (100)
1974-75	13,500 (15.3)	19,250 (21.8)	52,000 (58.8)	3,750 (4.1)	58,500 (100)
1975-76	13,500 (13.7)	25,500 (25.9)	55,250 (51.3)	4,250 (9.1)	98,500 (100)
1976-77	13,500 (15.3)	11,250 (12.7)	60,000 (67.0)	3,750 (5.0)	88,500 (100)
1977-78	16,000 (15.7)	10,750 (12.1)	60,500 (67.9)	3,750 (4.3)	89,000 (100)
Mean (%)	15.2	23.6	58.2	4.4	—
S. D. (%)	2.3	8.5	7.6	1.2	—
C. V. (%)	15.3	36.01	13.05	27.27	—

Table 2 (*contd. on page* 263)

Table 2 (*contd. from page* 262)

Year	*Fixed Cost*	*Book Cost*	*Journal Cost*	*Service Cost*	*Total Cost*
			Phase II		
1978-79	15,000 (16.7)	10,750 (11.9)	60,500 (67.2)	3,750 (4.2)	90,000 (100)
1979-80	16,000 (17.6)	8,750 (9.6)	62.500 (68.7)	3,750 (4.1)	91,000 (100)
1980-81	16,500 (13.1)	38,500 (30.4)	66,000 (52.2)	5,500 (4.3)	1,26,500 (100)
1981-82	17,000 (13.4)	34,500 (27.2)	70,000 (55.2)	5,500 (4.2)	1,27,000 (100)
1982-83	17,250 (13.6)	34,500 (27.1)	70,000 (55.1)	5,500 (4.2)	1,27,000 (100)
1983-84	17,500 (13.2)	32,250 (24.3)	72,000 (55.3)	5,750 (7.2)	1,32,500 (103)
1984-85	18,000 (13.5)	34,250 (25.8)	74,000 (55.6)	5,750 (5.1)	1,33,000 (100)
1985-86	18,500 (14.0)	26,450 (20.0)	77,800 (58.7)	5,750 (7.3)	1,33,500 (100)
Mean (%)	14.4	22.1	58.5	5.1	—
S. D. (%)	1.6	7.1	5.7	1.3	—
C. V. (%)	11.11	32.13	9.74	25.50	—

SOURCE : Computed from secondary data.
NOTE : Figures in parantheses indicate percentage to total.

43 VARIATION IN COST DUE TO THE NUMBER OF USERS

In spite of the fact that the number of users fluctuate over the years, there is continuous rice in total cost of the library resources and services as seen in Table 2. The rate of increase of cost is Rs. 1,196 and Rs. 559, respectively in the two phases for an addition of every user as revealed by the results of the simple regression analysis given in Table 3.

Table 3: Correlation of Cost with Users

Term	*Phase I*	*Phase II*
	A—Total cost on No. of Users	
B_0	−1,237.81	67,380.1**
	(−0.06)	(3.32)
B_1	1,196.45**	559.02**
	(3.02)	(2.87)
R^2	0.476*	0.55*
F	9.11	7.12
	B—Cost per User on No. of Users	
B_0	1,161.39*	2,156.26**
	(2.61)	(9.84)
B_1	0.72	−8.51**
	(0.084)	(−3.52)
R^2	0.001	0.67**
F	0.007	12.38

SOURCE : Computed from secondary data.
NOTE : Figures in parantheses are t-statistic values.
**Significant at 1 per cent level.
*Significant at 5 per cent level.

$t_{0.05} = 1.81$ $t_{0.01} = 2.76$ for 10 DF (I)
$t_{0.05} = 1.94$ $t_{0.01} = 3.14$ for 6 DF (II)

It also reveals that there is a two-fold increase in the unit cost during the first phase of the development of the department and it gradually decreases in Phase II.

44 PERFORMANCE MEASURE

Lancaster[2] has evaluated the effectiveness of the library system in terms of the percentage of success in document delivery, reference questions answered accurately and completely, interlibrary loan received successfully within X days, recall and precision ratio of a literature search and so on. Due to non-availability of data only the percentage of

success in document delivery is taken for evaluating the performance of the library in the present study. The use of library services as depicted in Table 4 shows that as the level of education increases, the use of library materials with reference to borrowing of books and journals also increases.

Table 4: Average Annual Borrowings

Category	*Books*	*Journals*	*Reprints*
M Sc	15	5	1
M Phil	26	12	1
Ph D	32	49	12
Staff	54	58	9

SOURCE : Computed from primary data.

The retrieval efficiency of the library is 80 per cent and above for the users of various group (Table 5). There is only a marginal difference bet-

Table 5: Accessibility of Materials Per User Per Day

Category	*Books*			*Journals*			*Reprints*		
	W	*C*	*R*	*W*	*C*	*R*	*W*	*C*	*R*
M Sc	5	4 (80%)	3 (75%)	4	3 (75%	2 (66%)	—	—	—
M Phil	6	5 (83%)	4 (80%)	12	10 (83%)	7 (70%)	2	2 (100%)	2 (100%)
Ph D	5	5 (100%)	4 (80%)	6	6 (100%)	5 (83%)	5	5 (100%)	5 (100%)
Staff	5	4 (80%)	3 (75%)	5	5 (100%)	5 (100%)	1	1 (100%)	1 (100%)

SOURCE : Computed from primary data.

NOTE : In each column W = documents wished to be consulted; C = documents consulted; R = documents found relevant Left % = Retrieval ratio of the documents; Right % = Relevancy of the documents.

ween the total number of books retrieved and the total number of books found relevant. Regarding journals, the difference is significant except for the staff members. In the case of reprints its accessibility is optimum for every respondent.

45 Impact of Library Services

As the user satisfaction regarding the library services is high, it is felt necessary to measure the impact of this service. According to Stephen A Roberts[3] measures of impact and benefit relate as far as possible to the final goals and objectives of the service. The ultimate objective of this Centre (Marine Biological Station) is to increase the research output in the form of theses and research publications. The information gathered from the respondents reveals that the Library supports them to a great extent in supplying the relevant materials for the writing of theses and research papers.

5 RESEARCH PUBLICATIONS

51 Primary Data

The data collected from the respondents showed that they have personal collections of books and journals and it varies among them. Hence an attempt is made to analyse the individual effect of personal collection and documents referred from the Library (they are taken as explanatory variables in the study) on research publications. A multiple linear regression model of the number of publications as influenced by personal collections (X_1) and number of books and journals referred (X_2) is attempted for the primary data since the correlation values are 0.54 (X_1) and 0.21 (X_2).

The result arrived in Table 6 shows that there is significant positive influence of personal collection (X_1) and the number of books and journals referred (X_2) on the number of publications (Y). It is inferred that an increase of Rs. 100 in the value of personal collection leads to an increase of one research publication. But in the case of books and journals referred an additional use of 100 volumes leads to an increase of three publications.

52 Secondary Data

In the use of secondary data cost per user is taken into consideration as it is a basic predictor variable to determine about the effectiveness of service. Table 2 reveals that a major portion of the total cost is diverted towards the purchase of journals as journals play a significant role in

Table 6: Multiple Linear Regression Model for Research Publications (Primary Data)

Term	*Coefficient*
B_0	3.56 (1.35)
B_1	0.01** (5.02)
B_2	0.032* (2.63)
R^2	0.61**
F	12.76

SOURCE : Computed from primary data.
NOTE : Figures in parantheses are *t*-statistic values.
*Significant at 5 per cent level.
**Singificant at 1 per cent level.

providing the current information. The percentage of the journal cost is taken as another predictor variable to study the influence of it on research publications. In order to measure the effect of these two variables disregard of the number of scholars, the multiple regression analysis is undertaken.

In the secondary data the relation of the number of research publications (Y) individually with cost per user (X_1), percentage of journal cost (X_2) and number of scholars (X_3) is also revealed by the simple correlation coefficient values:

0.19 (X_1), 0.59 (X_2) and 0.67 (X_3) in Phase I, and
0.23 (X_1), 0.64 (X_2) and 0.92 (X_3) in Phase II.

Hence, research publication as influenced by X_1, X_2 and X_3 is analysed by fitting a multiple linear regression model of the form.

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3$$

using computer ORION-8001 under STATPAK Programme.

The result arrived at in Table 7 reveals that the percentage of journal cost (X_2) and the number of scholars (X_3) have significant influence on the number of research publications in Phase I. But in Phase II cost per user (X_1) and the number of scholars (X_3) have their significant influence on the number of research publications (Y). It can be inferrred that in

Table 7: Multiple Linear Regression Model for Research Publications (Secondary Data)

Term	*Phase I*	*Phase II*
B_0	−61.67	−80.15
	(−1.88)	(−2.19)
B_1	−0.009	0.04*
	(−0.74)	(2.5)
B_2	1.21*	0.05
	(1.89)	(0.07)
B_3	2.20*	2.27**
	(2.41)	(6.65)
R^2	0.62*	0.95**
F	4.39	26.54

SOURCE : Computed from secondary data.
NOTE : Figures in parantheses are *t*-statistic values.
*Significant at 5 per cent level.
**Significant at 1 per cent level.

$t_{0.05} = 1.86$	$t_{0.01} = 2.896$	for 8 D.F. (I)
$t_{0.05} = 2.13$	$t_{0.01} = 4.54$	for 4 D.F. (II)

Phase I for one per cent rise in journal cost there is an increase of one research publication and an increase of one scholar gives rise to 2 more publications. In Phase II an increase of Rs. 100 in the cost per user results in an increase of 4 publications and an increase of one scholar gives rise to two more publications. The fitted regression model is the best in Phase II since the coefficient of determination $R^2 = 0.95$. It reveals that 95 per cent of variation in publication is due to the linear influence of cost per user (X_1), journal cost (X_2) and number of scholars (X_3). But this value is only 62 per cent in Phase I.

6 THESES AWARDED

A well-equipped library in terms of books and journals in a research unit is really an asset. When the library collection is strong and readily available the time required for literature search will be minimum which can otherwise be used for doing the research. Mere increase in the number of enrolment of the researchers will not lead to the increase in the number

of theses awarded. There must be corresponding increase in the cost per user which means great investment in the purchase of books and journals.

In the secondary data the number of theses awarded (Y) depends upon cost per user (X_1), number of books purchased (X_2) and enrolment of students (X_3) as indicated by the simple correlation coefficient of Y individually with X_1, X_2 and X_3 taking values 0.59, 0.39, and 0.32 in Phase I and 0.2, —0.48 and 0.79 in Phase II, respectively. In order to derive the influence of each variable on Y independently of other 2 variables, the multiple linear regression model is fitted using computer ORION-8001, STATPAK Programme.

Table 8 : Multiple Linear Regression Model for Theses Awarded

Term	*Phase I*	*Phase II*
B_0	5.76 (0.44)	24.99 (0.82)
B_1	0.05* (1.86)	—0.05* (—2.48)
B_2	0.008* (1.96)	—0.004 (—0.28)
B_3	0.202 (0.82)	0.61* (2.91)
R^2	0.44	0.76
F	2.08	4.29

SOURCE : Computed from secondary data.

NOTE : Figures in parantheses are t-statistic values.
*Significant at 5 per cent level.
$t_{0.05} = 1.86$ $t_{0.01} = 2.896$ for 8 D. F(I)
$t_{0.05} = 2.13$ $t_{0.01} = 4.54$ for 4 D.F (II)

Table 8 shows that cost per user (X_1) and number of books purchased (X_2) have significant positive influence on the number of theses awarded in Phase I. But in Phase II number of books purchased (X_2) has significant negative influence on the number of theses awarded. In Phase I it is inferred that for an increase of 1000 books there is an increase in the award of 8 theses and an increase of Rs. 1000 in the cost per user leads to an addition of 5 theses. In Phase II an increase in the enrolment of 10 students leads to an increase of 6 theses.

7 CONCLUSION

Until we have measures of both cost and effectiveness, it is obvious that we cannot manage the library system in a way that will minimise costs and maximise effectiveness. Cost effective analysis is the only valid evidence to judge the extent of the library's achievement of its aims and objectives. This is obvious from the present study also.

During the period the cost per unit increases, a corresponding increase in the research output in terms of research publications and number of theses awarded is identified, i e an increase of Rs. 100 per user results in an increase of 4 research publications; a one per cent increase in the journal cost gives rise to one more research publication. It leads to the prediction that by increasing the per user cost and journal cost, more and more research publications can be expected. Besides, it helps the library managers to improve the financing policy decisions.

From the cost structure, it is seen that there is a decline in the share of journal cost in the recent years which has seriously affected the number of research publications. In order to maintain the rising trend in the research output, it is better to allocate a major portion towards the subscription of journals.

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EVALUATION OF REFERENCE SERVICE PROVIDED BY THE JAMMU UNIVERSITY LIBRARY: A USERS' SURVEY

S S SAHI*

0 WHAT IS USERS' SURVEY

Surveys and studies have become important techniques for investigation. In the opinion of Line "like an elephant, it is easier to recognise than to define a survey".[1] However, ALA glossary of library terms defines survey as "a scientifically conducted study through which data is gathered according to a definite schedule, is presented in statistically tabulated or summarised form".[2] A survey gives an oversight of a field and is thus distinguished from the sort of study which consists of a microscopic examination of the turf; it is a map survey rather than a detailed plan.[3] According to Webster's Dictionary, it is "a systematic collection and analysis of data and especially statistical data on some aspects of an area or group."[4] Thus a survey can be defined as a systematic study to be conducted for gathering the data according to a particular method. It is also a study which involves some scientific examination of different problems.

1 UTILITY OF USERS' SURVEY

A users' survey in a library is a specialised type of investigation which is done to find out the reaction of the users to a service or set of services provided by a library with a view to improve the library services. In the trinity of library—books, staff and readers, it is the user of the library who finally knows the richness or the weakness of the collection and services frequently used by him. His opinions about the collection and services, therefore, are of prime importance. These opinions can be helpful in evaluating the strength or otherwise of collection and services.

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Many surveys seek to collect, organise, and disseminate information useful to the scholars, and all of these surveys attempt to further the improvement of collection and services. In some cases, the surveys merely indicate that additions are required; at the other extreme, a survey may describe gaps minutely. Under the overall heading of improvement, therefore, the purpose may be only to demonstrate need in the most general terms, or it may be to provide detailed guidance in building up the collection.[5]

Surveys are conducted to collect information concerning various elements and aspects of libraries and librarianship. The range of the survey will depend not only on the information wanted but on the state of knowledge in a given field. For example, a broad general survey is qualified when a broad general picture of the functioning of the library is required, or when so little is known about the field of inquiry.[6]

From such surveys, levels and kinds of users' needs can be identified, and trends in research and changes in interests can be determined. The various needs of the difficult types of researchers can be identified and determined.[7] By conducting such surveys, it can be found out that whether or not the clientele are satisfied with the services being provided to them by the library. Whether some new services are needed to be introduced or not. In order to keep the services of the library up-to-date, the surveys are most important.

