DOCUMENT RESUME

ED 049 768 LI 002 730

AUTHOR	Wilden-Hart, Marion
TITLE	Cooperative Resource Development in the Five Associated University Libraries; A Study with Recommendations.
INSTITUTION	Five Associated Univ. Libraries, Syracuse, N.Y.
PUB DATE	Sep 70
NOTE	84p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	Librarians, *Library Acquisition, *Library Collections, *Library Cooperation, Library Networks, *Library Services, Research, *University Libraries, Use Studies
IDENTIFIERS	FAUL, *Five Associated University Libraries

ABSTRACT

The three objectives of this study of the Five Associated University Libraries (FAUL) are: (1) an evaluation of the FAUL Acquisition Committee; (2) a feasibility study of cooperative resource development; and, (3) guidelines and recommendations to analyze the research collections. It is determined that for effective co-operative resource development, FAUL must assign priority of fulfillment to its goals of (1) increased value, (2) attainment of optimum collection size, (3) improved resources and services, (4) consideration of user needs for a more relevant system, (5) adequate budget allocations for research resources, (6) controlled special collections, (7) improved acquisitions and dissemination procedures, (8) increased research and development, (9) fostering professional education of all library personnel and (10) determination comprehensive plan that enjoys the total commitment of the five university libraries. (SG)

Five Associated University Libraries

Binghamton / Buffalo / Cornell / Rochester / Syracuse

Office of the Coordinator of Library Systems

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

AD049768

ED049768

(2)

COOPERATIVE RESOURCE DEVELOPMENT IN THE FIVE ASSOCIATED UNIVERSITY LIBRARIES

A study with recommendations

(1)

Marion Wilden-Hart
Senior Lecturer in Subject Bibliography
School of Librarianship
Birmingham, England

(5)

September 1970

LI 002 730

TABLE OF CONTENTS

Prefatory Note	i
Letter of Transmittal	ii
Underlying Problems	1
Objectives	4
The User	9
a. The Performance Audit	9
b. Feedback Mechanisms for Changing Needs	12
Acquisitions	18
a. The Policy Statement	18
b. Scope of the Collection	20
c. Size of the Collection	24
d. Book Retirement Programs	25
e. Feedback for Joint Acquisition Programs	34
f. Co-operative Bibliographical Organization	35
1) Processing	36
2) Increased Access	39
3) Inter-library Loan	40
Service to Users	42
a. Bibliographic Service	42
b. Self-Help	43
c. Group Needs	43
d. Relevance	45
e. Specialized Information Centers	46
f. The Center of Research (COR)	47
Profitable Use of Manpower	49
a. Co-operation in Staff Resources	50
b. Maximum Capability as a Resource	51
1) The Circulation Staff	51
2) Technical Processing Staff	52
3) Acquisition Staff: FAUL Acquisition Committee	53
4) Subject Specialists	55

TABLE OF CONTENTS

Effective Co-operation 56

a. Systems Development
b. Work of the FAUL Acquisition Committee May 1968-June 1969
c. Budgetary Considerations

Conclusions 63

Recommendations, Abstract and Index 64

References 74

Prefatory Note

This document is the result of a contract drawn in April 1970 between the Executive Council of the Five Associated University Libraries and Miss Marion Wilden-Hart. Miss Wilden-Hart was at that time preparing to leave the Research and Planning Group at the Syracuse University Library to spend a summer teaching at the School of Librarianship at the University of Washington in Seattle prior to assuming a teaching position as Senior Lecturer in Subject Bibliography at the School of Librarianship, Birmingham, England.

Both parties to the contract considered this historical moment to be most appropriate for an unhurried and considered review of a major part of FAUL's activities. Miss Wilden-Hart had been a very active member of the Association's Acquisitions Committee until its de-activation in April 1969.

Accordingly the contract requested the author to do three things: (1) summarize and evaluate the work of the FAUL Acquisition Committee, (2) estimate the degree of feasibility for cooperative resource development in FAUL, and (3) list guidelines and recommendations for a systematic analysis of the research collections of the FAUL member libraries.

This is a working document and as such has been reproduced with ample space for comment by those so designated by the Executive Council. Whether the report satisfies the contract objectives is a matter of judgment. In any event, the document is provocative, wide ranging and brings some major issues into sharper focus than has been done heretofore. The effect of the report depends completely upon the response which FAUL makes to it.

Ron Miller
Coordinator of Library Systems
Five Associated University Libraries

UNIVERSITY OF WASHINGTON
SEATTLE, WASHINGTON 98105

School of Librarianship

August 21, 1970

The Board of Directors
Five Associated University Libraries

Sirs:

I enclose the report and recommendations on the Co-operative Resource Development of the Five Associated University Libraries, which you commissioned me to write April, 1970.

I trust you will find it acceptable, progressive in thought, and practical in its recommendations. In writing it, I have tried to assimilate the present research being done in the United States and Britain to co-ordinate university holdings, utilize resources to the full, and provide greater access to them.

Other institutions and researchers have shown interest in FAUL's work as I have contacted them concerning other consortia and co-operative plans. None have shown the readiness yet to reorganize for the 1970's, but all have agreed on the need and the urgency to plan the future on different lines, and with greater relevance to users' needs.

FAUL has the potential to experiment, lead university consortia into more meaningful co-operative ventures; to demonstrate the potential of resource material for service to research and thereby to redefine the place of information and resources on campuses throughout the United States. It is a challenge and an economical necessity for though it may cost more, research cannot afford to use only partially, materials and specialized skills, already costing one fifth of each university's budget.

As I leave the United States to take up a position as Senior Lecturer in Subject Bibliography, School of Librarianship,

Birmingham, England, I am grateful for the opportunity to have worked within FAUL and of having contributed in a small measure, to the work of the Acquisitions Committe.

I wish FAUL success in its every undertaking.

Sincerely,

Marion Wilden-Hart.

Marion Wilden-Hart, (formerly)
Bibliographic Associate
Research and Planning Unit
Syracuse University Library

MWH:pt

1. Underlying Problems

Libraries in the past have played essentially a passive role, that of acquiring materials, storing them and making them available on request. The university library of the future will be required to play a decisively different, more aggresive role, and though it is still uncertain what this role will be precisely, there are signs to indicate the direction.

FAUL is faced with the decision as to whether the libraries should attempt to integrate these specialized needs with more conventional library procedures, or develop services and systems tailored especially for the needs of the group. Some might argue that the problem of libraries is in itself an enormous task and that libraries should concern themselves with developing systems which allow them to do traditional operations first. Others might feel that it is both desirable and technically feasible to integrate these requirements into newly designed systems. Further, that the interchange that is possible between such diverse efforts is mutually beneficial. It is not necessary to attempt a description of the current state of library service in the Five Associated University Libraries, for most would agree "it is unsatisfactory to a significant percentage of the users of libraries."1/ It is essential, however, to try to identify at least a few of the underlying problems. Do present library processes actually limit the performance of research? Do our libraries actually hinder rather than help the researcher by the present organization set up to provide a previous generation of researchers with learning resources? Is research being given library service at the expense of other studies at the university? Are students of doctoral programs limited by the resource needs of their own studies? What services should be provided and how are these services to be made effectively available? Improvements in the availability and the quality of bibliographical control can only increase the already heavy pressures for improved physical, textual and document access.

The selection and development of acquisition policies into programs and systems that mould and meet the full requirements for optimizing conditions to facilities use, is a problem that still remains to be solved. Integral programs are needed which provide all of the conditions and requirements for research. Still prevailing is a "come and get it" policy, restrictive practice of ownership, obliviousness to resources outside, and unawareness of wasted resources within.

Red tape abounds and the limited view persists. It would seem that the work of libraries in the future cannot be done fully and well by traditional operations, methods and procedures. Changes in acquisition policies and operations are urgently required if all the research programs are to be supported with information and materials that such research needs. In addition, a statement is needed of the criteria currently used to determine priorities of service and relative costs.

We have to discover the means potentially available, that will make it possible to accomplish more nearly than at present, the goals that are expected of libraries. It is possible that the time latencies and delays in collection development are to an important degree due to the real limitations of performance relative to the full requirements of research. We have over-developments in our collections and retarded developments in other areas of our resources. We have to tighten our bibliographical control, and all those processes having to do with collection building, organization of the collection for use, and related public services.

It seems fairly certain that much of the basic intellectual work of bibliographical control and analysis of research materials will increasingly be generated by a national network of documentation centers. Consequently, FAUL should not develop its own networks alone, even in areas of exceptional interest and competence, but should link itself up to the national and government sponsored organizations by every means available. It is most likely that during the seventies, a significant improvement in the quality, speed and scope of bibliographical and content control of research materials will occur, and that those who are prepared to cooperate and utilize these resources will be those who will be consulted as to the need for changes, developments, scope and matters of accessibility, since they will participate as users. FAUL needs to be in such a position, not only to utilize the resources on behalf of its users, but because cumulatively FAUL should merit being considered a consultant and advisory body.

The needs--demands of research are unlimited, but bibliographical and information operations are limited, bounded and restricted. It seems imperative that the steps being taken by individual libraries to preserve their own collections, and FAUL's cumulative efforts, be somehow coordinated to get maximum benefit from this work and to establish a base for further progress.

Improved inter-institutional patterns must be found for collection development in some major fields and individual libraries must seek to improve the process for local physical access to all kinds of resources.

Priorities must be established to determine collection development and extension of services. Resources must be available more easily, faster and with greater certainty. To do this, we must utilize and if necessary, generate, the necessary bibliographical control data. This report seeks to indicate improvements that might be made in the decision making processes necessary to the effective use in library resources. It will attempt to identify a number of approaches which libraries should utilize, individually and collectively, in order to take better advantage of existing library resources, to keep ahead of research requirements and to significantly improve the bibliographical control.

2. Objectives

Objectives are the foundation for all future plans and their implementation, because they provide a basis both for decision making and evaluating results. Since the acquisition of research resources have a long term impact on collection development, it is necessary to define objectives which will be valid for a maximum period of time. The definition -- and periodic review and revision -- of objectives is a continuous job, since the academic environment, and the relative importance of various influence on its course of action, are constantly changing. Within the broad interpretation of objectives, collection development will be most feasible if decisions can be made on a long range plan with enough flexibility to change as need arises.

The objectives for collection development of the Five Associated University Libraries will disintegrate if they do not allow each of the associated libraries to pursue their own interests and objectives. FAUL has therefore a twofold task; to establish corporate objectives that yield benefits to the individual library, and to motivate the same member library to adopt goals that are compatible with the corporate objectives.

FAUL has a basis for its preliminary preparation of objectives through its inherent recognition of a variety of existing resources, skills, policies, preferences and other internal and external influences. To establish objectives which will be more than to improve accessibility of resources, requires a practical awareness of some strengths and weaknesses. As FAUL constructs its goals, a review of resources will generally indicate the need to improve deficiences or to add skills, techniques or time spent on service and processes. Long range planning is essential if objectives are not to be hindered by the constrictions of time.

Value objective. One of the primary objectives must be increase in value. Value to FAUL must be in terms of present or future potential usefulness, since it is the utilization, not the preservation of the collection that is the objective. Utilization of resources must be the measure of operating performance, for all else is to this end. The total assets of a library

put to use will increase the value of the collection. What has to be determined is how much use is good use? What is the suitable standard for relevant use? How much "use" should be set as a corporate goal, how is it to be reached, and what will be the attitude towards balancing other objectives, policies and methods as they may effect the goal of increased utilization?

Volume objective. The rate of growth, as well as the optimum size of the collection, must be the volume objective. Growth is to a considerable degree controlled by the availability of funds and is dependent upon the way in which these funds are utilized. Growth here must be understood to mean increase in resources, not necessarily (with microfilming programs and future automated storage possibilities), the number of items acquired during a year. Growth must also mean increased utilization, for with research resources, increased potential use grows with the age of some materials and decreases with other. If a library were not to purchase any materials for a given period, for a short time at least, it would still be possible to ensure growth in the collection from the point of view of the user, by increased accessibility of the materials already acquired. Growth in utilization might also be achieved through reduction in the size of the total collection. Volume objective is therefore coexistant with greater flexibility in organization for the benefit of users, as well as volume in strength of the total resources.

Resource and Services Objectives. These should be stated in detailed terms though they may also have a concise general theme. A systematic examination of existing circumstances may even point out that the present resources and services being offered are not compatible with future plans and thus do not provide a good basis for planning. The discipline of setting resource and service objectives exposes FAUL to the problem of considering development of the collections, and the means by which this can best be accomplished. Resource and service objectives may also be stated in terms of desired quality levels. Quality might be best at any price, or best quality be obtainable at low price or the compromise made of best quality at best price. This is very relevant today when it is possible to get varying quality of the same resource; different editions, micro-copy versus hard copy, different types of approval plans with varying costs and quality of service. A study of the cooperative experience of FAUL can only be beneficial, and resource and service objectives should be based on the common experience of all.

User objectives. These determine the types of research the libraries are required to serve. Research grows out of research, and to that extent can be charted for potential development. FAUL's user objectives must therefore take into consideration the future user rather more readily than has been done in the past; on the other hand, past users have no further need of the resources found most useful to them, and these same resources may have little value to present users. User objectives indicate the need to eliminate resources as much as to strengthen them. They may show new interdependence of subjects and new relationships which develop among the various disciplines of human inquiry.

Objective of percentage of total resource budget. By estimating the number of research programs in progress, and the potential number of individuals engaged in research, it is possible to set an objective of percentage of total resource budget which should be set aside for research resources. The percentage of total budget has particular validity when it is projected over a period of time, and is used as a check point for making decisions concerning collection development, cooperative purchases, accommodation and matching services. It is imperative for each library to develop its share of the university budget in relation to research being undertaken, since it is extremely difficult to develop suddenly special collections with sufficient comprehensiveness to be adequate for research. The hiring of new faculty at any of the Five Universities should be a common concern, for it is possible that the total resources will be utilized in new programs for teaching and research. Consultation between the Five Libraries, (before the commencement of the academic year), on provision and utilization of new fields of study being introduced at any one of the Five Universities by new faculty members, could be mutually advantageous. In setting percentage of total resource budget objectives, it is necessary to be very realistic about the prospects of achieving a major position in the face of strong or entrenched competition.

Special collections objectives. Because not all the member libraries of FAUL have even roughly the same size collections, the nature and strength of special collections may be a better comparative guide as a measure of performance than is volume. It is necessary, however, to define clearly for each library what is meant by a special collection. Not all special collections are, or need be, comprehensive; the collecting objectives may be purposefully restricted to a level well below that which is attainable, in order to improve

relevance, (and thus save the time of the user), and to save money for resources which are needed more. Controlled special collections also keep the collecting policy within the management capability of the staff and budget. Special collections can also refer to general collection which is organized in some special way for a special group of readers. It may well be that a smaller library is in a position to reorganize interdisciplinary subjects into "special collections" far more readily than a larger library. Differences in arrangement of the same materials in different places between the Five Associated University Libraries may be beneficial and may revitalize materials that under present organization are having less than their potential use.

