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ABSTRACT

This study of the libraries in the publicly supported academic institutions of higher education in Maryland presents standards in the areas of library collections, library personnel, facilities, and methods of collaboration; provides formulas for their performance; and suggest growth patterns for the future. Eighteen detailed recommendations are made, including the general conversion of state and community college libraries to the Library of Congress classification scheme. (MF)

MARYLAND COUNCIL for HIGHER EDUCATION LIBRARY STUDY

Proposed Library Standards and Growth Patterns for Maryland Public Higher Education Institutions

by
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Baltimore, Maryland
1970

MARYLAND COUNCIL FOR HIGHER EDUCATION
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A STUDY OF THE LIBRARIES IN THE PUBLICLY SUPPORTED ACADEMIC INSTITUTIONS OF HIGHER EDUCATION IN MARYLAND PRESENTING STANDARDS IN THE AREAS OF COLLECTIONS, LIBRARY PERSONNEL, FACILITIES, AND METHODS OF COLLABORATION; GIVING FORMULAS FOR THEIR PERFORMANCE; AND SUGGESTING GROWTH PATTERNS FOR THE FUTURE: WITH RECOMMENDATIONS.

For the Maryland Council for Higher Education

By Paul Bixler
Library Consultant

September, 1969

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PREFACE

The present study was conducted over a period of three months in the summer of 1969. In Maryland a share of that time was spent visiting most of the libraries of public four-year and two-year colleges and the University of Maryland plus those of a number of private colleges and universities in the state. Considerable time also was taken in examination of their activities as reported individually by the libraries, and their statistical and other records as reported in detail to the Maryland Council for Higher Education.

The study was a labor flavored with much personal pleasure. I am indebted to the many librarians and a number of administrators at both public and private institutions who received the visits of my assistant, Miss Virginia Thomas, and myself to their campuses with a very friendly cordiality. Much indebtedness extends also to staff members of the Maryland Council and to a number of officials in the state's educational system. The study could not have proceeded without the full cooperation which they gave to us.

My thanks and appreciation go also, but especially, to Miss Thomas, whose knowledge of the state, its institutions, and the files of the Maryland Council were always helpful and whose labor over the specific statistical and other tables within the short period at our disposal can be described as little short of heroic.

Paul Bixler

September 30, 1969

HIGHLIGHTS OF THE REPORT

As a major supportive unit in the operation of the modern institution of higher learning, the library and its development are of major concern to educators everywhere. In Maryland, the knowledge "explosion" particularly in printed and other recorded forms, the struggle to meet the demand for advanced and sophisticated education on the part of the student generation, and the growth of new colleges and the further development of institutions already established have required special attention.

In a tripartite system, in which three types of higher education have developed historically as primarily separate units, the present need is for new and improved practices of collaboration. To lay a firm basis for such collaboration as well as other improvements in library service, general conversion to the Library of Congress is of prime importance (Recommendation 1, page 4). Another condition to be met is the development of automation for wider library use (Recommendation 2, page 6). The context of collaboration is the broadening of intercommunication among state and community libraries (Recommendation 3, page 12).

At the same time that mechanization is developing, libraries should not lose sight of the user, the ultimate consumer for whom collaboration as well as other resources of convenience are designed. A study of user needs and practices in the complex Baltimore area would have wide application (Recommendation 4, page 16). For collaboration and further self-study of library problems by academic institutions, a library specialist would be helpful for a limited period (Recommendation 5, page 17).

Maryland has recognized the continuing need for new buildings and additional space for libraries. Specific standards for facilities should be used (Recommendation 6, page 23). In the planning of new buildings, the incumbent librarian or a library building specialist should in all cases prepare a detailed program statement (Recommendation 7, page 27).

Book collections are the life blood of library activity. The University of Maryland, now assuming the burden of becoming the chief state resource center in research, should be financially assisted in building her collections according to the schedule set by the university's library study in 1965 (Recommendation 8, page 39). The libraries of state colleges and community colleges which require increases in their annual accession rate to approach recommended standards should receive additional funds (Recommendation 9, page 41, and 11, page 48).

In order to implement the library's role as supporting unit to its institution and to keep its collection abreast of institutional need, the library director should be a member of both the

curriculum committee and the library development committee (Recommendation 10, page 43).

Economic and administrative relationships between media departments and libraries are in need of a more rational pattern on a number of campuses of Maryland's state supported colleges - as they are nationally. A study of such relationships would be not only helpful but innovative (Recommendation 12, page 55).

People are important to libraries in the role of staff members. There are a number of excellent examples of administration and performance in the libraries of Maryland's publicly supported colleges. But overall in number and adequacy, there is no element needing more attention than library staffing, nonprofessional as well as professional. State colleges should adopt a definite guideline for number of professional librarians (Recommendation 13, page 60); and those professional librarians not yet having faculty status, rank and a salary commensurate with that of the teaching faculty should receive them (Recommendation 14, page 66).

The nonprofessional side of staffing is weak, particularly in a state situation which seeks more library automation and collaboration - a condition inevitably requiring more nonprofessional workers in relation to professionals. As rapidly as possible, state supported colleges should establish a ratio of two nonprofessionals to one professional (Recommendation 13, page 60). The state should examine library technician training programs with a view to establishing a system that would feed an adequate supply of nonprofessional workers into the nonprofessionally hungry academic library staffs (Recommendation 15, page 68). The State Merit system is quite inadequate for the needs of libraries in the state colleges and should be extended after the pattern established at the University of Maryland (Recommendation 16, page 70). New items needed in the library budgets of state colleges too often fail to reach approval at the state level. An approach to lump sum budgets, greater autonomy and responsibility placed on individual state college administrations is suggested (Recommendation 17, page 73).

Growth of Maryland's system of public higher education has been projected to 1977. There will be new colleges and more students in nearly all public academic institutions. Inflation also continues to be a factor in total costs. Before such factors stall, inhibit or make normal expenditures next to impossible, minimum levels of expenditures for state and community colleges should be established (Recommendation 18, page 76).

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"...we need much more consideration than has been given to the library user. Any applications of technology to library activities will have to be engineered to be humanly acceptable since there will be resistance to them all---to the use of microforms in place of books, to console-typed texts instead of print, to engaging in complicated interaction with a machine, to reading in a fixed place without moving around. The machines will breed their own resistance to the extent that they place restrictions on people...." --- From "The Impact of Technology on the Library Building," Educational Facilities Laboratories.

CHAPTER I

COLLABORATION IN LIBRARY SERVICES

The academic library is basically an institution supportive of the particular college or university of which it is a part, and its budget, the number and quality of its personnel, and its facilities should reflect the purpose and drive of the mother institution. Yet the library cannot develop in campus isolation nor can its service to faculty and students depend solely on its own resources. The problems of library coordination in recent years have arisen everywhere, but nowhere have they seemed more insistent than in Maryland where a tripartite system of higher education, pressure to develop resources to meet the explosion in student population, and rising costs have called for study to consider answers and solutions.

The area of attention is not new to the Maryland Council for Higher Education. In February, 1967, Nelson Associates issued for the Council a study, Possibilities of Library Coordination for Maryland Institutions of Higher Education; a Reconnaissance Study.... The present report begins with a review of library coordination: its persistent problems, recent developments, and future needs.

Conversion to Library of Congress Classification

The Nelson report recommended a study of the feasibility and costs of a changeover from Dewey Decimal Classification to

LC Classification for state college libraries and suggested that early conversion would preclude the need for increased costs later on. The University of Maryland had already begun the task of converting its huge collections, and using additional funds, it is today, with 90,000 volumes yet to change over, in sight of completing its project. A number of other academic libraries are now in the intermediate but uncomfortable position of having begun the changeover with new accessions (which is no budget problem), but of having a "backlog" of material still in the Dewey Decimal Classification which will cost additional funds to convert. (See Table I.) Partial conversion is an obstruction to library service, confronting the library client with two separate catalogs and two separately shelved collections as long as the classification dichotomy exists.

In the opinion of the consultant, conversion to the Library of Congress Classification should be viewed as an investment in the future. In this respect it is in accord with some aspects of ultimate automation in processing and other services.

Conversion to LC Classification, now almost a national movement, has been predicated largely on the belief that it will provide an opportunity for alignment with an eventually automated system at the Library of Congress. Yet there are other reasons: a) though conversion is unlikely to cut gross costs (since modern library inputs are increasing) it will reduce unit costs; b) it improves the quality of the catalog (this on the supposition, usually well founded, that it avoids previous variations in detail); c) it reduces the need for professional personnel in the processing department by putting more work within the grasp of

TABLE I

STATE OF CONVERSION TO LIBRARY OF CONGRESS CLASSIFICATION IN MARYLAND PUBLIC TWO-YEAR AND FOUR-YEAR COLLEGES

Institution	Current Total No. Volumes	No. Vols. Yet to be Converted
COMMUNITY COLLEGES		
Allegany Community College	25,583	300
Anne Arundel Community College	21,211	0
Catonsville Community College	34,972	0
Charles County Community College	12,361	0
Chesapeake College	7,426	0
Community College of Baltimore	43,567	40,000
Essex Community College	20,398	5,000
Frederick Community College	9,194	All
Hagerstown Junior College	30,419	All
Harford Junior College	22,622	20,100
Montgomery College-Rockville	23,071	11,500
Montgomery College-Takoma Park	28,924	21,000
Prince George's Community College	37,000	7,000
STATE COLLEGES		
Bowie State College	44,836	All
Coppin State College	57,886	All
Frostburg State College	85,294	55,000
Maryland State College	56,288	All
Morgan State College	110,917	All
Salisbury State College	82,025	All
St. Mary's College of Maryland	23,126	10,834
Towson State College	131,101	40,000

Total Volumes to be Converted - 602,299. Total Volumes in Conversion Plan yet to be Funded - 580,805.

INSTITUTIONAL NOTES

Community College of Baltimore - Fiction changed to FIC and Cutter. Reference collection in process.
Frederick Community College - Librarian unfavorable to change.
Hagerstown Junior College - Unable to consider change with present staff and facilities.
Montgomery College-Rockville - Considering contracting for remainder.
Prince George's Community College - Hope to complete conversion by September 15, 1969.
Bowie State College - Will accept conversion.
Morgan State College - Library staff favorable to change.
Salisbury State College - Favorable to change.
St. Mary's College of Maryland - In process of change (currently lack a Director of Library).
Maryland State College - Favorable atmosphere for change.

nonprofessional staff. (Released professionals could shift to much needed professional positions elsewhere in a growing library system.)

How much does LC conversion of a library backlog cost?

Since conversion is inevitably entangled with an on-going process of current cataloging, few librarians have answered that question. But a documented case history of conversion is at hand, and copies have already been mailed to those college and community libraries considering such conversion. In this well planned project, 120,000 volumes in Dewey classification were converted in two and a half years at a cost of approximately $1 a volume.

1. It is recommended that state and community college libraries which have not already completed conversion to Library of Congress classification do so as soon as possible, that the conversion be accomplished with few or no deviations, and that where a library collection yet to be reclassified is substantial (10,000 volumes or more) state funds be provided to perform the operation and reduce the interim period when the library's collections and catalogs are divided between two systems and two locations.[1]

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[1]Viewed as a total project for all state and community colleges which have 10,000 or more volumes to convert to LC (a grand total of 580,805 volumes), the cost of conversion is a considerable sum. Since a baker's dozen of institutions are involved, however, it seems unlikely that the job can be consummated short of three or four years, and it could be funded over such a period. It is possible also that some costs could be cut if the project were handled cooperatively; for example, a small team working under a cataloger expert in Library of Congress classification might form a visiting nucleus of major assistance to each library in process of conversion. I make this suggestion tentatively as it may not be feasible. In such a project, careful planning is vital.

Computer Applications and Automated Services

Nearly all public community colleges have their own computers, and a number of these institutions give courses in data processing. For good and sufficient reasons, however, library operations are usually well down on the list of suggested applications in the smaller colleges, and the number of institutions which have employed automation in any of its aspects are few. As a matter of fact, any small institution which does not need a computer for teaching data processing or a similar course, can more economically contract "time-share" for its automation needs as they arise.

As the largest academic institution in Maryland and one of the largest in the nation, the University of Maryland at College Park allowed the library to install its own computer in the library building. Beginning in 1965, automation was first applied to acquisitions and then to circulation control. Without such mechanization the university library could not have managed the enormous book traffic which developed in the late 1960's as its collections became the second fastest growing academic book resource in the United States. The library should have its list of serials in book form for distribution in another two years, and a book catalog of its collections is contemplated somewhat further in the future.

No study of the collaborative uses of automation as suggested by the Nelson report has been made. The University of Maryland Baltimore Co. Campus has developed its own automated system and plans the first printout of its book collection for this October. Johns Hopkins has confined its own automated system to

circulation control.

Telefacsimile has not developed, but teletype is in use between the College Park and Baltimore campuses of the University of Maryland. Teletype is also used by College Park and Johns Hopkins in a regional university hookup for interlibrary loans in which delivery service is now planned by air. Both institutions have joined the fast-growing national TWX service.

The establishment of a centralized processing facility accepted in principle by a number of librarians in the community colleges, can be given attention only after full or nearly complete conversion to LC classification.

The computer center at Towson State was developed to serve as a tool for all state colleges, and if adapted for library application, it could serve to facilitate library cooperation within the state group. Such is the growth of enrollment and library facilities at Towson that automation now seems mandatory for library services on its own campus. If a recent report urging the merger of Towson, Coppin, Morgan and UMBC into an urban university takes formal shape, the Towson experience as well as that at UMBC would be useful in developing the required automation of the new university's greatly augmented library collections.

2. It is recommended that Towson prepare its library for the application of computer services by appointing to its library staff at the earliest date a library-trained systems analyst.

Interlibrary Cooperation

The largest and most widely operating system of interlibrary cooperation in Maryland is centered in Enoch Pratt Free Library through an agreement with the Division of Library Extension Service of the State Board of Education. Core of the operation is a teletype hookup to the state's county public libraries by which films, book loans or Xerox copies of periodical articles are made available to Maryland citizens in their local areas. The library of Frostburg State College was the first state-supported institution of higher learning to be included in the system. More recently both state and community college libraries were given permission to make application by mail, or on urgent demand by telephone, for loans from Pratt Library. Even more significant was the entrance of the University of Maryland's McKeldin Library into the network as a "backstop" resource for material which could not be supplied by the Pratt system. In the fiscal year 1968-69 McKeldin supplied 2,872 requests referred to it by the network, a growing and significant service in the University's projected role as the major publicly supported research center in the state.

Table II gives a measure of the volume of interlibrary loans among academic institutions within the state. As a group Maryland's colleges and universities still borrow more materials than they receive but they are beginning to approach a balance. The Johns Hopkins, with its considerable holdings in specialized areas, is a tower of resource strength for other institutions both within and without the state. Two years ago the University of Maryland's library, for the first time became a major lender instead of a major borrower; in the past year its interlibrary loans to other

TABLE II (1st Section)

INTERLIBRARY LOAN TRANSACTIONS, 1967-68, MARYLAND PUBLIC AND PRIVATE INSTITUTIONS

TWO-YEAR COLLEGES	Total Items Borrowed	Total Items Supplied	Nature of Items Supplied		Total Number Transactions
			Non-returnable *	Returnable	
A. Public					
Allegany Comm. College	16	0	0	0	16
Anne Arundel Comm. College	6	0	0	0	6
Catonsville Comm. College	69	4	2	2	73
Charles County Comm. Coll.	42	6	4	2	48
Chesapeake College	8	0	0	0	8
Comm. Coll. of Baltimore	NA				NA
Essex Community College	9	2	NA	NA	11
Frederick Comm. College	0	0	0	0	0
Hagerstown Junior College	10	0	0	0	10
Harford Junior College	129	12	0	12	141
Montgomery-Rockville	11	0	0	0	11
Montgomery-Takoma Park	17	5	NA	NA	22
Prince George's Comm. Coll.	48	0	0	0	48
Totals, Public 2-Year Coll.	365	29	6	16	394
B. Private					
Mt. Providence Jr. College	0	0	0	0	0
Trinitarian College	5	0	0	0	5
Villa Julie College	3	NA	NA	NA	3
Xaverian College	21	0	0	0	21
Totals, Private 2-Year Coll.	29	0	0	0	29

*Non-returnable items supplied usually consist of photocopies.

TABLE II (2d Section)

INTERLIBRARY LOAN TRANSACTIONS, 1967-68, MARYLAND PUBLIC AND PRIVATE INSTITUTIONS

FOUR-YEAR COLLEGES AND UNIVERSITY	Total Items Borrowed	Total Items Supplied	Nature of Items Supplied		Total Number Transactions
			Non-returnable *	Returnable	
A. Public					
Bowie State College	0	0	0	0	0
Coppin State College	8	0	0	0	8
Frostburg State College	1,018	127	4	123	1,145
Morgan State College	119	60	21	39	179
Salisbury State College	50	40	NA	NA	90
St. Mary's Coll. of Md.	120	4	0	4	124
Towson State College	150	44	20	24	194
University of Maryland	3,291	6,062	2,880	3,182	9,353
U. Md. Balt. County	7,626	3	0	3	7,629
Maryland State College	423	0	0	0	423
Totals, Public	12,805	6,340	2,925	3,375	19,145
B. Private					
Baltimore Coll. of Comm.	0	0	0	0	0
Columbia Union College	38	12	5	7	50
Eastern College	NA	NA	NA	NA	NA
Goucher College	75	233	18	215	308
Hood College	130	77	22	55	207
Johns Hopkins University	5,813	10,659	2,424	8,235	16,472
Loyola College	160	14	0	14	174
Md. Inst. College of Art	12	2	NA	NA	14
Mt. St. Agnes College	12	0	0	0	12
Mt. St. Mary's College	42	55	35	20	97
Ner Israel Rabbinical Coll.	0	0	0	0	0
College of Notre Dame	15	9	4	5	24
Peabody Consv. of Music	7	18	0	18	25
St. Johns College	75	19	10	9	94
St. Joseph College	166	6	3	3	172
St. Mary's Seminary Univ.	25	15	NA	NA	40
University of Baltimore	NA	NA	NA	NA	NA
Washington College	160	1	0	1	161
Western Maryland College	245	9	0	9	254
Totals, Private	6,975	11,129	2,521	8,591	18,104
GRAND TOTALS, PUBLIC AND PRIVATE TWO- AND FOUR-YEAR COLLEGES, AND UNIVERSITIES	20,174	17,498	5,452	11,982	37,672

*Non-returnable items supplied usually consist of photocopies.

institutions was almost twice the number it received, a result both of its important growth in resources and of its new role as backstop to the Pratt-operated statewide network.