2 REFERENCE SERVICE

One of the most important functions of a university library is the dissemination of information in order to keep the readers well informed about their own disciplines and interdisciplinary subjects. In this context, any assistance to readers in making them acquainted with the reference materials or any instruction to readers for using the library materials more effectively or rendering a personalised service to readers is called 'reference service'. Reference service in the words of Wyer, "is sympathetic and informal personal aid in interpreting library collections for study and research".[8] Shores believes that "reference is to library service what intelligence is to the military".[9] He further adds: "In the reference room the library's resources are utilized to meet specific needs. Most frequently the need is for a particular fact to answer a question. Other demands involve aid to research and instruction or simply counsel on cultural recreational reading".[10]

According to Hutchins, "Reference work includes the direct personal aid within a library to persons in search of information for whatever purpose, and also various activities especially aimed at making information as easily available as possible. Selecting and organising materials with this end in view is as important a part of reference work as their

interpretation to the individual reader. It is the driving power without which the goal cannot be attained.[11] According to Ranganathan "Reference service, let it be asserted, is the essential process in a library of establishing contact between the right reader and the right book by personal service. Reference Service is essentially individual in its nature. Its character varies with every reader-book context. But in all contexts, reference service amounts to dowering books with living energy and personality."[12] From the foregoing definitions, it is clear that the reference section is the hub of all activities of a library.

21 Functions of a Reference Section

Shores has discussed the functions of a reference section under the following heads:[13]

1 Supervision;
2 Information;
3 Guidance;
4 Instructioni
5 Bibliography; and
6 Appraisal

Under *supervision* comes the proper organisation of facilities, selection of materials, direction of personnel and the study of the clientele. The main aim of *information* is to furnish suitable answers to queries. The aim of *guidance* is to give readers advice on the availability of good books in their fields of interests. *Instruction* and *bibliography* help to make the best use of a library and its various bibliographical resources. *Appraisal* is considered to be the most important of these functions because it deals with the right type of materials. A reference section should possess the latest reference tools and readers should be encouraged to make the maximum use of these tools.

3 EVALUATION OF REFERENCE SERVICE PROVIDED BY THE JAMMU UNIVERSITY LIBRARY

In an attempt to know the opinion of the readers, 50 questionnaires (sample provided in Appendix) were circulated among students, research scholars as well as teachers. Only 32 readers returned the questionnaires. Therefore, calculations and conclusions about the use of the library services have been made on the basis of the data collected from these questionnaires.

Comments. About 65% of the total number of readers to whom the

Table 1 : Frequency of the Use of the Library

Frequency	*No. of Users*	*Percentage*
Daily	9	28.12
Several times in a week	12	37.5
Once in a week	7	21.88
Once in a month	2	6.25
Rarely	2	6.25

questionnaires were circulated admit that either they come daily or several times in a week. The percentage about the frequency of the readers is satisfactory, but some how the library should try to attract more and more readers for the use of the reading materials available in the library. The exhibitions and other kinds of book-displaying activities should be performed by the library.

Table 2 : Time Spent in the Library

Time spent in the Library	*No. of users*	*Percentage*
Less than one hour	7	21.9
One hour	7	21.9
Two to three hours	12	37.5
More than three hours	5	15.6
Any other comments	1	3.1

Comments. The percentage of the readers who come to the Library and spend about two to three hours or more than three hours is 53. This is a satisfactory percentage keeping in view the services rendered by the departmental libraries. The various readers who are fully satisfied with the services of the departmental libraries seldom visit the Central Library.

Comments (Table 3). More than 62.5% of the readers who responded to the questionnaires are satisfied with the timings of the Library, whereas about 38% of them are either not satisfied or declined to comment on this issue. It is, therefore, suggested that the library timings should be extended,

Table 3 : Satisfaction About the Library Hours

Satisfaction about the library hours	*No. of users*	*Percentage*
Satisfied	20	62.5
Not satisfied	9	28
No opinion	3	9.5

especially the reference section and the text book section should remain open for 12 to 15 hours daily as has been suggested by a few readers.

Table 4 : Purpose of Visiting the Library

Purpose	*No. of users*	*Percentage*
To locate the books already known	1	3.1
To consult the books	11	34.4
To pursue individual research	10	31.25
For borrowing and/or returning the books	10	31.25

Comments. Only 31.25% of the readers come to the Library to pursue their individual research and the rest come either for the issue/return of books or to locate or consult books already known to them. Therefore, the Library should increase the research facilities for the research scholars. Separate research rooms for different disciplines should be provided. The arrangement for cubicles for the research scholars should be made so that they can pursue their individual research without any disturbance.

Table 5 : Help of the Library Staff

Have you ever asked for any help from library	*No. of users*	*Percentage*
Yes	23	72
No	9	28

Table 6 : Users' Purpose for Help

Purpose for asking help	*No. of users*	*Percentage*
In connection with Library catalogue	5	21.74
For finding an appropriate book	10	43.48
For borrowing a reference/ text book	4	17.39
For any other purpose	4	17.39

Table 7 : Response of the Library Staff

Reference staff is	*No. of users*	*Percentage*
Always ready to help	3	9.5
Helpful	16	50
Not very helpful	9	28
No opinion	4	12.5

Table 8 : Accuracy of the Information Provided by the Library Staff

Accuracy of Information	*No. of users*	*Percentage*
Accurate	17	53
Not accurate	8	25
No opinion	7	22

Comments. It has been calculated with the help of the data provided by the readers that 72% readers do seek help from the Library staff, and 50% of them admit that the staff is helpful. It means that the staff appointed in the reference section is not adequate. The number of staff members in reference section should be increased so that they may be in a position to serve the maximum of readers. It will also improve the accuracy of the information to be provided to the readers.

4 ASSESSMENT

Reference service is the most important of all the services provided by any library. This involves the direct relationship between the readers and the staff. Any library especially the university library should give much stress on this kind of service. Though the reference service being provided by Jammu University Library is by and large satisfying keeping in view the resources at its disposal, a few things are yet to be added and improved. For example, there is no provision for the preservation of maps in the reference section or any other section of the University Library. Therefore, the library authorities should pay special attention towards reference section and should also acquire the latest reference tools to serve more and more readers. A register may also be maintained in this section to record daily the various reference queries of the readers. In the long run, it will also help in evaluating the reference collection.

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APPENDIX

QUESTIONNAIRE

EVALUATION OF REFERENCE SERVICE PROVIDED BY JAMMU UNIVERSITY : A USERS' SURVEY

1 *General*

1.1 Name

1.2 You are a

(a) Student ( )
(b) Research scholar ( )
(c) Teacher ( )
(d) Others _____

1.3 Field of Specialisation

1.4 Department

1.5 Please record for Library your average frequency of use of the library.

(a) Daily ( )
(b) Several times in a week ( )
(c) Once in a week ( )
(d) Once in a month ( )
(e) Rarely ( )
(f) Any other comment _____

1.6 How much time you spend in the Library?

(a) Less than one hour ( )
(b) One hour ( )
(c) Two to three hours ( )
(d) More than three hours ( )
(e) Any other comment _____

1.7 Are you satisfied with Library hours?

(a) Yes ( )
(b) No ( )
(c) No opinion ( )

If the answer is 'NO' then for how much time the library should remain open? _____

1.8 For what purpose you visit the Library

(a) To locate books known to me ( )
(b) To consult various books ( )
(c) To pursue individual research ( )
(d) For borrowing and returning the books ( )
(e) For any other purpose, please specify ————————

2. *About Reference service*

2.1 Did you ever ask for any help from the library staff?

(a) Yes ( )
(b) No ( )

If the answer is 'Yes' then what for :

(a) In cennection with the library catalogue ( )
(b) For finding appropriate book ( )
(c) For issuing the Reference/Text books ( )
(d) For any other reason ( )

2.2 Reference staff is

(a) Always ready to help ( )
(b) Helpful ( )
(c) Not very helpful ( )
(d) No opinion ( )

2.3 Reference staff encourages the use of library materials.

(a) Yes ( )
(b) No ( )

2.4 The information provided by the reference staff is :

(a) Accurate ( )
(b) Not accurate ( )
(c) Any other comment ( )

Please make suggestions for the improvement of the services provided by the Jammu University Library.

IDENTIFICATION OF QUALITATIVE LIBRARY SERVICES : A USER SURVEY OF JNU LIBRARY SYSTEM

S MAJUMDAR*
T VISHVANADHAM**

0 INTRODUCTION

It is said that the quality is a term that is applied to the goods and services, that are produced, to what is called the productive frontier and refers to their:

(a) productivity,
(b) desirability (capacity to meet the users requirements), and
(c) affordability (pricing).

All the above elements are measurable. That is why the producer has to plan consciously for the quality of goods and services under the overall supervision of the shrewd and experienced eyes. Day by day quality in library services in any kind of library is going downward, with respect to the increasing user expectation. Deterioration has come to such an extent that people have started doubting the very existence of library profession.

It is indeed right time to talk about the quality of library services and identify the weak areas where improvement is necessary.

Productivity in library profession means, the utilization of professionally qualified library staff produced by the various Schools of Library Science. And, in terms of an individual library, the preliminary jobs like acquisition, processing, indexing, abstracting etc are done by the qualified library staff, for better services.

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Desirability or the capacity to meet the users requirements is another factor which the library profession has to take care of. It is the zeal and consciousness which will give results. The items which are produced by one section of the library staff can be disseminated by another section.

It is the affordability which determines the quality of library services. Exchequer's money is involved. For good professionals and for good library collections, the financial aspect should be taken care of.

Keeping in view the three factors of quality, if the producer and consumer are satisfied, we may assume that the perfect quality is achieved. But it never happens so, because the perfect quality is an utopian idea. Even if the middle path is achieved, we may be satisfied.

1 THE PRESENT STUDY

This paper tries to find out the various factors which affect the qualitative library services in an academic institution. It is the M Phil and Ph D students (hereinafter referred as users) in any academic institution, who can be an important sample, through which we can try to identify the various factors affecting the qualitative services. Their standing in the academic institution is not less than a year or two. During this period, they are able to form an idea of the various aspects of library services in their mind. The present study keeps its limitation to this extent only.

2 PSYCHOLOGY OF THE USER

Normally, psychology of the user should be understood first before we try to bring him to the specific task of identifying qualitative services. With this idea a question was asked about, how it occurred to him that he must do research in the topic chosen by him. Different variables were given and we found that majority of the users take help of their guide or supervisor. While finalizing the topic of research, his own experience and knowledge plays an important role. Library staff hardly comes into picture at this stage. When we go to the reasons for non-involvement of library staff in the finalization of the topic by users, we find that either the professionals are not well-qualified or do not have the authority in subject. This factor should be taken care of by the producers of these professionals, i e the library schools.

3 JAWAHARLAL NEHRU UNIVERSITY LIBRARY

The JNU Library was established in the year 1969 with a basic ideal of standing for humanism, for tolerance, for reasons, for adventure of ideas and for search of truth. The total number of students enrolled in

the JNU Library is 2,828 out of which 986 are M Phil and Ph D students. JNU Library has a massive collection of 2,05,520 books, 50.000 bound volumes of periodicals and serials, 3,000 microfilms and microfiche etc. It has an annual grant of Rs. 37 lakhs. The staff in JNU Library is well-qualified and has academic background of various disciplines. The total staff strength is 120 comprising one Librarian, 3 Deputy Librarians, 12 Assistant Librarians, and 27 Professional Assistants Under the para-professional category it has 26 Semi-Professional Assistants, 23 Senior and Junior Library Attendants.

The Library is divided into 3 divisions: Social Science Division, Humanities Division and Sciences Division. Acquisition of books and periodicals has recently been centralized. Each division provides its own services like Reference Service, General Circulation, Textbook Circulation, Documentation Service, etc.

4 THE SURVEY

The entire group of 75 users comprising M Phil and Ph D students who answered various questions (APPENDIX A) have used the JNU Library. But the extent of use varies. 36% users have used exhaustively, 34% very often and 30% users have used it often. Since no one replied the question regarding use of JNU Library in negative, there has been no need for identifying the reasons.

Related to this question, the users were asked what other type of information agencies were used by them. 20% used newspaper agencies, 6% broadcasting agencies, 50% specialized institutions pertaining to their type of research and 24% used the government agencies. When the question of satisfaction came, 15% were totally satisfied, 45% were simply satisfied and 30% were some what satisfied and 5% were dissatisfied.

When we compare the use of JNU Library with other institutions, we find that users normally do not depend upon one library, but they try to use those libraries also which specialize in their area of research. They also try to compare qualitatively and quantitatively the academic libraries with those of special libraries. We all know that the very existence of the two categories of libraries differs with each other in all respects. Their collection development policy is limited to the special area for which the library is established in comparison to an academic institution which tries to accommodate all spheres. But one thing which normally has been pointed out by the users is that the cooperation between the two types of libraries can be of great help in terms of library services. It is suggested by them that this factor of cooperation should be taken care of.

5 SOURCES OF INFORMATION

Dependence on the various sources of information by a user varies on his requirements. But there are some basic conventional and non-conventional types of material in the library which if identified can be a better factor to decide the qualitative use of various services. Each such source of informations was analysed independently. Table 1 shows the extent of use by the users.

Table 1 : Extent of Use by Users

Source of information	*No. of users*	*% of the samples*
Books	73	99%
Periodicals	69	90%
Newspapers	38	50%
Conference Proceedings	25	35%
Govt. Publications	36	48%
Reference Works	37	48%
Survey Data	28	38%
Bibliographies	36	48%

It is observed that each source of information plays an important role in research work of the M Phil and Ph D students and every user uses them very extensively. If we analyse from the library service point of view, a basic question can be asked that why only 48% of users have used various bibliographies. As we know that the preliminary step of the research work is to have a control on the previously published articles, books, conference proceedings, etc which in technical term is called bibliographical control. 100% users should have consulted various bibliographies. And if it was not so, then it is a reflection on qualitative service of the academic library.

Similarly, Table 2 shows the use of various non-conventional material by the users in gathering their required information.

Table 2 : Use of Non-conventional Material by Users

Source of information	*No. of users*	*% of the total sample*
Microfilms	8	10%
Microfiche	3	5%
Maps	11	15%
Radio/TV Programmes	7	10%
Other audio-visual materials	4	5%
Computers for data-compilation	9	12%
None used	45	60%

In this coming age of paperless society, the above sources should have played an important role in the data compilation or in the research work, but it is entirely contrary to the present age. Why this is so? Perhaps, (a) Users are not made aware of the availability of these sources; or (b) The users are not very conscious about the utility of the above sources; or (c) The facility for using them is not convenient or congenial to the user, or he is not used to avail such services; or (d) The Library policy is not to encourage the use of the above materials.

6 USE OF VARIOUS GUIDES

A comparative question whether they have used various guides in the compilation of the data or during the research work was asked. The position in this regard is shown in Table 3.

Table 3 : Use of Various Guides

Type of guides	*No. of users*	*% of the total sample*
Library Catalogue	66	88%
Abstracting and Indexing Journals	34	45%
Bibliographies, reading lists	38	50%
Reference works	40	53%
Book Reviews	24	32%
Government Publication Guides	15	20%

It is here also that only 50% of the total users have used various bibliographies or reading lists. Therefore, consciousness towards bibliographical control is very limited and the academic libraries should take care of this factor. This is so because we know that 'abstracting and indexing journals' play an important role in the qualitative research work of the user and also there is no dearth of these sources in any reputed and established academic library. But we find that only 50% users, used them. This surely reflects users' unawareness tendency towards library services. We have found one factor which reveals that majority of the users are unable to identify the regular periodical with that of abstracting and indexing periodicals. It became a difficult task to separate the names of those periodicals which are not in the latter category. Table 4 shows the use of abstracting and indexing material.

Table 4 : Use of Abstracting and Indexing Periodicals

No. of Abstracting and Indexing Journals Used	*No. of users*	*% of the total sample*
Four	9	12%
Three	4	5%
Two	6	9%
One	17	22%
None	39	52%

About 50% of the total users under study have not at all used the abstracting and indexing periodicals and barely 22% of users have used only one journal. This journal was *Suchika.* an indexing periodical published by JNU Library. Related to this we asked another question about the extent of the use of these periodicals by the users. The position in this regard is shown in Table 5.