Acquisition objectives. It is self evident that no one institution can today collect all, or even the bulk of its own requirements. It is essential then to seek means for integrating the strengths of each member library into an accessible system, to cumulatively buy other resources material, to share specified and specially organized services, and to put all available resources (materials, staff and funds), to maximum purpose. Acquisition work is a continuous process, and cannot be operated on an intermittant basis because of shutdown and startup costs. Some programs need greater flexibility than others because of pressures of peak periods of use, availability of materials on the market and current interests, which may fluctuate in demand and scope. The larger the unit, and therefore the financial resources, the greater flexibility in theory is the bargaining power, long range planning opportunities and manipulating facility. FAUL is in a position to take advantage of cooperative planning for resource development in all of its many facets.

Dissemination objectives. These should be examined and comparison made between the Five Libraries, to see whether they are adequate and whether they fulfill the purpose for which they are intended. They may prove to be nothing more than a description of the means being used to implement other primary objectives. In our eagerness to carry out our buying objectives, we may overlook the end purpose, which is to disseminate.

Research and Development objectives. These are needed by each institution, in order that each member library can keep up with the demands made upon it. This will

also be true of FAUL as a consortium. More, not less, work is what FAUL should anticipate for the future. This will not be an indication of the failure of each library to fulfill its function, but rather the success with which each is meeting the challenge of greater demand. FAUL is an addition to individual adequate library service. It has the means to offer superior service to each of the five member libraries.

Personnel objectives. Any cooperative venture must be heavily dependent on people. Personnel objectives offer the opportunities for leadership and effective implementation of the intangibles of motivation and energy. With a larger unit, such as FAUL, coordinated in needs as well as resources, there is increased opportunity to employ top specialists in subject and language areas, management and systems personnel. Professional education at all levels is possible through workshops, seminars and training institutes, and should be included in the objectives.

Status objectives. In a situation where the organization can be looked upon from many points of view, and has potential to create many different impressions of itself, it is desirable to decide which image should be selected. It is often possible to create different images among the many groups with which an organization makes contact. FAUL must determine the many roles it can play as a consortium and potential national resource, and formulate objectives for liason with all outside bodies -- 3 R's, CRL, NYSIL, and other consortiums, etc. The image objectives should in any case change over the years as the programs change in emphasis. Growth and technological progress of recent years of each of the Five Libraries has obscured the hard core of reality of performance. It is possible to acquire a reputation in a relatively narrow field and subsequently to broaden the activities as FAUL is able to deal with them. FAUL has been in existence long enough to make itself significant beyond regional boundaries. On the other hand, it should not fall into the error of attempting too much too quickly with too little. Building on strength must be the corollary to the objective of increasing value.

3. The User

Little is known about the informal organization of the Library -- of how the various groups of user's interest with each other to affect the processes of the library. Until recently, libraries had "felt" their user communities, mainly through complaint. In the last few years, however, various surveys of user needs and habits have been undertaken, and bibliographies of these are available. Little action has resulted from the conclusions reached, perhaps because some of the findings suggest the need for a completely new concept of library organization for service to research. Some of the user studies are very individual to the library conducting the survey, and may have limited significance to FAUL. Others, on the other hand, should be analyzed critically., for some of the conclusions reached might profitably be used as criterion to evaluate systems and services of the five member libraries.

Only by analyzing our user needs in greater depth will we be able to offer qualitative service, utilizing to the extent of our capabilities, resources of our combined strengths. Since it is difficult to appraise utilization except quantitatively, it may be expedient to appraise instead, the users' needs. For if there are presently pockets of discontent, it is useful to know where and why so that something constructive can be done. It may well be that rather than providing poor service and inadequate collections the library and/or the user has not found the formula for taking advantage of an existing resource or service. Alternatively, and this is most possible, the user demands have been so individual that no one library has been able to satisfactorily provide service for such small minorities, and only those working in more general subject fields or interdisciplinary studies have been able to receive adequate attention. Cumulatively, a study of user methodology in the Five Universities may result in small research areas being identified as of interest to several researchers. Proportionment of expenditures might then be adjusted, each member library sharing the responsibility of providing for minority interests in greater strength than has previously been possible.

3a. The Performance Audit

Until now the methods employed to determine user's needs have been too casual, subjective and superficial. A

depth analysis is usually only undertaken when the situation is near critical or shortage of funds and staff necessitates the reduction of service or resources. Shared experience -- weakness and strengths -- can set patterns and goals, and a documented case history can provide strong support for budgets to follow successful performance.

Causes of unsatisfactory performance are identifiable and correctable in the great majority of cases. The best solution to the probelm for FAUL is a program of performance audits, the purpose of which should be to search for improvements and to spot weaknesses in services and resources from the user's point of view. Corrective action, and a system of controls should also be installed before major dissatisfaction sets in.3/

A comparison of the audit performance of each of the member libraries could lead to valuable discussion, resulting in innovation and progress. The audit, undertaken from the user's point of view should cover policies, facilities, services and resources. The emphasis should not only stress what is right or wrong, but also what changes might be helpful. As librarians, we have been conscious of our inadequacies in dissemination and in demonstration techniques to the user; too often we have neglected to listen and have not established satisfactory channels for us to do so. An audit of service performance should undoubtedly penetrate the veil of the confidential relationship between user and library that has hitherto obstructed the accumulation of data. Secrecy is dangerous. It leads to mistakes in policy which can be very expensive.

Objectivity must be the cornerstone upon which such an audit should be built. It is difficult to accept an evaluation of our performance by others and retain any degree of objectivity, but unless we do, there is little hope that causes of inadequacies or weakness will be revealed in their true light. The audit should not be used as an occasion for mutual congratulation, but rather to establish corrective action and improve our co-operative performance to our users.

In such an audit, the user must play the crucial role in both analysis and design. A team approach of librarian and user, dominated essential for success. Only by joint participation can a worthwhile performance audit be achieved; any other method can only be biased by research methods on the one hand, and implementation interests on the other.

Clearing away debris that obstruct better results, is one result to be obtained from the audit. It can also encourage a candid appraisal of user practices and library provision which obstruct superior performance. FAUL could, after reviewing the findings on a confidential basis, develop an action program. The evaluation program whould be initiated by staff working in each of the five Public Service Divisions; they would set standards, approve methods, conduct a playback of various case studies of usage, and make decisions on the recommended future program for improved performance. The Bibliographical Staff might be needed to counsel the Public Services Staff in sound evaluation of the use made of the resources. The end product should be a report summarizing findings, causes, and suggested courses of action.

The value of a *User Services and Facilities Policy Statement*, upon which an evaluation can be made, is that it should enable us to improve those things which seem to be most used and to discontinue those that are hardly used at all. Through such an analysis, priorities of attention for major overhauls or new systems will thus be ascertained. By such considered renewal of systems and services, to bring the library in line with present day user needs, previous processes and resources will not be recklessly abandoned, since co-operative responsibility will cover possible eventualities where previously individual libraries had attempted to meet every need themselves.

It is probable that at least minor and perhaps major problems will be uncovered -- some really important, others merely annoying. These should be listed in order of priorities for attention. Problems revealed will fall into several categories:

a. A weakness in basic capability
b. An internal communications problem
c. An organizational problem
d. A personnel problem
e. A problem that can be solved by methods and procedures.

Most of the problems will be solvable through action -- by shifting personnel, restructuring the organization, redefining objectives, reallocating priority or effort, shortening the approval chain of command, re-examining the policies, revising the system of compensation and motivation, installing in-service training programs,

or finding means to break through the internal communications barrier. A comparative look and joint decision making process may resolve more than current problems. It may help FAUL to take care to avoid future problem areas as well.

It is possible that such an audit, undertaken regularly, could become a major management tool for short and long-range planning. When it does, each library will not merely tolerate being appraised by its users, it will welcome it and time it strategically for the next year's budget review.

3b. Feedback Mechanisms for Changing Needs

With the increase in specialization, the intense fracturing of older modes of organizing knowledge, and a growing emphasis in the past two decades on comparative and interdisciplinary studies, the difficulties users have always had in locating essential primary and secondary sources have increased considerably. This condition has forced researchers to think in new ways about information they use and need. In the library, information science has caused present retrieval practices to be submitted to critical examination and searching analysis, so that new methods are being sought which are responsive to the changing needs of scholarship, and which at the same time maintain a built-in quality control feature. Until now we have paid little attention to the feedback given to us from the patterns or use made of the collection.

Possessing more data about our readers is essential in order that we can service the present and future requirements of our users. With skillful organization, the user can become his own feedback mechanism. We could make more use of our circulation records, for once automated, a tabbing system designed to produce relevant data about the use made or the resources is possible relatively cheaply. By comparing records within subject fields in each member library, some conclusions might be drawn concerning either the resources or the user's pattern of needs that could prove very significant for future development planning. To analyze one circulation record is limited in value, because in each subject field there are many variables -- location and accessibility of resources, coverage and comprehensiveness, state of the subject in record form, researcher's techniques, etc. By comparing circulation records we can learn beyond quantitative measures:

1. Patterns of use of inter-related subjects
2. Patterns of use of highly specialized subjects
3. Patterns of use in relation to the allocation of budget
4. Patterns of use in relation to date of publication
5. Patterns of use of foreign language publications in each subject
6. Patterns of use of types of materials

Studying circulation records in this way on a comparable basis should affect (a) Supply (comprehensiveness, duplication, etc.), (b) Storage and Book Retirement programs, (c) Collection development programs, (d) Processing methods, (e) Proportionment of budget, and (f) User self-service apparatus.

Other Feedback Mechanisms. Besides circulation records it is possible to get other feedback from our users that will circumscribe very exactly reader requirements and possible collection development. These include:

1. Research in progress
2. Research recently completed
3. Evaluation by users of sections of the collections in use in relation to research
4. Graduate programs, non-graduate programs and independent study programs, needing research materials
5. Language ability requirement in each subject field
6. Reader's Requests. -- source of request, language, publication date, type of material, publisher, etc. An analysis of this kind will build up valuable information on items being missed by the regular ordering methods, reviewing sources being used, shifts in interest or emphasis in subject areas, etc. An analysis of requests received by the five libraries by working parties responsible for certain specialist fields would provide valuable information in each subject area.
7. Loss of relevancy in circulation. Loss of relevancy and non-relevant items disguised by the publisher or librarian as useful by misleading title, class number, shelf arrangement, etc.

8. Shelf check for subjects not represented at all on shelves. This may mean all items are in circulation, demand is heavy and further provision should be made, or no materials have recently been published and obtained through routine ordering methods, (very special fields very often have specialist publishing sources which might have been missed). Absence of materials suggests wider scope or more copies, shorter loan periods, or control on users building up private collections by extended loans.
9. Citation collecting habits of users. Can we limit our acquisition policies to items cited, leaving special collections only to collect more extensively?
10. Little used materials. Are these due to irrelevancies, poor classification, bad shelving, not indexed enough, not out of date material not old enough for use as historical studies, in languages not read, or presence unknown to potential users?
11. Inquiry analysis. Distribution of inquiries between subject fields, relative use of inquiry services, types of inquiry, proportion and nature of unanswered inquiry, number of facets needed to answer different types of inquiry. Pooled experience of the FAUL subject bibliographers could systematize much of the inquiry work now being handled on an individual basis.
12. User Behavior. The type of user (professor, instructor, researcher, bibliographer, thesis writer, etc.), subject field, progress of the user's work, his seniority and his environment, have all been found to affect the use made of the collection.4/ Profiles of users, in conjunction with acquisition and service policy statements, are useful tools to re-vitalize developed collections. We may learn that the library does not have, or that the collection is so large, that locating particular pieces of information is so time-consuming that the user stays away except when he knows that this is the only likely collection to contain the information he needs. To be of use to the librarian, User Profiles should include:

a) What research does the user do?
b) What information does the user need in each step of his work?
c) Where does the user obtain the information now?
d) From where sould the information needed by the user be obtained?
e) Is the user receiving the information rapidly enough?
f) Is the information received complete?

As the user's questions become data and the services he uses and the way he uses them become data, every contact will add to the profile of the user concerned. Such information monitored for each researcher will then provide more feedback for the librarian, such as:

a) Is the information the library generates re-usable?
b) What should be kept permanently?
c) What other services are available to the user?
d) What kind of information services should the Five Associated University Libraries maintain between them?
e) What kind of information services can special libraries be depended upon to provide?
f) How should these functions be supported?

These are some of the many controls that might be installed to obtain the feedback necessary to organize our library services on readers' needs and patterns of use.

A study of the use made of Purdue University Library collection has be published.5/ An analysis of this study throws light on what could be relevant to FAUL were such a sample survey to be undertaken. Alternatively, the findings at Purdue are thought to be general enough for them to be tested for relevancy in other libraries, and FAUL could utilize this study to evaluate its own practices. Annotation on relevance to FAUL have therefore been added to the summary of each finding.

Patterns of Use of Purdue University Library: 1965-66

1. Marked decrease of use with age of publication.
Implication: Age is relevant criteria for book retirement programs. A new look at shelving organization might be worthwhile. Should older material be re-vitalized by new groupings, re-classified according to new inter-relationships of subjects, re-assessed to form special collections for research for purposes other than those for which they were collected?

2. Graduates read three times more than undergraduates and four times as much as faculty.
Implications: Greater emphasis should be given to supporting graduate programs. Data from faculty on graduate programs should be readily available. Probable need for resources of FAUL to be closely co-ordinated and fully accessible. Request facilities and inter-library loans should be analyzed for evaluation of service and efficiency. Need to promote greater faculty use of library by user studies. Selected faculty members of FAUL be appointed advisors to subject working groups for co-ordinated provision of resource material needed for new graduate programs as instigated.

3. A higher use of books in English was made than cumulatively all other language, even in area studies.
Implications: Subject and language needs should be assessed very carefully. Test "English" to see if it means U. S. only, or all books in English? How many significant books are not translated into English? Does time lag of translation matter? Can literature be shared provision to a greater extent between FAUL? Do scholars needing foreign materials do field studies and research abroad anyway? Is foreign buying normally done by language rather than by subject need?

4. Sixty-five percent of collection was found to be available on shelves.
Implications: What books are left in? Are the books that are primarily needed, out? Should interlending be allowed for books that are found to be "out" when needed? Is the request, reserve, and interlending service fast enough? Are patterns of use different in each of the member libraries? (Would a book needed by one be necessarily in use at another?)

5. 18.5 percent were found to be missing.
Implications: Is this our figure, too? Can we reduce it? Is "missing" due to misplacement on shelves, on long loan, in transmit, theft, or unrecorded temporary transference? Do some libraries have fewer missing volumes than others? What is the secret of their success?

6. Most recent (last 2 years) foreign books used less than those for the 10 years previous, and less than the 10 years previous to that, i.e. Recent books less used than books published up to 20 years previous.
Implications: Whilst it is necessary to buy quickly to obtain publications before they are out of print, it may only be necessary to catalogue selectively until usefulness has been established. Citations might be the reason for use. Possible to depth index and catalogue those most cited?