Though relatively few compared to other library circulation and reference services, interlibrary loans are significant beyond their number for their assistance in research and their value to the ultimate "serious" borrower. They are also of special help in a time of early academic growth when the library resources of new institutions are too limited to serve all but the most elementary needs of their readers. Use of the Xerox has eased restrictions on loans of rare, expensive or frequently used periodicals, and the reader-printer has made available copies of material in their original type size from microfilm holdings. The climate for library cooperation in Maryland is good; performance could be improved.

The Association of Maryland Independent Colleges (College of Notre Dame, Goucher, Hood, Loyola, Mt. St. Agnes, Mt. St. Mary's, St. John's, Washington, and Western Maryland) has formed a Library Cooperative Program that has led to collaborative action. Hood, Mt. St. Mary's, and Western Maryland share the acquisition of materials in non-Western civilization - an area of learning generally neglected in American colleges. Checked copies of the American University Field Staff's Select Bibliography serve as a catalog for interlibrary loan purposes. Loyola, the College of Notre Dame and Mt. St. Agnes in a similar arrangement have also shared triangular acquisition of non-Western materials among themselves.

Still more innovative is a joint venture between Loyola and the College of Notre Dame, which will share the same library, a new facility to be built on land adjoining both campuses and controlled by an independent non-profit corporation with representation from each college. The library, scheduled to open in 1971, will have a capacity of 310,000 volumes, more than twice the present combined collections of the two institutions.

Further opportunities for collaboration may lie in updating or revising the Maryland Union List of Serials or in taking an inventory of special collections. The Union List has proved useful as a source of interlibrary loans in the past, but today it is behind schedule in its latest edition, and participating institutions do not offer such wide representation of academic libraries as they once did. The Learning Resources Division of the Maryland Association of Junior Colleges recently circulated a questionnaire asking information about special collections.

Both revision of the Maryland Union List and an inventory of special collections are worth serious consideration for the further assistance they might render interlibrary cooperation. Subject areas for inventory in liberal arts collections could include the non-Western materials (for East Asia, South Asia, Southeast Asia, Africa, the Slavic world, Latin America) already mentioned; urban studies, peace and disarmament, conservation, space exploration, population control, food production, the history and technique of film making, the information explosion, Negro history and culture, higher education. For materials in technical areas, community college libraries should examine collections (including periodicals) generated by special

technical programs offered by their respective institutions.

Further, a census of special resources in audio-visual materials may be useful - for example, the collection of filmstrips at Coppin State, the 16 mm. films at Maryland State, the videotapes and 8 mm. films at Catonsville Community College, the film collection at Frostburg State, the phono-records and other special materials at Morgan State.

Among state colleges there has been sporadic interest in cooperation like the limited relationship developing between Salisbury State and Maryland State. But in general the weakest link among the evolving chains of library collaboration in Maryland is that of the 4-year state colleges.

3. It is recommended that the Board of Trustees of State Colleges actively encourage intercommunication among the librarians of its constituent colleges; that the State Board for Community Colleges perform a similar function for its constituent members; and that cooperation be explored not only within the perimeter of their class or immediate region but beyond it.

The Baltimore Complex

There is a congestion of undergraduate use of library service in Baltimore, specifically a concentration at Johns Hopkins University and Enoch Pratt. Urged sometimes by their college teachers, more often responding to their own or their parents' previous patterns of library use, college students sometimes neglect library use in the institution where they are enrolled for facilities elsewhere. Students are mobile in these days, and library books may be where you find them. Yet it is clear that

concentration in two resource centers in Baltimore is not logistically or academically the most reasonable or feasible solution. The process of off-campus use tends to downgrade the local academic library whether or not it is underdeveloped. Even more significantly, Pratt and Johns Hopkins are already doing more than can reasonably be expected of them in assistance to "off-campus" reader-clients.

Pratt Library already makes its resources available in a statewide network which, although basically a public library system, reaches out as well to academic libraries through interlibrary loan. Johns Hopkins, primarily a graduate library, allows visiting students to use books on the premises daily till 4 p.m.; after that hour visitors must show a guest or visitor's card. A limited number of such cards are distributed not only to visiting graduate students and faculty of other universities but to selected students from Goucher, Towson State, Morgan State and other colleges in the area. With somewhat less than 700 seats in its main library, Hopkins has often found its facilities stretched to the full, and as a private institution devoted to the demands of research, has recently considered but so far rejected the charging of a fee for use by off-campus students.

In Washington, five universities have attempted to rationalize a similar problem in library use by making student I.D. cards issued at one institution viable for library use at each of the other four. It has been suggested that a number of Baltimore academic institutions go and do likewise. The idea has value in itself but ignores a larger question. Just what is the

problem? Is it one of congestion in two large, hospitable libraries in Baltimore ostensibly devoted to service to other than undergraduates? Does it involve academic library use more generally? Or does it raise other questions?

Aspects of the use of the Pratt Library system have been studied on a number of occasions. Recently Dr. Mary Lee Bundy of the School of Library and Information Services of the University of Maryland published a study of public library use in the state; notably one of her conclusions disclosed that professional people and others involved in serious research composed the occupational group least satisfied in their use of the public library.

As for knowledge of college library use, information is local, institutional and partial; practically speaking, it does not go much beyond what academic librarians can observe at their circulation, processing and reference desks.

User Study

Traditionally, reports on college libraries have been set down in quantitative rather than qualititative dimensions. Statistics on library needs in number of volumes to be accessioned, periodicals to be sent to the bindery, square feet of space for a new collection - these and similar items form the basis of an annual report, a request for additional funds, or a survey of anticipated growth. Such figures are useful; they give an inventory of an on-going, internal operation. They present the library as an institution prepared to entertain clients, visitors or readers. If the report also presents growth in circulation figures, this is only part of the iceberg of library use, as the

librarian usually points out. The essential result is a survey of potential efficiency rather than one of effectiveness. Usually lacking is knowledge of the quality of readership, the full context in which the library operates, the library's relationship to other resources in the region.

Quantitative evaluations play a significant role in the establishment of institutional libraries or in the on-going activities of a library already fulfilling a specific job at full or near full capacity. They are partial or less conclusive in a changing environment, where the college student population is exploding, where new institutions are springing up designed to meet new educational wants, where the educational milieu is in flux and old learning patterns are being altered - as in the Baltimore area. Moreover, knowledge of user psychology and the user point of view has never been in good supply anywhere.

Edwin E. Olson, faculty member of the University of Maryland's School of Library and Information Services, and others have acknowledged that the user in search of specialized knowledge - whether student, teacher, or researcher - usually has a choice today in the patterns by which he may obtain the answers or the services he wants. They further point out that a "user's estimate of the relative cost-effectiveness of alternatives may not be very good - it may be biased by habit, incomplete knowledge, and attitudes based on inadequate trials - but good or bad, this estimate determines the decisions on which means he employs to obtain service. Dr. Olson and his associates have approached this problem qualitatively, from the point of view of what librarians should know about patterns of use, and in terms of

research and development.

4. It is recommended that, with special application to the Baltimore area, a thorough-going study of user needs and practices of the college population - researcher and student alike - be undertaken, and that conduct of the study preferably be placed in the hands of the School of Library and Information Services of the University of Maryland.

Such a study should assist not only in the rationalization of library use in Baltimore but in the furtherance of library cooperation throughout the state. These would be its implications, for the research target can hardly be the solution of circulation or seating problems at Johns Hopkins or Pratt but a better knowledge of the library patterns and needs of Maryland's college population. Implications of the study might, in fact, have their greatest impact on college administrators and those involved in library self-study as well as on librarians themselves.

Perhaps the most all-embracing recommendation in the Nelson Associates report was that each 4-year and 2-year college undertake "a self-study to determine what steps should be taken to build libraries supportive of the instructional program." The fact is that in the past three years some institutions took steps and others didn't, and that some of the steps that were taken were uncertain. Some institutions were new-born, operating largely in unknown territory. They lacked both direction and advice. As will be seen further on in this report a number of libraries, especially those in the state colleges, are in the midst of major problems of staffing, the construction or planning of new buildings or additions, and the acquisition of book collections

adequate for their college population. The varied climate in Maryland's tripartite system of higher education, the rapid growth in some institutions, the traditionalism in others, and the likelihood of further change in educational programming give a pressing quality to the many disparate library problems at this time.

5. It is recommended that a full-time library specialist be appointed by the Maryland Council for Higher Education for a defined period (not less than six months nor more than two years) to assist Maryland's publicly supported colleges with problems of development in their individual libraries and in the further improvement of collaboration among libraries in the state's academic institutions.

CHAPTER II

PHYSICAL FACILITIES

Sufficient and well proportioned space in library quarters is a major requirement for good library service. For colleges with an extended academic history, it is a common experience for library use to double in the first year that a new building is open for service. For new institutions or those moving to a new campus, it is now recognized that a library building should usually be the first to be constructed.

Inherently a sound building is no more important than an efficient staff or an adequate book collection. But in time sequence it comes first. And more significantly perhaps, the mistakes of a building poorly constructed or badly laid out are difficult if not impossible to rectify. Library buildings require special attention in planning.

Library space needs are of three types: accommodations for readers, storage for books and other learning resources, and work space and offices for staff and services. Over many years standards have been developed for each of these areas, yet such is the recent evolution of library use and resources that to apply all of them inflexibly across the board is to lose sight of the fact that an academic library (in its building as well as its other aspects) should be designed to support a particular academic program.

Standards, then, are guidelines, not laws for the Medes and Persians. For building space they may be less variant than for some other library elements. We are dealing here in numerical measurements and in "permanent" materials like steel and stone. Yet even here the ultimate objective is use by people and the result should be tempered to their changing needs.

The extensive Fuller Report[1] on space utilization gives only a few pages to libraries, but since it is specific in its figures and has been frequently cited in Maryland for library building purposes, let me refer to it in the following discussion. As will be seen, with some of the Fuller Report's standards for libraries, there is agreement, but concerning others, strong disagreement.

Book Storage

The Fuller standard for book shelving is .1 square foot per volume, a measurement of long acceptance by librarians, architects and library planners and one requiring little discussion. An expert planning a library for a state college in California in 1962, noting the library's need for "special materials," suggested that for these resources additional space of 25 per cent of the total for books be added to the original requirement. This is unusual chiefly in that the space figure for special materials is precise. The nature of these materials is not spelled out; it may refer to books or periodicals but more likely includes audio-visual materials.

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[1] Space Utilization Study and Future Capital Outlay Needs for Public Institutions of Higher Education in Maryland: a Report to the Maryland State Planning Department. By William S. Fuller and Leroy E. Hull. Bloomington, Indiana. 1964.

There are no accepted standards for storage of audio-visual materials. Such resources, increasingly recognized as of value in higher education, are often under library control in the library building, but they may not be. The shape of the materials (and their equipment), their purpose, and their use are still evolving. The thrust of an A-V program on any given campus varies. Storage of A-V materials in new college library buildings usually has to be taken into account, but to include it in the provision for book storage is to confuse the issue and the estimate.

The acceptable standard for book storage includes space for aisles and a small allowance for growth of the current collections. Plans for shelving, of course, should take additional account of the expected growth of the book collection, which may reach as far in the future as twenty years, which is often considered the estimable "life" of a new academic library building.

Readers

The Fuller Report notes that the "normal accrediting requirement is that the library provide a seat for one-fourth of the student body in the reading room."[2] We may accept the 25 per cent figure but only as a minimum standard while recognizing that many new academic library buildings now offer seating to a third of the enrollment or more. The difference in projected reader accommodations turns on the amount and character of library use, which turns again upon such factors as the amount of other study space available, whether or not the college is residential, and the

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[2]Page 70.

nature of the college's educational program.

One of the academic areas which the Fuller Report pinpoints as a focus of "major space needs" is the library.[3] Institutions of higher education, it notes, ought to "publicize the 'new' methods of utilization which they are developing and to begin to educate the general public as to the need for space to reinforce the educational program."

If we apply this well founded opinion to the Report's standard for student seating, the standard's inadequacy for a modern library readily becomes apparent. The average seat, says the Report, "requires approximately 14 assignable square feet."[4] (Somewhat more liberal space is accorded the graduate student - with whom at this point we are not primarily concerned.)

The year 1941 was a kind of watershed in both the structure and intellectual climate of academic libraries. Afterward there were introduced modular construction, free standing stacks, and a number of other technical innovations. More significantly, college teaching methods began to change, from primary reliance on a textbook to liberal use of library books in both reserve and "free" reading from open shelves, and presently to current periodicals and in many instances other types of material.

A standard of 14 assignable square feet per seat (actually 3.5 square feet per student FTE) is based on seating at tables. A table for four, for example, has an assignable area of 56 square feet, but if the area necessary for access is subtracted, the

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[3]Page 47.

[4]Page 70.

table itself could be no larger than 5' x 6', inadequate for modern students involved in study.[5] A round table, sometimes used to lend variety to this type of seating, gives for the same area of 56 square feet even less surface to work on.[6]

Modern students make notes and write reports in the library, they assemble materials other than textbooks, and they often need to spread out their work. Students may occasionally study together, but when they do, group study rooms are the better accommodation, for the chief medium is talk. Otherwise, as questionnaires and experience have shown, they generally prefer single accommodations, in a comfortable chair for reading, or for concentrated work, at a small carrel or desk, where sometimes like a mini-graduate student they can have a little shelf for books and other collected materials in front of them. Furthermore, wherever audio-visual materials are used, a major instrument for making them electronically available is the so-called "wet" carrel. The space required for a carrel, small desk or individual chair more than doubles the Fuller space standard for a seat at a table. It

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[5]It has been suggested that the dimensional standards as used in construction of the library of Bemidji State College in Minnesota be considered applicable to academic libraries in Maryland. The Bemidji library's statement and floor plans appear in the A.L.A.'s Libraries: Building for the Future, 1967. The total library area is listed as 48,914 square feet, its book capacity as 175,000 volumes. The seating capacity is 1,100, of which the great majority is tables, which within the total seating area available seems based on the 14 square feet per student standard. "Students and books are thrown together," according to the library's statement, in an attempted integration of shelving and seating. The whole is so crowded that anyone who assumes that the library's seats will at any time be filled to as much as a third of capacity is likely to be disappointed.

[6]Four people at a round table with a diameter of less than four feet may have room to play cards, but what other activity is possible?

is important to note also that the space required per carrel will climb higher if graduate students or faculty members are to be accommodated.

Staff and Service

The area under consideration here includes space for circulation, catalog and bibliography, shipping and receiving, current periodicals, processing of books and other materials, a staff lounge, offices for professional staff, and offices or space for nonprofessional staff.

The Fuller Report establishes its standard for library service space as 32 per cent of the reading area. If undergraduate seating were to be established on a basis of 14 square feet per student seated at tables, the service area would also be inadequate. The percentage is acceptable, however, if the standard per reading station is at least double the Fuller standard.

Within the area for service it is important to establish space dimensions for staff. The total area for staff members is often underestimated in new buildings, not so much in following the standard as it existed at the time of construction, but in underestimation of or planning for the normal growth of the staff along with the growth in collections and services.

6. It is recommended that the following guidelines or formulas be generally used for college library construction in Maryland: .1 square foot per volume for book storage; provision for seating a fourth of the student body with an area of 30 square feet per station; the total service area to be calculated at 32 per cent of the total area for seating; that within the service

area, space for professional staff be calculated at 150 square feet per person and for nonprofessional staff at 125 square feet per person.

No overall distinction is made here between construction guidelines for state college libraries and those for community college libraries. This does not mean that there will not or should not be differences between particular libraries supporting different types of institutions. The chief divergencies will grow out of differences in enrollment, in educational programs, in types and amounts of materials housed, in whether the institution has a history of some years or is in the throes of establishment.

In planning or discussing the functional details of public buildings, it is customary to use the term "assignable space." This usually refers to areas special to the activities of the building type under consideration. It will exclude stairways, coatrooms, rest rooms, elevators, lobbies, mechanical equipment, inside and outside walls, corridors - areas common to most substantial buildings designed for some public use. In a library, assignable space concerns the elements or functions for which guidelines are established in Recommendation 6 above. It is the space for which the librarian-planner should expect to take a major responsibility.

A common formula for library assignable space is 65 per cent of the gross area. However one may evaluate the formula, the ratio of assignable to nonassignable space is significant, though the relationship in a given library building may fall as much within the province of the architect, the engineer and the

financial officer as within the responsibility of the librarian.

There may also be a kind of twilight zone between space strictly construed as library-assignable and that considered unassignable. In new facilities, the library, built to contain future book and seating expansion, may give over some of its available space to immediately needed functions not within library control and only peripherally related to library functions. These could cover almost any activities associated with the college - administrative or faculty offices, classrooms or seminars scheduled for classes, an exhibition area supervised by the art department, a faculty lounge, a bookstore, or a student-related activity. The arrangement is possible as a temporary or emergency measure if the space is planned in terms of library use and if the schedule for reversion to such use is kept as the library needs the space. Pragmatic as such an arrangement is in a new or rapidly expanding academic institution, it should be recognized that it complicates and widens the responsibility for good library planning in advance of performance.

Planning and Expansion

Visits to the campuses of Maryland's public academic institutions had to be brief and examination of individual library buildings was necessarily somewhat cursory. Hence the following remarks are limited to impressions and general observations rather than an analytical critique.

One cannot observe the recent condition of library facilities in Maryland without concluding that an enormous collective effort has been made to stay on top of a very trying problem. Pressed by

the needs of a rapidly expanding college student population, potential as well as actual, most educational officials have responded to the need for financing and building new facilities. Maryland is to be commended for its broadly accepted recognition that the library building is the heart of academic activity in institutions of higher education. Libraries have been centrally located; on the new campuses of the rapidly developing community colleges, buildings for library service have usually been the first to be erected. Half of all the state colleges have built new library structures within the past five years, and for the community colleges new buildings are almost a unanimous experience. In spite of exploding enrollments, the general capacity and condition of library facilities of public academic institutions is improved over what it was three years ago at the time of the Nelson Report.

This is not to say that all of the new buildings are prime specimens of library architecture. Plans have had to be hurried. Estimates have had to be made without adequate background information. Accommodation, no matter how simplified, was a first requisite. Some buildings have been put up as a kind of way-station on the road of early expectation that something bigger and better would be possible or forthcoming later on. Lacking with some frequency was a local librarian or a library building expert to write an adequate program of the interior needs and relationships of the proposed building.

In spite of the continuing trend in modular construction, which in its early manifestations was considered a "warehouse" fashion, interior layout for libraries can be peculiarly intricate.

An adequate program statement requires more than figures for seating or shelving for volumes, more than a list of certain minor library activities or of rooms with square feet. In one sense, an active library is a series of movements, some of them traced with only moderate frequency, others repeated over and over again so that the shortest of distances becomes the most significant factor. Movement involves the flow of materials from receiving room to processing to shelf to circulation. It also involves people in a series of relationships of staff member to staff member, reader to staff member and reader to shelf or study desk, relationships that nonlibrarians cannot anticipate. A sound program statement for planning a library building requires both knowledge of the academic institution to be served and experience in the inner activities of a viable academic library.