Table 5 : Extent of Use of Indexing and Abstracting Periodicals

Extent of use	*No. of users out of the total number of users*	*% of the total sample*
Very often	13	32%
Often	16	40%
Sometimes	8	20%
Rarely	3	8%
Total	40	100%

From Table 5 we find that 50% of users make use of abstracting and indexing periodicals whenever they require. Many users have pointed out that the indexing and abstracting journals which they really need during their research period, are not procured by the Library. They also pointed out that proper guidance in this regard has not been given to them either by the supervisors or by the library staff. Majority of the library schools do teach the basics of indexes and abstracts. But the service part, which need to be experienced by the fresh professionals, should also be done in detail. If this is done, the use of such most important guides can be of great help to the users.

7 COLLECTION DEVELOPMENT

As we all know, among the three important functions of any library, the collection development process plays a very vital role. Without the proper document procurement policy, no library can achieve its objective for which it was established. The policy should match with the users requirements. In order to judge the qualitative service of any library it is very important to know how the users feel about the collection of that particular library.

Table 6 shows the worthiness of the various types of documents available in the JNU Library system.

Table 6 shows that users were very conscious in answering the question and were not at all hesitant to disclose their satisfaction or dissatisfaction with the collection of the JNU Library. Almost all kinds of documents have been used extensively by the users except the non-conventional one, i e the microfilms and microfiches. But if we want to analyse the quality of each type of document, then we must take into consideration the various factors used to identify the quality of collection. Only 40% of the total users stated that qualitatively the books are very good or good and 50% of the users stated that the collection is average.

The policy of JNU Library collection development can be questioned. If the basic collection is of an average nature, then it has definitely an effect on the qualitative services of the library. Similarly, when we evaluate the periodicals procurement policy, we find that only 50% of periodicalsprocured are good or very good, 30% remain average and 20% poor or very poor. Since huge amount of money is spent on procurement of these two types of material, we may say that 50% of the total amount is spent on procurement of average, poor or very poor type of documents. Perhaps, readers requirements are not taken care of. Or, the relation between the library and faculty has not developed to such an extent that both could take care to make use of the library fund for developing a good and qualitative collection.

On the other hand, we find that only 37% text book collection remains

Table 6 : Collection Assessment of Various Categories of Documents

Category of Document	*Very good*	*Good*	*Average*	*Poor*	*Very poor*	*Total*
Books	8 (10%)	24 (30%)	36 (47%)	3 (5%)	6 (8%)	75 (100%)
Periodicals	15 (21%)	24 (32%)	20 (30%)	8 (10%)	5 (7%)	72 (98%)
Serials	1 (4%)	8 (27%)	13 (45%)	4 (12%)	4 (12%)	29 (40%)
Microfilms	—	—	4 (18%)	8 (32%)	12 (50%)	24 (32%)
Microfiche	—	2 (10%)	1 (5%)	6 (30%)	11 (55%)	20 (28%)
Textbooks	9 (13%)	34 (50%)	17 (25%)	5 (6%)	5 (6%)	70 (95%)
Reference books	3 (4%)	30 (49%)	15 (23%)	9 (15%)	5 (9%)	62 (82%)
Government Documents (Indian)	3 (8%)	16 (35%)	14 (32%)	7 (16%)	4 (9%)	44 (60%)
Government Documents (International)	2	9	15 (33%)	6 (15%)	3 (8%)	44 (60%)

as average, poor or very poor and 63% as good or very good. This shows that users use textbook collection very heavily. It has been indicated that when a document is used by many users and catches the eye of the library staff or faculty it is immediately shifted to textbook sequence. This policy of making all important documents a text-book reduces the usefulness of general collection. Only those documents should remain in the textbook which are directly related to the subject taught in the class. Use of reference works by the users is only to the extent of 82%. It is surprising to note that 18% users never used reference books during their research work. Perhaps this reflects on the quality and availability of reference collection. Among those who used the reference works, according to some users only 50% of the collection is found to be good or very good and remaining 50% average, some consider rather poor or very poor. With all this analysis we draw a conclusion that collection development policy of the JNU Library needs to be overhauled and a Faculty-Library Committee should regularly meet to assess the requirement of the clientele.

8 LIBRARY STAFF

Basically there are two types of library staff in any kind of library : (i) clerical or non-professional, (ii) technical or professional. It is the professional staff of the library who manage the service part. It is normally said that one of the important features of any profession is that the practitoner takes responsibility for some portion of the clients' welfare. In the context of library we do not provide various services for the sake of being good to the users or to make the users feel good. We also do not provide good service by telling the users what we happen to know or what we can readily find for them. Rather we take the responsibility for the information welfare of the users. The statement shows that the library staff should have the professional touch. With this in view a question was asked of the users to identify what they think about the library staff. Users' response to various variables is presented in Table 7.

Some of the variables in Table 7 appear to be similar to each other. But it is not so, when we look at the trend of users' answer to each variable. We find that they themselves have tried to differentiate each variable. Professionalism or subject expertise, has not grown to the extent among the library staff that users may identify them as a professionally capable lot in the library. Rather 47% users feel that library staff should be highly qualified to take care of their interest. 55% users state that staff's job is to help the readers in day-to-day search and 44% users have rightly stated that staff should qualitatively match with the readers requirement. All these questions are similar to each other and for analysis purpose should be considered as one. Users were conscious that

Table 7 : Users' Response to Variables Regarding Library Staff

Variables	*No. of users who answered*	*% of the total sample*
They are just a receptionist/clerk	6	9%
Their only job is to issue and return the reading material	12	16%
They should be highly qualified to take care of the interest of the readers	35	47%
Their job is to help the readers in day-to-day search	40	55%
They should qualitatively match with the readers requirement	33	44%
They should not do any qualitative work at all	5	8%

the library staff can be of a great help for the academic community and they consider professional library staff as protector of the resources of the profession and quality control can be maintained by them.

In the context of the JNU Library, when a question was asked of the users whether or not the quality exists in JNU Library staff, 65% users stated that one or the other quality does exist in the library staff. Related to this a question was asked of the user to list out the qualities. We find that majority of the users feel that the job of the library staff is to help in the day-to-day search of the users. 30% of the users feel that JNU Library staff should be well qualified or qualitatively match with the readers requirement. This shows the weakness of our reference service. We concentrate ourselve to the directional service only. We do not participate in the extensive reference service along with the user. We have not developed the attitude toward providing information, finding out the users needs for information, their preferred sources. We must provide service by scanning the literature and matching it with the users' requirements. We must have different skills like professional skill, background knowledge of the subject, logical and analytical skills in literature search, and we must develop the aptitude to have bibliographic organization and control.

91 LIBRARY ENVIRONMENT

Library environment plays a very important role in the work of a researcher. It may be the physical location of various documents, furniture or it may be the total library environment, i e the staff behaviour, library management, book collection etc. Environment should be conducive to the satisfication of users and the staff. If staff gets tension free environment within the library, his performance will be to the maximum and if users get noise free, helpul staff, good collection he will also hope to be satisfied to the maximum.

In order to know about the general awareness and desirability of users for physical environment, various alternatives were given to them. Table 8 shows the general requirement of the user about the physical environment.

Table 8 : Users' Requirements about Library Environment

Environment wanted	*No. of users*	*% of the total sample*
Home like environment	8	10%
Quiet Library type atmosphere	51	70%
Open atmosphere	9	12%
Separate research wing in the library	47	68%

Users themselves have differentiated between the home like environment and quiet library type atmosphere. Only 10% users wanted the first alternative. Normally, in home like atmosphere one can have the general reading and writing, but the serious reading and writing needs a peaceful environment around. On asking another set of questions—whether they wanted an open atmosphere where no separation between the users is made or they wanted a separate research wing in the library, the users pointed out that they wanted the latter alternative. Perhaps the reason is that since each document which they consult, has to be at one place for a longer time, they do not want to be disturbed. Each academic library should take care of such users. They are the backbone of the academic library user community. If maximum number of research scholars use any library, it shows that good quality of collection and staff exist in the library.

Similarly, a question was asked whether users get the environment in JNU Library which they wanted, the answer was 50 : 50. While asking

to specify the reasons for not getting the satisfaction from the present environment, the users gave many reasons. These are :

1 *Library Building*

—Seating arrangment is poor,
—Furniture not designed for comfort, and
—Lack of space.

2 *Library Management*

—Very noisy,
—Untidy,
—Disorganized,
—Total system is in a mess,
—No proper allocation of seats,
—No restriction for outsiders,
—Market type atmosphere, and
—Separate wing for research scholar needed.

3 *Library Services*

—Library service is poor,
—No research environment,
—Non-cooperative staff, and
—Staff is non-committal.

4 *Library Staff*

—No one can be satisfied by the staff,
—Staff is undutiful,
—Uninterested staff,
—Readers are more and they are not taken care of,
—No fellowship, and
—Communication gap between librarian and research scholar.

5 *Library Collection Development*

—Lack of reading material, and
—Lack of coordination between faculty and library in collection building.

6 *Library Collection Maintenance*

—Collection kept untidy,

—Collection is disorganized,
—Better cataloguing facility required, and
—Catalogues do not tally with the shelf.

7 *User Behaviour*

—Some rest room,
—Lack of interest in research, and
—Very little interest in research in comparison to job oriented readings which reduces the use of subject periodicals and other research material.

92 USERS OPINION

Finally, users were asked to specify what system they wanted which will satisfy their needs. We received overwhelming response as follows:

1 *Library Management*

—Overcrowding to be reduced,
—Quiet atmosphere,
—Good sanitation,
—Outsiders are hurdle to research work,
—More seating capacity,
—Mobility of users in using various documents should be less, and
—Close access system should be introduced.

2 *Library Services*

—Computerized system for information retrieval,
—Dynamic inter-library-loan facility,
—Quick xeroxing facility,
—Information scientists should be introduced in the library,
—Users should be made aware of the arrangement of catalogue,
—Good and extensive bibliographical service by the staff,
—Documentation work needs improvement,
—Press-clipping should be properly maintained,
—Conversation in English by staff is required, and
—Regular discussion and seminars with the researchers about the use of library material should be conducted.

3 *Library Collection Development*

—Adequate and good reading material,

—Acquisition should be according to the needs of the user,
—Regular supply of periodicals and the introduction of new journals,
—Large extent of general book collection has not been used even once, and
—While finalizing the purchase of reading material, Librarian should consult research scholars.

4 *Collection Maintenance*

—Proper maintenance of books,
—Placement of related document should be at one place, and
—unused books from the shelf should be weeded out.

5 *Library Staff*

—Professionalism is must,
—Staff should be attentive and cooperative in their duties,
—Responsible, helping and mechanized relation between the staff and the users,
—Staff should be well-qualified to know and trace the required reading material and prepare the bibliographies in order to save the time of users,
—Vigilant staff,
—Expert library staff,
—Hierarchical cooperation system should be controlled to reduce delays, and

6 *Library Building*

—More space to accommodate future expansion, and
—Mind refreshing wall paintings.

7 *User Behaviour*

—Casual recreation facility,
—A system which will encourage the users to do research work, and
—Users who misplace the reading material should not go scot free.

93 CONCLUSION

As has already been stated, quality is a term applied to the goods and services and refers to productivity, desirability and affordability. There-

fore, it is necessary to evaluate in whole all the aspects of qualitative service. The identification of better service in the library depends upon :

(a) Whether the library has a definite purpose;
(b) Whether it has clear objectives and jobs;
(c) Whether the performance can be measured; and
(d) Whether it has result oriented system.

Mainly, the two important aspects for qualitative service are : 1, The collection development policy; and 2, The involvement of staff.

Ranganathan's concept of "Every reader his or her book" or "Every book its reader" should be the policy for collection development. The efforts should be made to provide best collection to the largest number of users at a minimum cost.

Similarly, the greater involvement of staff in the working of the library shall provide good results. Staff should have the following qualities :

—Good subject background:
—Good knowledge about the requirement of the users:
—Promptness in the disposal of matters;
—Ability to coordinate the collection development;
—Good knowledge of indexing system, classification schemes and cataloguing codes;
—Good knowledge of various new and old terminologies or thesaurus;
—Good communication power and skills;
—Imaginative and receptive, clarity in expression;
—Good knowledge of the present library collection, particularly the reference sources;
—Ability to organize and to work methodically.

All these qualities in the library staff cannot be achieved in one day. It needs practice, and only experience can bring the good results.

APPENDIX (A)

IDENTIFICATION OF QUALITATIVE LIBRARY SERVICES : A USER SURVEY OF JNU LIBRARY SYSTEM

1 Please indicate, whether you are a student of :
(i) M Phil——— (ii) Ph D———

2 What is the topic of your research/assignment

———————————————————————————

———————————————————————————

3 How long you are engaged in this topic ———

4 How it occurred to you, that you must do research in the topic you have chosen (if your choice is more than one, please do not hesitate to tickmark) :

. . . With friend's advice ———
. . . Discussed with teacher/guide ———
. . . With own previous knowledge ———
. . . By browsing the books, periodicals etc ———
. . . By scanning the *Disseration Abstracts* ———
. . . Some one encouraged you ———
. . . Any other (Please specify) ———

5 In finalising your topic of research/assignment did you take help from (if your choice is more than one, please do not hesitate to tickmark):

. . . Your own experience ———
. . . Through discussion with your friends and relatives ———
. . . Reading through newspapers, periodicals and books etc. ———
. . . Listening to TV or Radio programmes ———
. . . With the help of the Library Staff ———
. . . With the help of the teacher/guide ———
. . . Any other (please specify) ———

6(A) After finalizing the topic of research, did some body tell you about the research method to be adopted by you.

Yes——— No———

6(B) If yes, please answer:

. . . You had your own experience from previous education ———

. . . Taught by the teacher/guide ———

. . . Informed by the library staff ———

. . . Any other (please specify) ———

———

7(A) Do you consult your library or other libraries:

Yes——— No———

(B) If yes, please answer, whether:

. . . Exhaustively ———

. . . Very often ———

. . . Often ———

. . . Any other (please specify) ———

(C) If no, then why:

. . . The topic did not need library consultations ———

. . . The topic needed entirely field work ———

. . . I can do by myself ———

. . . Laboratory work is for me ———

. . . Libraries are not of much help ———

. . . Any other (please specify) ———

———

8 What were your sources of information (if your choice is more than one, please do not hesitate to tickmark):

. . . Books ———

. . . Periodicals ———

. . . Newspapers ———

. . . Conference Proceedings ———
. . . Govt Publications ———
. . . Reference works ———
. . . Survey data ———
. . . Bibliographies ———
. . . Any other (please specify) ———
———

9 Have you used, any of the guides, in connection with your information collection (if your choice is more than one, please do not hesitate to tickmark):

. . . Library catalogue ———
. . . Abstracts and indexing journals ———
. . . Bibliographies, reading lists ———
. . . Reference works ———
. . . Books reviews ———
. . . Govt Publications guides ———
. . . Any other (please specify) ———
———

10 Name any of the Abstracting/Indexing Journals which you have often used:

1. ———
2. ———
3. ———
4. ———

11 How often you used these Abstracting/Indexing Journals (please write the serial numbers of question No. 10 against each variables):

. . . Very often ———
. . . Often ———
. . . Sometimes ———
. . . Rarely ———
. . . Not applicable ———

12 What other sources of information you have used (if your choice is more than one, please do not hesitate to tickmark):

. . . Microfilm _____
. . . Microfiche _____
. . . Maps _____
. . . Radio/TV programmes _____
. . . Other audio-visual materials _____
. . . Used Computers in data compilation _____
. . . Any other (please specify) _____
_____

13 How do you rate the collection of your library (please rate them as No. (1) Very good, (2) Good, (3) Average, (4) Poor (5) Very poor:

. . . Books _____
. . . Periodicals _____
. . . Serials _____
. . . Microfilms _____
. . . Microfiche _____
. . . Text books _____
. . . Reference books _____
. . . Govt Documents (Indian) _____
. . . Govt Documents (International) _____

14 What do you think about the library staff:

. . . They are just a receptionist/clerk. _____
. . . Their only job is to issue and return the reading materials. _____
. . . They should be highly qualified to take care of interest of the readers. _____
. . . Their job is to help the readers in day-to-day search. _____
. . . They should qualitatively match with the readers requirements. _____

. . . They should not do any qualitative work at all. ———

. . . Any other (please specify) ———

———

15(A) Did you find any of the qualitative, qualities in the library staff:

Yes ——— No ———

(B) If yes, please specify the item No/s from question No. 14.