7. Patterns of use in Fall and Spring may be quite different from those in Summer.
Implications: Controls should be set up to determine patterns of use, and implementation of practices resulting therefore must be flexible and based on sound measuring devices.

Summary: Too many user studies have been based on insufficient documentary resources, severely limiting the value of the results obtained and making the use of such studies unreliable. We must look for data which will enable us to select a course of action, for the quality of our decisions is largely dependent on the analysis.

4. Acquisitions

4a. The Policy Statement

Making a vast quantity of recorded information subject to at least potential, if not probable demand, is exacting and professional work. The pursuit of knowledge is not always orderly, systematic and without its own peculiar wastes nd diversions. The opportunity for problem-solving in the field of acquisitions is so great and of such magnitude that it can only be effectively met through cooperation.

A joint acquisition program needs unity in spite of the fact that it will be divided into several parts. It needs, also, continuity, precision and flexibility to allow adjustments to meet the pressure of circumstances. Acquisition policies vary not only from one member library to another, but also for different areas and levels in the book collection of a single university.

Acquisition policies are an important part of rational planning and appraisal of services. The extent to which a library fails to recognize the kind of policies which it is following may possibly be a measure of the potential inadequacies of its collection over a long period of time. This equally applies to any joint program of acquisitions. Acquisition policy statements, whether of single libraries or consortiums, are of fundamental importance for any planned expenditure and evaluation of performance. Policy statements can also "focus attention of the faculty and the university upon the need for basic decisions of the institution, i.e. what can the institution do, what should it not attempt, and what are the implications of changes in scope or direction."6/ After an evaluation of the collection(s), the policy statement becomes the standard for setting priorities for collection development.

Since FAUL, even collectively, is unlikely to secure resources to cover the whole universe of knowledge, it has therefore to select what it can do. It is necessary to re-study the Joint Acquisition Policy Statement, to determine the scope of the total resources, to indicate what must be done, and to set priorities in doing it. Such a collective policy statement whould:

1. Determine the needs for intensive research collections in special subject fields.
2. Designate those libraries which would assume responsibility for specialized collecting and services; those libraries, each, to define the policies for coverage by subject, by publication, by time, by treatment, by source, or by other standards to provide service in relation to the definition of user needs.
3. Determine the bibliographical tools and other apparatus necessary to make possible the most effective use of the combined resources that are and will be available, and to initiate the development of such tools, and to establish bibliographic and information centers to identify and locate reference and resource materials efficiently.

4. Outline means by which FAUL could utilize through membership (or as a national resource with free access), referral centers, networks and other specialized agencies already existing, so that FAUL could work with, rather than compete and duplicate, resources already available.
5. Form a structure of organization to discharge the function of acquisition services to:

    a. Get access to the reliable and up to date information available concerning research being undertaken in each subject field at the Five Associated Universities.
    b. Convert the data gained into programs or action.
    c. Involve the administration of each member library into greater awareness of library budgetary considerations in developing new research areas.
    d. At the tactical level, consider resources and programs in more detail.
    e. Examine acquisition procedures to determine which, if any, might be shared, such as scanning mailing list organization, user recommendations, overdue orders, etc.

6. Outline book retirement programs and cooperative storage projects.

4b. Scope of the Collection

Book buying for a large research library tends to be very strongly orientated toward future or potential use, even in subject fields where the institution has a current and well established interest. What percentage of books are bought on this basis in any large university library is probably impossible to ascertain, but it is quite apparent that a very high proportion of books are bought on the assumption that they contribute to the completeness or overall adequacy of a research collection, without any specific current need for the books at the time they are acquired. Most of the books in large research libraries are subjected to an extremely low, almost negligible amount of use. It is, as Fussler has written, "the balance of the library's holdings which are so infrequently used that in part distinguishes a research library from a college or reference library."8/

The difference between probable demand and the possible demand is of vital importance in building a collection. A research library cannot be measured for value from use, for little used books are a prime necessity in much research. These two characteristics, extensive buying for future assumed potential needs, and the very low rations of use of vast quantities of materials, present the case for joint acquisition of collection policies with considerable forcefulness. For it involves, not only acquisition policies, but services offered, storage, binding, weeding, and not least of all, budgetary considerations of staff, building and equipment to maintain resources that only might have value. Is it possible to arrive at an optimum as well as minimum size of a collection in one place, for research purposes? Would the cost of improved communication processes be counteracted by the considerable reduction of maintenance cost of "might be used" materials? Is the time, the energy, the manpower and the money spent on acquisition, organizing and servicing, rationally expended, or could these resources be spent in more fruitful ways? For although today we are increasingly able to apply technology to the handling and even retrieving of information, machines are even less able than over-worked librarians to differentiate between quantity and quality.

Control of the size of library collections is of importance, so that the contents can be managed effective-

ly, be capable of manipulation and utilized to the full. To this end therefore, FAUL should examine:

1. The extent to which completeness in subject collecting can be justified between the Five Associated University Libraries.
2. The extent to which completeness in subject collecting can be justified in each library.
3. The number and identification of subject fields so collected individually and collectively and the budgetary implications of this.
4. The extent to which these comprehensive collections drain the resources of the five libraries, limiting development in other fields.
5. In the light of the answers to the above questions, which special collections can justify their existence so that they continue to be "comprehensive" in their coverage.
6. The way FAUL can utilize to the full these comprehensive (and therefore very rich) collections and so benefit the research needs of the country as a whole.

It will follow, from such an examination, that very few subject collections will indeed be "comprehensively" collected. The corollary must therefore be to examine what constitutes a "special collection." Can they too be subjected to vigorous re-examination to determine the justification for continuing their maintenance? How much is spent on each annually? Is there any overlap in coverage between the five libraries in the "special collections" area? Are they being utilized to the full? By differentiating "comprehensive" collecting from "special collections" in a joint acquisition policy statement, it is possible to examine the economics or prestige collecting, superior resource holdings, unsolicitated gifts and donations, skilled bibliography and prized collector's items. It may be found, that for each collection there are tangible reasons for retention. On the other hand, by examining the use made of the collections in relation to the cost of maintaining them, it may be possible to transfer some of the weight we attach to their importance, to more recent, urgent and multipurpose demands. We can, for instance, utilize special collections, not by adding specially organized materials of the past, but by reorganizing

our libraries to meet present needs to form new special collections. Past special collections can have a cut-off date, just as easily as a starting period or defined scope; they can be rehoused, rearranged, freshly displayed, re-catalogued, inter-related with the general collection, even re-juvenated with a new look, exchanged or sold. A past special collection (e.g. religious tracts of the 19th century) may have a current significance today for quite some other reason than that for which it was collected (e.g. illustrations). An evaluation of the special collections of FAUL must include a re-look in terms of current use, an examination of alternatives, an appraisal of scholarship use today and a costing of the weight special collections in the total resources possible to FAUL.

Between the five libraries, besides the comprehensive and special collections held for potential use irrespective of demand, there is a vast body of material which is bought "for the future." Justification is readily made for this in terms of the number of items that go out of print and might therefore not be obtainable again, and in the need to anticipate the demands of the user. Whilst it is true that a university library cannot make its collection policy dependent upon the accident of whether a particular subject is being taught at a particular time, collecting for the future, unless based on intuition, experiences and informed judgment, and followed through with a systematic approach and consistent intensity, can become the basis for weakness in the future collections. An examination of the present collections will surely identify spasmatic collecting of the past, inconsistent selection by different librarians, personal biases of faculty or subject librarians, mobilization of faculty or staff. It seldom reflects change in the curriculum, which it should do, for it takes many years for most libraries to cut off a source of supply or subject coverage, as is testified by long files of outmoded periodicals still being collected.

The Joint Acquisitions Policy statement of the Five Libraries should therefore define "future use" collecting areas, as well as comprehensive and special collections. This the Joint Acquisition Policy statement issued in 1969 failed to do, because in the short time it was compiled, the descripters and hierarchy of subjects used, based on the evaluation statement suitable for Cornell's needs, was used by all. Clearly, the emphasis on each subject for each member

library of its own, relevant to its own collection. One example will suffice.9/

Philosophy

	Cornell	Buffalo	Rochester	Syracuse	Bing-hamton
History & Systems	B	C	C	C	D
Logic	B	C	C	C	C
Speculative Philosophy	B	C	C	D	D
Metaphysics	B	C	C	D	D
No. of Vols.:	21,661	10,340	23,333	34,133	6,227

Clearly, Syracuse has a superior collection if evaluated by size; and so it has in certain areas in philosophy, but not those particular areas so specified by Cornell.

Notwithstanding the need for clearly defined policy statements for each library, there may well be, within FAUL, two types of acquisition policies for current items -- one serving readers with a sample of materials in the field covered and one acquiring everything that may be of possible interest "for the future." Ultimately though, the only answer to the increase in materials available is increasingly selective acqusition programs, and these should be formulated in relation to the joint collection holdings of FAUL.

Where selective collecting is done, FAUL should actively collect all the bibliographies and indexes published to each subject so that full access is made possible to the wider range of materials, through bibliographical controls to specialized sources of information. Facilitating the identification of materials of interest should play a much larger part in library service than it has done in the past. Should the resource of original materials be too distant, or otherwise inconvenient, then FAUL might choose to acquire source materials in micro or other replica form. (It should be remembered that ephemeral and archival qualities are not inherent characteristics of materials. Rather, the end-use determines these qualities, so that what is archival to one may be ephemeral to another, and vice versa.)

Adequacy of coverage, not comprehensiveness, is most usually required for specialized field of study. We are assured from a recent study, that 4 percent of the available literature produces 60 percent of the pertinent information required.10/ The Five Associated University Libraries together should plan how to meet the 40

percent deficit of pertinent information whilst still at the same time reducing the quantity of materials acquired.

4c. Size of the Collection

The size of the library does not necessarily measure its adequacy for scholarly purposes. The minimum size, on the other hand, as Clapp and Jordan have pointed out, differs from institution to institution depending upon the size and nature of the student body and faculty, the curriculum, methods of instruction, availability of suitable places to study, geography of the campus and the intellectual climate. They go on to point out that "these factors differ widely in their susceptibility to measurement" and "can be achieved. . . only if all material is carefully chosen with a view to the purpose to be served, and the weeding program as an active and realistic in relation to needs as is the program of acquisitions."11/

Since few libraries have an active weeding program, even if it is assumed that all materials are purchased with a view to the purpose to be served, the true evaluation of measurement has to be left to each individual library, rather than assessed from statistical figures however "official" they might be.

The Clapp and Jordan formula, is however interesting, and is given here as a starting point for a comparison of the Five Libraries, inevitably very varied in size. An honest evaluation based on this formula might equate the collections rather more evenly than the annual statistics infer.

TABLE 1
FORMULA FOR ESTIMATING THE SIZE FOR LIMINAL ADEQUACY OF THE COLLECTIONS OF SENIOR COLLEGE AND UNIVERSITY LIBRARIES

(1)	BOOKS		PERIODICALS		DOCUMENTS	TOTAL
	Titles (2)	Volumes (3)	Titles (4)	Volumes (5)	Volumes (6)	Volumes (7)
To a basic collection, viz.: 1. Undergraduate library	35,000	42,000	250	3,750	5,000	50,750
Add for each of the following as indicated: 2. Faculty member (full time equivalent)	50	60	1	15	25	100
3. Student (graduate or undergraduate in full time equivalents)	..	10	...	1	1	12
4. Undergraduate in honors or independent study programs	10	12	...	...	...	12
5. Field of undergraduate concentration—"major" subject field	200	240	3	45	50	335
6. Field of graduate concentration—Master's work or equivalent	2,000	2,400	10	150	500	3,050
7. Field of graduate concentration—Doctoral work or equivalent	15,000	18,000	100	1,500	5,000	24,500

Clapp and Jordan add, "It is not too difficult to estimate the size of a collection for work at a given level in a single subject; it is when the library is required to serve the interests of many users at many levels in many subjects, as in institutions of higher education, that estimates of size become difficult."12/ They also point out that by such comparison it may be found that the larger libraries are not "in an absolute sense inadequate," but they are inadequate in relation to the programs which they are attempting to support; in other words, that the institutions have overextended themselves in relation to the available library resources.13/ Such systematic evidence based on formula, by which it is possible to make comparisons in like subject fields in various institutions, might well prove beneficial at budget times and to gain faculty support for increased resources, especially if it is found that this is repeated in other institutions within the region. Library resources are too frequently ignored at the appointment of a faculty member working in a new subject field or during the development of a program of studies within the university.

Stabilizing the size of the working collection requires equating the rate of input (acquisitions) to the rate of output (withdrawals). Possible means of accomplishing this include storing: a) all materials older than a certain age, b) all materials of certain types, such as newspapers and c) selected items throughout the classification system. It is also possible to discard all or any of the above materials instead of storing it.

4d. Book Retirement Programs

Selective book retirement programs are dependent upon the goals of the acquisition program, the growth rate of the collection, the economics of housing the collections, the needs of the user, bibliographical record keeping and overall administrative planning. It may involve either a shifting of volumes from the main collections to another section, or a complete discarding of the volumes; there is also the possibility of transferring materials from one affiliated library to another for integration into the latter's collection. This will not only strengthen the collection of the receiving library, but it will also ensure possible access for the donor library, should an unforeseen demand occur. Where gifts cannot be transferred, indefinte loans to another

institution may retain the implication of the gift, whilst at the same time, coordinate the materials at one institution for more effective use.

In the past we have been governed by misconceptions about the merit of storage to a degree that we are now conditioned and consequently handicapped by them. Some of these misconceptions include:

1. All publications have potential use. This presupposes that each institution is likely to study all knowledge at some time, and that before materials become in fact useless -- being many publications do become out of date before "potential" use is realized. The skill in selecting is to judge potential frequency of use in relation to value, and hence the current concept of priorities.
2. Any group of materials that can be defined as a collection, is a useful addition to the overall holdings, and will at some time be of use. This is of course true, only if a research program covers, or is likely to cover the subject. It is also dependent to some degree upon whether there are supporting materials for researchers to use and whether the collection is "displayed" adequately -- housed, catalogued, indexed and publicized. By making commitments in areas which have low or no priority, the library weakens its human and time resources for more purposeful work. It also hinders another library making immediate use of the materials because they contribute to an existing strength.
3. That long runs of files or periodicals are desirable where current or certain issues have shown demand. -- the "potential-use" philosophy. Because we have failed to monitor in the past which issues are most wanted, we have only just begun to realize that citations promote the use of individual back numbers, not the reputation of the journal, and that indexes and abstracts, because they index subjects, date as much as the material. Time is proving the concept correct that it is possible to rely on citations as a guide for selecting older materials

for retension in the working collection.14/ This certainly rules out the need for complete runs of back numbers of journals, and we must fight the current psychological reaction to gaps in our holdings, with informed practice of selection by citation.