7. It is recommended that when a new library building or a substantial addition to an existing structure is to be planned, the incumbent librarian or a specialist in academic library building be asked to write a detailed program statement outlining the internal needs and related functions of the proposed building for presentation to the architect and such other persons as may be involved in the planning.

Librarians and architects may be assisted in their planning by an advisory faculty committee, especially when faculty interest in the library has been well established. An excellent example is the substantial report of a faculty committee at the University of Maryland in 1965 ranging over the whole spectrum of library needs. At that time a schedule of new and additional library facilities was set up including an undergraduate library with seating for

4,000 and a capacity of 200,000 volumes; a science center library to serve engineering, the physical sciences, and the biological sciences; and a major addition to McKeldin Library, which was built as the main facility in 1958 for a student body scarcely a third as large as it is today. A number of adjustments and additions have been made to the facilities in the University's library system, but the above major projects have fallen behind schedule. If the appropriation of necessary funds is a chief factor, it is suggested that the funds be made available as soon as possible. The need for library seating space at College Park, already considerable in 1968 when the building's construction was first scheduled, is even more pressing today.

In an immediate survey the community college libraries appear to be well outfitted in facilities. (See Table III.) Four buildings were opened for occupancy in 1968, and one, Allegany, will be dedicated this fall. All but two colleges have buildings constructed within the past five years, and one of these two, Frederick Community College, now housed in two small rooms in an old converted school building, can already see the footers of a new structure on a new campus scheduled for occupancy in another two or three years.

Four libraries[7] are housed in buildings occupied by administrative or other officers, and three of them may with some confidence await expansion as the non-library residents move out to other quarters. The fourth, Prince George's Community College,

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[7]Another, Allegany, its building as yet unoccupied, is also to include the college president's office.

TABLE III

COMMUNITY COLLEGES: PLANNING OF FACILITIES

Institution	Date of Present Building	Volumes* 1968-69	Volume Capacity	Expansion Plans
Allegany Comm. College	1969	25,600	50,000	---
Anne Arundel Comm. Coll.	1967	21,200	30,000	Will expand into 1½ floors of present bldg. housing other depts. Capacity 100,000 vols.
Comm. Coll. of Baltimore	1966	43,600	57,000	An extra floor requested.
Catonsville Comm. College	1968	25,000	100,000	---
Charles County Comm. Coll.	1968	12,400	18,000	New bldg. planned 1971 (3 floors, 100,000 volume capacity).
Chesapeake College	1968	7,400	20,000	Will expand to 2d floor present bldg. now housing administration.
Essex Community College	1968	20,400	30,000	Will expand to 2d floor present bldg. now housing faculty offices.
Frederick Community Coll.	1957**	9,200	10,000	New campus, new bldg. (1972): capacity 28,500 vols.
Hagerstown Junior College	1966	30,400	30,000	Planning new wings.
Harford Junior College	1964	22,600	25,000	New bldg. 1971-72, capacity 75,000 volumes.
Montgomery Jr.-Takoma Park	1958	28,900	25,000	No definite plans.
Montgomery Jr.-Rockville	1965	23,100	25,000	Large addition to present building planned; capacity 80,000 volumes.
Prince George's Comm. Coll.	1967	37,000	60,000	Plan for new bldg., but faced with budget problems.

*All figures to nearest 100.

**College-renovated school building.

is face to face with a student body of over 3,000 and growing, a fast-developing collection of books and audio-visual materials, plus the fact that the library may need a new building before the "old" one (built in 1967 as an administration structure as much as a library) can be given up wholly to other residents. Prince George's may simply be a product of supply being unable to meet educational demand.

In spite of what must seem a kind of nonstop pace in building, a number of other libraries are already at, just under, or just over capacity with plans for expansion not yet being firmed.

The library of the Community College of Baltimore is near capacity. The librarian has requested the addition of another floor. In her province also is the solution of a joint problem. The Community College is to open a branch, the Inner Harbor Campus, in 1973. The branch library, planned for the same year, is to have a capacity of 70,000 volumes.

Libraries on both campuses, Takoma Park and Rockville, of Montgomery Junior College, are at capacity, but there similarities end and differences in philosophy and approach begin. The library at Takoma Park is traditional and there are no immediate plans for expansion. Rockville has produced a program statement for a "Library-Learning Resources Complex" in which space of 75,000 square feet is allocated for 30 areas including an "innovation center," faculty offices annex, alumni office, snack area, laboratory-listening rooms (10,500 square feet) and catalog (100 square feet). Posed here are questions of facilities complicated by the problems which will affect them as two libraries (the mother institution Takoma Park, the offspring Rockville) attempting

to go their opposite ways while still bound together.

State Colleges

Half of the libraries of the state colleges are housed in structures built within the past five years (see Table IV), and there may also be included here the Baltimore branch of the University of Maryland, whose library has developed to date, though very rapidly, not far differently from the facility for a state college. Nevertheless, a number of institutions face problems.

Bowie State has an excellent program statement for a new building written by Stephen McCarthy, one of the top library experts in the nation. The problem here will be to fit a new facility to a campus beset by other problems, principally of a certain suspended animation in growth, campus logistics, and finance. It will be no solution simply to water down the program or to abandon it.

Morgan State also has a good program statement for a new facility, a statement drawn up under the guidance of an experienced Maryland librarian as consultant and later checked over by a nationally known expert. Morgan can proceed confidently with its library plans if and when the necessary funds are forthcoming.

Coppin State plans expansion of its present building, but her greater problems are elsewhere than in facilities.

If Morgan, Coppin, Towson and U.M.B.C. join in forming a new urban university as was suggested in a recent report of the Maryland Council for Higher Education, libraries of these institutions will have to adjust to the new pattern, yet it is not clear at this

TABLE IV

STATE COLLEGES:* PLANNING OF FACILITIES

Institution	Date of Present Building	Volumes 1968-69	Volume Capacity	Expansion Plans
Bowie State College	1959	44,800	60,000	New building expected 1973: capacity 240,000 volumes.
Coppin State College	1961	60,500	NA	Plan extension, money budgeted.
Frostburg State College	1965	85,300	125,000	Campus master plan projects new building in center of campus.
Morgan State College	1939**	111,000	160,000	Phase I new bldg., to open 1971, capacity 250,000 volumes.
Salisbury State College	1956	82,000	50,000	Plans addition for expansion to 1977.
St. Mary's College of Md.	1968	23,100	50,000	---
Towson State College	1969	131,100	600,000	---
U.M.B.C.	1967	76,700	100,000	Three additional floors 1971; Phase III of bldg. plan, capacity 1 million volumes.
Maryland State College	1968	56,300	105,000	To complete basement (now with dirt floor) for periodical collection.

*Included here also is the relatively young U.M.B.C. (University of Maryland, Baltimore County Campus).

**Two additions followed.

point that the changes in relationship should force major changes in plans for new library facilities beyond firming up the schedules for expansion.

Maryland State's new building (1968) would be quite adequate if only its basement, left unfinished for lack of funds, were completed. This action should be taken promptly.

Frostburg's building plans, beset in the past by uncertainty and lack of campus direction, now seem on the right track; a new building is proposed for the center of a changing campus under pressure of rapid growth.

Salisbury's book collections are well beyond the planned capacity of its present building, but before final planning of a new addition, its holdings should be sifted for material that can be discarded.

Problems of library facilities exist on many campuses of Maryland's publicly supported institutions, most noticeably perhaps at the University of Maryland where the growth of students and collections in the recent past has been unprecedented. For the present, however, these problems seem generally less pressing (except at College Park) than others of a library nature.

CHAPTER III

COLLECTIONS

There is an old library saw that a library can be no better than its collections. In this day of growing interlibrary communication, such a truth may not carry quite the weight that it once did. Yet it continues to be true that the bulk of library use in a college must still take place on its campus, and that if library use is minimal there, no amount of interlibrary loans, useful as they are to a minority, or travel in search of other sources can make up the difference. A network of liberal interinstitutional loans is a "fringe benefit" to young scholars, but the fringe benefit which in the long run will hold the distinguished faculty member which Maryland plans to attract to its institutions is a sound collection of books in the campus library - some of which books he, of course, has had a hand in selecting! Nor will he be able to teach his students effectively without them.

Building a good collection is a problem in quantity and quality and the problem is how to get both at the same time. They cannot be measured in the same way. Budget authorities, academic planners and librarians have tangled with this problem, usually to their own bafflement. Verner W. Clapp, former president of the Council for Library Resources, and Robert T. Jordan, former staff member of CLR, point out in their "Quantitative Criteria for Adequacy of Academic Library Collections" (referred to below in Table

V) that with one exception regional accrediting agencies reject outright the number of books as a measure of adequacy and that the exception, the Southern Association, hardly gives the idea so much as a passing grade; in using the reference Library Statistics of Colleges and Universities: Annual Analytic Report, says the Association, "institutional authorities should consider it a serious danger signal if the library regularly falls in the lowest quarter of any of the categories analyzed."

Clapp and Jordan recognize, however, that budgeting and appropriating authorities have to use quantitative bases for their decisions. So also, apparently, does the Association of College and Research Libraries of the American Library Association, for after devoting much more space in its statement of standards on the quality of the library books that need to be acquired by colleges emphasizing four-year programs for undergraduates, it presents a numerical formula. Specifically, it denotes a minimum collection of 50,000 "carefully chosen" volumes for a student body of 600 students, increasing for every additional 200 students by 10,000 additional volumes, and suggests that the rate for necessary growth may slow down when a collection reaches approximately 300,000 volumes.

The figures have sometimes been criticized as arbitrary. But 50,000 volumes is a minimum base, figures are needed in the midst of any budget approximation, and no one else has come up with another acceptable numerical standard. The fact that quantity cannot be equated with quality in book collections grows out of differences in function, point of view, and purpose. Budget authorities work with figures and cannot know intimately the

TABLE V

QUANTITATIVE FORMULA FOR ACADEMIC LIBRARY COLLECTIONS

BY VERNER W. CLAPP AND ROBERT T. JORDAN*

	Books		Periodicals		Documents	Total
	Titles	Volumes	Titles	Volumes	Volumes	Volumes
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

*See Verner W. Clapp and Robert T. Jordan, "Quantitative Criteria for Adequacy of Academic Library Collections," College and Research Librarios, September, 1965, pp. 371-80. The article is the most sophisticated treatment of its subject in print, yet the formula suggested is incomplete and does not answer the problem of quantity in a definitive, across-the-board manner. What it does do is to suggest in quantitative terms, as in the above table, some of the important qualitative factors in building a sound academic collection over a period of time; for example, in addition to the basic collection of 50,750 volumes it postulates 50 additional titles (60 volumes) for every faculty member FTE but suggests that these be added at the rate of 3 a year over a 16-year period, which is postulated as the predictable "life" of an academic library collection. More importantly, the article points out the many qualitiative factors which can affect an academic library collection. Such factors are significant for library planners on a particular campus seeking to fit the adequacy of a library collection to the institution's educational needs. Every academic library administrator should be thoroughly familiar with its suggestions.

materials or the objectives at stake. Quality can be applied only by those closely involved with the selection of books on and for a particular campus. Theoretically, those responsible for building a specific library collection could become so convinced of the significance of their mission and their performance in carrying it out that they could impose their conviction on the appropriating authorities - or the appropriation authorities could be so sympathetic to the purpose and performance of a particular college or library administration that it would quickly accept its proposals at face value. Such attitudes, however, are not usually within the roles played by either group of participants. Thus a quantitative standard is acceptable as a first guideline. The guideline is especially useful in budgeting for publicly supported academic institutions where appropriating bodies are concerned not with one or two institutions but with many of varying size and tradition, and where, as in Maryland, the institutions are attempting to cope with numerous and varied problems in their efforts to respond to student and teacher demand.

It is useful here to distinguish between library collections at four-year state colleges and those at two-year community colleges. Not only are there major differences between lengths and shapes of program in the two types of academic institutions to which the libraries must fit their resources, but there are differences in rate and manner of collection growth.

The State Colleges

Like other four-year institutions, the state colleges have developed in a more traditional manner. Their library collections must continue to grow with accessions from the modern world

burgeoning with new knowledge, but they cannot ignore the pattern of their past "established" history. The pattern was noted by the late Fremont Rider when he discovered some years ago that most academic library collections double every sixteen years. In this period a library completes a cycle. Depreciation of earlier accessions sets in. Subjects which are still standard in teaching and learning have to be renewed with new editions and modern replacements. Some older material - obsolete editions, extra copies of works now seldom used, broken sets of unindexed periodicals, damaged volumes - has to be weeded. Many, of course, having longer life than others and still circulating occasionally, should remain on the shelves.

It is no arbitrary judgment to estimate that the basic collection for a liberal arts college should be somewhere between 50,000 and 75,000 volumes. Harvard University's Lamont list, first to be related to an undergraduate library and having a number of weaknesses, numbered 39,000 titles. The University of Michigan's undergraduate collections, published in 1964, improved over Lamont and totalled 56,550 titles. A bibliography for undergraduate library use, sponsored by University of California librarians and checked by many nonlibrary experts outside as well as within the state, numbered 53,400 titles.[1] Our first attention

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[1]Published as Books for College Libraries: a Selected List of Approximately 53,400 Titles Based on the Initial Selection Made for the University of California's New Campus Program and Selected with the Assistance of College Teachers, Librarians and Other Advisors. A.L.A., Chicago, 1967. Its program suggests that 15,000 volumes of periodical files be added to the basic book collection, but no list of periodicals has been included.

here is on numbers, yet the most interesting factor in the California list, a major one, is its solid quality; there is not an academic library in Maryland that could not profit from extensive use of it in their selection; it is assumed that a number (there is no source for knowing how many) have already profited.

Table VI, showing the extent of library collections, includes that of the University of Maryland though the University's growth formula, necessarily differing from that for four-year undergraduate institutions, is its own. Although the library's annual accession rate has averaged better than 100,000 volumes over the past three years, the total collections have been falling behind the schedule set by the University's library study in 1965. Meeting its annual objective in collections is important if the University is to maintain its growth as Maryland's chief state-supported research center.

8. It is recommended that the University of Maryland be given full financial support in meeting its growth objective in library collections.

Of the state colleges only Salisbury and Maryland State meet the numerical level of collections in the standard's formula. Of the others whose collections' growth may be compared with that of three years ago as recorded in the Nelson Report, Coppin, Frostburg, and U.M.B.C. have improved their holdings relative to the standard. In these three years Bowie has slipped back slightly in the ratio of holdings to standard. In the same period the ratios for Morgan and Towson, with increasing enrollments pressing heavily against the resources of each institution, have markedly fallen. Both Towson, with a large new building of 600,000-volume

TABLE VI

HOLDINGS OF PUBLIC FOUR-YEAR COLLEGES AND UNIVERSITY OF MARYLAND COMPARED WITH STANDARD FORMULA*

Institution	Fall, 1968 Enrollment FTE	Recommended Holdings	Actual Holdings 1968-69	Difference
Bowie State College	1,008	70,000	44,836	-25,164
Coppin State College	869	63,450	60,543	-2,907
Frostburg State College	2,237	131,850	85,294	-45,933
Morgan State College	3,890	214,500	110,917	-103,583
Salisbury State College	855	62,750	82,125	+19,375
St. Mary's Coll. of Md.	443	50,000	23,126	-26,874
Towson State College	6,151	**	131,101	--
University of Maryland	29,234	**	1,092,054	--
U.M.B.C.	1,707	105,350	76,737	-28,613
Maryland State College	671	53,550	56,288	+2,738

* 50,000 Vol. 1st 600 students
10,000 Vol. every 200 students thereafter

**Above 300,000 Volumes, formula becomes less appropriate or applicable. Applying formula in full, Towson's recommended holdings would be 327,500 volumes.

capacity, and Morgan, with a new building planned for 1971, could accommodate collections larger than the number of volumes projected for them under the standard.

A master's candidate requires several times the number of volumes to draw upon as does an undergraduate. In the face of the number of master's programs and enrollments in state colleges (see Table VII), it should be a matter or priority to eliminate deficiencies in library collections as rapidly as possible. Such programs and enrollments will markedly increase if the need for them as outlined in the MCHE's Master Plan is met in the coming years. Furthermore, if an urban university were to be established by the merging of four state colleges in the Baltimore area, as has been proposed, one of its developments would be a Ph.D. program, which would require book resources in urban studies ten times stronger than for the largest master's program.

9. It is recommended that funds be appropriated to bring the holdings of state college libraries requiring increases in their annual accessions rate much nearer to, if not in every case entirely up to, the recommended holdings formula.

The quality of library book collections, fully as important as their quantity, is within the local responsibility of each individual college and library administration. The book collection should be related both directly and indirectly to the curriculum, it should include a variety of books for purposes of recreational reading as well as for stimulating and satisfying intellectual curiosity, and its reference collection should range outside the curriculum to bibliographies and other standard works in all major fields of knowledge. For basic selections the library should make

TABLE VII

MASTER'S PROGRAMS AND ENROLLMENTS
IN STATE COLLEGES, FALL, 1968

Institution	Number of Master's Programs	Graduate Enrollment* FT	PT
Bowie State College	7	4	383
Coppin State College	2	13	193
Frostburg State College	6	—	558
Morgan State College	5	25	430
Salisbury State College	NA	—	115
St. Mary's College of Md.	—	—	—
Towson State College	7	44	1,350
U.M.B.C.	NA	—	5
Maryland State College	—	—	—
	—	—	—
PUBLIC 4-YEAR STATE TOTAL	27	86	3,034

*Part-time enrollment cannot be evaluated in FTE.

Enrollment figures reported to Maryland Council for Higher Education.

liberal use of Books for College Libraries, and for maintaining an annual increment of authoritative and timely publications, it should regularly check listings and reviews in the monthly magazine Choice. Where additional or advanced material is needed for honors work, independent study, or master's programs, there are available for utilization standard bibliographies prepared by specialists in nearly every field of interest for advanced college work. Selection is the responsibility of the library director working in conjunction with the faculty.

10. It is recommended that the library director be a member of the college curriculum or educational planning committee; it is further recommended that the director be a member of the college's Library Development Committee, commonly considered useful in an advisory role, and that one of the committee's major duties be to assist in planning the general growth of the library's collections.

Community Colleges

A decade ago minimum standard size of a book collection for a junior college of a thousand students was postulated at 20,000 volumes - considerably less than for a four-year college. Today this can hardly be the norm. Both the role and rates of growth of the community college have changed from those of the earlier two-year institution.