(C) If no, what is the reason (please indicate in few lines).

———

———

16 Do you use any other type of agency in collecting information (if your choice is more than one, please do not hesitate to tickmark):

. . . Newspaper agency ———

. . . Broadcasting agencies ———

. . . Specialized institutions pertaining to your topic of research ———

. . . Govt agencies ———

. . . Did not use any other agency ———

. . . Any other (please specify) ———

———

17 How satisfied you were with these agencies (give few numbers from previous para):

. . . Very satisfied ———

. . . Satisfied ———

. . . Somewhat satisfied ———

. . . Very dissatisfied ———

. . . Dissatisfied ———

. . . Somewhat dissatisfied ———

. . . Dont' know ———

. . . Not applicable ———

18 What type of environment you wanted for your research work (if your choice is more than one, please do not hesitate to tickmark):

. . . Home like atmosphere ———

. . . Quiet library type atmosphere ———

. . . Open atmosphere ———

. . . Separate research wing in the library ———

. . . Any other (please specify) ———

———

19 What environment did you get, for your research work (please indicate in few lines, use separate sheet if needed).

———

———

20 Are you satisfied with the present environment in which you are doing research work.

Yes ——— No ———

21 If no, then why (please indicate in few lines).

———

———

———

22 In your opinion, what type of system you would like to have in the libraries, which will satisfy your needs (please indicate in few lines).

———

———

———

INFORMATION SERVICES IN GRASIM

A TEJOMURTY*
A PARULEKAR**

1 INTRODUCTION

The word 'information' is used to identify many different concepts. But still it is difficult to define it precisely. In the generic sense it is that which can be communicated, distributed or received through any media of communication. Farradane defines information as "Any physical form of representation or surrogate of knowledge or of a particular thought used for communication".[1]

In our present rapidly changing and highly cost-oriented society, information is becoming an important raw material. Users' need for information is stimulating libraries and librarians to consider techniques so far considered as either too costly or too complex. Traditionally, special libraries alone were indulging in active information services. But now demand for information is changing fast. Many types of users, viz technicians, managers, executives, economists, sociologists etc require information services today.

Before proceeding to discuss the information requirements and services, it would be useful to understand the meaning of the terms involved. Brittain clarifies:

> "A *need* is generally conceived as describing that an individual ought to have for his work, recreation etc. Pinpointing a need implies a value judgement".
>
> "*Requirement* may be understood as a bridging term; it can be loosely employed to signify that which is needed, wanted or demanded.
>
> "A *use* is what an individual actually applies. A use may result from a

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**GRASIM Technical Library, Nagda (M P).

satisfied demand on a library or information service, or may depend on information from some other source".[8]

2 NEED FOR INFORMATION SERVICES

The need for information services arises mainly out of two reasons described below.

21 Information Explosion

The growth of population and knowledge has resulted in information explosion. There are now more potential users, wanting to have access to information. The growth of knowledge must be followed by its information dissemination part. Information dissemination media must, in fact, grow faster so that the increasing published information can be processed, and the requirements of information seekers can be met.

22 Information Awareness

In the present day society the role of information is better understood by the government, management, and industry. Admittedly this understanding has probably been stimulated by the sheer growth of information, forcing policy makers to look carefully at how they use information. Nonethelesss there is now a greater awareness of the role of information.

3 USERS' NEEDS AND SERVICES

An information service provided without due attention to the needs of users is obviously no information service at all, and the special librarian should be fully aware of the main techniques necessary for discovering what his users want. The types of requests usually made are as follows:

(i) demands for specific documents;
(ii) demands for specific data;
(iii) retrospective searches (for references);
(iv) current awareness demands; and
(v) searches for research ideas.

While the gradual development of library services to answer the demands outlined above is common, it is often of value to undertake studies in order to discover whether or not the library is serving its users adequately and what kind of services they need.

4 SCOPE

This is a study of the information services provided to the engineers and technicians engaged in Gwalior Rayon Silk Manufacturing (Weaving) Company (=GRASIM), Nagda. Nagda town is situated at a distance of 90 km from Ujjain, and is on the Delhi-Bombay railway route. GRASIM went into production in 1952. Viscose fibre, caustic soda, sodium sulphate are the main products. These products are used in paper industry, textile mills, manufacture of detergent soap etc. The total turnover of GRASIM during the financial year 1985-86 was Rs. 417.77 crores. GRASIM has four divisions, viz (1) Birla Research Institute (=BRI), (2) Chemical Division (2CD), (3) Engineering Division (=ED), and (4) Viscose Fibre Division (=VFD). The study covers all the four divisions. It aims to find out the information requirements of engineers working in GRASIM, and the adequacy of information services provided to them.

5 METHODOLOGY

Primary necessary data has been collected with the help of questionnaires. In all, there are 390 engineers and technicians working in GRASIM. Questionnaires were circulated to 150 respondents on a random sampling basis, out of whom 107 respondents filled in and returned the questionnaires. Table 1 provides the statistical analysis.

Table 1 : Number of Questionnaires Circulated and Returned

Name of unit	*Total no. of staff*	*Questionnaires circulated*		*Questionnaires returned (% to total number)*	
		No.	*%*	*No.*	*%*
BRI	10	10	100.0	7	70.0
CD	75	30	40.0	22	29.3
ED	55	35	63.6	28	50.9
VFD	250	75	30.0	50	20.0
Total	390	150	38.5	107	27.4

6 INFORMATION REQUIREMENTS

People engaged in industrial entrepreneurship and production usually require information at two stages : (a) pre-investment stage, wherein information is required by the entrepreneur to decide whether to invest or not

to invest; and (b) current operational stage, wherein information is required for day-to-day decision making and proper functioning of the enterprise.

Industrial information is generally broad-based, consisting of techno-economic, technological, managerial, and financial types. Engineers and technicians generally require information on production, quality control, engineering, research and development. As all these are related with machinery, they require information on latest technological developments. The user profile of an engineer, in the words of Slater[3] is as follows:

> "Engineers were the least frequent library users, and were more likely to go outside the resources of their own library than scientists, using friends, colleagues and experts more than the other groups;
>
> Brought high level practial problems to the library;
>
> Asked for information (rather than specific documents) and depended on librarian for assistance;
>
> Low use of periodicals compared with other groups, tended to use handbooks, standards, specifications, and databooks; Appeared to have most problems with getting information."

61 Information Requirements of Engineers in GRASIM

The data regarding information requirements, made available by the respondents, is broken into broad areas and working departments. This is presented in Table 2.

7 INFORMATION SERVICES IN GRASIM

71 GRASIM Technical Library

There are two libraries attached to GRASIM. One is the GRASIM Technical Library, established in 1960, and is presently housed in the main office building. It is looked after by a trained librarian, and is supposed to serve the engineers and other technical personnel of all the four units of GRASIM. The library collection is mainly macro in nature, with about 5,000 books covering chemistry, cellulose, textiles, pulp treatment, quality control, and management. It subscribes to a few periodicals like *Chemical Age of India*; *Chemical Engineering World*; *Indian Journal of Environmental Protection*; *Textile Month* etc. There are no abstracts, indexes, standards and patents worth their name.

72 Birla Research Library

This was established in 1965. One information scientist and one

Table 2 : Information Requirements—Areawise and Departmentwise

Main area	*Information required on (working department)*
Management	Production management Personnel management Supervision of mechanical work
Production	Process control Target production Design and development Viscose production
Quality control	Testing —Viscose preparation —Rayon fibres —Heat treatment of steel —Material specification
Engineering	Electrical Civil Mechanical/Maintenance Project
Research and development	Textiles Fibres Viscose chemistry Environment science (air, water) Pollution control Synthetic organic chemistry Pulping

librarian are working presently. The Library has a book stock of about 16,000 volumes. It also has a considerable number of patents, standards, and annual reports. It subscribes to 40 current periodicals.

73 Services

The GRASIM Technical Library provides merely pedestrian services to its readers. It is only the Birla Research Library which provides some information services to its clientele, which include all the scientists/ engineers. Basically, the details discussed hereafter relate to Birla

Research Library only. It should be interesting to know the service pattern and satisfaction level in this regard.

731 *Search Requests*

The figures relating to the number of respondents giving search request to the information centre are given in Table 3.

Table 3 : Respondents and their Search Requests

Unit	*Search request given*		*Search request not given*		*Total*	
	Number	*Percentage*	*Number*	*Percentage*	*Number*	*Percentage*
BRI	7	100.0	—	—	7	100.0
CD	9	40.9	13	59.1	22	100.0
ED	6	21.4	22	78.6	28	100.0
VFD	8	16.0	42	84.0	50	100.0
Total	30	28.1	77	71.9	107	100.0

Table 3 shows that only 30 out of the total 107 respondents (28.1%) made their search request to the Library, whereas majority of respondents, 77 out of 107 (71.9%) have not bothered to give their search request. This points out the fact that in GRASIM, many technical personnel believe in finding out information by themselves, instead of depending on the information officer.

732 *Feedback*

In any information centre, feedback is very important. In the absence of feedback, it becomes difficult to find out the relevance of the information provided to the information-seeker, and/or improve the quality of information service. The position in this regard is made clear in Table 4.

Table 4 makes it clear that feedback exists only with 30 out of 107 respondents (28.9%), as against non-existence of feedback with 49 out of 107 respondents (45%). 28 out of 107 respondents (26.1%) have not provided any answer.

8 SATISFACTION FROM SERVICES

The general information dissemination methods like documentation list, abstracts, indexes, CAS, SDI, Translation services etc are not pro-

Table : 4 Feedback

Unit	Respondents Having feedback		Not having feedback		No. reply		Total	
	No.	Percentage	No.	Percentage	No.	%	No.	%
BRI	6	85.7	1	14.3	—	—	7	100
CD	1	4.5	5	22.7	16	72.8	22	100
ED	8	28.6	16	57.1	4	14.3	28	100
VFD	15	30.0	27	54.0	8	16.0	50	100
Total	30	28.9	49	45.0	28	26.1	107	100

vided in GRASIM. Some type of personalised service only is provided on demand. Occasionally, a subject bibliography and/or an index is prepared, and provided to the reader. The answers to the question relating to the satisfaction/dissatisfaction with regard to information services are presented in Table 5.

Table 5 : Satisfaction of Respondents

Unit	Satisfied		Not satisfied		No reply		Total	
	No.	Percentage	No.	Percentage	No.	Percent	No.	Percent
BRI	5	71.4	2	28.6	—	—	7	100
CD	9	40.9	7	31.8	6	27.3	22	100
ED	12	42.8	11	39.3	5	17.9	28	100
VFD	39	78.0	11	22.0	—	—	50	100
Total	65	60.8	31	28.9	11	10.3	107	100

The number of respondents satisfied with the services is broken into different levels of satisfaction and presented in Table 6.

Out of the total 65 respondents who are satisfied, 12 (18.5%) indicate a low level of satisfaction, and majority of respondents, i e 42 out of 65 (64.6%) express medium level of satisfaction. Only eleven out of total 65 respondents (16.9%) are highly satisfied with the services. This does not seem to be a good gesture.

Table 6 : Level of Satisfaction of Respondents

Unit	*Low*		*Medium*		*High*		*Total*	
	No.	*Percent*	*No.*	*Percent*	*No.*	*Percent*	*No.*	*Percent*
BRI	1	20.0	2	40.0	2	40.0	5	100
CD	2	22.2	4	44.4	3	33.4	9	100
ED	2	16.7	8	66.6	2	16.7	12	100
VFD	7	17.9	28	71.8	4	10.3	39	100
Total	12	18.5	42	64 6	11	16.9	65	100

Table 5 indicates that 31 respondents out of the total 107 are not satisfied with the information services. They were asked to specify the reasons of dissatisfaction. The reasons of dissatisfaction as expressed by them are given in Table 7.

Table 7 : Respondents' Reasons for Dissatisfaction

Reason	*BRI*	*CD*	*ED*	*VFD*	*Total*
Information not uptodate	1	3	5	4	13
Information incomplete	—	1	1	—	2
Library material inadequate	1	—	2	2	5
Service not prompt	—	1	2	1	4
Service insufficient/inadequate	—	—	1	3	4
Irrelevant information provided	—	2	—	1	3
Total	2	7	11	11	31

9 CONCLUSION

As is clear from Table 7, quite a few engineers in GRASIM, i e 31 out of 107 respondents (28.9%) are not satisfied with the information services provided to them. The reasons for this are not far to seek. An analysis of the respondents' remarks gives the reasons as : (1) The information contained in the old volumes on technology and engineering subjects is not uptodate and thus not satisfactory (e g only three old volumes of *Chemical Abstracts* are available); (2) Adequate financial provision is not

made by the management for the information services; (3) Whenever useful material like patents, reports, know-how books are added to the Library, they are requisitioned right away by the higher-ups in management, and are not immediately made available to the technical personnel who are actively working on the spot; (4) The Library is closed when the librarian is on leave. Besides, the library is used for conducting the company meetings or seminars, and the frequency of this is high; (5) The management have established the information centre all right, but are apathetic to the proper service part of it; and (6) The Librarian/Information Officer is not given proper status with his engineer counterparts, which also is affecting the service aspect.

Information is the lifeblood of industrial activity. Information services are essential for specialist users, and inadequacies or lapses in this would jeopardise the interests of both the specialists and entrepreneurs. The above difficulties should be removed so that adequate information services can be provided. Any progress in this direction should be a welcome step.

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QUALITATIVE IMPROVEMENT OF SERVICE IN COLLEGE LIBRARIES: A RESUME

J K ANAND*

0 INTRODUCTION

It is really commendale on the part of Indian Library Association to have chosen "Quality in Libraries" as the focal theme of the present Conference. Quality of service is considered extremely important in the present context in view of genuine expectations of library users. The parity in status and service conditions with those of academic, scientific and similar staff can be achieved by the profession only by aiming at the highest standards of library service. In the present paper an attempt has been made to briefly analyse and explain the points whereby sufficient qualitative improvement can be brought about in providing better service in college libraries.

1 STATUS OF LIBRARIAN

The post of college librarian should be formally accorded high academic rank in keeping with the importance which a library has assumed in the academic life of a college. The powers and responsilbilities of a college librarian be defined, especially as they relate to the organisation, operation and development of library services in a college. Library work should be accepted as a specialised job and the librarian should be accorded the status as head of library department like heads of other teaching departments in a college.