4. That all gaps in serial holdings should be filled if possible. The reputation of a library has been made where few gaps in serial runs have been revealed from Union Lists. In fact, these libraries most recently developed very often have collections of greater relevance, since their materials have been selected, rather than accumulated over decades by standing order. Co-operative storage, if it does nothing else, must give us courage to terminate subscriptions for standing orders of journals that are now out-moded, irrelevant, in their decline, or superceded.
5. That files must be housed together (regardless of the subject content or the potential use factor of each volume). In closed access this might be the most practical arrangement, but in open access, where scholars approach most of their work by subject, it is time consuming and potentially wasteful in use, to shelve in one place, publications which are issued as subject contributions.
6. All acquired materials, by gift or exchange, are significant to the collection and should be kept. In fact, few materials acquired either by gift or exchange are individually selected (as are purchases) and they must therefore be integrated into the collection before generally they are of use. This might mean strengthening and adding to the materials acquired in this way; it might also suggest that in terms of priorities they can be an added expense which the library can ill afford. Rather than donate them to other collections where there are already existing strengths, or sell them in order to purchase more relevant items, they are frequently stored, where they take up space, time and staff effort, and distract from purposes of higher priority.

7. All foreign materials, especially in a foreign language, are potentially useful. We do in fact select less in the acquisition of foreign materials than U. S. ones and have least control over them. Because we know we cannot obtain all that we need, we accept any that we can get. Subject buying in other countries is no different from subject buying in the United States since all libraries in their own countries, other than national libraries, have highly selective programs of their own materials. Liason with research libraries in other countries, rather than with commercial agents who collect for depository libraries and then supply research libraries with the same items, might be more rewarding in terms of relevence where the depository functions do not exist.
8. The primary interest of foreign publications is determined by the place of publication. Many useful subject items that would be classified elsewhere if in English are thus hidden by being shelved with materials eminating from the same country. Demographic studies, art, costume, religion and philosophy are shelved with anthropology; politics, social sciences, urban developemnt, agricultural economics, women's status, education and technology become for a foreign country its history; current opinion and fiction become its literature, making it difficult to distinguish fiction from fact.
9. All items must be kept equally accessible. Rather than store we have opened branches, splintering the interrelationship of subjects somewhat sorely at times. Rather than do selective cataloging, we have back re-classified whole sections in order to neatly interfile in one sequence. Rather than favor one, we have in fact satisfied none, content to display by Library of Congress classification, rather than by the use made of the materials.
10. Subject areas and relationships of subjects do not change but remain constant. In fact the potential use factor does not remain constant. Storage, as with acquisition, must consider the changing scope

of subject areas as research dictates the needs. This change constantly outmodes subjects either in their approach or their content. Potential use is constantly halted.

In determining a policy of weeding, it is first necessary to reconsider the aim and objective.15/ For FAUL to maintain a systematic book retirement program, whether as individual libraries or cumulatively -- and whether for discard or for some system of collective storage -- it is necessary to study the use made of the collection for reference, for browsing and for borrowing. We must, on the other hand, discard irrelevance, and on the other, allow flexibility for subjects to develop, inter-relate, re-model, interact, subside, erupt, go in and out of fashion. We should allow for different levels of accessibility, and consider the economics of all the alternatives. We should recognize the maximum span of control for collection size if we are to manipulate, disseminate, and make accessible working collections of resource materials for the researcher. If we fail to do these things, the library becomes a depository, not a working collection.

By failing to have adequate weeding and book retirement programs, we have built up for ourselves problems of considerable proportion. The shelving space is unmanageable; we have fragmented collections; we have had to decentralize some sub-systems and consequently have lost the advantages of standardization even within our own libraries. Co-ordinating systems have replaced the managing of one. We have mortgaged budgetary funds to provide additional space, which more usefully could have been spent on additional services. We have spent money on reclassifying and reshelving where first we should have selected to remove. Operational criteria for weeding policies and experiments to test their efficacy, will become more and more urgent as the tempo of research increases and the half-life of information is correspondingly reduced.

To bibliographically control the problem of growth in our libraries, three types of solutions have been used:

1. Development of on-campus facilities for storing materials beyond the scope of current interest. This has assured proximity and relatively fast retrievability of materials for the user.

2. Development of off-campus enterprises with either closed or open access.
3. Microfilming to reduce the size of bulky publications, and salvaging little used but important materials in poor condition.16/

We have still, as a Consortium, to agree on the development of a co-operative storage scheme either subject orientated, types of materials orientated, or merely warehousing. The advantage of such a co-operative scheme is not merely that it is economic, but that it also increases the resources available to each library when the materials are merged, forming a new collection. From such collective housing of little used materials, it is possible to determine previously unknown strengths, to test use made of these older materials, to eliminate duplicate holdings, to set up priorities of concentration, and plan division of responsibilities to meet them.

FAUL should examine the studies that have been made to develop formulas for predicting economic retension periods that assure effective utilization of available space. Only then should the five libraries consider co-operative storage provision. Both Fussler17/and Trusswell18/have employed the "use factor" as a basic criteria in book attack thinning. Trusswell developed a procedure whereby the degree of future use can be predicted with reasonable accuracy from the past circulation history. His method provides a way to determine a "cut-off" date that can be used as an aid for separating the collection into a "much used" segment that would satisfy a pre-determined portion -- about 95 percent -- of the user's demands, and another "little used" segment that the remaining portion -- 5 percent -- would fulfill. The advantage of this method is that it also suggests the need for duplication for highly used materials.

FAUL should set up a task group to study the findings of Trusswell and Fussler, and the Yale Book Retirement Program,19/for between the three, there are important implications. For instance, if weeding policy is based upon past circulation, not only is it possible for the operation to become clerical, thus saving staff time, but it is also possible, by prefixing the location number in compact storage with a decade code (60 equals 1960's, 50 equals 1950's, etc.), batches of the stock are arranged for further weeding as time progresses, in diminishing quantities, instead of the operation annually increasing in size. The hundred years' gap (60 equals 1860 ? 1960?) will in fact not

confuse, for such volumes that have survived will be valuable either for the collection, or a "rare books". or on the market for sale or exchange. Such mater al may have changed in subject value which shelving by decade will reveal; 186C's school books, variously arranged throughout the classification scheme might now be collected together to form an historical pedagogical collection. By shelving little used materials by decades of last-used dates, at present scattered amongst the most used, new strengths, and new uses of older material are identified.

Harvard and Yale have utilized the subject approach in their retirement programs for storage, co-operative storage or total discard. Welsh, at Harvard, in 1954 believed that the method used must vary among subject fields. The age factor, he felt, had little importance. He recommended that the weeding should be done by subject specialist librarians who could enlist faculty advice.20/ Yale carried out similar programming, a report of which was published in 1963.21/ Whilst agreeing with Harvard that the actual weeding should be carried out by subject bibliographers in conjunction with faculty, they found in actuality that the part the faculty played was minor or minimal.

The results of these studies show that there is a difference in opinion on the method to be used for book retirement programs, though there seems to be total agreement on the need to develop some program for weeding. FAUL should therefore study the published findings available on the subject and select a method that is compatible with the services, acquisition programs, growth rate of the individual collections, the economics of housing and the bibliographical record keeping of each library. Whilst it would be possible for each member to retain its independence on the matter, it would be very beneficial if the systems could be standardized into a routine, with a view to co-operative storage.

FAUL should consider co-operative storage only after each member library has established a book retirement policy of its own and these policies have been examined by FAUL to determine the implications for a joint storage enterprise. For warehousing cumulatively is but one of the many advantages that co-operation in the provision of little used materials can bring. FAUL should utilize a systems approach to co-operative storage, as it does for some of its other projects.

By systematic planning from the first, it is possible to give greater accessibility, not less, through co-operative storage. Renting out warehouse space provides only space. Co-operative storage, on the other hand, could include computer print-outs of runs of annuals, directories, yearbooks and other reference material on file; could identify materials being held whilst they mature into primary seource materials of the past; could build up files for later microfilming as a collection, and could provide each library with read-back on:

a. Details of items requested from co-operative storage
b. Types of materials being requested
c. Types of material not being requested
d. subjects of materials being requested
e. subjects of materials not being requested.

Such information could be invaluable for determining future storage and discarding policies.

Discarding materials is not necessarily an alternative to co-operative storage; it can be practiced alongside it. What each library does discard, would be a matter of concern to FAUL. In certain instances, other special libraries in the region might also be interested, enough to subscribe to a cost distributing service of unwanted materials. At Columbia, from a list of 155 titles circulated to faculty in 1964, 8 titles were transferred and subscriptions cancelled, 56 titles were moved to another location within the campus, and 82 remained under observance. Of those 82 titles, many later were distributed "among the large New York City research libraries."22/

Though offering materials to libraries outside of FAUL is obviously desirable, such a system can only be feasible if made economical. The offering system must be streamlined to simplify routine procedures. Circulating a photocopy of the title page (plus date and edition if needed), and arranging the volumes offered, on shelves marked by library to which the items have been offered, reduces record keeping to a minimum. . . and reveals tardiness in reply and co-operativeness in organization. It has therefore its own built-in control system.

Where Fussler and others have studied the obsolescent rate, Burton and Kebler have revealed interesting data on the "half-life" of currently published literature.23/

The significance of the findings is twofold. It matters very much, in terms of use, how quickly materials are processed and made accessible after publication, if we are to get from them maximum use. It also means they should, for their short life, be fully available. It follows, then, that indefinite loans are not in accord with the objective of maximizing use, and that some method of priority cataloguing should be practiced. There should be some way to get material out in circulation as soon after publication date as possible, even if the acquisitions are not at this stage (fully) catalogued.

Those books that are most used should obviously have maximum availability, which means basically, open access and sufficient duplication; it does not necessarily mean, however, full cataloguing. On the contrary, those materials most used are usually those most known about, and a locating index might therefore suffice. Published bibliographies describe these items very adequately, and reference to many sources will recommend them to the researcher specializing in an interrelated field. Full cataloguing should be used for the exceptional item; the record generated by the order work might be used for locating the commonplace. The publisher could be the deciding factor; commercial publishers normally insure that their publications are listed in a variety of trade lists and bibliographies; institutes, associations and all other private bodies are not always so assiduous in this respect, and they are more difficult to trace.

At the end of a set period of time, (Truswell recommends eight years, based on his research findings), many items will be retired, worn out, missing or not needed for replacement, leaving the residue for reconsideration for depth of indexing or cataloguing needed. This will be considerably less than each year's intake at any library. It would also renew the life of significant books that have lasted this period of time (a testing time indeed of usefulness), and de-emphasize the value of material just because it has recently been published. As we select for purchase, we should also select the way we will spend time and money giving access to the resources.

4e. Feedback for Joint Acquisition Programs

The individual Acquisition Policy statements of each library and the combined evaluation statement of FAUL based on the profile of Cornell's needs, will indicate the types of materials, depth and breadth of each collection and present acquisition needs. It will be necessary to review regularly the statements and evaluation, and gradually it is hoped, by taking user subject fields in turn, develop a more detailed analysis of intention and holdings. Comparative evaluation of collection and needs will be most valid if undertaken from the user's point of view, rather than that of the librarian. The results may be less prestigious -- for scholars have not time for dead material, irrelevancies, primary sources outside their own fields and so on -- but it will be a guide to possible expansion. It will also establish priorities.

The interaction and response data at the present time, is practically non-existant in any library. We need to know the exact use made of the materials purchases; how, if at all, they react upon each other. What further use could be made of the materials, and what type of use is wanted. We need the relevant data that makes a collection special to the general holdings and/or the users, and we need to know what new groups of materials already in stock could be recognized to become the nucleus of new special collections to meet today's needs. We also need to know what other collections are used by our readers, when and where. On the average, 10 percent of our faculty are given annual leave to undertake "research." Does this mean that the more specialized the subject, the more users rely on special collections? The inference, if it does, must mean that as top priority, we should describe our special collections between us in terms of user's subject fields, locate others in the same field, interrelate them, and disseminate this information to present and potential users. What librarians refer to as "special collections" -- donations, special formats, collections made for reasons other than subject content, etc., may be relatively unimportant to the user. The special collection strengths of each library to the user can mean only the breadth and depth of materials in his subject field, conveniently accessible and kept up to date.

It is necessary to work out potential means for rapid and effective assessment of resource material by means of our users' reaction to them. This might reveal

the misuse of resource material and even the required competencies needed by researchers, some of whom at present use them less effectively than they could. We know for instance we use modes of presentation which do not fit the information needed to display the resources to the best advantage. After defining research areas, we could then identify and collect research material around it. We could use the catalogue for locating, (instead of describing) and the shelves for storing, but use in addition other methods for displaying the collection. (For example, selective KWIC indexes, Subject Profiles with classification and subject headings for individual users, contents page listings of selected items, etc.)

The possibilities of misuse of research resources are endless, as every librarian knows but seldom mentions. From not using the index in an encyclopedia, to misinterpreting or quoting citations, misusing statistical information or other data out of context, not following up leads, quoting missed information, etc. From the user's point of view, librarians misuse information by describing them inexactly, disseminating irrelevant items, and not relating relevance to potential usefulness. Misuse of resources has to be controlled as use has to be promoted.

These feedback controls for the user's benefit, do not exclude the possibility of presenting periodically as needed, other kinds of special tests and examinations between the five libraries. The same apparatus could be used for testing purposes and for the presentation of resource materials. For instance, order print-out used as overdue print-outs used as notification print-out. We know the order of magnitude involved, enough to make a first approximation and this is the only effective way or identifying the areas in which better data are needed. Then it will be necessary to talk about the system or organization which would make it work.

4f. Cooperative Bibliographical Organization

In developing our ideas on the use of books, we may at the same time find it necessary to reconsider our bibliographical organization. In any case, it is useful here to review it, for some of the processes we at present perform might be cut, or at least shared between the five libraries.

a) Processing. In using multiple sources of information concerning available materials, it is obvious that there may be considerable overlap in items announced by various sources. Though regular procedures must be established to acquire the physical materials, the process can be divided into two:

1. Identification of "bulk" sources of materials (which are increasingly being left to jobbers and approval plans)
2. Identification of individual items or materials from the bulk sources which may be acquired separately.

The latter process has meant identifying the source of the user's information, quoting it, and "checking" in some standard bibliography. This presents FAUL with an opportunity to share some of the acquisition procedures. It is possible for subject-bibliographers, working in the same subject fields, to share the reviewing, scanning and evaluation of the more specialized materials; or for FAUL to enter into negotiation with special organizations in each subject field which have similar interests and acquisition policies, for the use of their professional scanning services and materials order lists. This would leave the subject bibliographers in each of the five libraries free to concentrate on their subject speciality whilst organizing the acquisition of broader subject areas which are designated to them to control.

Superimposed on an approval plan for bulk ordering, either or both of these shared scanning procedures could be utilized very conveniently in FAUL. In some measure, we already do this, without admitting that we do. Buffalo's poetry list is sent to each of the five and presumably scanned, giving us information both on what we should buy and what we can afford not to purchase. Several other lists eminating from a library specializing in a particular field are checked among the five so that it is only a matter of further organization and systematic receipt of such lists that prevent FAUL putting into operation immediately a co-operative scanning service.