The community college, first fostered in Maryland as a local institution, has become in a brief span the fastest growing segment in the state's system of higher education. It brings higher education within the economic range of an increasing number of

state residents. It offers not only introductory work for transfer to junior and senior years in a four-year college, but programs for adult (or continuing) education and terminal-occupational programs for young people interested in preparing themselves for jobs in the new technology. Table VIII gives both present situation and future perspective on the growth of terminal-occupational programs, all of them requiring educational resources in addition to those required in the first two years of a liberal arts curriculum. The community college library reflects these new factors in such degree that it can no longer be considered either a pale imitation of the library of the liberal arts college or an institution necessarily smaller in size. One team of authorities has suggested that because a greater amount of materials is necessary to maintain the diversified programs offered by a comprehensive community college its "library should probably be larger than that of a comparable-sized four-year liberal arts college."[2]

Youth of organization, new programs, and rapidly continuing growth of student population are the principal reasons for quantitative development of collections. The traditional sixteen-year cycle of growth does not apply. Though the community colleges vary in the first stages of their advancement and one cannot accurately predict their approach to maturity, a decade appears to approximate more closely their first cycle of growth. The recent explosion of published knowledge and the immediate demand

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[2]F. P. Merlo and W. D. Walling, Guide for Planning Community College Facilities (New Brunswick, N.J.: Division of Field Studies and Research. Graduate School of Education. Rutgers--the State University, 1964), p. 34.

TABLE VIII

TERMINAL-OCCUPATIONAL PROGRAMS IN MARYLAND COMMUNITY COLLEGES OPERATIONAL, 1968-69; AND PROPOSED
(Proposed programs in parenthesis.)

Institution	Agriculture	Applied and Graphic Arts	Business and Management	Health Services	Technical-Vocational	Miscellaneous Services	Operational	Proposed
Allegany Community Coll.	(2)		3(2)	(3)	2(1)	(2)	5	(10)
Anne Arundel Comm. Coll.	(2)	2(2)	3(6)	2(4)	4(7)	2(3)	13	(24)
Comm. Coll. of Baltimore		2(2)	5(3)	9(9)	7(6)	9(3)	32	(23)
Catonsville Comm. Coll.		(2)	4(3)	5(8)	7(3)	(5)	16	(21)
Charles Cty. Comm. Coll.			6	(3)	3	(2)	9	(5)
Chesapeake College			2(1)	(1)	(3)	1	3	(5)
Essex Community College			5(2)	3(7)		8(1)	16	(10)
Frederick Comm. College			1(3)	2	2(3)	(1)	5	(7)
Hagerstown Junior College			3	(1)	7	(1)	10	(2)
Harford Junior College	(1)	(6)	3(4)	1(5)	(10)	(4)	4	(30)
Montgomery Jr.-Takoma Pk.		1	4(10)	4(9)	3(1)	1(6)	13	(26)
Montgomery Jr.-Rockville		2	4(12)	1(4)	2(16)	2(7)	11	(39)
Prince George's Comm. Coll.		(1)	3(1)	1(2)	(9)	(1)	4	(14)
Cecil Community College*			1(1)	(2)		1	2	(3)
TOTALS: Operational		7	47	28	37	24	143	
Proposed	(5)	(13)	(48)	(58)	(59)	(36)		(219)

*Opened fall, 1968.

Figures from revised copy, "An Inventory of Programs in Maryland's Public and Private Universities and Colleges," MCHE, January, 1969.

for technicians to apply that knowledge has much to do with the unprecedented need for substantial collections of materials for community colleges. The bulk of these materials cannot be supplied by interlibrary loan or in collections elsewhere but should be available in the library on the home campus.

It is consequently suggested that the basic quantitative objective of the community college library be to acquire a collection of 40 volumes for every student in the first thousand students FTE, 30 volumes for each of the second thousand, and 20 volumes for each additional student thereafter.[3] This formula meets the criterion for a substantial collection in the early stage of growth and the factor of later slowdown in acquisitions rate. Only one of the community libraries presently meets the standard set by the formula (Table IX), but it is suggested that the formula be applied as an objective to be met in the next five years. For purposes of practical discussion and planning, these colleges appear to be in the midst of their first decade of development. The three colleges with the largest gaps to fill to meet the objective - Community College of Baltimore, Montgomery Junior at Rockville, and Prince George's - have the largest student populations; their problem in all educational phases is to keep abreast of student demand, and it is vital that they not fall behind in this educational resource.

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[3]No distinction has been made here between titles and volumes. In practice, however, it is recognized that small enrollments call for a heavy emphasis on purchase of single copies of titles whereas larger enrollments call for a proportionately larger number of copies (included in the volume count).

TABLE IX

HOLDINGS OF COMMUNITY COLLEGE LIBRARIES COMPARED WITH FORMULA*

Institution	Fall, 1968 Enrollment FTE	Recommended Holdings	Actual Holdings 1968-69	Difference
Allegany Community Coll.	428	17,120	25,583	+ 8,463
Anne Arundel Comm. Coll.	1,220	46,600	21,211	-25,389
Comm. Coll. of Baltimore	3,404	98,080	43,567	-54,513
Catonsville Comm. Coll.	2,099	71,980	34,972	-37,008
Charles Cty. Comm. Coll.	423	16,920	12,361	- 4,559
Chesapeake College	316	12,640	7,426	- 5,214
Essex Community College	1,475	54,250	20,398	-33,852
Frederick Comm. College	584	23,360	9,194	-14,166
Hagerstown Junior College	892	35,680	30,419	- 5,261
Harford Junior College	1,072	42,160	22,622	-19,538
Montgomery Jr.-Takoma Park	1,509	55,270	28,924	-26,346
Montgomery Jr.-Rockville	2,954	89,080	23,071	-66,009
Prince George's Comm. Coll.	3,193	93,860	37,000	-56,860

*40 vol. per student, 1st 1,000.
30 vol. per student, 2nd 1,000.
20 vol. per student, balance of enrollment.

11. It is recommended that funds be appropriated to bring the holdings of community college libraries requiring increases in their annual accession rates over the next five years much closer to, if not in every case entirely up to, the recommended holdings standard.

Quality is as much at stake in the community college library as in that of the four-year liberal arts institution. Responsibility for quality, again, lies with the college and library administration. Where there is a college organization by division, the library administrator should be a division head, and he should be a member of the curriculum committee and of a library development committee (if not also its chairman) as noted in Recommendation 10.

For books in the general and liberal arts program, bibliographies for junior colleges are outdated, except for Frank J. Bertalan's The Junior College Library Collection (1968) which can be used judiciously. Library selection can draw more confidently upon Books for College Libraries and currently on the lists and reviews as they appear in Choice. For terminal-occupational programs, selection may be more difficult. Current indexes and reviews of technical books will be helpful, but heavy reliance will fall on assistance in selection from teaching faculty.

Other Materials

Frostburg State and Salisbury State are regional depositories for Federal government documents. Other libraries may purchase such documents as they need and process them in their general collections. One common weakness in academic libraries is documents

on the state level; this may be one area (we have no information) in which Maryland's college libraries should make a greater effort at acquisition. State documents are sometimes difficult to learn about and obtain in any consistent fashion.

Periodicals are secondary only to books as academic library materials. Clapp and Jordan recommend 125 periodical subscriptions as the basic minimum for two-year colleges, and 250 for four-year colleges. However, such is the importance of current periodicals for terminal-technical programs that 250 appears the best minimum figure for community colleges as well as four-year institutions. Table X shows that all but three community colleges have reached this level, and each of the three has an enrollment of less than 600.

The problem again, however, is not so much quantity as quality and pertinence to the individual institution's curriculum and program. A periodical indexed and accompanied by a bound back file is a valuable resource simply on the basis that readers, using the indexes, will ask for it. (An exception to be taken account of here is the useful new technical journal which has not yet "made" one of the major indexes.) Librarians may choose their subscription list from among the major periodical tools: Readers' Guide to Periodical Literature (130 selected general and nontechnical periodicals), International Index (170 journals in the social sciences and humanities), and Applied Science and Technology Index (200 journals). For academic libraries, however, a larger list selected specifically for academic use is Evan Farber's Classified List of Periodicals for the College Library. Its last edition,

TABLE X

CURRENT PERIODICALS AND OTHER SERIALS RECEIVED BY MARYLAND'S PUBLICLY SUPPORTED ACADEMIC INSTITUTIONS
Reported August, 1969

Institution	Periodical Titles	Other Serial Titles
FOUR-YEAR COLLEGES AND UNIVERSITY OF MARYLAND		
Bowie State College	501	103
Coppin State College	526	2,300
Frostburg State College	937	Est. 600
Morgan State College	771	130
Salisbury State College	405	200
St. Mary's College of Md.	430	18
Towson State College	1,060	924
University of Maryland	14,206*	7,874**
U.M.B.C.	1,951	328
Maryland State College	675	120
TWO-YEAR COLLEGES		
Allegany Community College	220	14
Anne Arundel Community College	250	100
Community College of Baltimore	534	0
Catonsville Community College	356	112
Charles County Community College	185	20
Chesapeake College	279	41
Essex Community College	416	262
Frederick Community College	184	11
Hagerstown Junior College	399	NA
Harford Junior College	375	50
Montgomery Junior College-Takoma Park	275	8
Montgomery Junior College-Rockville	299	50
Prince George's Community College	414	179

*Includes duplicates
**Incomplete count

issued in 1957, is now outdated, but a new and revised list, to be published in 1970, will include some 900 titles, 60 per cent more than previously. There is also to be available this fall Bill Katz's Magazines for Libraries, a new annotated list of more than 2,000 journals which will focus partly on the needs of academic libraries. Periodical titles need to be weeded more frequently than books, and all of Maryland's academic libraries should find the new lists helpful in evaluation of their own collections.

Fifteen thousand volumes of bound periodicals is the recommended basic collection for four-year colleges, and the same number but with many different titles, would be a useful objective for community colleges. A growing number of these back files (as well as publications like newspapers, out-of-print items and documentary series) can now be more easily purchased in microform - microfilm, microcard, microprint, and microfiche - rather than in their original form. Maryland's academic libraries, both public and private, have recently been increasingly adding microforms to their collections as shown in Table XI A and B. Microforms are considerably less simple and convenient to use than original print since reading machines are required to "blow up" the microtext to readable size. Recent introduction of the reader-printer, however, has made feasible the readable reproduction of brief materials from microfilm and microfiche, and despite a cost higher than Xerox copying, librarians should anticipate greater use of this device in reproduction of periodical articles for both local students and faculty and as an excellent substitute for interlibrary loan of back files.

TABLE XI A

GROWTH OF MICROFORM HOLDINGS BY YEAR-END TOTALS IN MARYLAND PUBLIC INSTITUTIONS OF HIGHER EDUCATION

Institution	1966 - 1967 Reels of Micro Film	1966 - 1967 Units Other Micro Form	1967 - 1968 Reels	1967 - 1968 Units	1968 - 1969 Reels	1968 - 1969 Units
FOUR-YEAR COLLEGES, AND UNIVERSITY OF MARYLAND						
Bowie State College	387	0	499	0	502	351
Coppin State College	1,904	0	2,127	0	2,720	0
Frostburg State College	1,457	7,319	2,126	7,872	3,390	8,714
Morgan State College	2,863	1,438	3,523	1,460	3,728	1,642
Salisbury State College	1,172	324	1,292	1,326	2,517	1,907
St. Mary's Coll. of Md.	2	0	558	0	1,052	3,039
Towson State College	3,816	20,275	5,725	22,285	6,164	23,904
University of Maryland	11,689	23,288	14,572	92,594	17,960	210,147
U.M.B.C.	0	0	887	0	3,437	0
Maryland State College	1,568	139	1,831	324	2,727	3,216
TWO-YEAR COLLEGES						
Allegany Comm. College	170	76	228	76	287	76
Anne Arundel Comm. College	0	0	1,275	0	1,418	0
Comm. Coll. of Baltimore	1,436	0	2,312	0	2,954	0
Catonsville Comm. College	782	0	787	0	1,486	491
Charles Cty. Comm. College	0	0	0	0	13	0
Chesapeake College	0	0	1,148	0	1,355	0
Essex Community College	0	0	771	0	917	0
Frederick Community Coll.	0	0	0	0	14	0
Hagerstown Junior College	0	0	483	2,225	1,125	2,225
Harford Junior College	360	0	462	0	462	0
Montgomery Jr.-Takoma Park	463	0	581	0	718	0
Montgomery Jr.-Rockville	246	0	405	0	759	25
Prince George's Comm. Coll.	433	0	682	0	880	0

TABLE XI B

GROWTH OF MICROFORM HOLDINGS BY YEAR-END TOTALS IN MARYLAND PRIVATE INSTITUTIONS* OF HIGHER EDUCATION

Institution	1966 - 1967 Reels of Micro Film	1966 - 1967 Units Other Micro Form	1967 - 1968 Reels	1967 - 1968 Units	1968 - 1969 Reels	1968 - 1969 Units
FOUR-YEAR COLLEGES, AND UNIVERSITIES						
Baltimore Coll. of Comm.	0	0	0	0	164	0
Columbia Union College	0	2,054	0	2,095	0	2,136
Goucher College	3,850	Est1,000	4,036	1,019	4,205	1,019
Hood College	1,905	958	2,054	958	2,828	958
Johns Hopkins Univ.	12,000	384,000	10,856	454,500	NA	NA
Loyola College		2,478	560	2,478	620	29,100
Md. Inst. College of Art	0	354	0	600		854
Mt. St. Agnes College	338	190	333	190	NA	NA
Mt. St. Mary's College	1,481	1,672	1,961	NA	2,467	500
Coll. of Notre Dame of Md.	933	450	961	450	961	450
Peabody Consv. of Music			2	0	NA	NA
St. Johns College	25	0	25	0	25	0
St. Joseph College	5	0	202	0	350	241
St. Mary's Sem. Univ.		0	1,253	0	NA	NA
Univ. of Baltimore	328	7	2,104	400	2,403	956
Washington College	1,273	5,120	1,345	5,120	NA	NA
Western Maryland College	965	133	1,306	138	1,568	138
TWO-YEAR COLLEGES						
St. Charles College	0	0	98	2	(See St. Mary's Sem. University)	
Kirkland Hall					239	
Trinitarian College	90	0	98	2	NA	NA
Xaverian College			257	0	NA	NA

*Institutions without microform or not reporting in these three years not included.

The latest invention in mini-form, ultra-microfiche, reduces the original type-size still further and requires still another type of reading machine; it has so far been limited in promotion and production to the packaging in cartridge form of a series of large library book collections considered beyond the resources of the small or medium-size college library. The expense and use of ultra-microfiche should probably be shared in consortia or by groups of libraries.

No other material is more uncertain or troublesome for an academic library to relate to than the audio-visual. There are no recognized standards of quantity or quality.[4] The A-V department's quarters may be in the library or elsewhere, and in either case the department may be administered under the library director or under its own independent leadership. Nor are its materials or its mission consistently defined. In one institution its chief role may be to borrow and show films. In another, the department, an expansion of activities under the title of "media center" or "learning resources center," may include some former library activities as well as having responsibilities for operating a language laboratory, a computer center, or closed circuit television. The uncertainty of its role in colleges may stem from the rapid growth of electronic technology and production, from a certain competition with the intellectual and longer established method of learning by reading, or from the fact that media directors are distracted from becoming connoisseurs of A-V materials (paralleling "bookmen" in

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[4]The National Education Association's Department of Audio-visual Instruction has drawn up quantitative standards for personnel, equipment and materials in the schools, but there are none for higher education.

the library) by the need for constant attention to machines. Whatever the reasons, the media department and the library are frequently in an uneasy state of tension.[5]

The presence of audio-visual media is well established in Maryland's publicly supported colleges, particularly in its community colleges. Yet in a brief informal survey, the extent of audio-visual activities and responsibilities appear to vary considerably. On campuses where the library is established and the A-V department is dynamic or growing, the relationship between the two tends to be restless and shifting, and this can be true whether or not the department is in the library, and whether or not it is under library administration. The consultant also has the strong impression that whether A-V is considered a part of the library or whether it is administered separately, there is rarely any planned, consistent ratio in budget expenditures between the two as there should be.

12. It is recommended that a study be made of the economic and administrative relationships between media departments and libraries on the campuses of Maryland's publicly supported colleges in order to establish a more rational pattern of their use in the total educational programs of these institutions.

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[5]Bettye U. Johnson and Densil Swiger report a brief survey of current audio-visual organizational practices in many American colleges in "New Research: How Colleges Organize Media Services," College and University Business 45 (November, 1968): 78-80.

CHAPTER IV

PERSONNEL

A major measure of the strength of a library is the quality and size of its staff. Without competent people, employed in sufficient numbers to handle library services as they develop, no amount of educational materials, machines, or bricks and mortar will accomplish the desired result. Wages and salaries are the largest single item in the budgets of nearly all academic libraries in the United States.

The best available shorthand measure of staff adequacy is the proportion of full-time students to professional staff members. No standard has been set up by American college and university librarians, but the ratio adopted by Canadian librarians is one professional worker to every 300 students.

Table XII gives the ratio of professional staff FTE to student FTE enrollments for Maryland's publicly supported institutions of higher learning. Of the institutions which, according to the suggested ratio, are understaffed, five are community colleges, all of which have been suffering growing pains. Of the larger institutions, the University of Maryland is better supported than the state colleges by a substantial nonprofessional staff, but in contrast, its enrollment includes several thousand graduate students, whose library needs are greater than those of undergraduates; Towson State, more seriously affected, has recently been asking without

TABLE XII

RATIO OF PROFESSIONAL LIBRARY STAFF TO FULL-TIME EQUIVALENT ENROLLMENT IN MARYLAND PUBLICLY SUPPORTED INSTITUTIONS OF HIGHER EDUCATION, FALL 1968

Institution	FTE Enrollment* Fall 1968	Number of FTE Professional Library Staff	Ratio of Professionals to Students
FOUR-YEAR COLLEGES, AND UNIVERSITY OF MARYLAND			
Bowie State College	1,008	3	1:336
Coppin State College	869	4	1:217
Frostburg State College	2,237	8	1:280
Morgan State College	3,890	14	1:278
Salisbury State College	855	6	1:143
St. Mary's College of Md.	443	4	1:111
Towson State College	6,151	13	1:473
University of Maryland	29,234	90	1:326
U.M.B.C.	1,707	6	1:285
Maryland State College	671	4	1:168
TWO-YEAR COLLEGES			
Allegany Community College	428	2	1:214
Anne Arundel Comm. College	1,220	2.5	1:488
Community College of Baltimore	3,404	8.2	1:415
Catonsville Comm. College	2,099	6	1:350
Charles Co. Comm. College	423	2	1:211
Chesapeake College	316	1	1:316
Essex Community College	1,475	3	1:492
Frederick Community College	584	2	1:292
Hagerstown Junior College	892	3	1:297
Harford Junior College	1,072	4.5	1:238
Montgomery Jr. - Takoma Park	1,509	5	1:302
Montgomery Jr. - Rockville	2,954	5	1:591
Prince George's Comm. Coll.	3,193	5.25	1:608

*The demands made on libraries, especially where graduate students are involved, may be more accurately reflected by a head count of students than by FTE enrollment.