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2 LIBRARY FINANCE

Finance plays a significant role in the organisation and administration of a library. A library should be assured of adequate finances, otherwise it cannot discharge its obligations and guarantee the continuity of proper service to the users. There is a great concern on account of the inflationary spiral of prices of documents and ever rising maintenance costs of libraries. The real value of library budgets has decreased and in return it has slowed down the development and progress of the libraries. Commissions after commissions established by the Government of India have aptly observed in their reports that expenditure on academic libraries will have to be increased if teaching is to become effective. To meet the ever rising expenditure of the college libraries relating to books, journals, furniture and equipment, library building and library accessories etc, it is imperative that sufficient funds on a recurring basis are made available to the college libraries so that they are in a position to perform their academic functions in an efficient manner. The present formulas regarding recurring and non-recurring UGC grants to college libraries have become quite irrational. It is, therefore, suggested that provisions regarding library finance in college libraries should suitably be revised in order to make the libraries self-sufficient.

3 LIBRARY BUILDING

A college should have an attractive, spacious, well-equipped and functional building for its library. It should be a place where reference, browsing and recreational reading are the chief activities. It should provide adequate space for reading material, library staff and different service points. Moreover, it should have ample provision for future expansion. The objectives of a library cannot be satisfactorily achieved without the help of a properly planned and functional building. It can be said without any contradiction that most of the college libraries in the country are functioning under pitiable conditions. The existing University and UGC norms and guidelines regarding construction of college library buildings have become obsolete. It is suggested that the same may immediately be suitably revised.

4 LIBRARY STAFF

Library staff holds a pivotal position in the matter of providing effective service. If library staff is inadequate, the services are bound to be far from satisfactory. No library can render desirable service without adequate and competent staff. A large number of college libraries have grown in size and complexity. They are working under severe handicaps including lack

of proper space and inadequate staff. Book collections in the libraries have multiplied several times during the past two decades. Provision of staff in the libraries has consistently remained the same. The growth in the number of students, the introduction of new courses, the constant increase in the annual budgets and the frequent special grants from the UGC have placed additional and often new demands on the libraries. Day by day the expectations of the users are rising. They are demanding reference, documentation, bibliographical and reprographic services. There is an immediate need to fill up the widening gap between the users' expectations and actual performance of the libraries.

The staffing pattern of the libraries needs a fresh look. The existing staffing pattern in the libraries has become obsolete in the context of all-round development in the collections and phenomenal rise in the use of the libraries. Unless the whole question of the administration of college libraries is reviewed with clearly defined aims and objects, the college library will not be in a position to fulfil its objects. There is an immediate need to organise the work of the library systematically with proper delegation of responsibility and authority to staff members for different phases of the work. The delay in the necessary restructuring of library staff would lead to further inefficiency and confusion in the libraries. It is, therefore, suggested that the existing staffing pattern in the college libraries should be reviewed immediately in order to make it more conducive to latest situation.

41 Library Training and Continuing Education of Library Staff

There is an urgent need for a change of curricula in the libray science courses in university departments and other librarians' training programmes with a view to aligning these with the present day needs and demands of the users of the libraries. The present library science courses are quite unsuitable for adequately increasing the functional efficiency of library staff. Besides imparting training in acquisition, processing and dissemination of library material, adequate emphasis should also be placed in the curricula on the library management techniques. There should be ample provision of in-service training courses, short-term workshops and seminars for different cadres of library staff.

42 Motivation and Commitment

Quality of library service has been a casualty mainly because of insincerity and lack of earnestness among staff for maintaining quality and acquiring excellence. The quality of service in the libraries cannot be improved unless the library staff has a commitment to perform better.

There is an immediate need to inculcate a new work-ethic and work-culture among the library staff. The corrupt, the lazy and the inefficient persons should nave no place in the libraries.

The talk of new work-culture *sans* motivation is meaningless. Motivation is, therefore, a pre-requisite of any new work-culture. A work-culture divorced from motivation, will produce no results. A library may present an image of helpfulness, politeness and efficiency, derived from the attitude and behaviour of the library staff. The library staff should aim at seeking an effective use of its resources. The library staff should have a sense of satisfaction and pride in their work. Honesty and efficiency should be their hallmark. They should be motivated to work with a missionary zeal. A highly motivated staff in the libraries will be a big asset. A desired level of motivation among the staff can be brought through training as well as disciplinary proceedings against erring staff.

5 LIBRARY COMMITTEE

The composition, functions and role of library committees in colleges shoule be defined in the university statutes. The library committee in a college should be of a representative character consisting of teachers, students and library staff. It should be statutorily laid down that the Principal, Vice-Principal and the Librarian will be the ex-efficio chairman and convener, respectively of the library committee. It is necessary for smooth implementation of the decisions taken by the library committee.

6 COLLECTION DEVELOPMENT

There is an immediate need for college libraries to adopt a collection development policy bearing in mind their peculiar problems with regard to lack of space, limited budget and inadequate staff. A proper collection development policy would enable the book selectors to use limited funds more wisely resulting in richer and better collections. Moreover, the high rate of non-usage of materials in college libraries demands a greater interaction between teachers and professional library staff in the matter of book selection. The librarians, by virtue of their training and experience, are in a better position to understand and assess the overall needs of the libraries' clientele. In order to keep the collection within a manageable size, the college libraries should adopt a systematic plan of weeding out the collection from time to time.

7 SERVICES AND FACILITIES

It is a matter of common knowledge that most of the college libraries in the country are providing minimum services. They concentrate on acqui-

sition, processing, helpful shelf arrangement and lending of books and journals to teachers, students and non-teaching staff of the college. Documentation services are not being provided in college libraries. Reference service also is not given as a matter of routine but usually depends upon the interest and initiative taken by an individual librarian.

Library services and facilities should be developed and provided as a part of total programme of a college. Libraries exist for users. Services cannot therefore, be planned without relevance to the needs of the users. User studies on scientific lines should be undertaken periodically and the findings of such studies should be the determining factor in designing of the various services to be offered. The aim should be to provide the following services to the users in a college library:

(i) Lending services,
(ii) Instruction in the use of the library,
(iii) Reader's advisory service,
(iv) Inter-Library loan,
(v) List of additions,
(vi) Reservation of documents, and
(vii) Reprographic services.

8 USER EDUCATION

Library orientation programme should be made a part of the curriculum of the freshers in a college so as to give the students a proper understanding of the resources of the library and their use. Every member enrolled should be given a pamphlet giving the guidance about the library.

91 MODERNISATION OF LIBRARY SERVICES

The introduction of library automation can go a long way in improving the quality of library service. The information and allied technology, such as computers, reprographic, micrographic, audio-visual and telecommunication technology will have to be introduced at appropriate levels in the libraries. The mechanisation of library operations, which are of a routine and repetitive nature, should be introduced wherever possible. This covers usually housekeeping functions such as acquisition, serials control, cataloguing and circulation. Computer application will contribute to speed and efficiency in the libraries.

92 LIBRARY STANDARDS

The college library system should be viewed as network of local, univer-

sity and national libraries forming an integral part of the academic library system of the country. Minimum standards of library services should be designed and strictly adhered to in a college library. Appropriate machinery should also be established at various levels for regular monitoring of the services.

QUALITY IN PUBLIC LIBRARIES IN INDIA

G M AHUJA*

0 IMPORTANCE OF BOOK

Education is Universally accepted as *sine qua non* of the progress of civilization and culture made through the ages. And there is least doubt that books still remain as one of the most effective tools of education. Although mass-media like radio, television, film and audio-visual aids have made advances and rapid strides in the recent past, yet the print material, specially the books, still play a major role for the advancement of knowledge and stimulation of ideas. The book can elevate the very soul of man to unknown heights. "As instrument of educational culture, the book remains unrivalled in its effectiveness. The contemporary revolution of communications has confirmed the primacy of the book. The audio-visual media, the radio, film and television, have advanced rapidly and powerfully, and this advance will continue and soon spread to the developing world. But recent studies have established the fact that the new media do not and cannot replace the book; on the other hand they promote literacy and highlight the essential role and importance of the book."[1] These are, thus, necessary anxilaries but in no way replacement of the book and the position it occupies today.

01 LIBRARY MATERIAL

Present day library service is no doubt more dependent on books and substantial book stock is the basis of service to the readers but non-print material like films, film strips, cassetts, tapes etc have now found a place in the library for imparting education to the readers. In a way they are the basis of library service in any library.

Due to advancement of science and technology, there is knowledge

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explosion throughout the world. Research has become the order of the day and inventions and discoveries are being reported every day. To keep the public abreast with all these advances and developments in all the fields of knowledge, which has now become multi-dimensional, it has become imperative for the libraries to give speedy information to the public, demand for which is increasing many fold. "We cannot afford to be indifferent to the information needs of the people any longer. We need to collect, organize and supply up-to-date information required by our community. Libraries in the West have done much in extending their horizons and are struggling to become people's institution We should not miss any opportunity of bringing information to the people."[2].

Every researcher wants to lead and not to be left behind in the race so as to win recognition of the highest order. The libraries have thus been obliged to use modern gadgets and appliances such as photo-copier, micro-film, audio-visual aids, television sets and micro computers etc to supply information to the reading public without any loss of time.

1 THE PUBLIC LIBRARY

"In the foundation of Public Library, the social purpose is paramount, viewing it as the social service. It is the purpose of library to make it possible for all men, according to the needs and circumstances, to enjoy whatever benefits of full access to books and related forms of record may bring them. There is a growing need for the public libraries throughout the world, particularly in the developed countries, where educational programmes and the production of suitable reading materials are being stepped up. More and more people are learning to read through libraries serving as centres of popular education, support and continue the work of teachers by providing people with life long opportunities for self development. Without the public libraries, many adults and young people who have left schools give up reading and gradually lapse into illiteracy."[3]

11 Extension Programmes of Public Library

The present day public library is charged with the responsibility of imparting non-formal education to its reading public. In order to discharge this duty social education programmes or the extension activities are arranged inside as well as outside the public libraries as part of their service to the general public. These comprise study circles, discussions and debates, book clubs, discourses, lectures, exhibitions, demonstrations, audio-visual shows, musical concerts and staging of plays and the like. These activities, apart from giving education to the public, develop aesthetic aspect of life in them and make them more civilised and cultured.

It is heartening to see that the present day public library is also meeting the obligations of giving library service to the special categories of general public like the children, the old, the in-door patients, the prisoners, the blind, and visually handicapped persons. The present day public library contains a wing of children section attached to each of its branches. The children of today are fortunate to have an easy access to the books right from their infancy thus paving a way for developing a reading habit from the very beginning to be fully utilised in their adulthood. They feel much more happy when they take part in the social education activities of the library like the puppet show, story hour and tit bit programmes.

12 Territorial Extension of Public Library

The expansion activities of the public library are not only limited to this functional extension but its services are rendered through territorial extension as well. Library branches and deposit centres are established through the width and breadth of cities to extend service to their door steps. The services of mobile-book-vans have also been utilised for giving library service to the residents of far flung urban areas as well as the rural public so as to save them from unnecessary long traval and waste of time.

13 Special Problems of Public Library

Public libraries in India face many problems which are not common to its counterparts such as the academic, special and research library. Since the attention of library scientists is diverted from this part, the problems are aggravated rather than solved.

There is a problem of stock of books in Indian languages other than English. The supply of funds is not sufficient and regular. Most of the state libraries depend on ad hoc grants from government and other agencies in the absence of library legislation. New buildings are not being constructed. The staff of the public library has to work odd hours in different shifts—morning, day and evening like the factory workers facing the fury of hot season of June and chilly mornings and evenings of December while attending duties and going back home. They are burdened with excessive workload due to heavy use but placed in poor grades. Strenuous duties are performed by them while going out with mobile book vans in different seasons and they are deprived of cool rooms in summer and heaters in winter. They even lack the facilities of drinking water and use of toilets while on moving duty in mobile vans. The problems of such magnitude and volume can only be tackled by good managers. Persons with good academic career who are required to be recru-

ited in public libraries." There is a notion that public librarianship can do with inferior talents and does not require the academic standards of university and special libraries. A public library system has to deal with men, women and children who are out entirely on their own in quest of knowledge and information. It is obvious that those who man the key posts in this system should be men of intelligence, understanding and knowledge and should be endowed with a capacity for warm human relations,"[4] if the quality service is expected of a public library. It is an appeal to the senior library colleagues not to turn a deaf ear to this side of the picture. We need to attract better managers to man the libraries and provide incentives and motivation to existing personnel.

14 Use of Public Library

All efforts are to be made to see that the public library is used to the maximum extent. For this purpose, books are purchased keeping in view the taste of readers and reading trends of the modern society. The *Five Laws* of Library Science as enunciated by Dr Ranganathan, the father of library movement in India, are being put into practice in giving shape to the present day library service to the readers. Public library is now humming with reading public, making it a live institution in true sense of the word. The primary objective of the public library is now considered to take books to the public and bring public to the books. It would thus be seen that the task of the public library is not so simple.

2 QUANTITY VS QUALITY

The use of the public library is on continuous increase. The statistics of Delhi Public Library, with its modest start in 1951, show that about 10,000 books are issued now for home reading per day coupled with the same figure of use at its premises While we should be satisfied with the quantitative increase in use, membership, book stock and annual expenditure in one of this premier and leading public libraries of India, it does not mean that one should turn his back to the qualitative aspect of the work in the public libraries which also needs utmost attention.

The details of expenditure, book-stock, membership and yearly issue of books in Delhi Public Library from its inception in October 1951 to March 1986 are given in Table 1.

It is seen from Table 1 that the public library in India is becoming popular day by day. More attention is required to be paid for better and greater utilization of its services by the community.

3 USERS' SURVEYS AS FEEDBACK

Library science is one of the disciplines of social sciences. Surveys have

Table 1 : Data on Delhi Public Library

Year	*Expenditure* (Rs.)	*Book Stock*	*Membership*	*Yearly Issue*
1951-52	1,09,917	13,887	6,072	38,757
1956-57	2,47,137	1,11,122	32,616	4,37,133
1961-62	3,55,916	1,42,302	45,489	7,98,959
1966-67	11,78,158	3,70,525	1,36,432	19,22,511
1970-71	15,06,000	4,83,762	1,30,801	20,36,547
1975-76	25,64,000	5,19,966	1,17,047	19,55,279
1980-81	38,80,462	6,42,078	99,359	26,04,367
1985-86	1,14,03,700	8,25,487	94,786	27,59,451

SOURCE : *Annual Reports of Delhi Public Library*.[5]

taken a top place in the development of the social science subjects. Without making a survey in any field of the discipline, it is not possible to assess the needs of the society. Similarly, findings of users' surveys play a great role in the development of the public library. They help in assessing the needs and demands of the readers and thus help in increasing the quality of service. With this view in mind the author conducted a users' survey of Delhi Public Library in 1977. The problems posed by the then readers hold good even today in almost all public libraries. Some of the important suggestions were—the spacious canteen where readers could read and write over a cup of tea; a reading-room outside the check post of the library where readers could read their own books; separate study circles for female readers; books be issued for four weeks; more branches be opened in the suburbs of the city; more space be provided in the reading room; and reprographic services be provided for quick copying of reference material. Many of these suggestions have been accepted by the Library. Such surveys need to be repeated at regular intervals to assess the needs of users.

4 IMPORTANCE OF FIFTH LAW

The author is of the view that this law has lost its importance by getting a fifth place in enumeration. Since the growth of a library is a well known phenomenon, it should be kept well in mind while planning

a library building. Library buildings should be planned in such a way that there is ample scope for their future expansion, vertically and/or horizontly as may be possible. Librarians should resist and desist from opening a library in any unsuitable building with over-enthusism, otherwise they will have to face the ticklish problem of the shortage of space in the future.