We do not know enough about the ordering procedures of each of the libraries to determine whether further co-operation could be applied to this area of acquisition work. Are the items not supplied to each library the same each month, 80 percent the same, 60 percent or 45 percent the same? If sufficiently the

same, the five libraries could check overdue receipts in turn, each library sending to the common supplier a list of its own overdues, requesting the supplier agency to check the order for each of the member libraries. Thus by checking files twice a year, each library in fact would be kept up to date monthly, only a very small percentage (the items not ordered by any of the other libraries) being checked only twice a year. A control for urgent items could be superimposed on the general routine.

By comparing the work of the Acquisition Departments of the Five Associated University Libraries, it would be possible to obtain data that might lead to new policies and procedures, and even a shift in allocation of resources.

Cost of book plus cataloguing plus shelving divided by the number of users equals the cost per user for service.

Comparative figures might be revealing, and would at worst give a method of measuring performance. We do not know our standard of operating efficiency; how much time is wasted searching bibliographies through lack of knowing resources. Would one hour's training period a week save three hours wasted in wandering around vaguely? Do we take cognizance of our heavy workload periods and plan accordingly? We know that we will be busiest with August-November requests, and September-October and February-March with orders, for these are the heaviest publishing seasons, or start of new curriculums. If we do not conform in this matter, which is general to most academic libraries, that too would make interesting study. How much backlog in cataloguing do we each have? Are some of the books already out of date, of less significance now than when bought (since presumably no one has yet asked for them)? At the moment, though, "no use" should indicate some difference between those uncatalogued and those already processed and on the shelves in full use, we catalogue them (when we get around to it), all the same. Between the Five Libraries, experimentation in trying to solve the backlog problem is beginning. Temporary indexing, or locating through order number is being tried. This is a remedial practice, superimposed on a system that has been in operation in some cases, for many decades. It may be that we should re-look at the whole system rather than patch up an imperfect one.

Books are ordered for a variety of reasons:

1. In answer to a request.
2. Latest edition or addition to subject matter.
3. Topical subject and of immediate interest.
4. Current curriculum programs.
5. Of interest to the present generation of students and faculty. (These should all be processed immedately, but there are others.

Others that should be processed immediately:

1. Those bought to build on strengths in the collection.
2. Those bought to build up strengths in the collection.
3. Materials that will have value as a research collection in the future, but might now be regarded ephemeral except as a collection. (E.g. material issued on various campuses during student revolts, hairstyle magazines for men, etc.)
4. Rare/scarce items snapped up at first opportunity in acquisition policy collecting areas.
5. Donations useful to keep but which have low priority in processing.

Reason for acquiring should be determined by the factor of priority in processing, not the date of receipt of the parcel, language of material, vocalness of department or other artificial determination. Indeed, were special materials (building on strengths or building up strengths) to be collected together and periodically processed, a special team (with subject/language/cataloguing abilities) could be employed as a team for work among the five during, perhaps, a summer vacation. (Library Schools seem to have little trouble in getting visiting faculty, even from abroad; the experience is what the schools have to offer and which attracts. Can not the same be said for a special project working on special materials for a specialist?) Between the five there must be adequate work to be organized within similar fields (subject or language or clerical work) for projects lasting 4-8 weeks each summer. Lecturers from Library Schools might be glad of an opportunity to get such experience and head such a team.

Other forms of re-organization which might effectively be introduced between FAUL include:

1. Standardization of record-keeping procedures.
2. Standardization of circulation methods.
3. Central processing.
4. Development of union catalogues.

FAUL needs to activate the awareness of the need for bibliographical control.

b) Increased Access. More bibliographical aids will be available as we input more into our collections, and in the future it seems likely that library services will spread over a wider spectrum and include a considerable resource of limited-market documents, under highly coded retrieval control. In addition, it is likely there will be published, indexed or catalogued materials, available to be scanned, excerpted, borrowed, or bought. Achievement like that of the American Chemical Society is beginning to be available from other sources in various subject fields.

There are many specialized agencies in the U. S. producing indexing and abstracting services now suitable for the computer and each of these searching tolls and a great many special libraries amount to ready-made subsystems available to the researcher. The problem for the researcher is how to avoid going out of date in awareness of them. The work of hundreds of indexers is available at quite modest price, giving research opportunity never before available. It is most necessary that FAUL organize for researchers, educational activities, workshops, exhibits and consultant service to meet the massive need of user orientation and source up-dating.

The scholar needs more assistance as more information is available; if we cannot reach him individually, then we must work through small groups. One of FAUL's first tasks must be to detect what small groups exist, at present in isolation, and bring them together so that unified they would find a voice and their needs would be heard. Publishers are themselves moving on to this, by providing greater specialization through new journals, publishing more review articles, presenting excellent general coverage of a broad view of progress and abstracts in new fields accompanied by sophisticated, if expensive retrieval devices. FAUL could share the expenses of these new retrieval devices, thus supporting other agencies in the common cause and itself deriving the specialist benefits that such advance retrieval methods make possible.

Speed and ease of retrieval is required by researchers, but a significant increase in the availability of information is not dependent on them alone. Rather, we must depend on increase in availability of information through coordination of effort, co-operative services and integrated resources. In any case, what increases the computer can contribute will be small unless there is effective co-operation of effort. In spite of the fitness of technological communication developments and especially the characteristics of information storage, which insists on greater relevancy than has previously been the case (a factor which should be welcomed by researchers), the organization of our research materials are retarding acceptance and use of these developments and applications. Research materials require different attention than that given to the more general; they also require special physical facilities. We should have been advised of this by the fact that the use of materials has not increased in relation to budgets and quantities of materials added despite continued improvements in general overall operational efficiency. Approval plans have not substantially increased the use made of our collections; we do not even know whether they have improved our strengths.

c) Inter-library Loan. Whether or not approval plans are as effective as we hope they will prove to be, and whether or not the number of our readers increases, we can expect an increase in inter-library loans because as the output of publication increases every 20-25 years, so the volume of rarely used materials expands as rapidly. In place of the general hesitancy to allow the use of the facilities available between the five libraries, we must publicize FAUL's services, the holdings of the collections and the methods of access to them.

Because of the multiplicity of problems involved in gaining access to library resources and services, it is recommended that a committee be formed to plan for increased access. Their work would include studying:

1. Borrowing facilities of each library.
2. Inter-borrowing facilities.
3. Indexing and cataloguing services achieved in each library.
4. Translation services available and used.
5. Inter-library loan service.

The mechanics of inter-library access are facilitated by assigned responsibilities, provision of bibliographies

and indexes, directories for identifying existence and location, and by extension of privileges. In the past, this greater access has been hindered by red tape, slowness of service, inadequacy of staff to give extra assistance, charges for extra services, inadequate communication between the Five Libraries and a lack of system voice in making co-operative access policies.

FAUL, following the pattern of the 3R's, needs to examine the inter-library service offered and utilized to ensure:

1. The service is truly inter-library in character.
2. That the service gives as complete access as possible to the total resources of the Five Libraries.
3. That the collections are made available in the most efficient way.
4. That the inter-library loan data available is utilized for planning the experimentation of texts for rapid access to the collections. ("TRAC")

To undertake this experimentation, we need to know how many loans are made from each library; the identity of titles of subjects; the frequency of request for each title or subject; the reason for the need to go outside at all -- (lost, beyond scope, out, missed in acquisitions and now out of print, etc.); what patterns exist, if any, exist in terms of language and country of publication of wanted items; how items were bibliographically located by user; what probable activity and trends are most likely to occur in the immediate future. Other aspects that might be worth examining include the need and desirability for union catalogues, the problem of obtaining relevant information quickly, the patterns of communication and the modes of delivery.

Contact should be made with the reference group set up by the 3R's to exchange information on strengths and to foster better (or initial) interpersonal relations among operating staff. A study of the report of the Central New York 3R's region and their inter-library loan evaluation might be useful to FAUL in its deliberations.24/

FAUL should review the financial outlay of specified techniques common to schemes of co-operative acquisition. It should consider the long standing probelm

areas in order of priorities for possible solutions, and develop a long-range plan for assisting users to discover relevancy in what exists, rather than locations for quantities of materials.

Service to Users

a) Bibliographic Service. To exploit the growth of our collections, we must use our experience to develop new techniques and to anticipate the resource needs of the new types of research. It is to be expected that the range of services available to the user will continue to widen and that libraries will not regard themselves as limited to their traditional services, but will increasingly extend their range.

More attention must be paid to service generally, so that we do not limit our reputation to scholarly holdings. We should collectively plan a strategy to emphasize service activity, and through it, interact between resource and research. Whatever measures are necessary to insure convenient, prompt and economic service, FAUL must make sure they are implemented. We should start by assessing the services and reader demand honestly, accurately, and objectively; it is possible, for instance, that we may find a service is being kept up greatly in excess of the real needs for it in one field, and greatly insufficient in another.

In serving our readers, we must concentrate on their needs, their methods of research, their time demands and their specializations. Our needs are relative only to their needs, our techniques only adequate in so far as they meet their requirements; our time spent wisely only if we serve in time their demands, our specializations only of interest to them, if in their field. This is not to say we should limit our procedures or our work to present needs; but plainly, to serve a past or future generation of users is more devious than we can afford. We need to review our services. We must test and evaluate alternate systems, accomplish rapid and efficient processes, promote user self-sufficiency and monitor needs. We should seek to co-ordinate decentralized services and to reduce waste and unnecessary duplication. On the other hand, we must make sure that the specialist services now covering small fields well and cheaply, will not be amalgamated into large and expensive services which we cannot afford.

Nevertheless, we should however explore every means we can to make our resources more accessible. It has been suggested that less effort should be put into input, particularly when output frequency is so low.25/ In fact, the output end is most frequently kept relatively low, because of low frequency of use. It is argued that whilst we have to index every document, we will not necessarily wish to retrieve all materials. There are probably many reasons for low output, but one of them must surely be because researchers will not have quick and economical access to the materials until they are able to identify and locate items effectively for themselves.

b) Self-help. The majority of research workers need greater help than they now receive in discovering what materials can be found. It would seem to be essential that we conduct faculty workshops to demonstrate the use of new materials. No new technological innovations or important changes can occur successfully without the re-education and re-training of people who must accept and apply the innovations and who are most affected by them. Computer research, microfilm collections, data banks, tape indexing services and many other professional systems for storing information, need to be demonstrated, signposted for the user, and their access publicized.

The target for FAUL is not to enable the staff to do bibliographical work for researchers, but to enable the staff to show the users how to do their own literature searches. An outline of a course for researchers in the sciences has been published.26/ The course lasted about ten days, and its main feature was practical work in the library, and answering questions -- the sort of questions which the researchers themselves have produced. The course was reported to be practically useful, not only in showing university faculty how to use some of the available guides, but also in drawing attention to the absence of some of these guides in some university libraries.27/ With two Library Science Schools amongst the Five Associated Universities, it would seem possible that programs in searching the literature for scholars and researchers in various subject fields could be organized to some benefit.

c) Group Needs. Besides providing access, we need to provide special services relative to group needs. We do not, at the present time, cater for the varying needs within a subject field; the same service is provided for all. By comparing results of user service in like subject fields, we might find we have a measure for evaluation. It is feasible for FAUL to

organize comparative surveys of specialized needs and usage of the services and resources, and from this, formulate long range plans for systems development.

By setting up small working parties of librarians and researchers working in specialized fields, it would be possible to set standards for evaluation of the provision, and thereby not only identify needs, but budget for improvements. Concentrating on such specialized subjects within one library system is far too costly and out of proportion to the whole; cumulatively however, FAUL must have a considerable number of very small specialized fields in which a number of researchers are working, having common needs, and who are present in each individual library being neglected in the face of quantitative demand.

From such subject user surveys, FAUL might also consider studying the inter-relationships of subjects, with the view to organizing the five collections into a network of special libraries serving special needs. Emphasis should particularly be given to those subjects normally spread out through the Library of Congress classification, but which researchers study under new configurations and in different relationships.

Evaluation of services in relation to resources at this depth has the added advantage of manageability, which evaluation of the entire collection (still less evaluation of the five collections) has not. Individually the collections are too large for a summary appraisal, and too small for comprehensiveness to be the criteria for evaluation. Comparison of the collections of member libraries by subject user groups, using an efficiency evaluation of useful results over cost involved, is not only feasible but potentially beneficial. From such studies it would be possible for each library to develop research programs into the efficiency of internal organization and its effect in implementing the goal of service to its users.

We know something of what our users might expect were the opportunity to offer special services made possible. From studies made for the International Conference on Scientific Information in 1958, 28/we should conclude that our services should be developed to cumulatively provide:

1. A list of the various services available.
2. A list of the library bibliographies (or accessions list) circulated periodically.

3. Literature surveys in special subject fields.
4. Up-dating service of specialized bibliographies.
5. Readers' Interest File Service. This might include marked copy of accessions list, contents page lists, unusual contributions in subject fields, advisory service on documentation.
6. Better and quicker photocopying service.
7. Translation services in specialized fields from specified languages. (African documents, for example.)
8. A list of materials not acquired by the libraries as they are currently made available. (This pertains especially to reprints and collections on the market.)
9. Abstracts or short reviews or materials acquired especially of value. (New subscription services, microfilms bought, archives bought or negotiations for filming, etc.)
10. More specialized, less general arrangements of the collections.
11. Better coverage in current topics and less attention to past needs.

d) Relevance. We are working at a problem time, during technological change, which has not yet provided us the means to do things that need to be done as quickly and effectively as we should like, at a cost we can afford, nor has it stabled techniques enough for uniformity to assist machine operations. We have not accepted the responsibility of making any information our users might require available; we have, instead, sought refuge in collecting as many records as possible, with little order of priorities, and with limited selection. This we operate in preference to providing instantly what is needed. So busy are we in acquiring, we have not measured how much is relevant to present day use.

We have not measured the relevance of our reference services, though we claim to select the materials for their relevance according to given criteria. Though it is unreasonable to believe that documents have a fixed relevance to an expressed information requirement for all users at all times, we have not sought out the different purposes for which information is required to measure how our services match, overlap,

complement or are superior to the user's needs of them. The research users is a generator, requestor and ultimate processor of information. Document delivery cannot be equated with document usage. We need to devote more attention to determining what is significant and then convey it in concentrated form. Relevance involves taking into account both systems and user.29/

The growth of many specialized information centers outside universities might suggest a growing dissatisfaction with, or ignorance of, our present services. The Reference Standards Committee of the A.I.A. has been trying to get support for studies which might analyze reference questions, reference services and statistics, so that some standards for reporting and for comparison might be drawn. FAUL would do well to study continuously trends and needs, because for too long we have nibbled at the fringes, neglecting the heart of the matter, the user's specialization.

e) Specialized Information Centers. There are many ways FAUL might tackle the problem. One requires no advances in mechanization and is an immediately practicable, if not a complete solution. Every research project in the university could have its own information officers, whose job it would be to have intimate and expert knowledge of all the research being done and to search the periodical literature as it was issued. Some departments have already appointed graduate assistants to act as liaison between them and the library. This is a beginning but it does not go the whole way. Trained specialist information officers are what is required, and anything less than that is remedial subsitute.