Enrollment figures from MCHE. Staff figures reported by institutions on U.S. Office of Education HEGIS forms.

success for more staff assistance.

A variable in the difference in ratios among some of the institutions listed in the table is institutional size. The minimum standard for staff in four-year colleges, regardless of smallness of enrollment, is three professional librarians, and for two-year colleges the minimum was put a decade ago at two professionals and one experienced nonprofessional. These figures are an arbitrary necessity, for an academic library giving adequate service will be open a minimum of 65 hours a week, including five evenings, with a competent staff member in attendance at all times except the dinner hour.

As the library grows, the makeup of the staff should approach or reach the ratio of two nonprofessional assistants to every one FTE professional librarian.

As for student workers, they are useful on at least two counts - as a current liason with the student body and as a developmental pool for eventual full-time nonprofessional or professional library workers, currently much needed everywhere. They may be included in the nonprofessional work force (see Table XIII), but if their assistance FTE makes up more than a third of nonprofessional FTE, their training and supervision is likely to require an undue amount of staff time and attention, and the quality of library service will tend to deteriorate. Students should not be accepted for library jobs on federal work-study funds or on any other basis without an interview and a brief aptitude test.

The small library in its beginnings may not be able to attain the one-to-two professional-nonprofessional ratio. But as the library grows, such should be its objective. The tendency toward

TABLE XIII

LIBRARY STAFF PROFILES, INCLUDING STUDENTS, 1968-69

Institution	Professional Staff FTE	Nonprofessional Staff FTE	Total Student Assistance Hours*	Total Student Assistance FTE**	Total Nonprofessional FTE	Ratio Professional to Nonprofessional
FOUR-YEAR COLLEGES, AND UNIVERSITY OF MARYLAND						
Bowie State College	3	4.5	2,520	1.44	5.94	1:198
Coppin State College	4	6	5,430	3.1	9.1	1:2.27
Frostburg State College	8	8	6,286	3.59	11.59	1:1.45
Morgan State College	14	12	14,974	8.56	20.56	1:1.47
Salisbury State College	6	3	2,784	1.59	4.59	1:0.77
St. Mary's Coll. of Md.	4	3.8	5,054	2.89	6.69	1:1.76
Towson State College	13	16	14,122 3/4	8.07	24.07	1:1.85
University of Maryland	90	148	142,822	81.61	229.61	1:2.55
U.M.B.C.	6	9	17,256	9.86	18.86	1:3.14
Maryland State College	4	3	7,845	4.48	7.48	1:1.87
TWO-YEAR COLLEGES						
Allegany Community College	2	1	4,435	2.53	3.53	1:1.77
Anne Arundel Comm. College	2.5	1.5	5,190	2.97	4.47	1:1.78
Comm. Coll. of Baltimore	8.2	4	9,750½	5.57	9.57	1:1.17
Catonsville Comm. College	6	8	8,000	4.57	12.57	1:2.1
Charles Cty. Comm. Coll.	2	1.5	4,427	2.53	4.03	1:2.02
Chesapeake College	1	3.6	5,106	2.91	6.51	1:6.51
Essex Community College	3	3	3,577	2.04	5.04	1:1.68
Frederick Community Coll.	2	1	567	0.32	1.32	1:0.66
Hagerstown Junior College	3	1	3,002	1.72	2.72	1:0.91
Harford Junior College	4.5	2	3,200	1.83	3.83	1:0.85
Montgomery Jr.-Takoma Park	5	6	576	.33	6.33	1:1.27
Montgomery Jr.-Rockville	5	4	900	.51	4.51	1:0.90
Prince George's Comm. Coll.	5.25	12	11,330	6.47	18.47	1:3.52

*Includes following hours of nonstudent work in these institutions: Morgan State 2,100 hours; Salisbury State 2,784; University of Maryland 3,533; Anne Arundel 990; Community College of Baltimore 2,903½; Charles County 1,273; Chesapeake 44.

**Student FTE calculated on basis of 1,750 hours = 1 FTE nonprofessional.

a greater number of nonprofessionals proportional to the number of professionals should be accelerated not only by growth in size, but by allocation of increasing clerical work to clerical (nonprofessional) workers, by conversion to Library of Congress services and classification, and by eventual progress in automated assistance. On the other hand, pressing mechanization and packaged programs in the beginning without the full minimum of professional staffing is likely to inhibit interpersonal relationships with faculty members and the development of the library as a respected college department. The librarian's professional touch is never more needed than in the establishment of a library and its patterns of use.

13. It is recommended that Maryland's public academic libraries recognize as a guideline the ratio of one professional librarian for every 300 students enrolled FTE; and that all libraries as they grow, approach as rapidly as possible a staff ratio of one professional librarian FTE to two nonprofessional assistants FTE including no more than a minor proportion of student participation.

Another measure of staff adequacy is financial, relating to salaries and wages within the library budget. Two types of items - salaries and wages, and funds for books, other materials and binding - dominate an annual library budget. The ratio between these two clusters of expenditures will normally fall somewhere between 3 to 2 and 2 to 1 - 60-67 per cent for salaries and wages, 40-33 per cent for books, periodicals, other materials and binding. Table XIV shows that in 1968-69 only three community colleges and three state colleges fell within the limits of the

TABLE XIV

RATIO OF TOTAL WAGES AND SALARIES TO TOTAL SUM FOR BOOKS, OTHER MATERIALS AND BINDING IN MARYLAND PUBLICLY SUPPORTED INSTITUTIONS OF HIGHER EDUCATION 1968-1969

Institution	Salaries and Wages*	Books, Materials and Binding	Percent for Salaries and Wages	Percent for Books, Materials and Binding
FOUR-YEAR COLLEGES, AND UNIVERSITY OF MARYLAND				
Bowie State College	$ 36,392	$ 56,864	39.02%	60.98%
Coppin State College	67,782	44,403	60.42	39.58
Frostburg State College	142,834	125,248	53.28	46.72
Morgan State College	208,964	85,344	71.0	29.0
Salisbury State College	71,657	87,845	44.93	55.07
St. Mary's Coll. of Md.	64,383	41,520	60.79	39.21
Towson State College	239,195	141,934	62.76	37.24
University of Maryland	1,664,286	1,307,716	56.0	44.0
U.M.B.C.	127,250	311,821	28.98	71.02
Maryland State College	68,586	54,806	55.58	44.42
TWO-YEAR COLLEGES				
Allegany Community Coll.	$ 33,927	$ 8,004	80.91%	19.09%
Anne Arundel Comm. Coll.	43,549	14,000	75.67	24.33
Comm. Coll. of Baltimore	94,112	34,135	73.38	26.62
Catonsville Comm. Coll.	117,972	55,000	68.2	31.8
Charles Cty. Comm. Coll.	31,051	25,000	55.40	44.60
Chesapeake College	24,198	24,477	49.71	50.29
Essex Comm. College	64,911	33,497	65.96	34.04
Frederick Comm. College	18,157	19,128	48.70	51.30
Hagerstown Junior College	34,552	38,346	47.4	52.6
Harford Junior College	55,298	33,701	62.13	37.87
Montgomery Jr.-Takoma Park	97,705	22,546	81.25	18.75
Montgomery Jr.-Rockville	83,557	67,093	55.46	44.54
Prince George's Comm. Coll.	116,083	77,047	60.11	39.89

*Includes federal work-study funds.

norm; four others may be said to come fairly close to either its upper or its lower limits. That over half of Maryland's academic libraries markedly miss falling within the limits of the norm's pattern suggests serious imbalance of budget. For many in the group, however, it also suggests something else. In eleven institutions the weak item in the ratio is the one for wages and salaries. Other evidence points to the conclusion that, particularly in several state colleges, there is a need to beef up salaries either individually, on a staff basis, or both.

Professional Staff

Figures on beginning salaries for professional librarians are published annually. In the Library Journal for June 15, 1969 the national average (mean) salary for all 1968 library school graduates was $7,660; graduates with previous experience received an average salary of $8,517; without such experience, their average salary was $7,218. We do not have salary figures for all Maryland academic libraries, but samples from a number of public colleges range between $6,000 and $8,200. Whether salaries for experienced librarians follow a similar pattern would require further data and analysis.

With some exceptions Maryland's academic institutions compete for personnel in a high-salary area. The average salary of 1968 graduates of the University of Maryland's School of Library and Information Services was $8,017, fourth highest reported among the 43 accredited library schools in the United States. In the Washington-Baltimore area competition for competent personnel comes not only from academic sources. Graduates of Maryland's library school, with a minor background of office skills acquired

at a community college, can receive a federal government GS9 rating and begin work immediately at a salary of $9,230.

One aspect of Maryland's library salary problem is reflected in the library school's records. The school attracts a majority of its students from Maryland; in 1968-69, 174 out of 243 students pursuing a library degree came from within the state. From September, 1965 to January, 1969 the school's graduates numbered 196, of whom 167 responded to questionnaires about their employment. Of these, 96 reported positions in Maryland libraries - but in this period of four and a half years only 21 were employed in an academic library, either public or private, within the state. In a broad manner of speaking, Maryland's academic institutions appear to find it difficult to retain as professional librarians the state's own qualified citizen-students.

In a few institutions - Coppin, Bowie, Chesapeake, Maryland State - librarians report that lack of nearby housing or residential restrictions form an obstacle to attracting and retaining staff, professional as well as nonprofessional. Frostburg, in spite of persistent efforts, has discovered its geographical isolation a problem in hiring professionals. Nevertheless, money (the lack of it) is essentially at the root of this "evil."

The problem of hiring enough competent professional staff is most acute among some of the state colleges as appears in Table XV. At the present time state colleges must request special permission to fill vacant budgeted positions because of a "freeze" on state employment. Vacancies, however, are only the top of the iceberg. Hidden below the surface is the number of needed additional staff members asked for but denied in budget requests;

TABLE XV

VACANCIES IN POSITIONS BUDGETED FOR FALL TERM, 1969
IN STATE COLLEGES AND UNIVERSITY OF MARYLAND
Reported August 1969

Institutions	Budgeted Professional Positions	Budgeted Nonprofessional Positions	Unfilled Professional Positions	Unfilled Nonprofessional Positions
Bowie State College	5	4	1	1
Coppin State College	6	7	2	1
Frostburg State College	11	10	4	1
Morgan State College	11	16	0	0
Salisbury State College	8	4	1	0
St. Mary's College of Md.	7	4.8	3*	0
Towson State College	16	22	2	6
University of Maryland	89.5	161	8.5	12
U.M.B.C.	9	13	2	2
Maryland State College	8	1	2	0

*Includes Director of Library.

also to be included are the staff turnover with consequent lack of staff stability and continuity, and the considerable time taken from the chief librarian's normal administrative duties in the effort to find replacements.

Community college libraries report no vacancies - a condition growing out of their proportionately better financial support and from the fact that their professional salaries are usually negotiable and are often tied in with faculty rank and salary scale.[1]

Concerning faculty salaries, the MCHE's Master Plan says:

> "As the standard of living rises and salaries in general increase, salaries in higher education must also increase. If faculty salaries were to fall far below salaries in other fields, the faculty would seek employment in areas other than academic with a general deterioration in the quality of higher education."

In a national profession in which the job today seeks the man rather than the reverse, the professional librarian considering an academic position in Maryland is already in a condition analogous to that of the faculty member weighing the advantages of other employment. In the Washington-Baltimore area in particular he can see better salaries in government and special libraries, and sometimes better working conditions in public libraries or in private academic libraries.

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[1] In one community college library the director, presently hard up for shelving facilities, shifted funds from his liberal book fund in order to add the salary of a much needed professional staff member - a move reflecting not only the director's professional intelligence but his freedom from bureaucratic repression.

In order to serve a first-rate academic program, the academic professional librarian should be a co-equal member of the teaching faculty with a salary scale commensurate with the faculty's. In May, 1969 the American Association of University Professors reported that compensation for all faculty ranks at colleges and universities had risen 7.2 per cent during the year. Its salary survey gave average salaries by rank, type of institution, and type of control in 1968-69 (nine months basis). For public liberal arts colleges ("public colleges and emerging universities," a parallel category, differed by less than $12 a year in each rank) and for public junior colleges it gave the following figures:

	Public Liberal Arts Colleges	Public Junior Colleges
Professor	$15,274	$16,246
Associate Professor	12,133	12,903
Assistant Professor	10,120	10,776
Instructor	8,005	8,863

These are the salary averages which Maryland's public colleges have at least to meet if not to surpass and they should be the salary scale which the respective libraries should meet or surpass in a professional library ranking parallel to that of the teaching faculty.

14. In Maryland's publicly supported academic institutions in which professional library staff members do not yet have faculty status and rank and a salary scale paralleling that of the teaching faculty, it is recommended that they be accorded such status, rank and salary scale.

Nonprofessional Staff

The problem of attracting and retaining competent nonprofessional assistants in Maryland's academic libraries is as difficult as attracting professional staff, and as the proportion of trained nonprofessionals increases according to need, the problem will become acute. As Tables XIII and XV make clear, the majority of Maryland's public academic libraries need greater numbers of nonprofessional workers immediately, but with normal library growth and the development of mechanized devices, the numbers needed will be still greater in the near future. Lacking is not only sufficient compensation but for the state colleges enough flexibility in the State Merit system to accommodate the better candidates for nonprofessional jobs who might apply.

The general contours of the problem are not Maryland's alone but nationwide. Officials of the American Library Association, in some alarm over the national need for nonprofessional library personnel and over the confusion in efforts to solve it, have taken steps toward establishing policy in the training, recognition and employment of the nonprofessional. The policy envisions several levels of positions, but essentially it recognizes as the three most distinct categories the clerical worker; the nonlibrary professional who is a specialist not in librarianship but in subjects like information, business administration, or a foreign language; and the library technician, who is a modern, emerging figure requiring special training.[2]

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[2]Lester Asheim, Director of the A.L.A.'s Office for Library Education discusses policy in "Education and Manpower for Librarianship," A.L.A. Bulletin, October, 1968; definitions are elaborated in "The Subprofessional or Technical Assistant; a Statement of Definition," A.L.A. Bulletin, April 1968; criteria for education of technical assistants appear in the Newsletter of the A.L.A.'s Library Education Division, no. 68 (February, 1969).

The clerical worker is a well known, traditional figure in library nonprofessional jobs. The nonlibrary professional is a person of growing importance in large academic and research libraries requiring special expertise. For most Maryland academic libraries looking for added strength in their nonprofessional work, the most important figure would appear to be the library technician or technical assistant.

For four years Catonsville Community College has had a library technician program, and at least two other community college campuses propose similar programs within the next three years. The need is there, but the Catonsville experience is not promising. Since 1965, 65 students have taken courses in its technician program but no one has completed the program, and as of now it is being discontinued.

One library school expert in Maryland has suggested that libraries should set up their own interns training program for library assistants and other nonprofessional workers. This suggestion, however, is a kind of throwback to a public library scheme of on-the-job training, abandoned thirty years ago as a makeshift arrangement. More importantly, it is impossible for any but the largest institutions to establish such training without distorting or abandoning some of their own regular library services. The need is for post-high school academic training.

15. It is recommended that a study be made of the potential students and the curriculum required for training library technicians, with a view to establishing a successful program which would feed into Maryland's academic libraries the needed flow of nonprofessional workers.

A problem for the prospective library technician or for someone expecting a job at the end of his training is the single job level established under the State Merit system. The standard beginning salary for "Library Assistant" was recently raised to $4,411, with annual pay rising over six years to a dead end at $5,797. This is the only nonprofessional category under which the state college libraries can apply for nonprofessional assistance. Over the state of Maryland there are 25,000 positions in this category. Almost one-sixth (4,000) of them are now reported "vacant." The state's Personnel Office has not opposed expansion of the Merit System to advanced and better paying positions but requests to expand them have died on the vine.

The University of Maryland's library, operating under the University's current system of fiscal autonomy in the area of nonprofessional hiring, has established three levels of nonprofessional positions beginning with the one which is statewide. The university library has on its staff by far the largest nonprofessional representation, proportionately as well as numerically, of any state supported institution in Maryland. It is fair to say that the library with its problems of growth, could not operate successfully without these graded positions. The positions with attached salary ranges are:

Position	Salary Range
Library Assistant I	$4,411-5,797
Library Assistant II	$4,852-6,377
Library Assistant III	$5,871-7,715

16. It is recommended that Maryland extend its State Merit system for state college libraries to include three categories of nonprofessional library positions as they are currently in operation at the University of Maryland.

CHAPTER V

SUPPORT AND GROWTH

How much does it cost to save money?

That is "a good question" - one that would no doubt disturb an accountant unless the problem were more precisely defined and there were full access to all cost figures. This observer, who is no accountant but was once an administrator, is moved to ask the question rhetorically. He asks it as he views the budget process for state college libraries. The "cost" involved is not so much an item in dollars and cents as it is a matter of prolonged time, personal effort, and human frustration.

In order to establish a new professional or nonprofessional position in the library budget, the Library Director must include the position approximately a year in advance in the library's budget request. Beginning with the Library Director, the request must pass to, be considered by, and receive the approval of the following officials or agencies:

Library Director

*State College President and his budget officers

Board of Trustees of the State Colleges
Staff
*Board members

*State Budget Bureau

*Senate Finance Committee

*House Ways and Means Committee

Governor's staff (recommendations)

*General Assembly

*Governor

The asterisk indicates those stopping points at which the new library position may be dropped from the budget. Budget hearings are held for the state college budgets before the Senate Finance Committee and the House Ways and Means Committee take action. At these hearings all state college budgets are considered, and the college presidents, the Executive Director and several members of the Board of Trustees of the State Colleges as well as other interested parties are invited to attend and provide additional information or justification for specific items as requested. Few requests for such items as more library personnel make it to the end of the line.

No one would deny that budget hearings are necessary and useful or that questions of fact and program should be raised at such hearings. But is not institutional responsibility for institutional programs a reasonable objective of Maryland's system of higher education? If it is, would not some degree of fiscal autonomy - the opportunity for a state college to determine how it will apportion a lump sum budget - be an improvement over present methods?