As a suggestion the library scientists are called upon to sit together and revise the order of Five Laws of Library Science by naming the first law as "Library is a Growing Institution." This law would thus get a rightful place and save us from the present day problem of double-row shelving in libraries. This is not only deterrent to the quality work in the library but an irritant to the readers in locating books of their choice.

5 IMPORTANCE OF QUALITY

The element of quality in libraries is the most important aspect of library work. If it is neglected the book stock will be under-utilised. On the other hand, it will be seen that even the meagre stock of books will be well utilised if quality in library work and techniques is adopted.

The author of this paper is dismayed to see the prevailing deteriorating conditions in many libraries including public libraries in India. If we look upon Dr Ranganathan's *Five Laws* as guiding star for conducting the affairs of the public library, the things will certainly take a new turn. The quality of work will automatically increase if we adopt all the techniques for the proper use of the library, thus helping the reader for selecting right type of books, imparting education to them in the use of the library, extending the advisory services in selecting and locating the books on the shelves, and use of the library catalogue etc. The quality of work will also improve if book shelves are properly lighted and guided by bay guides; un-wanted, old, out-of-date and mutilated books are removed and regularly replaced by new editions and latest publications.

51 The Librarian and his Staff

It would rightly be said that it is the librarian who will have to fight on this front to bring quality in public libraries. Public library has full involvement with the community. Now-a-days it is one of the essential community services like the school, post office, water supply and the like. The librarian has to involve himself fully with the day to day affairs of the community around him so as to assess their book needs. He should play a role of a guide in the community and work as a good salesman for the promotion of library service to the community to be served. The librarian should be warm-hearted and a friend of public in its true sense. He should see to the maximal use of the library by the public who

should be attracted towards it like the bees towards the flower. He should work as the linkman between the books and the readers which is possible only if he himself loves books and has full knowledge of books through the help of his dedicated staff. It has been seen that even the dedicated helpers and attendants in the public library give better service than the technical staff.

It may be emphasised here that if we have to effect quality in public library, we will have to bring forth the dedicated and hard workers on the library staff who will have to work with mission to achieve the goal of 'service with a smile'. If a single student of Melvil Dewey, the young American librarian W A Borden can single handedly set the ball of library movement in India rolling at Baroda and give an impetus to the profession in the early part of this century, can't so many *chelas* (disciples) of renowned Dr. Ranganathan change the present map of public library service of India in the later part of the century, when circumstances are more favourable and when there is the proper season to sow the seed and reap the crop in abundance.

6 PRESENT DAY PROBLEMS

There is no doubt that numerous problems are being faced by the librarians of today. The librarians, old or young, big or small are not ignorant about these problems. If we want to bring quality in libraries, they should solve these problems without much delay any more, otherwise we would lag behind. Some of the important problems are formulation of national library policy, problem of resource sharing, bringing out the national bibliographies in various Indian languages, construction of new library buildings, sufficient availability of finances and the like.

7 CONCLUSION

Last, but not the least, librarianship in India, due to the untiring efforts of Dr Ranganathan, has now found a rightful place in the eyes of the public. It is now regarded as a noble and important profession. But there are always ups and downs. The younger librarians should see that they take the profession sky high and save it from going down. If the libraries go high, they themselves will gain.

God bless the younger librarians! I am sure my prayer will come true one day!!

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QUALITY LIBRARIES FOR QUALITY EDUCATION

MOHAN BHATIA*

There has been phenomenal increase in the number of educational institutions since independence. This increase was necessary to meet the socio-economic and techno-economic needs of the country. However, the same has been achieved without adequate planning and regard for the quality of education. The result has been insufficient input and poor as well as lop-sided output. The existing state of affairs in the education system has been well documented in the official document *Challenge of Education—A New Perspective.*[1] The poor standards of education could be attributed mainly to the quality of teachers, laboratory equipment, library and information services etc and facilities for extra-curricular activities like games, debates and dramatics etc provided in schools, colleges, universities and other institutions of higher learnings.

Realising that the libraries and the librarians have been neglected so far, the 'National Policy on Education—1986' states that "a nation-wide movement for the improvement of existing libraries and the establishment of new ones will be taken up. Provision will be made in the educational institutions for library facilities and the status of librarians improved."[2] How to improve these services has been broadly outlined in *National Policy on Education, 1986—Programme of Action.* Mention has been made in this document for improving libraries by establishing regional networks and modernising them by introducing computers and reprographic services. However, no mention has been made on improving the status of librarians.[3] Here, an attempt has been made to study the role of libraries and librarians in improving not only the quality of library and information services but also the quality of teaching and research programmes.

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In order to derive maximum benefit from the application of new knowledge generated by research in sciences what is needed in a country like India, is to produce best brains in science and technology, a hard core of technicians, engineers and designers. There is also need for entrepreneurs, administrators, managers trained in modern management techniques, and sociologists who could study aspects of socio-economic impact of new technologies on society. These people, no doubt, could be properly trained in our universities and institutions of higher learning if adequate infrastructure is built up. It may be pointed out that in the early stages of industrial development, Britain had to pay very careful attention to the programme of higher education in science and technology.[4]

The Government of India also realised the importance of higher education in science and technology and expressed its concern for its proper development by stating in its Scientific Policy Resolution that "The wealth and prosperity of a nation depend on the effective utilisation of its human and material resources through industrialisation. The use of human materials for industrialisation demands its education in science and training in technical skills. Industry opens up possiblilities of greater fulfilment for the individual. India's enormous resources of manpower can only become an asset in the modern world when trained and educated." Accordingly our science policy aims among others "to ensure an adequate supply, within the country of research scientists of higher quality . . ." and "to encourage and initiate, with all possible speed, programmes for the training of scientific and technical personnel, on a scale adequate to fulfil the country's needs in science and education, agriculture and industry, and defence." Recognising the value of information the science policy aims "to encourage individual initiative for the acquisition and dissemination of knowledge and for the discovery of new knowledge, in an atmosphere of academic freedom."[5] In the twenty eight years that have passed since the Government of India passed its Scientific Policy Resolution in 1958, several institutions of higher learning have been established in different fields but much remains to be done to achieve the qualitative goals.

Today, the universities are neither self-centered ivory towers nor fully autonomous social institutions, which have been built to fulfil our basic socio-economic needs. For example, these institutions are expected to produce the required number of skilled specialists needed in different areas for national economic development. For this, there is acute need for accurate manpower surveys to project the requirements of trained personnel required in different sectors over certain time horizon. This calls for techno-economic surveys at micro-levels, which may lead to radical restructuring of the education system, better integration of human resources planning and our economic development needs, more effective educational planning and better use of trained manpower. If the univer-

sities could be advised of nation's manpower requirements from time to time they could adopt their curricula and training programmes in the desired directions and also control the enrolment. This would not only boost the economy but also avoid much of the unnecessary and avoidable unemployment and consequent frustration among the educated youth.

Educational Plans, concerned institutional reports, political propoganda and academic discussions have always emphasised quantitative targets and achievements of institutions established, enrolment, and degrees awarded in different fields. However, no mention is made of the quality of the institutions established for imparting higher education.

Quality of our universities has been quite unsatisfactory. It has been reported that only 20 universities in India could be called developed and that 20 percent were underdeveloped, the remaining being unviable.[6] What is the reason for this poor state of affairs of our universities? Apparently more institutions of higher learning have been established to meet the increase in demand for higher education without regard to their quality. The question is: Have these institutions been staffed with expert teachers, equipped with latest scientific instruments, teaching aids, books and journals, etc?

Generally speaking, most of the universities and institutions of higher learning are poorly organised and ill-equipped. These bodies have been functionally crippled by the growing indiscipline resulting in frequent strikes and demonstrations by teachers, students as well as other employees from time to time. These institutions lack academic atmosphere for carrying out research and related studies. It has been observed that research is not accorded its due importance in the academic institutions. Apparently, the performance of an academic institution is measured by the student enrolment and not by the number of discoveries made and research papers published by the members of its faculty.

Secondly, there is but little cooperation between the government agencies, industries and private organisations on one hand and the universities and institutions of higher learning on the other. The industries, etc seldom refer their problems to the academic institutions. These institutions, therefore, carry out research on the topics which are only of interest to the individual faculty members without regard to the national requirements. Mostly, teaching is also centred around what is contained in text books. The librarian has to keep in mind the interests of the teaching and research community while developing his library. No wonder the development of library and information services in such institutions is also affected adversely. There is, therefore, urgent need for a change in the outlook and management of the academic institutions. To begin with these institutions should orient their teaching and research programmes to suit the national requirements.

Thirdly,, the priorities in the allocation of funds in these institutions

must also change. At present, major share of funds is allocated to buildings and plant and very little for laboratories and libraries. Recurring budgets are primarily devoted to the staff salaries and too little portion is allocated for the acquisition of books and journals, etc. Buildings are of course necessary to house the academic institutions but it is not necessary to squander crores of rupees on them and have just paltry sums for the purchase of library books and journals, etc.

Libraries in the universities are starved of funds for buying books and periodicals. At present, nearly 50 percent of the university libraries have book budget of less than one million rupees. Only 7 university libraries have book budgets ranging between Rs 25 and 50 lakhs. Delhi University Library is the only library having book budget of over Rs 50 lakhs.[7] Latest books and journals are quite expensive. But these have to be acquired to enrich the education system.

Current literature in the form of books, journals, reports and documents forms the basic ingredient for active academics. It is through these sources that an academic is able to keep abreast of latest happenings in his field of interest. Any slackening in this vital input may result in intellectual bankruptcy of the academics.

In the absence of sufficient basic inputs of literature and equipment, education standards have shown a steady decline, with the result that the existing system of higher education is producing much waste and suffers from stagnation. The failure rate at the first degree level is about 50 percent. Further, 70 percent of students who complete their post-graduate education in Arts and Commerce are placed in the third division and in sciences more than 40 percent of successful students in the post-graduate examinations are placed in the third division.

One of the reasons for this state of affairs in the field of education is the dearth of standard text and reference books as well as research journals (back as well as current issues) in libraries of most of the universities and the institutions of higher learning. For example, only six university libraries subscribe to over 2,000 titles of current periodicals.[8] Whereas most of the university libraries in North America, where standards of education are considered high, subscribe to 10,000 and odd current journals. No wonder, it has been said that 'you cannot have a quality education without a quality library.' A library, therefore, is considered as an essential department of an educational institution but it receives step-motherly treatment in the annual budget of institutions, etc. With meagre resources available, most of the libraries find it difficult to meet the demands placed on them by the community they are required to serve.

Libraries are manned by people who were earlier called as custodians of books because libraries for long have been considered as store-house of knowledge. The present day population explosion has led to mass

communication and mass literacy. These, coupled with the advances made in science and technology, have led to a knowledge explosion, putting increasing pressure on the libraries and information services. The role of libraries and information centres in disseminating recent developments in science and technology and its impact on education research, social and economic development has not been fully appreciated by the authorities. For example, if a seminar/conference is being organised in the university, its library could easily bring out a bibliography on the subject and also arrange display of relevant literature in the library or near the conference/seminar room.

Similarly, the teaching methods based on text book learning need to be modified and improved. Here, libraries and librarians can play a positive role. The teaching should involve increasing use of library resources than text books only. The students atleast in higher classes need to be given assignments in such a manner that they are compelled to make use of library. Students should also be taught methods to use basic reference books like Atlases, Bibliographies, Catalogues, Dictionaries, Encyclopaedias, etc. For this, the librarian should be involved in the teaching process. If possible, there should be a library period on the lines of methodology of research course taught in some of the universities.

There are many more ways in which libraries could contribute to the various academic and research activities going on in the institution. Since these services are not appreciated, they also get the least support when it comes to providing optimum professional manpower and funds. This has led to pitiable conditions of libraries and the librarians. The old concept of libraries as storehouse of knowledge has since changed. Scholars now look to libraries as resource centres for dissemination of knowledge. Many progressive librarians have started issuing, at regular intervals, 'Indexing and Abstracting Services', and 'Current Awareness Services', etc. Latest of these services is called the 'Selective Dissemination of Information (SDI)', where profiles of individual scholars are matched against the new additions made in the information base of the library and pertinent information communicated to the respective scholars. For retrospective service entire information file has to be searched. If the information file to be searched is sufficiently large it has become necessary to use sophisticated computers for providing efficient SDI. An attempt has already been made by some libraries to computerise their operations. It is high time to look at the computer seriously and start using it in various library operations. For this there is urgent need for computer trained librarians. Also the existing library personnel have to be trained in the operation of the computers. Here library schools could play a vital role. There is, therefore, need for increase in the quantity as well as quality of personnel in the library and information services who are trained in the art and science of collecting, collating, organising and

disseminating knowledge in the form and at the level required by the community they serve—and not just custodians of books.

The quality of education is also affected by the quality of teachers. Efforts made by the authorities to improve the faculties of universities and institutions of higher learning have not always paid dividends. Most of the post-graduate departments in various institutions do not have well-equipped libraries and laboratories, etc to ensure excellence of research and teaching. With the result that the students who become teachers after completing their studies continue teaching based on text books which they themselves had received as students. This is also true of research scholars who continue research on the same subject or related areas throughout their career. This vicious circle has continued for several years and needs to be stopped immediately, and corrective measures taken to improve the situation.

The poor state of affairs of the library and information personnel is largely due to the weaker professional organisation. For this, none but the professionals are to be blamed. Others discriminate against library personnel. But what about librarians themselves? They also discriminate against their own profession. This is clear from the library services extended to various groups in the university community. The libraries extend royal services to the teachers at the expense of other professional groups including their own. First, the librarians should learn to treat themselves as equals to teachers before other groups could accord them the same recognition.

Personnel managing these services are not given equal treatment as teachers, and kept away from the decision making process in the academic institutions. In some universities, they are considered as non-academic staff. They are even deprived from participating in such vital decisions as related to their own profession. This segregation if carried farther may lead the professionals to close their ranks and fight for their professional rights. Otherwise, this would harm the interests of edueation. For this, the outlook of teachers has also to change. They have to accept professionals in library and information services as their equals. Already, UGC has done right thing by according them non-vacational faculty status. However, universities have yet to implement the same. This recognition should not be only on paper but should be put into day to day practice by involving libraries in the teaching and research programmes of the institutions.

At present, when a new research project is planned or a new teaching course is to be started the librarian is usually the last person to be informed of the same. However, he is expected to provide best information services as soon as the research project or a teaching course commences. Then librarian is at a loss. If librarian is to provide best information input, then he should be involved from the initial stages of

planning of new courses and research projects. This will help him to acquire relevant material and organise the collection accordingly. He could also prepare reading lists and bibliographies and provide the same to all concerned. The quality of education could be improved if library and information services could be integrated in the teaching and research programmes. For the time being, these services, though considered essential, continue to be given a low priority.

So far the government policy for libraries has also not been encouraging. In the past one year the Central Government has issued three documents relating to education policy. The first one "*Challenge of Education—A New Perspective*", broadly outlining the present state of affairs in the educational institutions. It had but little to say about the libraries. The second document entitled "*National Education Policy—1986*" spells out the official policy and has a paragraph on libraries.