The research programs of each of the five universities may not be able to find or appoint persons of this calibre. But cumulatively, (each university and library contributing from library budget and research fund) it would be possible to set up a system of specialized information centers between FAUL. It would also be possible to develop seminars and courses -- or provide leave for special training -- for subject specialists prepared to enter the information field.

Though we have separated materials and formed branch collections to give added shelf space and more study room, only recently have universities like Yale reorganized the materials to provide special services for specialists.30/ Such work could result in published abstracts, bibliographies, compilation of data, informa-

tion about equipment, processes, techniques and instruments. It could provide not only an information retrieval service, but an information analysis center, advisory service and documentation production unit. A document depot could be attached as an acquisition storage adjunct for retrieval, announcement and dissemination of an assortment of documents, journal articles, technical reports, books and data. The specialized information centers could then:

1. Selectively disseminate bibliographical information.
2. Organize interactive search procedures.
3. Provide greater indexing in depth in fields not adequately covered by published sources.
4. Publish a Current Awareness Newsletter weekly, which would provide vertical flow of published information and horizontal flow of internal information.
5. Provide on-line manipulation of subject headings and profiles.
6. Facilitate remote browsing techniques.
7. Provide technical assistance in the future planning and developemnt of a network of referral centers between the five libraries.

Some of the above facilities already exist amongst FAUL, scattered, uncoordinated and with budgetary problems. FAUL needs, in any case, to be able to fit into a national synchronous communication retransmission system when this development becomes a reality. We need therefore, not only to coordinate what we have, but plan to meet the demands of the future and be ready for the potential technical developments as they occur.

f) The Center of Research. The establishment and operation of information services is the responsibility of FAUL. On the other hand, we should not develop structures and projects which will compete, duplicate or hinder the work of other institutions. A Center of Research (COR) besides co-ordinating the Information Services and absorbing FAUL's present administrative office, could become a clearinghouse to prevent duplication of experimentation and programs.

In proposing bibliographical retrieval projects utilizing the new technolgy, it is necessary to carefully examine any proposal in order to ascertain whether it is within the scope to prevent expensive duplication

of effort, to provide for co-ordinated development and to ensure that the project is financially feasible. The longer we delay action to induce compatability, the more difficult it will be to achieve reasonable standards among existing programs. We must provide for economical access, but we should at the same time make effective use of the technology available to us. Some improvements may be possible (at cost) through automated data processing, and use of data banks, but there is still need for FAUL to be self-supporting to a considerable extent for specialized bibliographical services. Though it is necessary to look to national resources and international ones for some machine held material, it is highly questionable whether large amounts of little used materials will ever be stored on computers.

The number of data banks so far established in the U. S. have indicated the enormous increase in use of materials previously little searched, once they are made accessible. The development of discipline oriented bibliographic services in machine readable form should be a continuous project of the Center of Research. COR should have the responsibility to determine the volume of requests that might have to be handled, and seek to establish the identity of potential users in order to select the most judicious placement of equipment, for each subject specialization. The Center of Research would also be in a position to review in detail with all personnel the procedures and operations of all systems in operation. The initial stages of all projects should be devoted to learning the tasks and procedures necessary to the proper functioning of the network. Retrieval service should be introduced only after operations have become a matter of routine.

The component parts therefore of a Center of Research would consist of:

1. Library Services. Centralized or coordinated services for processing, ordering, circulation records, statistics, etc. User services to include translation services, extended photo-copying services, instant inter-library loan, provision of union catalogues and indexes, etc.

2. Specialized Information Services. To provide a referral center for highly technical specialized data needed by users: a terminology center to produce as needed, thesauras, lists of descriptors and other retrieving devices.

3. Specialized Educational Services. Educational programs in the use of specialized materials; workshops for the information officers; current awareness service of bibliographical tools and facilities for faculty and graduate students working in interdisciplinary fields; seminars on technological developments including new devices, new communication media, new procedures.

4. Data Processing and Data Transmission Facility. To cover selective dissemination of information, network teleprocessing, micromation and videotape developments.

5. Administration Center. To balance factors of performance time and cost. To minimize technical, economic and schedule risks. To control changes to requirements. To provide documentation supporting decisions made and action taken, and to establish a working manual for staff guidance. To identify and schedule significant actions and effect accomplishment. To establish requirements for the flow of information. To undertake as necessary, research and development.

b. Profitable Use of Manpower

Already the limitations on bibliographical staff time have forced the libraries to restrict the selection process. Approval plans are taken up and utilized as order plans; acquisition plans for national preservation needs are utilized for acquiring the same publications by libraries whose function is very different from that of an agency preserving documents for posterity. The publications easiest to get and quickest to process are given priority over non-commercial publications; selection is motivated by ease of retrieval. Within FAUL there are examples of staff without adequate training performing tasks calling for special training. Professionally trained staff are found performing non-professional tasks.

Bibliographical staff are found many hours a day underutilizing their capabilities for which they were employed. The reasons may well be that their speciality is too narrow for them to be employed full time on it within one institution, and that there are other subject areas unattended which must be given service. The language ability in one area may be required as a specialty in another (Chinese language, for example in the African or Latin American Programs). The solution is available if we can revitalize our human resources. Faul must enquire of itself (as the Committee

on Library Education and Manpower did):

1. Are the kinds of positions now provided in libraries actually those needed to meet the demands for services?
2. What really is the nature of professional staff service in the Five Libraries?
3. What auxiliary and technical personnel can be used in association with professionals to perform the service needed?
4. To what extent is professional education needed?31/

a) Co-operation in Staff Resource. Inter-institutional co-operation demands effective communication among participating member libraries not only through administrative personnel, but among operating staff as well. In the implementation of co-operation, it has been found that human relations count for more in achieving progress and success than the mechanics of the control and operation. Re-inforcement by way of measure to improve collective programming and operations is really a matter of educating people, dispelling prejudice and making bridges easier to cross. The essential requirements are flexibility and ability to make personal contact. The key to participating is the quality of people involved.

FAUL should develop an effective recruiting program of subject bibliographers, acquisition organizers and language specialists to encourage competent people to undertake acquisition work at all levels. As management becomes bibliographically conscious, and makes subject bibliographical work attractive, more librarians will be interested in this dynamic field; they will then be able to speak to users in their own language and be accepted by them. At the present time, due to the quality of work presently possible, bibliographers are not always accepted on equal terms with faculty. It is necessary for FAUL to undertake an analysis of the various types of jobs and occupation groups that work in the bibliographical field, in order to identify by specific classification the qualities needed for each.

Research resources require a separate and distinct type of organization if service is to be effective, and it is necessary to ba able to attract top quality people to perform this important work. Most of our library organization is geared to undergraduate and early graduate programs. The supply of managerial talent must be carefully husbanded; we do not in fact, have enough spare management talent to do anything else. Special abilities can be shared like other resources. Between

FAUL there may be many undeveloped talents and specialities not fully utilized which would react to opportunity and be brought to fruitation by the management of change.

The acquisition staff between them have much to offer in the management of collection developemnt. In the planning stages we need their cooperation to determine our present position and our future goals. FAUL is dependent on the staff to control the organizational plan so that it is carried out effectively and on schedule. To utilize the staff resource to the best advantage to develop the collections and afford greater access, it is essential that FAUL should determine and divide the responsibilities for attaining the objectives, establish a reporting system and determine the span of control. If staff with capabilities are to utilize them they must be given the responsibility and authority to do so.

b) Maximum capability as a resource. Staff working directly or indirectly with research resources constitute a large percentage of the total human resource available in our libraries. Staff concerned with research resources, apart from top management include:

1. Subject specialists.
2. Acquisition staff.
3. Technical processing staff.
4. Circulation staff.

In some of the five libraries, the functions overlap to such a degree that the Head of Acquisitions can become the co-ordinator of the subject bibliographers and Head of Technical Processing as well. Resource staff have not been functioning as a unit of operation with common objectives, and consequently attention has not been given to misused manpower, underdeveloped abilities, unserviced areas.

1. The Circulation Staff. Though organized to disseminate material, they are not organized to be part of the resource team, though their activities suggest they should be a very important part of it. Though the data they collect daily (statistically, orally, through experience) is a vital contribution to management planning and bibliographical control, very little of this information is utilized or even discussed; and only a small portion of it is ever recorded. The habits and needs of users, the relevancy, availability, accessibility and reliability of materials and

their organization, can all be monitored by trained circulation staff working in line with the subject bibliographers. Because we fail to utilize this manpower resource, we work at a disadvantage not knowing our performance effectiveness, and dissemination cost.

Physical distribution is a large part of the total cost of the provision of resources. Proficiency in physical distribution is an important management tool, providing we are able to develop distribution systems that, whilst minimizing the total of all the costs involved, they provide us with continuing data to plan ahead. The Access Committee should be made responsible for budgeting the total cost of distribution, analyzing it, introducing new distribution methods and services as required, and evaluating the performance of each of the distribution activities against the plans and budgets the unit itself recommended. It may be possible to leave things in the traditional pattern, providing we utilize to the full the results we obtain from the effort made. The circulation staff of each of the Five Libraries have been visiting each other during the last six months. Little consultation with any of the bibliographical staff has been attempted, and a programmed report recommending procedures improvements, long-range plans, etc. has yet to be forthcoming. A detailed evaluation of one system was made by one visiting circulation staff; sixteen advantages were listed and seventeen disadvantages.32/ So far, no report has been written on what objectives we seek from a circulation system; until one is forthcoming it is doubtful whether the Five Libraries will be able to reach agreement. It is important for the further extension of co-operation services that they do.

2. Technical Processing Staff. The goal of the technical services staff must be to achieve the greatest output in least time efficiently, whilst at the same time maintaining the systems and procedures established for satisfactory service. Unfortunately, these goals can and do conflict with the public service goals which serve the users. The priorities of the processing department influence to a considerable degree the extent and quality of public service possible; new materials may be held up, periodicals sent to binding, serials not received and not claimed promptly and orders for materials not executed at all. The flow of material is part of the bibliographic service and should be in line with the work of the acquisition objectives. The success of the technical staff

depends on the co-operation of the bibliographical staff, but it also works vice versa. The processing of the department has been isolated from the users and little feedback is maintained except through the subject bibliographers and service department heads. Any major co-ordination program, internally or between the Five Libraries, is bound to involve several sets of people, who will have to operate as parts of the overall system. This may involve a re-training program of some size and a co-ordinating program of some magnitude, for it will involve not only the horizontal and vertical line of command within one library but it will involve the staff structures of each of the libraries, not all of whom have the same staff hierarchy or organization.

3. Acquisitions Staff. One of the reasons for the limited success of the FAUL Acquisitions Committee, disbanded in June 1969, was due to the lack of recognition of the importance of integration. The required unity of effort was not established among the functional specialists of FAUL, because organized integration was attempted through traditional methods not suitable for the mammoth task that lay ahead. The tasks of integrating are so important and so complex that they cannot be handled by a single person nor by a standing committee that just sits. The integrator's role involves handling the non-routine, unprogrammed problems that arise among traditional functions as each strives to do its own job. It involves resolving inter-library conflicts and facilitating decisions, including not only major decisions as large acquisition expenditures but also many smaller ones regarding binding processes, acquisition reporting, performance standards, inter-library loans, etc.

Since FAUL is operating within rapidly changing environments and needs, it is most important that it is assured that this integrative function is effectively carried out. The setting up of unclear repeating relationships and the temptation to change them often should be avoided. On the other hand, because of a natural reluctance to admit any institutional dependency, it is necessary to avoid lasting entanglements, and concentrate on getting the job done.

Most of the integrating efforts of the Acquisitions committee were limited to exchanging information across a table. Committee members need to be able to contribute to important decisions, make good value judgments, be informed and be a specialist in at least one area of research resources. As integrators, they need to orientate themselves to the needs of all the

specialists whose long term projects and the technical processing staff who will in all probability have short term problems. The resource integrator needs to work with one, while solving the other. Effective committee works ensure that even though a member is not in initial agreement with the decision taken, he is expected to carry out the actions worked out in the meetings. The acquisitions committee had no authority to see that the decisions were carried out and had on it representatives of staff from each library of different hierarchies in their own systems, working in limited areas unconcerned with the overall objectives of acquisitions, and a turnover of representatives on the committee which made stability and functioning almost impossible.

Because the Five Libraries are performing different tasks, we have to expect that they will develop different resource structures and that their users will be oriented differently. If attempts were made to standardize the structures of all the libraries and to have all users orientated in the same direction we would lose the benefits of specialization. The FAUL acquisition committee was a means whereby the specialist groups and the integrator could work through their differences and arrive at the best common approach. Unfortunately, work was going on through various committees of immediate interest to acquisition policy and bibliographical control which was never reported to the committee and opinion and recommendation was never sought. The user approach end the user's needs were totally unrepresented in systems development discussions, the flow of information was not adequately forthcoming from management, the expertness and experience of subject bibliographic staff was never fully utilized, delegation of authority was not forthcoming.

If we are to begin organizing for innovation we must provide a means by which more than one person can work together to perform a task that one individual cannot perform alone. We must divide the total task into specialized pieces and provide a means by which units working on different parts of the total task may co-ordinate their activities to come out with a unified effort. We must work across libraries in subject groups, and across subject groups in co-ordinated effort of the Five Libraries. The path to integration is a hard one. It requires diligence, hard work and the support its importance warrants.

4. Subject Specialists. It is essential that we provide for our users, not only access to information stores, but to specialist manpower as well. Specialists can bridge the gap between the source of information and the point where it is needed. They assure that pertinent knowledge is taken into account in technical problems. The day is gone when we employ highly trained people behind the scenes as cataloguers while insufficiently trained or untrained people work with the public. Specialists working on different tasks develop different viewpoints and methods of operation. A new breed of librarian has emerged to meet changed and more complex demands of service. The Five Associated University Libraries must each employ them. New roles for library staff in bibliography and information retrieval are being created. There is a growing need for specialists, for people capable of operating and exploiting computerized information services, of evaluating and interpreting information in the local context and of participating in policy decision making.

Working with research resources today requires staff with detailed knowledge of the scope and holdings of other special collections, a means of ascertaining work in progress at other centers likely to be of interest to each researcher in particular subject fields, and an organization of personnel contacts of users or other staff. A Head of Information Retrieval Services should be appointed on the staff of FAUL who will be informed on matters that are concerning those who are in quest of new ways to achieve greater and more accurate subject depth. In each library, the reference services should continue to serve the user in the traditional way and act as a laboratory to develop new ways of doing better reference work with technological retrieval methods. Subject specialists who can cover very specific subject areas should be appointed between FAUL to work on their speciality for the benefit of each of the five libraries to head the Specialized Information Centers to be developed. Stationed at the library that appoints him, he will be free to direct the activities in his subject as worked out at the time of his appointment, each library contributing to the salary in proportion to the time "bought." It is recommended that co-ordinating the work of these bibliographic experts, the Head of Information Retrieval Services operating from the Center of Research (to be established) will:

1. Co-ordinate the needs of information between FAUL.
2. Facilitate inquiry work at any one of

the member libraries by coordinating with the libraries.

a. Inquiries received.
b. Materials available to answer inquiries.
c. Sources to use that are available nationally, regionally, and locally.
d. Translation services.