Largely because of local county support (county 25 per cent of p student costs, the individual student 25 per cent, the state 50 per cent), the community colleges have a different approach to fiscal control. Although community colleges vary in their practices, most of them have, for example, a salary scale competitive with their county's salary system and in general have

a greater degree of autonomy in positions budgeted, personnel qualifications, and negotiation in hiring. Although the colleges do not participate in the State Merit system, their personnel are eligible (without legal requirement) for membership in state insurance and retirement plans.

17. It is recommended that state colleges receive greater autonomy in the apportionment of the total institutional budget allotted to each of them annually so that they may exercise greater control and responsibility over important items within those budgets.

Adequacy of support of a library can depend to some extent on local conditions but there are certain general criteria which are useful in determining such adequacy: the library's proportion of the total educational budget; the size of the library in relation to the type of academic programs offered; the expenditures of the library as compared with the size of the student body. In current expenditures an important question is whether the library is already well established or is still in the process of acquiring basic materials.

In Table XIV we have seen that slightly over half of Maryland's publicly supported academic institutions do not fall within the limits of the normal ratio of expenditures for salaries and wages to costs for books and other materials; this, however, is in part an indication of the need for internal adjustment of library budget items, and for some libraries also an indication of the need for improved salaries.

A better overall indicator of support is the library's proportion of its institution's general educational budget. Financial

support should normally not fall below a level of 5 per cent of the institution's sum for educational purposes. If a developing audio-visual department is under library jurisdiction or if graduate student enrollment is becoming an important factor in the institution's curriculum, 6-7 per cent is a more realistic base figure, and if the library is in a period of very rapid growth, the percentage may go to 10 per cent or higher.

According to this general norm (see Table XVI), as of now the libraries of Bowie, Morgan, Towson (especially in contrast to its need for expansion), Anne Arundel, Community College of Baltimore, and Hagerstown Junior College need more support. In contrast are the rapidly expanding libraries of the University of Maryland, Baltimore County Campus; St. Mary's College of Maryland, which has recently developed from a two-year to a four-year institution; and Chesapeake and Catonsville Community Colleges.

Another frequently applied measure of adequacy is the library's expenditure per student. For continuing support in four-year colleges $100 per capita is considered a standard figure. According to this norm, Bowie is somewhat nearer adequacy than the library's percentage of her institution's total budget would indicate, but the figure for Morgan and even more that for Towson, reinforce the judgment that an increase in support is much needed for both institutions.

There is no agreed-upon per capita norm for Maryland's community college libraries, but none of the figures in Table XVI seriously contradicts a norm of $75 per student. The average for all Maryland community college libraries is $76.60.

TABLE XVI

LIBRARY EXPENDITURES AS PER CENT OF TOTAL EDUCATIONAL EXPENDITURES IN MARYLAND INSTITUTIONS OF HIGHER EDUCATION, 1968-69; AND THEIR LIBRARY EXPENDITURES PER FTE STUDENT, FALL, 1968

Institution	Total Library Expenditures	Total Institutional Expenditures (Educational and General)	Percent For Library	Library Expenditure per Student
FOUR-YEAR COLLEGES, AND UNIVERSITY OF MARYLAND				
Bowie State College	$ 95,806	$2,533,311	3.78%	$ 95.05
Coppin State College	124,582	1,517,749	8.2	143.36
Frostburg State College	281,486	3,945,143	7.13	125.83
Morgan State College	288,816	7,372,054	3.9	74.25
Salisbury State College	158,795	1,824,220	8.7	185.73
St. Mary's Coll. of Md.	108,924	958,805	11.36	245.88
Towson State College	377,679	7,884,122	4.8	61.40
University of Maryland	3,135,320	NA	NA	89.89
U.M.B.C.	460,912	3,042,240	15.15	270.01
Maryland State College	120,658	1,652,896	7.29	179.82
TWO-YEAR COLLEGES				
Allegany Community College	$ 37,447	$ 694,510	5.39%	$ 87.49
Anne Arundel Comm. College	54,985	1,488,655	3.69	45.07
Comm. Coll. of Baltimore	142,961	3,549,542	4.02	42.00
Catonsville Comm. College	184,455	2,017,040	9.1	87.88
Charles Cty. Comm. College	56,051	862,000	6.5	132.51
Chesapeake College	47,746	389,100	12.3	151.09
Essex Community College	101,781	1,481,802	6.9	69.00
Frederick Community College	34,285	450,717	7.6	58.71
Hagerstown Junior College	38,346	834,524	4.6	42.99
Harford Junior College	85,653	1,288,472	6.64	79.90
Montgomery Jr.-Takoma Park	126,452	NA	NA	83.80
Montgomery Jr.-Rockville	151,694	NA	NA	51.35
Prince George's Comm. Coll.	204,202	3,272,329	6.2	63.95

Figures reported by institutions, U.S. Office of Education forms.

18. It is recommended that all state college libraries failing to reach a minimum level of 5 per cent of their total educational budget and a level of $100 of library expenditures per FTE enrolled student receive added support to attain these levels; and that all community college libraries failing to reach the minimum expenditure of 5 per cent of their total educational expenditures and a level of $75 library expenditure per FTE enrolled student receive the added support necessary to attain those levels.

Inflation is a salient factor in library financing. Book and periodical prices have shown marked annual increases in the past decade. Periodicals in chemistry and physics, for example, have more than doubled their costs in this period, and such important publications as Chemical Abstracts advanced from $80 a year in 1958 to $1,050 a year in 1968, and Biological Abstracts from $80 in 1958 to $640 in 1968. A prominent library administrator reviewing library costs a year ago called it conservative to estimate from rising prices and the increased volume of publishing that 15 to 20 per cent increases annually in book and periodical funds would be necessary for an academic library to maintain its needed level of acquisitions. This seems an over-estimate except as a library needs to "catch up" on its rate, yet increases are the order of the day and seem likely to continue.

The Bowker Annual of Library and Book Trade Information 1969 gives the following recent cost figures:

	1967	1968
Average periodical subscription	$ 8.02	$ 8.65
Average serial service price for science and technical journals	51.65	64.02

Trade and Technical Books		1967	1968
Selected Subjects Average Price	General Literature	$ 6.84	$ 7.83
	Technology	12.86	12.93
	Art	12.32	12.00
	Education	5.62	6.22
	History	8.21	9.03
Average price per book for all books published		$ 7.99	$ 8.47

The average increase in book prices for 1968 over 1967 was 6 per cent. If one includes inflation in 1969 and what may be expected in 1970, the average book cost for budgets now being considered should be estimated at $10. In the Nelson Report of three years ago and in the earlier Hirsch report the average estimate was given as $7 per volume. Comparable increases in costs are also appearing in such other parts of the library budget as salaries, wages, bookbinding and equipment.

One does not need a slide rule to realize that if the present rate of inflation in educational costs continues - a rate higher than that of living costs - the cost levels in 1977 will be roughly 50 per cent higher than today. For more than a decade higher education has been an expanding American enterprise; there is no indication that its growth will discontinue or slow down in the near future.

Growth

In an effort to project the coming needs of Maryland higher education, new community colleges have been planned and estimates of academic enrollments have been constructed for the decade of the 1970's. Preliminary estimates were drawn from a number of

sources. Individual colleges plotted estimates of their own enrollment growth. Commissioned by the Maryland Council for Higher Education, an independent consulting firm, Robert Heller Associates, also drew up judgments of expected growth in the state's system of higher education. The Council checked these and other estimates against its own records of academic development and against recent data provided on HEGIS forms of the U.S. Office of Education. A single provisional estimate of projected 1977 enrollment for each institution appears in each of the Tables XVII-XXII in the following pages.

A special word needs to be said here about the University of Maryland. As a major institution in the state's tripartite system of publicly supported higher education, the university appears in Tables XVII and XXI as well as in several previous tables. Nevertheless, standards for large university libraries have not yet been developed, and most formulas for college libraries do not fit the problems or the mass expansion of a university system. In the 1977 enrollment projection for the University of Maryland, the number of graduate students for that year is estimated as roughly a fourth of the total enrollment. A graduate student requires far more library resources and facilities than an undergraduate. That fact plus the variety of separate graduate programs and the multi-library character of the campus precludes the possibility that space for seating and for library service can be quantitatively estimated without further information than that which is at hand. Inapplicability of formulas and approximations where necessary have been briefly footnoted in the appropriate tables.

Space in library buildings assignable to library use breaks down into four elements: user seating, books and materials as shelved, total area for service, and staff work space. The last element, office space for staff, is spelled out as 150 square feet per professional and 125 square feet per nonprofessional, but the total is included within the total service area.

Drawing upon enrollment projections and using recommended formulas, the tables which follow project the needs of individual academic libraries to 1977 in terms of yearly accessions of volumes, total holdings, number of professional and nonprofessional staff required, and the space required separately and totally for the major elements of library activity.

Table XVII projects space needs for seating and for library service operations in state college and university libraries as of 1977. Library service includes areas for circulation, catalog and bibliography, shipping and receiving, processing, and staff offices. It is included here because the total service areas are calculated according to the Fuller formula of 32 per cent of total seating. Table XVIII gives similar projections for community colleges, including six yet to be established.

Using projected enrollments, Table XIX projects to 1977 the recommended library holdings in volumes, total volumes to be added and annual rate of accessions necessary to reach the total for state colleges. The holdings formula is the one recommended for four-year institutions in Chapter III on collections.

Recommended holdings for community college libraries, based on 1977 enrollment projections, appear in Table XX. Its holdings formula, different from that for four-year institutions, is one

TABLE XVII

SPACE FOR SEATING AND FOR LIBRARY SERVICE AS REQUIRED FOR PROJECTED ENROLLMENTS IN STATE COLLEGES AND THE UNIVERSITY OF MARYLAND, 1977

Institution	Actual FTE Fall, 1969	Projected FTE-1977*	Square Feet For Seating**	Square Feet For Service***
Bowie State College	935	3,630	27,225	8,712
Coppin State College	1,010	1,200	9,000	2,880
Frostburg State College	2,117	3,500	26,250	8,400
Morgan State College	4,248	6,000	45,000	14,400
Salisbury State College	1,012	2,300	17,250	5,520
Towson State College	6,294	12,000	90,000	28,800
University of Maryland	27,724	45,850	343,875+	110,040+
U.M.B.C.	2,179	5,700	42,750	13,680
Maryland State College	684	1,250	9,375	3,000
St. Mary's College of Md.	493	900	6,750	2,160

*Provisional estimate based upon HEGIS data submitted by the colleges and the university and overall enrollment projections for all public institutions of higher learning in Maryland.

**On basis of 7.5 square feet per student.

***Based on 32 per cent of seating space. Includes staff offices.

+Approximations only.

TABLE XVIII

SPACE FOR SEATING AND FOR LIBRARY SERVICE AS REQUIRED FOR PROJECTED ENROLLMENTS IN COMMUNITY COLLEGES, 1977

	Actual FTE Fall, 1969	Pro-jected FTE-1977*	Square Feet For Seating**	Square Feet For Service***
EXISTING COLLEGES				
Allegany Comm.	625	1,500	11,250	3,600
Anne Arundel Comm.	1,685	5,000	37,500	12,000
Comm. Coll. of Baltimore	3,923	4,500	33,750	10,800
Catonsville Comm.	2,953	5,000	37,500	12,000
Cecil Comm.	190	500	3,750	1,200
Charles Co. Comm.	501	1,000	7,500	2,400
Chesapeake Comm.	382	650	4,875	1,560
Essex Comm.	2,017	5,000	37,500	12,000
Frederick Comm.	672	1,200	9,000	2,880
Hagerstown Junior	978	1,200	9,000	2,880
Harford Junior	1,230	1,500	11,250	3,600
Montgomery Jr. (Takoma)	1,586	1,650	12,375	3,960
Montgomery Jr. (Rockville)	3,797	5,200	39,000	12,480
Prince George's (Largo)	3,852	5,200	39,000	12,480
PROJECTED COLLEGES+				
Comm. College of Baltimore - Inner Harbor		3,000	22,500	7,200
Dundalk		1,000	7,500	2,400
Howard Comm.		800	6,000	1,920
Garrett County		500	3,750	1,200
Prince George's (Clinton)		3,000	22,500	7,200
Germantown		2,400	18,000	5,760

*Provisional estimate based upon HEGIS data submitted by the existing colleges and the overall enrollment projections for all public institutions of higher learning in Maryland.

**On basis of 7.5 square feet per student.

***Based on 32 per cent of seating space. Includes staff offices.

+Two other projected colleges, Baltimore County #4 and Fairland Regional, have been postponed past 1977.

TABLE XIX

RECOMMENDED LIBRARY HOLDINGS IN VOLUMES (BASED ON FORMULA*)
FOR 1977 ENROLLMENTS IN MARYLAND'S FOUR-YEAR
PUBLICLY SUPPORTED COLLEGES

Institution	Projected FTE 1977**	Current Library Holdings (nearest 100)	Recommended Holdings 1977	Total Volumes to be Added	Annual Accessions to Reach Total
Bowie State College	3,630	44,800	200,000	155,200	19,400
Coppin State College	1,200	60,500	80,000	19,500	2,438
Frostburg State College	3,500	85,300	195,000	109,700	13,712
Morgan State College	6,000	111,000	320,000	209,000	26,125
Salisbury State College	2,300	82,100	135,000	52,900	6,612
Towson State College	12,000	131,100	***	--	--
Maryland State College	1,250	53,600	80,000	26,400	3,300
St. Mary's College of Md.	900	23,100	65,000	41,900	5,237
U.M.B.C.	5,700	76,700	305,000	228,300	28,538

*Formula: 50,000 volumes, first 600 students;
10,000 volumes, every 200 students thereafter.

**Provisional estimate based upon HEGIS data submitted by the colleges and the overall enrollment projections for all public institutions of higher learning in Maryland.

***Above 300,000 volumes, formula becomes less appropriate or applicable. But on formula basis, Towson's projected enrollment would suggest holdings of 620,000 volumes.

TABLE XX

RECOMMENDED LIBRARY HOLDINGS IN VOLUMES (BASED ON FORMULA*)
FOR 1977 PROJECTED ENROLLMENTS IN
MARYLAND'S COMMUNITY COLLEGES

	Projected FTE 1977**	Current Library Holdings (nearest 100)	Recommended Holdings 1977	Total Volumes to be Added	Annual Accessions to Reach Total
EXISTING COLLEGES					
Allegany Comm.	1,500	25,600	55,000	29,400	3,675
Anne Arundel Comm.	5,000	21,200	130,000	108,800	13,475
Comm. Coll. of Baltimore	4,500	43,600	120,000	76,400	9,550
Catonsville Comm.	5,000	35,000	130,000	95,000	11,875
Cecil Comm.	500	NA	20,000	20,000	2,500
Charles Co. Comm.	1,000	12,400	40,000	27,600	3,400
Chesapeake Comm.	650	7,400	26,000	18,600	2,325
Essex Community	5,000	20,400	130,000	109,600	13,475
Frederick Comm.	1,200	9,200	46,000	36,800	4,600
Hagerstown Junior	1,200	30,400	46,000	15,600	1,950
Harford Junior	1,500	22,600	55,000	32,400	4,050
Montgomery Jr. (Takoma)	1,650	28,900	59,500	30,600	3,825
Montgomery Jr. (Rockville)	5,200	23,100	134,000	110,900	13,862
Prince George's (Largo)	5,200	37,000	134,000	97,000	12,125
PROJECTED COLLEGES***					
Comm. Coll. of Baltimore-Inner Harbor	3,000		90,000	90,000	
Dundalk	1,000		40,000	40,000	
Howard Comm.	800		32,000	32,000	
Garrett County	500		20,000	20,000	
Prince George's (Clinton)	3,000		90,000	90,000	
Germantown	2,400		78,000	78,000	

*Formula: 40 vols. per student, first 1,000 enrollment; 30 vols. per student, second 1,000; 20 vols. per student balance of enrollment.

**Provisional estimate based upon HEGIS data submitted by the existing colleges and the overall enrollment projections for all public institutions of higher learning in Maryland.

***Two other projected colleges, Baltimore County #4 and Fairland Regional, have been postponed past 1977.

adjusted to small colleges under pressure of rapid growth.

Combining its projections, Table XXI presents figures not only of recommended library holdings and size of professional and nonprofessional staff, but also gives requirements in space for seating, book collections, and library service as of 1977. Table XXII gives projections of a similar type for Maryland's community colleges.

The goals set forth in Tables XVII-XXII will not be easily arrived at. Nevertheless, the Maryland system of higher education is set on a course of steady growth, and postponing the response to need will not in the end save money but add to later fiscal burdens. The goals themselves are worthy of great effort and full attainment.

TABLE XXI

PROJECTIONS OF RECOMMENDED LIBRARY HOLDINGS, PROFESSIONAL AND NONPROFESSIONAL STAFF, AND SQUARE FEET OF SPACE FOR SEATING, COLLECTIONS AND LIBRARY SERVICE FOR MARYLAND STATE COLLEGES AND UNIVERSITY, 1977

Institution	Projected Enrollment 1977*	Recommended No. Vols 1977	Recommended Staff 1977**		Assignable Space in Sq. Ft., 1977			
			Professional	Nonprofessional***	Users	Collection	Service	Total
Bowie State College	3,630	200,000	12	24	27,225	20,000	8,712	55,937
Coppin State College	1,200	80,000	4	8	9,000	8,000	2,880	19,880
Frostburg State College	3,500	195,000	12	23	26,250	19,500	8,400	54,150
Morgan State College	6,000	320,000	20	40	45,000	32,000	14,400	91,400
Salisbury State College	2,300	135,000	8	15	17,250	13,500	5,520	36,270
Towson State College	12,000	+	40	80	90,000	--	28,800	--
University of Maryland	55,237	+	184	368	414,277++	--	132,569++	--
U.M.B.C.	5,700	305,000	19	38	42,750	30,500	13,680	86,930
Maryland State College	1,250	80,000	4	8	9,375	8,000	3,000	20,375
St. Mary's Coll. of Md.	900	65,000	3	6	6,750	6,500	2,160	15,410

*Provisional estimate based on HEGIS data submitted by the colleges and university and the overall enrollment projections for all public institutions of higher learning in Maryland.

**On basis of one professional and two nonprofessionals for every 300 students.

***May include student assistance FTE up to one-third of nonprofessional total.

+Above 300,000 vol., formula becomes less appropriate or applicable.

++Approximations only.