How to imrove library facilities has been broadly spelled out in the third document "*National Policy of Education 1986—Programme of Action.*"

It is heartening to note that the library has been considered as an essential facility from the primary stage. It has been proposed in the *Programme of Action* that the primary school library should have: (i) Reference Books—Dictionaries, Encyclopaedias; (ii) At least 200 children's books; and (iii) Magazines, journals and newspapers for teachers and children.[9] It is not clear why the Atlases have not been included in reference books. The number of 200 children's books seems to be too small. Also there is no mention of who will organise and service this collection. These are some of the points which need to be looked into.

For the libraries of universities and other institutions of higher learning, it has been proposed to have network of such libraries in a region which will be linked through a computer with terminal for each participating institution to enable them to share each other's resources. It has been further suggested that these libraries should be equipped with modern facilities for information storage, retrieval, reprography, etc. Library facilities for research and development and institutions engaged in technical and management education have been found poor and inadequate. It has been suggested in the *Programme of Action* to stengthen the same and modernise them. In short, it is proposed to introduce modern information technologies in the libraries. But how it is to be done, has been left out. Further, the *National Policy on Education, 1986* mentions that the status of librarian needs to be improved. However, the *Programme of Action* is silent on this issue. It is now for librarians and Library Associations to take up this issue.

Country needs quality education and this could be achieved partly by establishing quality libraries, documentation and information services.

Libraries have to procure, process and retrieve enough relevant publications to provide efficient service to their clientelle. Latest books and journals are quite expensive and their cost is going up every year. Even to maintain their present acquisition rate the libraries need more funds for their acquisition. For this, the existing system of allocation of funds to the libraries needs thorough investigation for better and fruitful appropriation of funds to the right channels.

To provide better library services, librarians and documentation officers should be involved in the teaching and research programmes. It may be desirable to start teaching courses on the use of libraries. This course should be based on the lines of methodology of research course taught in some of the universities. If possible, the librarians should be involved from the initial stages of planning for new courses and projects. This will enable the library personnel to collect the relevant material and organise the same for timely dissemination to all concerned.

For efficient organisation and dissemination of library's acquisitions it is imperative to make use of new information technologies. Immediate attention should be paid to introduce computers in various operations of the library. This will necessitate retraining of the existing library personnel in the use of computers. The library science departments in the universities should gear themselves for this and start immediately new course on computers for libraries not only for the existing staff but also for the new entrants.

In the end it may be emphasised that much depends on the personnel who run these services. In order to get best out of them they should be given equal opportunity as teachers and encouraged to undertake research and involve themselves in the teaching programmes. In other words, librarians and teachers should be considered as equal partners in the educational process.

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QUALITY LIBRARY SERVICES OF COLLEGE AND UNIVERSITY LIBRARIES

R K GUPTA*

0 INTRODUCTION

Both college and university libraries fall under the term 'academic library'. Both serve students (under- and post-graduates), faculty and staff. These libraries further the aims and objectives of their parent organisations, viz curricular needs plus research. It is true that relatively the research is carried on a larger scale in the universities. However, both colleges and universities are mainly concerned with study and teaching.

1 STRONG COLLECTION

The image which we generally build of a university library is that of a strong and extensive collection. Often, a number of students and teachers visit the university library with a hope of getting a book or periodical which is generally not available in the college library. The university library is supposed to cater to the intensive and extensive needs of researchers. Many titles that are not of immediate requirement for study and teaching, a college library generally does not retain. But the university library works with a view to long range research needs.

The point is well illustrated if we look to periodicals acquisition of a university library. Its range is extensive. And it also goes for depth coverage in a number of fields depending upon its teaching departments requirements. But the area in which a university library sharply differs from a college library (at least in our country) is in its acquisition of indexing/abstracting journals, bibliographies, book reviewing journals, publishers trade lists, etc. A college library generally does not have

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enough resources to buy these costly research items. But these tools are simply a must for research at the university level.

11 Need for Multiple Copies of Textbooks

The under- and post-graduate students' most pressing need is for textbooks. As the number of students studying a subject is quite large, it so happens that the same book is required by many students at a given time, say examination. Here is an area where college and university libraries can come together and coordinate their acquisition plans.

12 A System of Libraries

The college and university libraries should work as far as possible within the framework of one network. They have the same goals. It will be ideal if their total resources are put at the disposal of all users. It is difficult to coordinate their acquisitions without infringing their autonomy to some extent. But the overall collection will be balanced if some agreement may be reached on the coverage of various subjects. As far as costly foreign periodicals are concerned, more or less the college faculty entirely depends upon the university library.

13 Need for a Union Catalogue

A union catalogue should be compiled at the university library. This may cover all the participating libraries. This tool will enable readers to locate any item in the system of libraries. It is very important not only from the point of view of colleges but also of university. It is possible that a title wanted by a university researcher may be available in a college library. It will then be a case of inter-library loan (loosely).

We encounter two different categories of colleges in our country, viz private affiliated colleges (in majority) and constituent colleges directly run by the universities. (At this stage, I am ignoring newly emerging autonomous colleges.) It is difficult to have close liasion with the former. These are autonomous institutions with their own needs and limitations. The difficulties in formulating a cooperative acquisition and centralized cataloguing programme (necessary for compiling a union catalogue), therefore, should be accepted. On the other hand, there is more scope for action in the case of the latter. Centralized acquisition, coordination in distribution of incoming materials, centralized cataloguing automatically resulting in a union catalogue, etc have been achieved in case of some universities, constituent colleges and departmental libraries.

2 CONCLUDING NOTE

I have tried to point out a few areas in which some amount of coordination among college and university libraries can be exercised. However, if we survey the Indian academic library scenario we can not escape seeing that not much has been achieved even in these limited spheres. In fact, there seems to be not much contact between colleges and university libraries, particularly when the colleges are scattered over a vast area. And there is a basic problem of making people, even those (pardon me for not calling all of them educationists) who are daily concerned with education and running of educational institutions, library conscious. Of course, there is lip service. But who is enthusiastic about investing in the library—its buildings, collection and staff. However, librarians would also have to share some responsibility. Where is that *concern* among them that they should do something to build up an image of the library by their service. One hardly finds a broader perspective of looking at things and a compelling desire to achieve maximum within the limited resources at our disposal.

The university library should provide leadership to college libraries on account of its vast resources of funds, collection, and skilled manpower. The professional expertise should be shared with the college libraries to enable them to develop and stand on their own feet. The pursuit of excellence would result in quality library service.

QUALITY OF SERVICE IN LIBRARIES

AMITABHA CHATTERJEE*

0 INTRODUCTION

'Quality' is a relative term which has been defined in dictionaries as "degree of excellence."[1] Though literally the term may have both positive and negative connotations, it is now mainly used in positive sense. In that sense, it is synonymous to 'high standard'. Quality is then an ideal which is to be achieved in every sphere of life. The very existence of an industry, or a profession or any organisation depends on its quality, libraries and librarianship being no exception. Lack of quality leads to disrepute and disaster. The importance of quality has prompted the industrial community to evolve the idea of 'quality control'. The concept of 'standards' has also emerged out of man's search for quality.

1 QUALITY IN LIBRARIES

Library service is a social service which aims at self-development and improvement of skill and efficiency of the people of all walks of life. It is a vital input for research and national development. Obviously, the very purpose of library service will be defeated unless a minimum quality or standard is maintained by adopting some 'quality control' methods. Though quality aspect is involved in every material that is acquired or every action that is undertaken in a library, the ultimate quality of the library is judged by the standard of the service that it provides to its users.

2 FACTORS AFFECTING QUALITY

Library service is not simply supplying of a few documents demanded by the users. It is more comprehensive in nature providing complete

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indeed a difficult task since quality is a relative attribute. Nevertheless, the following methods, some of which are also used in other contexts, may be adopted for the purpose.

31 Recall Ratio

'Recall ratio' method has been successfully employed in measuring the efficiency of indexing systems. This may be profitably used in evaluating the quality of library service as well. Recall ratio is the ratio between the number of relevant documents retrieved and the total number of relevant documents available in a collection. It is calculated by a simple formula $a/(a + b) \times 100\%$, where a is the number of relevant documents retrieved and b is the number of relevant documents not retrieved. Thus, if in a library there are 10 relevant documents of a user, out of which the library is able to retrieve on demand only 6, the recall ratio will be $6/(6 + 4) \times 100\% = 60\%$. In this case it can be presumed that there are deficiencies either in the organisation of documents or in the retrieval system. The ideal quality service expects 100% retrieval.

32 Precision Ratio

In recall ratio only the ratio between the available relevant documents and retrieved relevant documents is found, but in course of retrieval often irrelevant documents are also retrieved. The precision in retrieval can be judged by precision ratio which is also used for measuring the efficiency of indexing system. This ratio is calculated by the formula $a/(a + c) \times 100\%$ where a is the number of relevant documents retrieved and c is the number of non-relevant documents retrieved in response to a user's demand. For example, if $a = 6$ and $c = 4$, the precision ratio will be $6/(6 + 4) = 100\% = 60\%$. This again will indicate some fault either in the organisation of documents or in the retrieval system or both. The quality target is of course 100%.

33 Scattering Ratio

In libraries sometimes documents on same subject-field are found scattered due to some reason or other which hampers the quality of service. A method may be evolved to find out the ratio for such scattering. This may be done by a formula like $s/(a + s) \times 100\%$ where a is the number of documents on the same specific subject classed under the same class number and s is the number of documents on the same specific subject found scattered under other class numbers. For example, if among the 10 documents on the same specific subject, 8 are placed under one class number and the rest under other class numbers, the scattering

ratio may be worked out to be $2/(8 + 2) \times 100 = 20\%$. The ideal scattering ratio should be zero per cent or nil.

34 Exhaustivity Test

A library is not often in a position to build up exhaustive collection even in a limited subject area mainly due to financial constraints. The quality of service, however, depends on the extent of demands of the users that can be met by a library. The extent and, consequently, the quality vary according to the degree of exhaustiveness of a collection. An idea of the demand-meeting capability of a library may be obtained by the formula: $b/a \times 100\%$ where a is the total number of documents demanded by the users of a library in a particular period of time, b is the total number of documents supplied to the users during the same period of time. For example, if a library receives demands for 400 documents in a month and is able to supply only 360 out of them, the percentage of document supply will be $(360/400) \times 100\% = 90\%$. This test also gives an indication about the exhaustiveness of a collection in relation to the demands of the users. Effort should be made to raise this percentage either by acquiring the required materials, if possible, or through inter-library loan.

35 Comparative Time

Time is an important factor determining the efficiency of the services of a library and, therefore, it can serve as a unit for measuring the quality. The average time of wait per user or the average time gap between the placing of demand by the user and rendering of service by a library can be measured and may be compared with the average time spent by other libraries known to be providing better library service. A standard per head time may also be calculated on the basis of statistics gathered from some standard libraries and an individual library's average time may be compared with it and effort should be made to achieve the standard time

4 QUALITY IMPROVEMENT

Improvement of the quality of library service needs a concerted and planned effort and may entail some financial involvement, too. Various methods may be adopted, but these should be preceded by a thorough survey of the various aspects of the library.

41 Library Survey

The efficacy of library survey in planning improvement of library

services has been acknowledged by experts, but unfortunately it is rarely employed in our country. A library survey may cover one or all the facets of a library, viz stock, staff and services. It aims at identifying the lacunae and bottlenecks and the sectors where inefficiency has set in. It brings out a clear picture of the real condition of a library and the effectiveness of its services. The survey may be conducted either by any official of the library or an outside expert. The survey should be objective based on definite, reliable and first-hand information obtained through questionnaires, statistics, records, personal investigations and interviews. For the improvement of quality of library service, conducting of users' survey may also be very useful since, through this, personal evaluation of the library services by the users can be obtained.

42 System Study

The library survey may also take the shape of system study or system analysis. System analysis has been defined as "the organised scientific study accomplished by breaking down the different components of an assembly (organisation, human anatomy, mechanical equipment, etc) and its subsequent synthesis into a unified whole with a view to achieving tasks, goals and objectives of the assembly."[2] A library simulates a system. The library system may be analysed into its functional components keeping in view the objectives of a particular library, since the objectives differ in different types of libraries resulting in differences in their users and their range and scale of operation, and the relationships existing between the components may be studied.

421 *Background Analysis*

The study of the existing organisational relationships is known as background analysis or systems investigation. Such a study is undertaken with the help of:

(i) study of organisation charts, standing operation procedures, manuals, etc
(ii) gathering information through questionnaires, field surveys, etc
(iii) personal observation, and
(iv) interviews with the concerned sections, divisions or departments.[3]

In course of his investigation, the system analysis studies mainly three situations, viz (i) manifest situation, i e the situation as found manifest in manuals, charts, etc, (ii) extant situation, i e the actual existing situation, and (iii) assumed situation, i e the situation as assumed by the various categories of employees. On the basis of these three situations, the

system analyst tries to evolve a requisite situation, i e a harmonious situation in which the goals of the library can be best achieved.[4] Such a situation will naturally help in providing the service of best possible quality.

43 MECHANISATION

The system investigation may suggest mechanisation of various library activities for improvement of the quality of library service. It is, nevertheless, a wrong notion that mechanisation is the only course of quality improvement. Mechanisation should be resorted to only when it is found absolutely essential, specially in the Indian context. Mechanisation does help in pin-pointed retrieval and cuts down the time involved in various library work and thereby contributes a lot in quality improvement. The machines that are usually employed in libraries are computers for housekeeping job and information storage and retrieval, machines for mechanical charging and discharging and reprographic machines. It may, however, be pointed out that all types of library work can not be done by machines and these lack the personal touch that is so essential for satisfactory library service.

44 STATISTICAL APPROACH

Help may also be taken of library statistics for quality improvement. Library statistics are tabulated quantitative data regarding the working and operation of different units or departments of the library. The various types of statistics that are usually maintained in a library are accession statistics, statistics relating to technical work, statistics relating to various services including circulation and statistics relating to users. The main sources of statistics are the diaries maintained by the various sections of the library. The crude data should be collected at regular intervals and should be edited, tabulated, cumulated, and abstracted. From the tables so prepared such inferences should be extracted "as will, when related to one another, throw light on the progress of the work in the library, indicate what sections are functioning satisfactorily, what leakages are taking place, and what economy may be effected, without imparing efficiency."[5] The figures collected in a library may be compared with the previous figures of the same library to know about the progress made by the library and also with those of other libraries of better standard, and measures may be taken for improving the standard of the library accordingly. Thus, library statistics help in evaluating the present condition and planning for necessary improvement.

45 Other Methods

Besides the methods described above, some other methods may also be adopted for quality improvement such as following of national and international standard formats in different activities, using standard goods and forms, participation in national and international networks or centralised and/or cooperative projects, subscribing to indexing, abstracting and translation services, etc. But before adopting any of the methods a library must assess how far a particular method would be effective and beneficial in its own context and environment.

5 CONCLUSION

In spite of its vital importance in library service, the quality aspect is often not seriously considered in Indian libraries. This is evident from the fact that very rarely any attempt is made to evaluate the performance of a library in the context of its objectives. Any neglect of the quality aspect is self-inflicting since unsatisfactory service or deterioration in the quality of service lowers the image of the library in the eyes of the users as well as the authorities. And without any objective evaluation of the performance and analysis of the causes behind deterioration neither it is possible to convince the authorities about financial and other requirements for quality improvement, nor it is possible to take up any permanent remedial measure. In fact, there should be a regular mechanism for quality control in every library, as in every industry, if it has to succeed in its mission.