3. Promote information retrieval through use of current technology and communication systems.
4. Promote standardization of reporting methods and information analysis in order to plan jointly for future provision.
5. Collect and process data on user needs among the Five Universities in order that long range plans can be developed for utilizing the combined resources of collections and staff for information retrieval.

The Head of Information Retrieval appointed by FAUL will work through The Subject Specialists appointed by each library as it can afford to develop specialized information centers and to undertake information retrieval and documentation work. The services of these subject specialists will be able to be "bought" by any of the other five libraries to advise in their own specific subjects only. The subject specialists will work through:

The Subject Bibliographers appointed by each of the five libraries to head broad subject fields as Humanities, Social Sciences, Area Studies, Science and Technology, etc. in their own libraries. The subject bibliographers will work with, or by themselves, the reference library staff, as dictated by the need of each individual library.

The Technical Process Staff will work with the Subject Bibliographers.

The Systems Analyst Staff (if any) will work with the Head of Information Retrieval, and through each of the other catagories.

Effective Co-operation

The basic purpose of a consortium such as FAUL must be to increase the library resources available for

advanced research. The Five Associated University Libraries share a common interest and obligation in supporting advanced research in many disciplines and to this extent have essentially similar library problems. It is hoped that FAUL can design a system whose shared resources in whatever form will continue to grow, but in orderly fashion and with a minimum of duplicated effort and cross purpose. The time seems ripe and the matter of sufficient moment that a long term examination should be made of the future pattern of supply and accessibility of research materials.

At the present time, we are scarcely utilizing the effort of others and we are suffering from lack of definitive developemnt plans. It is not at all certain that enough is being done and that what is being done piecemeal will eventually contribute to the effective functioning of the whole. We should seek ways that would enable cumulative effort not only to halt the increase in rising cost of staff, storage and materials, but which might by greater selectivity and planned programs, offer more with less.

There is a need to create an operational network designed to make libraries more efficient and economic and in so doing improve their services and make them more accessible. Co-operation amongst the five libraries holds more promise for providing improved bibliographical control and access to information access to information resources. Any consideration of inter-institutional arrangements must, however, safeguard the rights of member libraries and take into account the potential role and service capabilities of the national libraries and other special organization. To enrich the resources of books and other informational data there is needed modernized and expanded services for the user as well as research techniques. It may be necessary to at first work out a limited access program before full access can be achieved.

Without perceptive effort it is probable that this will result in fragmentation of responsibility within the overall pattern of library service. The only possible way to meet the resource needs of research is to build when possible on existing research resources and to link those resources to each other by an extensive and well ordered program of co-operation. This can only be effective if:

1. We have agreed upon scope for the varied institutions.

2. There are no requirements of total resource commitments or limitations of an institution's activities.
3. Goals are set up to eliminate barriers to use and to increase total resources.
4. A measurement of use is sought to determine future and present policies.

This report has attempted to indicate the various forms that future co-operation might take. We are led toward national and subject based systems, not by the attraction of centralization but by quantative and qualitative changes in our media. The continuing increase of output of publications, the complexity of languages, the varieties of interdisciplinary needs, the multiplicity of originating bodies and the cost increase in all library activities leave us with an urgency for increased and better structured co-operation.

System planning of the magnitude needed for the full utilization of our combined resources will require a research and development program to pre-test operational components to be involved in the development and improvement of the system. A centralized facility will need the services of an R. & D. team to plan for greater access to our combined resources. The function of such a team would be to design, develop, implement and manage a communications network between FAUL and to apply existing and advanced technology to the improvement of bibliographic resources. The growth of such a scheme needs close supervision at all stages in its development. The constitution and regulations governing use must show a realization of this need; some co-operative ventures of the past have been severly limited by the restrictions self-imposed.33/ Economic evaluation of the methods used and techniques employed in locating, receiving and disseminating of information must be carefully made. Too much informality has in certain cases proved a danger and may in the long run prove uneconomic.

The list of barriers to effective co-operation is formidable.34/ They are, however, real and a potential hazard and FAUL has already faced some of them. Safeguards and controls should therefore be implemented to reduce their impeding influence and this can only be done if FAUL prompts positive action among its members. This should certainly include:

1. A published outline of the objectives.
2. Frequent meetings between committee mem-

bers, including some week-end seminars or workshops held at university conference centers.

3. A confidential examination but systematic analysis of the libraries as they really are so that plans can be developed to create strength, rather than hide weakness.
4. User support for increased resources and access by active participation and constructive criticism. This can only be achieved if we are willing to examine our libraries from the user's point of view and consult as well as advise him on library matters.
5. Reduction of red tape and limitations on access that impede the user from getting what he wants, when he wants it at the place he needs it.
6. Promotion of the idea that co-operation does not relinquish responsibilities of any or all of the member libraries or staff, but rather increases the part that each has to play in providing for the re-search programs.
7. A funding of the physical and geographical barriers that impede progress. Funds for breaking down these barriers will then be seen to be wisely spent.
8. An analysis of how costs might be shared, by shared resources-operations, materials and staff.

A very real problem for FAUL is the difference in character, size and age of the collection of the member libraries. It was unlikely that a number of independent acquisition programs would interact on the first try. It had, however, achieved some success during the twelve months of its existence. It had:

1. Reported on 1967 Ph.D. dissertations accepted by each university according to subject. (Minutes. July 1968)
2. Accumulated data from each library on the holdings of administrative reports for U. S. Colleges and Universities. (Minutes. October 29, 1968, IX)
3. Reported on the joint acquisitions program. (Minutes. April 1, 1969, VI)
4. Inquired into the possibility of acquiring non-commercial publications from

a jobber at shared cost between the five libraries. (Minutes. April 1, 1969, VI)

5. Reported on purchases of expensive items over $2,000, and occasionally the intent to buy certain significant materials made available. (Minutes. April 1, 1969, V)
6. Recommended a program for formal and continuing education within FAUL library staff. (Memo. No. 4. 1968, from the Chairman on behalf of committee to Board of Directors.)

At the time of its dissolution, matters pending to be investigated included:

1. An analysis of gratis material being received by each library; its coverage, usefulness, storage, and expense in terms of time and potential use. (Progress report from Chairman to members of Acquisitions committee, December 19, 1968.)
2. An evaluation of methods and policy decisions of the five libraries on new periodicals as they are published; with view to setting up reporting system between FAUL. (Meeting Feb. 15, 1969.)
3. Examination of the coverage of United States newspapers as held by FAUL. (Meeting Feb. 15, 1969.)
   A report of foreign booksellers and dealers; their services, bibliographical competence, discounts and efficiency. (Deferred from April 1969 meeting to September 1969.)
5. Recommendation to the Board of Directors that a bibliographical sub-committee be established to investigate systematically all subjects of the concordance evaluation of total holdings in which strengthening is necessary and desirable. No report was received from the Board of Directors. (Minutes. April 1, 1969, II.)
6. The possibility of employing a book scout to locate out of print materials for all five libraries. (Minutes. May 15, 1969.)
7. A check-list of the holdings of the five libraries of national bibliographies of the world. (Minutes. May 15, 1969.)

The above record clearly indicates that the Acquisitions committee was attempting to tackle its responsibilities.

The way to correct inadequacies is not to eradicate, but to motivate, encourage, and set up control systems to monitor the progress made. Some social engineering might be required in any co-operative organization; not all value participative practices and not all are able to see the potential benefits. It is easy to hide behind red tape and other restrictive practices. Some libraries rest upon fixed technological commitments that make participative practice less advantageous and less feasible.

Within FAUL we must determine how we can use our resources best among institutions of differing sizes, budgets and academic programs. How we should determine reasonable division of labor amongst the libraries. How we should measure the effectiveness of the library services. How we should share the unit cost of closer co-operation sufficient for the purpose.

Acquisition work is a potpourri of library skills and bibliographical knowledge. We must tailor the various systems to fit the user situation, thus minimizing the irrelevant, the restricted, the neglected and the unused. We must study the roles to be played by each library in a program for greater accessibility and in addition, we must study the role the subject plays within the resources development of FAUL. We have to redress the imbalance of acquisition work to technical processes and set goals and priorities.

By co-ordinating holdings, we make the most economic use of our resources. This is only true if the co-ordination is as carefully planned as the acquisitions. The test of effective development is not our capacity to operate a shoe-string acquisitions program, but our ability to make full use of increased resources, even if this means increased budgets. We must know where and when we will continue to rise. Among the factors influencing increased costs are inflation, increasing demand for material and services by scholars in new subject fields, the new requirement in libraries for high salaried specialists, the need for wholly new catagories of research materials (such as census tapes), and the significant costs involved in storing and preserving. Economic forces set the pace of acquisition, expansion, and control. There is an increasing gap between library funds and capabilities on the one hand and the expectations and demands of library users on the other. It should now be possible to make a long term solution based on facts and on research into user requirements and the cost-effectiveness ratio of possible alternative organizational

patterns. Savings will be realized only after there has been considerable expenditures on experimental efforts, equipment and retraining of staff.

Limiting factors in the past have included the gross budget of the university from which the library can expect to receive roughly 5% for its services and resources. We do not know if this 5% is traditional, mythical, based on an analysis of the cost selected materials and services available, the gross output of materials, or just the highest that the best bargainer amongst us could achieve. The formula valid for the 1950's (when the standard was first formulated), was used in the 1960's (when patterns of learning were changing), and has not yet been re-evaluated for the 1970's when we are likely to have an educational revolution involving learning resources. Do universities need to re-apportion their resources as more emphasis is given to independent study and research?

Most university planning now starts by projecting student enrollment. In the annual contest our budget, the recipients of its benefits will be lined up as competitors of the library not as its advocate. We have no proof in assessing the results of greater accessibility to resources; nor the cost of lacking it. Our libraries in the years ahead will compete vigorously for funds and will be closely scrutinized to determine how these funds are spent. Research can make great advances by the consistent application of existing knowledge, providing it is accessible. Ways of saving this critical manpower in a university is important, but it is not shown in a library's budget if the user's time is saved. The university may have difficulty in estimating the value as distinct from the expense involved. We have, therefore, to persuade others that our goals are valid; that frustration and delay in finding and using resources as they are presently provided cost so much, that adequate funding for re-organization, and research and development plans are the better bargain.

Costs depend on wide range factors, including for example, scale of operations, capacity utilization, equipment employed, opportunities for standardization and specialization, effective use of labor and return on capital to provide for modernization, and if necessary, expansion. There are other factors to be considered about costs that are not always noted. The cost of lost opportunities, economies of scale and the volume variable, the cost-benefit of know-how and skills, the cost of time lost. FAUL could benefit

for example, from broadening its time-span, for unless it does, it is vulnerable to emergencies and sudden cuts, in competition with the better organized. R. & D. takes time to show results; long range planning, however, carries over its planned progress until results show.

Other cost factors to be taken into account include the invisible acquisition costs of personnel and equipment because these are budgeted for the library as a whole. Improved library service cost avoidance, and there are economies in skill if it is fully utilized. Lower unit costs of each library, when fully re-organized, could be utilized for funding FAUL and the needed developments. Sufficiency of time is a costly item, so economy in method, speed in service, accuracy in results and efficiency in procedure should be part of the cost-benefit analysis of FAUL's future development. It is necessary for FAUL to balance the factors of performance, time and cost. By utilizing a systems approach to counteract rising costs, FAUL can eliminate duplication, evaluate selectivity, share specialized resources, utilize to the full the short lived resources and long term potential use materials, and assess the implications of the new technology for carrying out the objectives of FAUL.

Conclusion

For effective co-operative resource development, FAUL must assign priorities to the objectives set; those which must be met, those which should be met, and those which are not critical. Although historical performance is significant in evaluating work that has to be done, FAUL is primarily concerned with the future. The Five Libraries can forego immediate profit, if it can be demonstrated that significant increase in accessibility and service are likely to be generated later.

Planning, which deals with the futurity of present decisions, is a dynamic process which requires a constant evaluation of results of decisions against expectations. We must commit library resources systematically, with the best possible knowledge of the future. We must organize systematically the effort needed to utilize these resources. We must measure the results of planning decisions against the expectations through organized systematic feedback. FAUL must commit the developemnt of library resources to a long range plan. FAUL's planning program for co-operative resource development must include a total commitment and must be comprehensive.

1. *The User*

1.1 A study of User Methodology should be undertaken in specific subject fields among the Five Libraries. The object would be:

a) to provide minority interests in greater strength than has previously been possible;
b) to adjust proportionment of expenditure to cover minority study areas at present too small for attention by any one library;
c) to identify methods of study and needs of researchers working in similar fields and by comparison of systems and evaluation of performance determine future provision.

1.2 A Performance Audit should be undertaken to evaluate effectiveness of service given to researchers by identifying:

a) causes of unsatisfactory performance;
b) improvement that might be made to performance;
c) the extent and the place for control systems to be introduced;
d) priorities for attention to weaknesses and gaps in the present services.

1.3 Appraisal of Service Systems from the user's point of view should be undertaken regularly:

a) to provide management with data to assess the effectiveness of the present system in each of the five libraries;
b) to provide management with enough data to restructure the present system in each of the five libraries according to needs;
c) to provide management with a tool for long-range planning and for comparative studies of the five libraries.

(see also Acquisitions. Section 3.7. Increased Access)

1.4 Feedback mechanisms in the Service Systems

should be maintained (and/or installed) to provide regular data which can be analysed and processed for management use.

2. *Service*

2.1 A program should be devised by FAUL to increase the quality and promote the successful extension of library service. It should:

a) emphasize the need for quality service in selected areas;
b) insure interaction between resources and research;
c) make provision for convenient, prompt and economic service;
d) concentrate on the present user's me ds of research, demands and specializations
e) promote user self-sufficiency and monitor needs;
f) test and evaluate alternate systems.

2.2 A working party of librarians and researchers representing each of the member libraries in selected fields should be established to:

a) co-ordinate the services presently offered;
b) reduce waste and unnecessary duplication;
c) plan for relevant specialist services in place of the unwieldy general services now available;
d) set standards for performance in each subject field evaluated, and budget for improvements.

2.3 FAUL should examine the feasibility of using research resources to appoint information officers for each research project undertaken by faculty on each of the five campuses. Such Information Officers to act as advisers to other member libraries as required. (See Manpower Resource.)