TABLE XXII

PROJECTIONS OF RECOMMENDED LIBRARY HOLDINGS, PROFESSIONAL AND NONPROFESSIONAL STAFF, AND SQUARE FEET OF SPACE FOR SEATING, COLLECTIONS AND LIBRARY SERVICES FOR MARYLAND COMMUNITY COLLEGES, 1977

	Projected FTE-1977*	Recommended No.Vols 1977	Recommended Staff 1977**		Assignable Space in Sq.Ft.,1977			
			Professional	Nonprofessional***	Users	Collection	Service	Total
EXISTING COLLEGES								
Allegany Comm.	1,500	55,000	5	10	11,250	5,500	3,600	20,350
Anne Arundel Comm.	5,000	130,000	17	33	37,500	13,000	12,000	62,500
Comm. Coll. of Baltimore	4,500	120,000	15	30	33,750	12,000	10,800	56,550
Catonsville Comm.	5,000	130,000	17	33	37,500	13,000	12,000	62,500
Cecil Comm.	500	20,000	2	3	3,750	2,000	1,200	6,950
Charles Co. Comm.	1,000	40,000	3	7	7,500	4,000	2,400	13,900
Chesapeake Comm.	650	26,000	2	4	4,875	2,600	1,560	9,035
Essex Comm.	5,000	130,000	17	33	37,500	13,000	12,000	62,500
Frederick Comm.	1,200	46,000	4	8	9,000	4,600	2,880	16,480
Hagerstown Junior	1,200	46,000	4	8	9,000	4,600	2,880	16,480
Harford Junior	1,500	55,000	5	10	11,250	5,500	3,600	20,350
Montgomery Jr. (Takoma)	1,650	59,500	6	10	12,375	5,950	3,960	22,285
Montgomery Jr. (Rockville)	5,200	134,000	17	35	39,000	13,400	12,480	64,880
Prince George's (Largo)	5,200	134,000	17	35	39,000	13,400	12,480	64,880
PROJECTED COLLEGES+								
Comm. Coll. of Baltimore Inner Harbor	3,000	90,000	10	20	22,500	9,000	7,200	38,700
Dundalk	1,000	40,000	3	7	7,500	4,000	2,400	13,900
Howard Comm.	800	32,000	3	5	6,000	3,200	1,920	11,120
Garrett County	500	20,000	2	3	3,750	2,000	1,200	6,950
Prince George's (Clinton)	3,000	90,000	10	20	22,500	9,000	7,200	38,700
Germantown	2,400	78,000	8	16	18,000	7,800	5,760	31,560

*Provisional estimate based on HEGIS data submitted by the existing colleges and the overall enrollment projections for all public institutions of higher learning in Maryland.

**On basis of one professional and two nonprofessionals for every 300 students.

***May include student assistance FTE up to one-third of nonprofessional total.

+Two other projected colleges, Baltimore County #4 and Fairland Regional, have been postponed past 1977.

STATE OF MARYLAND

MARYLAND COUNCIL FOR HIGHER EDUCATION
2100 GUILFORD AVENUE, BALTIMORE 21218
301-383-3010 EXT. 8815

Copy of a letter sent to a number of Maryland college librarians with the following enclosures on conversion to Library of Congress Classification

Since one of the major areas of attention in my report on libraries to the Maryland Council for Higher Education will concern the problem of Library of Congress reclassification, I enclose three reports concerned with the conversion to LC at Antioch College. The three reports include a) an interim report on the reclassification budget ("Annual Report, 1967"); a detailed analysis of procedures ("Library Reclassification at Antioch College"...); and c) an untitled explanation of the camera work. The last item is today a "museum piece," since the camera never went into general production, and the Polaroid camera -- more expensive because Polaroid has never consented to sell film at reduced cost in quantity -- is in general reclassification use by libraries today.

Since there has been no summary of the completed Antioch experience, let me give it briefly here. James Gaines' interim cost figure (84.6¢ per volume and $1.045 per title) was not far off the mark for the entire reclassification job. Reclassification as explained in these reports was begun in January, 1967 (with some months' planning beforehand) and was completed two and a half years later: total volumes reclassified numbered 120,000; total funds allocated were $120,000, with several thousand dollars finally returned to the college budget at the end.

I suggest that you or your processing chief keep this material on file for your information. In my judgment reclassification to LC of "backlog" material cannot be absorbed in a conventional processing budget within a reasonable time unless it totals something under 20,000 volumes. A seemingly contradictory but clearly demonstrable factor is that if the Gaines-Antioch method of reclassification is used, the unit cost per volume will rise slightly to the extent that the total number of volumes falls below 120,000. The basic reason for this is the original fixed cost in purchase of equipment. However, this does not invalidate, in my opinion, the soundness of the Gaines-Antioch method.

"Everyone knows" that the costs of conversion to the LC system are difficult to separate from the costs of regular on-going work in the processing department. As you will discover from his reports, Mr. Gaines made an unusual effort (largely successful) to make the separation and to budget his reclassification project. It seems to me that $1.00 per volume is a reasonable general estimate for reclassifying any collection of 20,000 to 150,000 volumes. This includes the factor that use of the Polaroid costs more than use of the Hazelrigg camera.

One other point. Mr. Gaines writes me that in retrospect he would make only one change in procedure: he would put the LC call number on labels and place them on the catalog cards a la the Wooster College method. "This way out," he says, "should always be taken when the reclassifying library has a high percentage of LC cards in its public catalog. Ideally, this is also the time to up-date the subject headings." I have enclosed a copy of the Wooster label procedure (though Gaines would reject some associated Wooster procedures). I also enclose a copy of the statement concerning the policy and procedures in use at Long Beach California State for supplementary information.

As I was writing this letter, I received a copy of a "Questionnaire on Cataloging and Processing Practice in Maryland Colleges and Universities" sent out by Mrs. Charmaine A. Yochim, Librarian at Prince George's Community College. Though the questionnaire has been sponsored by a group within the Maryland Association of Junior Colleges, I am informed that it was sent to all two- and four-year colleges in Maryland, both public and private. Most of the public college libraries are somewhere in the midst of change to LC classification, and most, it is fair to say, still have "problems." (To my knowledge, private colleges have not been polled on the subject of conversion to LC.) I would urge you and other recipients of the Questionnaire to answer it (and keep a Xerox copy for yourselves) even if you can't go into detailed answers. In the long run, the problems of LC conversion should probably lead to a Maryland conference on some of the subjects outlined in the Questionnaire.

Sincerely yours,

Paul Bixler
Special Consultant on Libraries

PB/js

Enclosure

ANTIOCH COLLEGE

OLIVE KETTERING LIBRARY

Library Reclassification Project

Annual Report, 1967

The year 1967 saw the reclassification of 46,402 volumes and 37,524 titles (new sets of catalog cards) into the Library of Congress Classification system. While the monthly average of 3,866 volumes was lower than hoped, we were pleased with the high quality of the project's work and the smoothness with which the work progressed. The unit cost of 84.6¢ per volume and $1.046 per title, while somewhat higher than anticipated, is not unreasonably high considering the amount of recataloging involved (about 5%) and the relatively high wage scale at the college. Necessary mending and binding, replacement of worn or missing books, careful weeding, and a complete inventory are the library's other benefits from the project.

The present salaried staff is composed of the director, two non-professional assistants (Mr. John Gilliat, cataloging assistant; Mrs. Sandra Maki, processing assistant), two typists (Miss Eyvonne King and Mrs. Martha Peppers), and one half-time senior clerk (Mrs. Harriet Halterman). With the exception of the director, all personnel were hired at various times during the year. Mrs. Halterman was put on salary in early January, 1968. On page 4 of this report, the increase in the proposed salary budget for 1968 reflects the fact that some positions were unfilled during parts of 1967.

The personnel paid out of the wage account presently number seven f. t. e. clerks. Under Mrs. Maki's supervision four full-time clerks and about one and a half f. t. e. clerks change the catalog cards and re-mark the books. At the start of the project most of the processing clerks were part-time student workers. But during the course of the year, the difficulty in finding enough good, regular student help forced us to hire full-time non-student clerks as suitable applicants presented themselves. Most of the students that we hire are good at their work -- they are screened by a locally devised test and the Minnesota Clerical Aptitude test -- but their working hours are relatively short and they usually work only one quarter. The present arrange-

ment is satisfactory in that it breaks the inefficient cycle of hiring and training new, short-term personnel. The remaining one and a half f. t. e. workers are engaged in searching, mending, maintaining the subject catalog, etc.

It had been our intention to obtain a sizeable reduction in our labor costs by hiring students who qualified for Office of Economic Opportunity (O.E.O.) funds, but we were able to get only three such students during the year. This saved us only $501.68 for 352 1/2 hours worked, a very small amount compared with our total expenditure for wages. (The O.E.O.-paid figures are not included in the expenditures listed on page 4 of this report.)

The expenditures for equipment, more than $6,000, were undertaken to save as much as possible in labor costs. To that end we bought four electric typewriters, a labeling device (which makes spine labels for the books, thus doing away with hand-lettering), a commercial paper cutter (for cutting the Xeroxed card stock), a Dennison coin-operated copier for public use (the reproduction of catalog cards ties up the library's Xerox 914 for about two hours a day), a cataloger's camera (to lift the Library of Congress' cataloging copy out of the Printed Catalog), darkroom equipment to go with the camera, and miscellaneous items. The Library's processing office already shares in the use of the equipment and will take it over at the conclusion of the project. It has not been determined at this time just what percentage of the equipment cost will be added to the direct cost of reclassification.

Because the work is basically the same, there are many points at which the work of reclassification unit and the library's processing office overlap. This sharing of certain parts of the work ensures more efficiency than would be the case with strict departmentalization, but it also makes the actual cost of reclassification that much harder to calculate.

Under this arrangement the reclassification project pays the wages for (1) the production of all Xeroxed catalog cards, 95% of which is for the project, (2) the filing of the subject catalog and the filing revision of the author-title catalog, about 85% generated by the project, (3) the dark room work connected with the cataloger's camera, about 90% of those prints originate with the library's book order personnel (with the start of 1968, the library assumed that financial responsibility), and (4) book mending, about 95% of which is originated by the project. Likewise, the project's supplies are bought in bulk and are shared with the library's processing office. A rough account is kept of their consumption and the two units take turn about in replacing them.

Other library departments have gotten heavier work loads as a result of the project without receiving any compensating benefits. The circulation staff receives two extra book trucks to shelve every

weekday and have to do major shifting every three months. The periodicals office has had six times the usual number of books to send to the commercial bindery. Early in 1968, the book order personnel will begin processing orders for books found missing as a result of the project's inventory.

Projection

The projected expenditures for the 1968 calendar year total $49,750. This amount is adequate to guarantee the reclassification of a minimum of 4,000 volumes per month during the year. It is likely that the monthly rate will be substantially higher than that -- it was during six months of 1967 -- but the actual rate depends on many factors. The end of 1968 should see 94,000 volumes reclassed, and the end of June, 1969, could see every volume in the library reclassified, if our estimate of 120,000 volume total is fairly accurate. However, from an economic point of view, it might not be desirable to reclassify all the material. Some money would be better spent on new materials rather than on re-processing the semi-worthless. The material that we judge unlikely to be used could be left in the Dewey Decimal classification where it would still be available to anyone who wanted to use it. Those few items that were used could be reclassified by the library's processing office on a very modest scale.

Request for Funds

The Administrative Council allocated $80,000 plus for the project in June of 1966. To complete the calendar year 1968, we will need an allocation of $12,500 above the original $80,000. To operate from January through June, 1969, we will need about $24,000, about one-half of the 1968 budget and kept rather low on the assumption that the project would be downgraded during the final six months. This would be a total of $36,500. However, because wage expenditures are very difficult to estimate, a rounded-off figure of $40,000 is requested to finish the project. If we do leave certain materials under the old classification system, a portion of the money could be returned to the general fund or to the library book budget.

James E. Gaines, Jr.
Reclassification Director
January 26, 1968

JEG:ek

Expenditures

Gross Expenditures for 1967 (Jan. - Dec.)

Salaries	$ 16,449.65
Wages (10,877 hours)	18,300.45
Equipment	6,453.43
Supplies (including Xerox charge)	5,038.82
Total	$ 46,242.35

Direct reclassification costs for 1967 (Jan. - Dec.)

Salaries	$ 16,449.65
Wages (10,877 hours)	18,300.45
Xerox charges	2,006.10
Materials, 46,402 at $ .03 for bk. pocket, card, Se-lin label, glue, including waste	1,392.06
Card stock	1,015.82
Miscellaneous	120.98
Total	$ 38,285.06

46,402 volumes - $ .846 per volume
37,524 titles - $ 1.046 per title

Projection

Proposed budget for 1968 (Jan. - Dec.)

Salaries	$ 25,250.00
Wages	18,500.00
Supplies and materials	6,000.00
Total	$ 49,750.00

Proposed budget for January - June, 1969: 24,008.00

$80,000 allocated in 1966. Amount needed to complete the project: $40,000

Schedule

	Jan. - Dec. 1967	Jan. - June 1968	July - Dec. 1968	Jan. - June 1969	Total
Vols. done*	46,402	24,000	24,000	24,000	118,000
Expenditures	$46,242	$24,875	$24,875	$24,008	$120,000

*based on a conservative estimate of 4,000 volumes per month

Copies available.

Library Reclassification at Antioch College:

A Report Prepared for the G.L.C.A. Conference on Reclassification held at the College of Wooster, Wooster, Ohio, on April 28-29, 1967.

James E. Gaines, Jr.

Background. The Antioch library staff had been aware for years that its classification system was inadequate for a library of its size, but considerations of cost and a lack of experience with LC prevented any change in the existing system. Cataloging was inefficient because the Dewey numbers and subject headings on the LC printed cards had to be checked carefully against those already in use. Use of the library's books was difficult because all books other than American and English literature, music, and a part of philosophy were not Cuttered.

During the first months of 1966, the assistant cataloger researched the question of reclassification and made a report to the librarian giving detailed arguments for a change to LC. The main argument was the economy of LC--and that the sooner reclassification was begun, the lower the eventual cost. The report recommended that the reclassification should be carried out by an autonomous, separately staffed unit within the Processing Department.

At the end of March the librarian petitioned the college's Administrative Council (Adcil) for approval of the project. He asked that (1) the reclassification unit be included in the college's budget planning for the fiscal year 1967-68, (2) the library be given permission to begin classing new accessions under the LC system in July, 1966 (since that step would commit the college to the expense of reclassification), and that (3) the library be granted $465 (for a typewriter and Sel-in labeler) in its 1966-67 budget so that it could begin using LC in July. The proposed reclassification unit was to be staffed by a full time cataloger, a sub-professional assistant, typists and clerks, all with their own equipment and supplies--an estimated expenditure of about $25,000 for the first year of operation.

Reclassification cost was based on an estimate of $1.30 per title (derived largely from wishful thinking and Earlham College's estimate of $1.25 per title), which was admittedly low. With approximately 60,000 book titles in the library, the total estimated cost was placed at $78,000. Adcil was warned, however, that the actual cost might be as high as $100,000.

In April the librarian was unofficially informed that Adcil would approve the project, though the size of the allocation was still undecided. Consequently, the library began classing new accessions in LC on May 1, 1966. On June 10 the librarian received a memo "to go ahead with the expenditure of $80,000+ for recataloging the library." Adcil also made it clear that the project should be instituted and completed as rapidly as possible so that disruption to library service would be limited to as short a time as possible.

With funds available at the start of the 1966-67 fiscal year, orders were immediately placed for a Sel-in labeler, three electric typewriters, a new card catalog case (for the new subject catalog), book trucks, etc. Large expenditures were also made for supplies--book pockets and cards, catalog card stock, plastic card protectors, etc.--to take advantage of price breaks for large orders. Plans were made to put the reclassification unit into operation on January 1, 1967. A new assistant cataloger was hired to replace Jim Gainer, who was appointed reclassification director.

Reclassification policies. Before the LC system was put into use in May, existing cataloging procedures were re-evaluated. The following decisions were made:

1) to establish a new series authority file which would gradually replace the old file.
2) to accept LC subject headings as they appear on the printed cards, but to add additional LC headings when it seemed desirable.
3) to continue to use book pockets and cards, using a pocket wide enough to hold an IBM card.
4) to establish a guide card filing system for the subject catalog (See Appendix B).
5) to send catalog card copy to the Union Catalog in Cleveland.
6) to refile the author-title card catalog (as cards were put back in) under LC rules.
7) to use the full LC call numbers, as they appear on the printed cards, whenever possible (PZ is to be used only after a search of the printed catalogs has failed to turn up an LC established author Cutter number in the national literature classes; the decision to class a work as part of a series or as a separate need not follow LC's decision); to indicate original cataloging with an "x" (for details see Daniel Gore, "Further Observations on the Use of LC Classification," Fall 1966, 40: 519-524).

The following decisions were made regarding the scope and procedure of reclassification:

1) all reclassed titles would be screened with regard to
   a) form and choice of entry (we would use LC's most current form, but would make a thorough search only for continuations).
   b) series (we would make decisions regarding series entries and record them in the new series file; old series decisions would be reconsidered and the cards transferred to the new file).
   c) LC call numbers and tracings (those which were obsolete would be brought up to date if noticed; the old subject headings would be caught and brought up to date as a matter of course by the clerk responsible for maintaining the new subject catalog).
2) the catalog cards of individual titles would not be pulled until the three decisions listed above had been made, so that the books and records would be out of place for as short a time as possible.
3) a temporary main entry slip would be filed in the card catalog for each title being reclassed; no temporary entry would be made for the shelf list.
4) new catalog cards would be Xeroxed for reclassed books, with the tracings given on the face of the cards (formerly, the tracings for typed catalog cards were recorded on the reverse of the main entry and shelf list cards); whenever possible, the old main entry card would be labeled with the LC call number and used as the Xerox master.
5) except for the filing in the subject catalog (under the supervision of the Processing Office, but financed out of reclassification funds), all card pulling and filing related to reclassification would be done by the reclassification unit.
6) the reclassification director (hereafter referred to as the reclassification cataloger) would have the authority to withdraw books considered not worth reclassification cost (should heavy withdrawals within specific subject fields be contemplated, arrangements would be made through the librarian for faculty consultation), to initiate replacement orders for worn out books, and to send worn or damaged books to the bindery.

Reclassification procedures. The reclassification cataloger examines the shelf list cards before the books are taken from the shelves. If the shelf list card is clean LC copy (that is, the LC card has not been altered in any way) he looks over the tracings, checking the series file and the 7th edition of the LC Subject Headings when necessary, and circles the LC call number in green ink. (All reclassification card editing is done with green ink to avoid confusion with any other markings.) If the LC card has been altered in some way -- date or imprint changed, for example, or if there is some question about a series entry -- the shelf list card is flagged for later attention. Typed shelf list cards are passed to a clerk who looks them up in the LC printed catalog and fills in the LC call number in the lower left corner of the card and checks the tracings and form of entry (See Appendix C). These cards are then screened by the reclassification cataloger.

A clerk takes a packet of edited shelf list cards to the shelves and fills a book truck, arranging the books alphabetically by main entry and leaving the shelf list card sticking up in each book. The truck is assigned a number (See Appendix D) which follows the books and the sets of catalog cards throughout the entire reclassification process.