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THE NEED FOR A NATIONAL PROGRAMME FOR QUALITY LIBRARY SERVICES

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0 ROLE OF LIBRARIES

Library and information centres are service institutions. These have to meet the social, educational and psychological needs of individuals. In this process they have to contribute not only for individuals' advancement but also to the national growth. These have been acting as carriers of culture and heritage and shall also act so in the future.

1 THE CHANGE IN OUTLOOK

11 AS A RESOURCE

The libraries which were hitherto regarded as 'store-houses' of knowledge, are now being treated as 'resource centres'. The information in the documents is regarded as a 'resource', just like the natural resources—water, energy, minerals, etc. Thus extraction, consumption and conservation are now being regulated for better, wider and proper utilization.

12 AS AN INPUT

The information is not only regarded as a 'resource' but as a major 'input' for national development. It is very much vital for study, teaching, planning, research as well as recreation.

13 RIGHT TO INFORMATION

Access to information is regarded as one of the fundamental rights of

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a citizen. Numerous steps are being initiated for free flow of information with due protection to personal privacy and intellectual freedom.

2 THE CHALLENGE BEFORE THE NATION

There has been an exponential growth of knowledge. The increase in knowledge leads to an increase in number and variety of records. Increase in records leads to increase in access. Simultaneously, there has been an increase in the number and variety of users. There are specialist users as well as special users. All these demand not only an increase in services but also a concerted effort to pool the resources, coordinate the activities, and increase cooperation in sharing and planning.

3 CURRENT PROBLEMS (SYMPTOMS)

(a) The growth of libraries and information centres in the country is uneven.
(b) There is not much cooperation and sharing of resources and experience.
(c) There is a wasteful duplication of resources.
(d) There are no cohesive national systems worth the name.
(e) There is no proper and uniform financial support.
(f) There is no uniform access to resources.
(g) There is an imbalance in the growth of collections.
(h) A large chunk of population is not covered by any sort of library services.
(i) Even the available resources are not put to proper use.
(j) No uniform and permanent policy has been laid down by the Union Government for the development of libraries and library systems.
(k) Not many State Governments have enacted library laws.
(l) The library associations could not provide the desired leadership.
(m) The library professionals have not realised the need for collective action and their other professional responsibilities.
(n) There is no proper cooperation and understanding between libraries, publishers and book-sellers.
(o) The library schools are not able to produce well rounded manpower for our library and information centres.
(p) There is no national centre to carry on research in library and information field; and
(q) There are no norms and standards worth the name and in vogue.

4 BARRIERS (DIAGNOSIS)

41 Attitudinal Barriers

The library professionals are mostly averse to the new technologies. Many of them are routine minded and lack foresight and proper perspective of the problems confronting the libraries. Managerial skills are lacking in them. There is no encouragement for resource sharing and other cooperative ventures.

42 Financial Constraints

State, local, institutional and private funding is insufficient and unstable. Under any financial crisis, libraries are the worst effected. In many circumstances, in spite of escalating costs of documents, there are budgetary cuts for libraries. These are not only hampering the development of libraries, but also making it difficult to survive.

43 Administrative Problems

Many of the libraries lack proper coordination in their functioning. Good intra-institutional and intra-personnel relationships are very much essential for successful working of libraries and information centres. It is unfortunate that many of the professionals are not having a free hand in the development of their libraries. There are many non-professional bosses, a great majority of whom are egoistic and lack perspective. Further red-tapeism, bureaucracy, lengthy procedures are a bane to proper development.

44 Lack of Skilled Manpower

The exponential growth in knowledge and records of information; increasing variety in documents; advent of new technologies; increasing and varied demands of users with regard to nature, kind, form and script of information and last but not the least, the changing social needs demand new thrust in teaching and training programmes in L & IS education. There is a need to modify the selection procedures, redraft the syllabus, introduce new methods in teaching, orientation towards the technologies, origanise refresher courses, and prepare them psychologically, to adopt new techniques and give new orientation to library and information services.

45 Professional Organisations

The professional organisations too have mainly confined their activ-

ities to organising ritually annual conferences, bringing out one or two publications, etc. The professional organisations have a great responsibility in enlightening the professionals with regard to the changing environment; create library/information consciousness; make the government realise the problems of libraries and library professionals; propose new schemes and new programmes for building up collections, sharing of resources, and distribution of documents through other varied services. They should strive for establishment of national systems, standards, and networks for continuous and free flow of information.

5 PROGRAMME (THERAPY)

Union Government should:

(a) *Establish* a 'National Commission on Library and Information Science' as a permanent, independent agency on the lines of one established by the US Government in 1970 for planning, coordinating, reviewing, recommending and reporting to the Government of India on library matters;

(b) *Develop* national information systems in various disciplines; and create centralised services for networking. For example, national libraries in various subjects be established. Such libraries should have a national audiovisual repository, lending division, periodical bank, reference department with provision for preservation of old, rare and valuable copies either in original or microform, repromicrographic unit, machine-readable data banks of articles and abstracts, etc.

(c) *Provide* special funds to institutions having major resource collections to continue and strengthen their efforts in building up comprehensive collections and thus have a bibliographical control;

(d) *Encourage and promulgate* standards for:

  (i) computerised information systems with regard to software, access, security, data elements, codes, etc;
  (ii) bibliographic formats; and
  (iii) reprography and micrography.

(e) *Establish* codes for:

  (i) inter-library resource sharing;
  (ii) compilation of union catalogues; and
  (iii) establishment of contractual systems, consortia, networks, etc.

(f) *Expand* the bibliographical services in the country by introducing distribution of standard bibliographic records (= printed catalogue cards);

(g) *Fund* libraries and information centres in establishing computerised information services;
(h) *Make available* an integrated tele and satellite communication system for online access to databases, fascimile transmission, etc;
(i) *Create* a 'National Institute of Library and Information Science' to develop suitable manpower; provide continuing education for library and information personnel; and also to carry on research in this field; and
(j) *Foster* cooperation among libraries, publishers, booksellers and other public and private agencies interested in information activities.

State Governments should:

(k) *Plan and establish* a network of libraries at various levels in the state and ensure their proper growth;
(l) *Strengthen* existing library and information resource and systems;
(m) *Enact* suitable laws for creation, maintenance and development of libraries and information centres; and provide free information at all levels of the society regardless of location, social condition and intellectual attainments; and
(n) *Participate* in central and intra-state programmes on library and information services.

Private Sector

(o) The private sector is to play a major role in the creation of cultural, scientific, technical and industrial information. This sector should *work closely* with the public sector in dissemination of information for the overall national development.

Professional bodies should:

(p) *Assist* the government in planning and execution of policies and programmes on library and information services;
(q) *Organise* the library and information profession in the country;
(r) *Help* in cooperation and creation of intra-library systems and services;
(s) *Publish* professional literature;
(t) *Conduct* surveys, studies and build-up data on libraries and information centres.

Professionals should:

(w) *Keep* themselves informed about the new developments in the science, profession and the field;
(x) *Develop* innovative skills;
(y) *Maintain* good inter-personnel relationships; and
(z) *Devote* to the cause of libraries and library service, thus to the development of a literate nation.

UNIVERSITY LIBRARY SERVICES: AN ASSESSMENT AND PLAN FOR IMPROVEMENT

M S DEOGAN*

0 INTRODUCTION

The barometer of library's success as an information system is the degree to which its 'patrons' utilise its 'services'. Mere planning and implementation of systems without having an insight into the user needs is futile and extravagant. The university libraries have to serve instructional programme as well as research projects.

The services provided in our university libraries are not only traditional in nature, these are traditional in methodology also i e, circulation systems, information dissemination systems and our approach to the queries has neither changed nor advanced with time. Strangely enough, but rightly so, the enquiries received in the reference section are also age old, like location of particular section or consultation of library catalogue. It is a common experience that the professionals managing the reference desk feel contented if they attend to a few such enquiries during the day.

If one digs up the reasons for the unsatisfactory condition of services in our university libraries it is found that many factors have played their role for this unsavoury condition. For example :

1 There is practically no coordination between the librarian and faculty members.
2 Unsympathetic attitude of the administrators towards libraries. Whenever there is a pressure for cut in the expenditure, the library budget is first to be axed.
3 Lack of interest on the part of the library professionals. Due to

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the vagaries of status, the faculty considers itself superior to librarian.

4 Soaring prices and inadequate funds. The increase in book budget is not proportional to the steep rise in prices which limit the size of information resources.

5 Lack of leadership by the university libraries in the introduction of advanced technologies available to-day.

6 Uncooperative attitude of sister libraries in resource sharing.

Thus, it is not surprising that use of libraries is made only by a little percentage of students and faculty for borrowing books. The people working in research projects in the university seldom contact the Reference Librarian and prefer to obtain the information from their friends or research journals and specialized academies. The university libraries fail miserably in inculcating the habit of library use in the future and working scientists.

It is time we take stock of the things because we are approaching the paperless society very fast and closing of our eyes will not stop this change. Martino says, "Rather than visiting a library any individual might be able to search the library files electronically and receive a print-out of specific information or a facsimile of a desired document."[1]

The writing is clear on the wall and it is yet not too late to rectify our deficiencies, by reorganising and planning the library services. It is all the more essential to emphasize the importance of university libraries in the development of the nation otherwise there is every likelihood of their being considered as a burden and their justification for existence and survival may be challenged.

1 WHY IMPROVEMENT IS INEVITABLE

The improvement of quality in services is essential not only to meet the requirements of to-day. It is necessary for creating a bridge from the present services to the needs of future generation, because :

1 There is a high level of science research which generates tonnes of data every day.

2 The information needs of the users have become more sophisticated.

3 The improved information processing systems are available.

4 There is a substantial change in the literature formats.

5 The operative word in to-days librarianship is 'Information' or 'Document' giving the desired information. It is immaterial for the society whether the source is a librarian or some other new professional breed.

Many a times the information is available in the library but it is not passed on to the user, because :

1 The user does not know whom to contact without a rebuff.
2 Lethargy on the part of library staff.
3 Inadequate publicity of library services.

In order to provide improved and additional services, the available advanced technologies can play a prominent role.

2 PLANNING ADDITIONAL SERVICES

It is worthwhile to study the information habits of the researchers and scientists in the university. As the saying goes the habits die hard, therefore they would like to get the information in the same form in which they have been getting.

A survey should be made not only of the members of library but also those who are non-members. The study will reveal the type of services required, the trend of student community, the approximate finances required for implementation of programmes and this can help in the coordination of services. The managers of finances can be convinced with facts and figures for the release of funds.

Every new service initiated must be well publicized to maximize its use and personal visitors need encouragement to ask the staff for help if they are unable to locate what they want.

3 MICROGRAPHICS

Holographic and faster recording techniques have made it possible to write in so small a print that a very high powered microscope can only see the intelligence. Information systems have developed on the lines of micrographics. For example, availability of microfilms of the indices like *Chemical Abstracts*, MARC tapes in microfilm form etc has made the micrographics an integral component of information support system.

The Indian university libraries are equipped not even with the latest models of microfilm reader printers. The libraries which acquired a microfilm reader years ago are content with it (in many cases these are out of order). The availability of huge literature in the form of microforms due to their many advantages like space saving, reproduction, long life and economy etc, is of no consequence without a microfilm reader. The choice of the readers in getting the information is limited to the printed word only. As a result they are deprived of the material which is only available in microforms. The microfilm reader printers are a very useful asset because these can provide a copy of the desired document at once.

There are many makes of microfilm readers printers available in the market and a good choice can be made.

4 ON TO THE 21ST CENTURY

Computer "technology provides a larger leap forward in inter-library communications than anything before, and thus it is certain to accelerate the development of resource sharing programmes among libraries and speed the inter connection of data banks, reference centres, and information networks."[2]

The 'telecommunication technology' has made it possible to receive and send the information to other data banks 'Online'.

By the turn of the century the computer is going to be a household word. There is not a single university library in India which is having automation. If we start planning now only then the services can be offered in the 21st century. The librarians are not taking the lead in planning library services with that object in view.

In USA, The National Commission on Libraries and Information Science (NCLIS) 1975 set the following goal: "To eventually provide every individual in the United States with equal opportunity of access to that part of the total information resource which will satisfy the individual's educational, working, cultural and leisure time needs and interests, regardless of the individuals' location, social or physical condition or level of intellectual achievement."

Since the scope of present paper is restricted to university libraries only, the services are mainly concerned with the educational needs of the faculty and students. The demands of the clientele can only be met if the librarian knows what he has in stock and what is available and where!

The traditional methods of card catalogues and manual searching of literature have not only become greatly time consuming and laborious but are also incomplete.

Secondly, the location of particular reference does not mean that the library has those pieces of literature.

Thirdly, even if the library has some literature on the topic can the researcher be supplied with a copy of the same.

The past quarter century has witnessed revolutionary changes in the information dissemination techniques and this has been made possible due to the technological advances, i e the introduction of computers in the libraries in developed and developing countries like Malaysia (MALMARC), Israel (MARCIS) etc.

The D B M S must be developed in the university libraries and these should be linked with telex. Instead of making enquiries by post (which again is highly time consuming and rarely fetches any reply) the search can be made immediately by making a contact with the data bank of

that library. To start with the development of the universit libraries of northern India, i e Panjab University Library Chandigarh; Kurukshetra University Library, Kurukshetra, Punjabi University Library, Patiala; Guru Nanak Dev University Library, Amritsar; Punjab Agricultural University Library, Ludhiana; Himachal Pradesh University Library, Simla; and University of Jammu Library, Jammu; can be linked together for information transfer and resource sharing.

5 QUALITY OF TECHNICAL SERVICES AND AUTOMATION

The introduction of computers also entrusts lot of responsibilities on the professional staff responsible for technical processing of material. The quality of technical services needs improvement. For fruitful sharing of literature among libraries adherence to certain national standards is a prerequisite. The standardization of author names in cases where they write under different names and maintenance of thesaurus for subject headings to avoid an overflow of references is a must. The strict authority control is essential to make the system work. Small mistakes in rendering an entry, normally acceptable in manual methods, can take enormous shapes in automated systems because while matching the request with the file, computer will ignore such material unless proper cross references have been provided.

The professional cataloguers will have to remain vigilant to avoid mistakes in their work because automatic checks in the computer will point out such mistakes at the time of input resulting into avoidable unpleasantness. There will be no choice left with the cataloguer to use his discretion in supplying the bibliographical details in an entry due to its standardization.

6 CONCLUSION

1 Although formats are changing day by day our objective is the same i e providing good service by making available the bibliographic material and towards improvement of quality in the services computers can play a significant part in our university libraries.

2 The U G C should consider the university libraries as priority areas and appoint a high level committee to go into the details of computerisation. On the lines of EDUNET (Education Network), LIBNET (Library Network) should be developed to link the university libraries in India with telex and online databases.

3 The university libraries should be provided with funds for purchasing hardware and software for the microforms, which have come to stay.

The reprographic service is the minimum requirement in a university

library but many university libraries do not have even this facility. Librarians must approach the U G C for special assistance.

4 Evidently, the present training imparted to the future librarians in library schools is inadequate. The syllabii need drastic changes to cope with the manpower required for the automated systems. The working librarian should be trained in information handling by conducting short term/refresher courses.

5 The librarians should come out of their slumber and take stock of the situation themselves. The greatest resistance to introducing new techniques for improving library services comes from the librarians themselves because they fear and "feel threatened by systems analysts, computer types, and others who do not speak their language and appear to have little sympathy with their problems."[3]

The need of the day is to provide library services very efficiently and pin-pointedly and for this objective the librarians should join hands. They must convince the financial authorities the benefits accruing in the form of information and knowledge by adopting new technologies for library services.

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