3. *Acquisitions*

3.1 Comprehensiveness: FAUL should examine:

a) the extent to which completeness in subject collecting can be justified in each library;
b) the extent to which completeness in subject collecting can be justified between

the Five Associated University Libraries;

c) the number and identification of subject fields so collected individually and collectively and the budgetary implications of this;
d) the extent to which these comprehensive collections drain the resources of the five libraries, limiting development in other fields;
e) in the light of the answers to the above questions, which special collections can justify their existence so that they continue to be "comprehensive" in their coverage;
f) how FAUL can utilize to the full these comprehensive (and therefore very rich) collections between themselves and so benefit the research needs of the country as a whole.

3.2 Acquisition policy. Having determined the above, the scope of the total resource capabilities of FAUL, a collective policy statement should:

a) determine the needs for intensive research collections in special subject fields;
b) designate those libraries which would assume responsibility for specialized collecting and services. Those libraries are each to define the policies for coverage by subject, by publication, by time, by treatment, by source, or by other standards to provide service in relation to the definition of user needs;
c) determine the bibliographical tools and other apparatus necessary to make possible the most effective use of the combined resources that are and will be available, and to initiate the development of such tools, and establish bibliographic and information centers to identify and locate reference and resource materials efficiently;
d) co-ordinate systematically for each subject, referral centers, networks and other specialized agencies outside of FAUL, which could be utilized through membership or as a national resource with free access. This would enable FAUL

to work with, rather than compete and duplicate, resources already available.

e) form a structure of organization to discharge the function of acquisition services to:

1. get access to the reliable and up-to-date information available concerning research being undertaken in each subject field at the Five Associated Universities;
2. convert the data gained into programs of action;
3. involve the administration of each member library into greater awareness of library budgetary considerations in developing new research areas;
4. at the technical level, consider resources and programs in more detail;
5. examine acquisition procedures to determine which, if any, might be shared, such as scanning, mailing list organization, user recommendations, overdue orders, etc.

f) outline Book Retirement Programs and Co-operative Storage Projects.

3.3 Special Collections.* From this Collective Policy Statement, FAUL must determine and evaluate regularly what special collections exist, or are needed, to:

a) justify their existence and cost of their maintenance;
b) obtain a cost-benefit analysis of present use and collection data available to predict future potential demand;
c) determine how much overlap exists between FAUL in the defined Special Collection areas; to determine the inter-relationship of subjects as now studied in the five libraries to increase potential use of them; to determine background needs of special collections which might need expanding individually or collectively;

* Meaning special collections formed to meet special needs.

d) reorganize the five research resources into equal special collections to meet specific special needs, in place of the general collections now seeking comprehensiveness in selected subjects. The aim of such special collections to be to meet the challenge of greater relevance without necessarily increasing the quantity of materials acquired.

3.4 Book Retirement Programs. FAUL should maintain a systematic book retirement program. It should:

a) study the literature and research undertaken by other research libraries on book retirement programs;
b) select a method that is compatible with FAUL's overall objectives, the acquisition programs, the growth rate of the individual collections, the economics of housing and the bibliographical record keeping undertaken at each library;
c) consider co-operative storage after each library has established a book retirement policy of its own; in order to give greater accessibility, not less, to retired materials;
d) systematically discard economically, those materials no longer required, retaining responsibility for awareness of supporting specialized national resources as required.

3.5 Feedback. FAUL must select the way to spend time and money and professional skills and knowledge available, giving access to the total resources. FAUL should:

a) develop a detailed analysis of information available to assist in the decision-making process;
b) control misuse of resources by analyzing use;
c) promote full use of research resources by comparing the evaluation of combined holdings with the combined use made of them.

3.6 Co-operative Bibliographical Organization. FAUL should investigate the possibility of providing:

a) a co-operative scanning service;
b) a standard method for measuring performance;
c) a co-operative venture to solve backlog problems;
d) a co-operative ordering and re-ordering service;
e) Union lists to little used materials, scattered rare resources, expensive purchases, and primary source materials not yet co-ordinated;
f) the continuance of joint acquisition selection of expensive material relative to its published cost, its little potential use, its costliness to obtain, its expense of processing and housing. (This covers Microfilm projects, rare individual items, highly specialized items in foreign languages, small ephemeral works and pamphlets, primary source material as a collection.)

3.7 Increased Access. FAUL should appoint an Access Planning Committee of Bibliographers and Public Service Staff from each of the Five libraries to study:

a) borrowing facilities of each library;
b) inter-borrowing facilities;
c) indexing and cataloguing services achieved in each library;
d) translation services available and used;
e) inter-library loan service;
f) the assessment of services provided and researcher's demand. (See The User. Section 3.)

3.8 Bibliographical Retrieval. To utilize the new technology and yet provide economic access, FAUL should establish a Center of Research which would:

a) co-ordinate information services available between FAUL;
b) selectively disseminate bibliographical information;
c) provide greater indexing in depth in fields not adequately covered by published sources;
d) organize interactive search procedures;

e) publish a Current Awareness Newsletter weekly, which would provide vertical flow of internal information;
f) provide on-line manipulation of subject headings and profiles;
g) facilitate remote browsing techniques;
h) provide technical assistance in the future planning and development of a network of referral centers between the five libraries;
i) become a clearinghouse to prevent duplication of bibliographical experimentation and programs.

3.9 Establishment of the Center of Research (C.O.R.) The component parts of a Center of Research would consist of:

a) Library Services: centralized or coordinated processes for processing, ordering, circulation records, statistics, etc.; user services to include translation services, extended photo-copying services, instant inter-library loan, provision of union catalogues and indexes, etc.
b) Specialized Information Services: to provide a referral center for highly technical specialized data need by users; a terminology center to produce as needed thesauras, lists of descriptors and other retriving devices.
c) Specialized Educational Services: education programs in the use of specialized materials; workshops for information and officers; current awareness service of bibliographical tools and facilities for faculty and graduate students working in interdisciplinary fields; seminars on technological developments including new devices, new communication media, new procedures.
d) Data Processing and Data Transmission Facility: to cover selective dissemination of information, network teleprocessing, micromation and video-tape developments.
e) Administration Center: to balance factors of performance time and cost; to minimize technical, economic and schedule risks; to control changes to requirements; to provide documentation supporting decisions made and action taken; establish

a working manual for staff guidance; identify and schedule significant actions and effect accomplishment; establish requirements for flow of information; undertake as necessary, research and development.

4. *Manpower Resources: It is recommended that:*

4.1 In order to utilize the staff resource to the best advantage to develop the collections and afford greater access, FAUL should determine and divide the responsibilities for attaining the objectives, establishing a reporting system and determining the span of control.

4.2 FAUL should develop an affective recruiting program of subject bibliographers, acquisition organizers and language specialists to undertake acquisition work at all levels.

4.3 The Access Planning Committee should be made responsible for budgeting the total cost of distribution, analyzing it, for introducing new distribution methods and services as required and for evaluating the performance of each of the distribution activities against the plans and budgets the unit itself recommended. (See 3.7 Increased Access)

4.4 FAUL established a re-training program of some size, and a co-ordinating program of some magnitude to introduce new programs, new technology, new materials, and new subject need developments to researchers and staff alike.

4.5 A Head of Information Retrieval Services be appointed on the staff of FAUL who will:

a) co-ordinate the needs of information between FAUL.
b) facilitate enquiry work at any one of the member libraries by co-ordinating with the other libraries:

1) enquiries received.
2) materials available to answer enquiries.
3) sources available to use, nationally, regionally, locally.
4) translation services.

c) promote information retrieval through use of current technology and communication systems.
d) promote standardization of reporting methods and information analysis in order to plan jointly for future provision.
e) collect and process data on user needs among the Five Universities, in order that long range plans can be developed for utilizing the combined resources of collections and staff for information retrieval.

4.6 The professional staff structure of the Combined Research Resources of FAUL will be:

a) The Head of Information Retrieval, appointed by FAUL, who will work through:
b) The Subject Specialists, appointed by each library as it can afford, to undertake information retrieval and documentation work. The services of these subject specialists will be able to be "bought" by any of the other five libraries to advise in their own specific subjects only. The subject specialists will work through:
c) The Subject Bibliographers, appointed by each of the five libraries to head broad subject fields as Humanities, Social Sciences, Area Studies, Science and Technology, etc., in their own libraries. The subject bibliographers will work with, or by themselves, the reference library staff, as dictated by the need of each individual library.
d) The Technical Process Staff, will work with the Subject Bibliographers.
e) The Systems Analysis Staff (if any), will work with the Head of Information Retrieval, and through each of the other catagories.

5. *Co-operative Effectiveness*

FAUL must promote positive action among its members. This effort should certainly include:

a) a published outline of the objectives.
b) frequent meetings between committee members, including some weekend seminars or workshops held at university conference centers.

c) a confidential examination but systematic analysis of the libraries as they really are, so that plans can be developed to create strength, rather than hide weakness.

d) user support for increased resources and access, by active participation and constructive criticism. This can only be achieved if we are willing to examine our libraries from the user's point of view and consult as well as advise him on library matters.

e) reduction of red tape and limitations on access that impede the user from getting what he wants, when he wants it at the place he needs it.

f) promotion of the idea that co-operation does not relinquish responsibilities of any or all of the member libraries or staff, but rather increases the part that each has to play in research programs.

g) a funding of the physical and geographical barriers will then be seen to be wisely spent.

h) an analysis of how costs might be shared, by shared resources -- operations, materials and staff.

i) a constant evaluation of results of decisions against expectations.

j) a planning program for co-operative resource development which is total and comprehensive.

4/27/70

PROJECT NAME: Recommendations on the Cooperative Resource Development of the Five Associated University Libraries (FAUL)

PRINCIPAL INVESTIGATOR: Miss Marion Wilden-Hart
Research and Planning Group
Syracuse University Library

SCOPE OF PROJECT: A report will be written by the Principal Investigator of not more than fifty single-spaced types pages and submitted to the FAUL Board of Directors. The report will:

1) Summarize and evaluate the work of the FAUL Acquisitions Committee deactivated in April 1969;
2) Estimate the degree of feasibility of cooperative resource development in FAUL;
3) List guidelines and recommendations for the systematic analysis of the research collections of FAUL libraries.

COST:

$500 direct payment to Miss Wilden-Hart from FAUL Consulting Funds
50 incidental expenses (postage, typing, etc.)
$550 TOTAL

DURATION: July 1 - September 1, 1970

The above project is approved as stated above and is hereby considered a letter contract between the Five Associated University Libraries and Miss Marion Wilden-Hart.

Ronald F. Miller, Coordinator of Library Systems, FAUL — April 28, 1970 Date

Marion Wilden-Hart — April 28 1970. Date

REFERENCES

1. Association of Research Libraries. Minutes of the 75th Meeting. Jan. 17-18, 1970. Chicago, Illinois., N. Y., Princeton. ARL., 1970. page 12.

2. Davis, Richard. A Bibliography of Use Studies. Drexel, School of Librarianship, 1964.

3. For an article on Performance Audit, I am indebted to the following article which I have freely adapted.
Ryan, M. P. & Colley, Russel M. Preventive Maintenance in clienteed agency relations. Harvard Business Review, Sept-Oct., 1967. v. 45. pp. 66-74.

4. Mauperon, A. Center of Information and Documentation of Euratom. Aslib Proc. July 1967. v. 19. No. 7. pp. 232-240.

5. Jain, A. K. Sampling and short-period usage in the Purdue library. Coll. & Res. Libs. v. 27. No. 3. May 1966. p. 211-218.

6. Fussler, Herman H. Acquisition Policy in the larger university library. Coll. & Res. Libs. Oct. 1953. pp. 366.

7. This was the result of Talk Paper 4. Draft 3.17.67. FAUL. Co-ordinating Acquisition Policy among large university libraries. Two years later was published FAUL. Joint Acquisitions Policy: Subject list arraged by the Library of Congress Classification System. (1969)

8. Fussler, op. cit., p. 366.

9. FAUL. Jt. Acq. Policy, op. cit., p. 1.

10. Kent, Allen. Specialized information centers. Spartan Books, 1965. p. 58.

11. Clapp, Verner W. & Jordan, Robert T. Quantitative criteria for adequacy of academic library collections. Coll. & Res. Libs., v. 26. Sept. 1965. p. 373.

12. Ibid. For full explanation of the formula, see pp. 371-379.

References (continued)

13. Ibid. p. 378.

14. Huang, R. T. Efficacy of citation indexing in reference retrieval. L.R.T.S., 12, Fall. 1968. pp. 415-434.

15. FAUL Talk Paper 3. Draft 3.14.67. Organizing a compact storage collection of library material. The paper limited itself to proposals for techniques and procedures.

16. Cooper, Marianne. Criteria for weeding of collections. L.R.T.S. v. 12. No. 3. Sept 1968. pp. 340-341.

17. Fussler, Herman H. & Simon, Julian L. Patterns in the use of books in large research libraries. 2nd ed. Chicago, Univ. of Chicago Library. 1970.

18. Trusswell, Richard W. A quantitative measure of user circulation requirements and its possible effect on attack thinning and multiple copy determination. Am. Doc. Jan. 1965. pp. 20-25.

19. Ash, Lee. Yale's selective book retirement program. Hamden, Conn., Archon Books. 1963.

20. Walsh, J. E. An experiment in the selection of library books for storage. Harvard Lib. Bull. vol. 8. Autumn 1954. pp. 378-381.

21. Ash. op. cit.

22. Cooper. op. cit. p. 348.

23. Burton, R. E. & Kebler, R. W. The half-life of some science and technology literatures. Am. Doc. 11. Jan. 1960. pp. 18-22.

24. Syracuse University Research Corporation. Inter-Library loan evaluation and study of the Central New York 3R's region. 1968.

25. Line, Maurice B. University Libraries and the information needs of the researcher. 1. A provider's view. Aslib Proc. v. 18. No. 7.

26. Wood, D. N. & Barr, K. P. Courses on the structure and use of scientific literature. Jnl. Doc. 22. (1). Jan. 1966. pp. 22-32.

References (continued)

27. Urquhart, D. J. Developing user independence. Aslib. Proc. v. 18. No. 12. Dec. 1966. p. 356.

28. International Conference of Scientific Information. 1958. Preprints. Area 1. pp. 132-133.

29. Rees, Alan M. The relevance of relevance to the testing and evaluation of document retrieval systems. Aslib Proc. v. 18. No. 11. Nov. 1966. pp. 318-323.

30. Shipman, Joseph C. Optimum size and the large science research library. Coll. & Res. Libs. v. 27. No. 5. Sept. 1966. p. 356.

31. Ashaim, Lester. Education and manpower for librarianship. A. L. A. Bull. Oct. 1968. See also. Library Education and manpower; ALA Policy proposal. Am. Libs. May 1970. p. 341-344.

32. Memorandum from Arthur C. Kulp to Co-ordinator of FAUL. n. d. (June 1970?)

33. A recommendation that the revision of the FAUL constitution "should be concurrently in order to reflect the new status of the FAUL organization" was approved at the Board Members meeting 3/17/70. FAUL Projects and Proposals. Report 11. Period ending 3/31/70. p. 4.

34. Nolting, O. F. Mobilizing total library resources for effective service. Chicago, A. L. A. 1969.