Books with flagged shelf list cards are examined by the reclassification cataloger. Usually, this is necessary because the descriptive cataloging on the shelf list card is not complete enough to identify the edition and make the assignment of the proper LC call number possible. Besides adjusting call numbers and giving instructions for changes in the cataloging copy, at this point he also does original cataloging and gives typing instructions for author and title see references.

If the book is not on the shelf, the shelf list card is marked NOS (not on shelf) and dated in pencil and is then refiled in the Dewey shelf list. If the shelf list holdings are only partly located, the absent volumes or copies are marked "not yet avail." on the shelf list card and a search is made for them by the Circulation Department if they are not found charged out in the circulation file (See Appendix F).

Temporary main entry slips are made by Xeroxing the shelf list cards (still in alphabetical order) six to a sheet on green paper measuring 10" X 10". A mask is put down over the Xerox window so that each slip has a note of explanation for the library user (See Appendix E). The main entry cards are pulled at the time the temporary slips are filed. The slips are cut so that about half an inch of the green paper stands above the catalog cards.

After the temporary main entry slips have been Xeroxed from them, the shelf list cards (now banded together in a packet marked "truck no.--") are given to a typist who types new book pockets and cards and Sel-in spine labels. She does not make them for shelf list items marked "not yet avail." The new pockets and cards are proof-read and the reclassed books, still on their numbered truck, are remarked. The old Dewey number inside the front cover is removed with an electric eraser, and the one on the reverse of the title page is x'ed out with a pencil; the LC call number is written in on the page opposite the old call number. The typed accession numbers on the pockets and cards insure that they are matched with the proper books (See Appendix F). The clerks who mark the reclassed volumes send damaged books to the Serials Department which prepares the books for the commercial bindery. They backlog the book pockets and cards for bindery books. The books on the finished truck are counted for reclassification statistics), tallied by subject class (for the library's statistics, which have always been kept for the number of volumes in the various subject classes) and sent to the circulation desk for shelving.

Meanwhile, the old added entry cards are pulled from the catalog by using the tracings on the Dewey main entry cards. This is usually done the first thing in the morning. The reclassification assistant or one of the senior clerks checks the packets for completeness and accuracy and throws the added entry cards away. The Dewey main entry cards are checked against their edited shelf list cards. Certain changes in the copy are written directly on the main entry card by the reclassification assistant. These include restored LC tracings, the addition of title tracings and form of series notes. If changes are extensive, typing instructions are given for the typing of a new main entry card. The main entry cards (with the old Dewey call number now covered with a paper label) and the edited shelf list cards go to the typists who type on the LC call number. In the case of typed main entry cards, they transfer the green checked tracings to the lower face of the labeled card.

The re-typed main entry cards are proof-read, bunched according to the number of copies needed per card set and Xeroxed on punched card stock. The Xeroxed stock is taken daily to a local printer for cutting (for the first month and a half it was cut by hand on a lever cutter and plans have been made to buy a machine paper cutter). The cut cards are then banded into sets, matched with their old shelf list cards and given to a typist. She makes a new shelf list card and types on the headings, circling the Arabic tracing numbers instead of typing on the subject headings. The finished cards are sorted at the time they are proof-read by the reclassification assistant or one of the senior clerks--one stack each for the old shelf list cards, the new shelf list cards, the main entry cards, added entry cards, and subject cards. The old shelf list cards are stored outside the library building to provide a permanent, dead record of the library's holdings. The old main entry card (the card which was labeled and Xeroxed) is sent to the Union Catalog in Cleveland. The new shelf list cards are counted (for reclassification statistics--title count) and filed as soon as possible. Rush filing is also done for the main entry cards. Added entry cards are alphabetized for filing by the reclassification unit. The subject cards are alphatetized in batches and given to the clerks who maintains the subject catalog.

The previously "not yet avail." copies and volumes of reclassed titles are routed to the reclassification unit by the Circulation Department. The typist receives them with the LC shelf list card stuck inside (the Dewey shelf list cards having been cleared by a clerk) and types new pockets, cards, and Sel-in labels (See Appendix F). These books are then put on the next available truck for re-marking.

Personnel. The reclassification began its work on January 1, 1967, with the reclassification cataloger, his full-time assistant (a 5th year student, experienced in library work, who is finishing college on a part-time schedule), one typist (very fast; on loan from the Processing Office), and two half-time clerks (both with considerable experience in this library and referred to in this report as senior clerks, one of which is responsible for the filing in the author-title catalog). In February another typist was hired as well as a half-time clerk (a student) and a full-time clerk (a college graduate who will take over as an assistant in July).

The reclassification assistant allots work to the typists and clerks (including the student workers) and generally runs the entire operation. Thus the reclassification cataloger is able to devote most of his time to original cataloging, editing shelf list cards, and the supervision of those taking information from the printed catalog. In July, when the present reclassification assistant graguates, the job will change somewhat. The college graduate clerk will become largely responsible for obtaining LC copy from the

printed catalog, including the adjustment of call numbers and original cataloging under the supervision of the reclassification cataloger. One of the typists will be promoted to editorial clerk with general responsibility over the clerks and typist.

The unit was seriously under-staffed for the first month and a half of operation simply because we held out for high-quality personnel. For example, we tested and interviewed four typists (the only ones not screened out by the college's personnel office) before we hired one. Fortunately, Antioch's beginning clerical salary is competitive. The senior clerks get $2.00 per hour; the typists are on contract at $3,600 per year, and the editorial clerk will get $4,000 per year. The collegewide, graduated pay scale for students is $1.25 per hour for 1st year students to $1.55 for 5th year students. Because of the special and temporary nature of the reclassification project, we are allowed to pay more than the college's fixed rates. Thus far we have only done so on one occasion, and that was to raise the reclassification assistant to $2.00 per hour.

From January through March we used only 4 hours a day of student help. Early in April the time had climbed to 11 hours a day--two students, 4 hours each; one student (O.E.O.), 3 hours. The students work with and under the direct supervision of the senior clerks, and do such jobs as preliminary filing, book marking, alphabetizing, etc.

Statistics, January through March.

Books reclassed.	Month	volumes	titles
	January	1384	1228
	February	2746	2322
	March	3637	2946
	total	7767	6496

Expenditures.

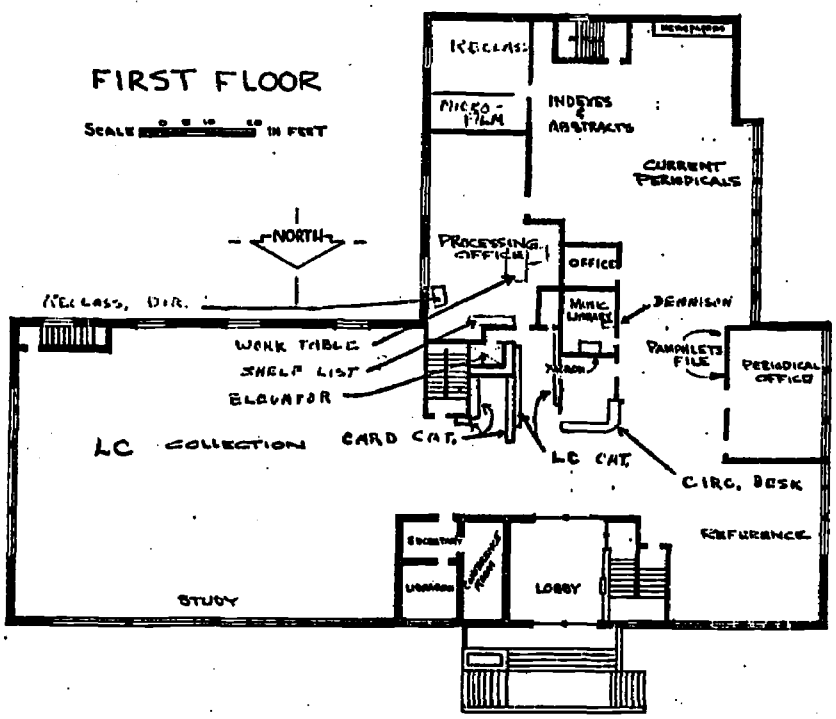
Supplies expended			
catalog card stock 8915 sheets @ $.032		$ 285.28	
green temp. sheets 1068 sheets @ $.01		10.68	
book cards 7767 vols. @ $.0031		24.08	
book pockets 7767 vols. @ $.00575		44.66	
Sel-in tape (7/8" width) 7767 vols. @ $.015		116.51	
miscellaneous (labels, glue, etc.)		30.00	
	total	511.21	$511.21
Charges			
Xerox (meter charge, toner, monthly rental) 9983 exposures @ $.055		549.07	
Ampersand Press for cutting card stock 27 batches @ $1.00		27.00	
	total	576.07	$576.07
Salaries and wages			5919.40
		Total	$7006.68

Cost per volume $ .902
Cost per title $1.077
Cost per catalog card (not including labor)

4 hole punched and perforated stock, bought from Xerox at $32.00M	$.00800
Xerox charge of $.055 per sheet of card stock	.01375
Avery label for each master main entry card	----- .00136
Per card total	$.02311

N.B. As soon as the Xerox card stock is used up, we will be using 6 hole punched, L.C. spec. card stock purchased from Walker-Goulard - Plehn at $28.25M for 50,000 sheets. This will bring the cost of card down to $.0047 per card.

Comment. The physical lay-out is adequate and convenient for the reclassification unit, though not necessarily so for the Processing Office staff, who are sharing their quarters. The reclassification cataloger has a carrel desk and typewriter next to the shelf list, series file, LC schedules, and the 7th ed. of LC Subject Headings. Sorting and proof-reading are done at a large work table; the book trucks are marshalled there also. The reclassed books are re-marked, etc., in the microfilm reading room, half of which has been set aside for the reclassification unit. When the additional typist begins work in late April, the entire unit (with the exception of the reclassification cataloger) will move into those quarters. The room is some distance further from the card catalog and the elevator (the Dewey books are shelved on the lower floor). The printed catalogs are located in the hallway between the Processing Office and the card catalog area.



As is apparent from the volume-title statistics, very few large sets and practically no continuations have been reclassed. The regular catalogers add the new continuation volumes to the Dewey shelf list cards, accession them, and pass the shelf cards, the unmarked volumes, and complete LC cataloging copy to a designated section of shelving in the marking room. From there they are worked into the regular flow of reclassed materials. The same procedure holds true for Dewey books which need re-binding, only in that case the reclassification unit is not provided with LC cataloging copy.

There is an unofficial goal of two years for the completion of the reclassification project. Since the size of the library's book collection is estimated at about 120,000 volumes, the output of the reclassification unit will have to be increased to about 5,000 volumes per month. That would be an increase of about 1,400 volumes over the March figure. It is possible that the still increasing proficiency of existing personnel will make up most of the needed increase, as we have yet to hit a plateau. Hopefully, some judicious tinkering with work assignments (such as having the typists relinquish what little alphabetizing and preliminary filing that they do) and the hiring of more student workers can make up the difference. If these minor adjustments do not raise production to 5,000 volumes a month, then we shall probably have to hire another typist.

In conclusion, it can hardly be over-emphasized that the project has run smoothly and well for two reason: (1) careful planning before reclassification actually began, and (2) the hiring of capable and experienced personnel. As a result, no procedures had to be reorganized, though some improved techniques (such as the Xerox production of temporary slips) were discovered after the project began. And, best of all, the reclassification assistant handles virtually all the problems arising in the day to day operation of the reclassification process once the edited shelf list cards have left the hands of the reclassification cataloger.

Appendix A: Specifications of equipment and supplies

Typewriter for Sel-in labeler. IBM, 13 inch standard electric, fabric ribbon, large bookface type, 55 tooth ratchet; one key change: substitute Dartmouth College Library's ℓ key for the 1/2 1/4 key, with the ℓ in the upper case (shift) position. IBM $358.00

IBM standard electric, 13 inch carriage, fabric ribbon, diplomat (elite) type. IBM. each $355.00 plus $22.50 (88 character keyboard), $15.00 (maximum key changes), $21.00 (card holding platen, no.1 hardness).

Metal book truck. 6 shelves, sloping. Gaylord no.176 each $72.00

Card protectors. Special 2 mil Mylar, 5" X 3-3/8". Gaylord. $24.75M on orders of 20M.

Book cards. white, med. weight. Gaylord no. 40M. $3.10M on orders of 100M.

Catalog card stock. no. 250/100% rag, med. weight, Govt. specs., LC cream shade, 22-1/2 X 26-1/2 cms., 6 hold punched. Walker - Goulard - Plehn, Co., 109 Lafayette St., N.Y., N.Y. 10013. $28.25M on orders of 50M.

Labels. 11/16" X 1" paper labels of ACP-P4, .0045 stock, arranged lengthwise on sheets 6 across and 4 down. Avery Label Company. Avery's identification no. SC 1116. $1.36M on orders of 50M.

Book pockets. Plain, 3-1/2" X 6-1/4" X 2-1/2" pocket, reinforced. BroDart catalog no. 23-265. $5.75M on orders of 100M.

Paper for temporary slips. no.5 bond, green, 10" X 10". Ampersand Press, Yellow Springs, Ohio. $2.69 per ream on orders of 20 reams.

60-drawer catalog cabinet in unfinished maple. No.3560-C with closed leg base. 36 of the drawers with no.97 large label holders and 24 drawers with no.98 large tilted label holders. Gaylord. $800.00.

Appendix B: the subject catalog

1. Policy decisions:
   a) That we continue to maintain the subject catalog separate from the author/title/series catalog.
   b) That subject guide cards be used in preference to typed headings on each entry.
   c) That a systematic effort be made in the future to keep subject terminology up-to-date and in line with Library of Congress practice.
   d) That Library of Congress filing rules for subject entries be followed consistently.
   e) That control over consistency in the use of terms be maintained at the point of filing. (This means, in effect, that the catalogers will not verify subject entries when they are adding new titles; the filer will be responsible for noting discrepancies in terminology and taking appropriate action to maintain consistency.)

2. Preliminary steps:
   a) The accumulation of a stock of subject guide cards prior to the start of reclassification. The 6th ed. of the Library of Congress List of Subject Headings and the existing subject card catalog were edited to identify those terms that could be accepted with reasonable assurance. Such terms were marked and from the List and the catalog drawers a typist prepared approximately 20,000 subject guide cards.

      Headings that could be accepted with some degree of certainty included:
      1) personal names
      2) corporate names
      3) geographical names
      4) many common terms that have remained stable over the years.

      To avoid a burdensome filing job, these subject guide cards were arranged alphabetically in three sections: personal names, geographical names, and other. Since many headings could be difficult to identify in these terms, we have stressed the necessity for searching in each of the three sections before anyone types a new subject guide card.

   b) Purchase of a new catalog card cabinet. During the reclassification period, two subject catalogs will be maintained, because the variation in terminology is too great to permit interfiling of old and new entries. As the old subject catalog shrinks, the new subject catalog will be expanded into the older catalog cabinets.

3. Current operation:
   a) One person has been assigned to take full responsibility for filing subject entries, for recording subject headings choices in the 7th ed. of the LC List, for noting and correcting discrepancies in terminology, for shifting the contents of catalog drawers as needed, and for alerting the catalog librarian to difficulties that arise.
   b) As books are reclassified, all subject entries are arranged in rough alphabetical order and turned over to the person in charge of the subject catalog.
   c) The package of new subject cards is first checked against the subject card catalog and all entries for which there are guides are filed immediately.

d) The remaining cards are then checked against the backlog of subject guide cards; if guides have been prepared, they are pulled, recorded in the 7th ed. of the LC List, and then filed in the subject catalog.
e) Remaining cards are checked against the 7th ed. of the LC List; if the heading is listed in the List, it is overlined with a yellow marking pen, and the subject card is forwarded to the typist for the preparation of a subject guide card.
f) If some cards still remain, they are brought to the attention of the Catalog Librarian for decision. In many instances, these are for terms not normally found in the LC List.
g) No effort will be made to build the cross-reference structure until the new subject catalog has expanded to full-size. Individual SEE references, however, are made whenever necessary to prevent use of older terminology.

4. Comments:
a) This procedure does not provide us with a complete subject authority file, simply because the LC List is not all inclusive; however, we believe the printed list is sufficiently inclusive to serve our purposes, without our attempting to maintain any additional subject authority files.
b) The catalog librarians and the subject catalog filer are on the alert to catch major changes in terminology made by the Library of Congress (e.g. from SPANISH AMERICA to LATIN AMERICA) and to incorporate these changes beforehand, if possible.

George W. Cornell
Librarian for Technical Processes
April 12, 1967

Appendix C: Instructions for transferring LC printed catalog information.

When checking typed shelf list cards through the printed catalog, the information to be secured is of three kinds: (1) the choice and form of main entry, (2) the tracings, and (3) the LC call number. All notations must be made with green ink (to avoid confusion with previous markings) and should be written or printed so neatly as to be unquestionably legible to everybody.

Make certain that the LC cataloging copy matches our edition by comparing the place, publisher, date, paging, and editor. If LC copy is not available for our edition, take down the information for the edition which is most similar--that is, having the same editor or translator, number of pages, etc., and differing only in place or date of publication. If the information taken down is from an edition different from our own, the other edition should be identified with a note. Example: BF 183 .P7 C3 -- Fr. ed., 1923 or, CB 51 .L5 Eng. ed., 1954, same p.

The information should be taken down exactly as LC has it -- with the same punctuation, spelling, abbreviations, brackets, or whatever. If any explanation should be passed on, make a note on the shelf list card for the reclassification cataloger.

(1) Form of main entry. The form of the main entry on the shelf list card should be exactly the same as that used in the printed catalog. If the author's given name and birth and/or death dates are not given on the shelf list card, they should be filled in. Example: Wilson, C.B. thus becomes Wilson, Charles Brown, 1897- If the form of name on the shelf list card is completely different from that in the printed catalog (as opposed to incomplete), check the later sets of LC to get the form that is in current use. Example: Ashley-Montagu, Montague Francis, 1905- is now Montague, Ashley, 1905- Sometimes, the shelf list author is complete different from what LC gives. In those cases, cross out the shelf list author and write in the proper one above it.

Example: Symposium on the Peaceful Uses of Atomic
Energy, New York, 1963.
~~---Johnson,-William-Arthur----ed.--~~

However, if the entry that varies is an NUC entry, do not cross out the shelf list author, but instead make a note of the other entry on the card.

Example: NUC gives entry as Conference on Teacher Education, New York, 1960.

(2) Tracings. Most of the tracings on old shelf list cards are either typed or written in pencil on the back of the card. Compare them with those given by L.C. Make a check mark in front of those that agree with LC and change those that do not. If the LC tracing includes a series tracing and the shelf list card does not show the form of the series entry, give the form of the series. Example: (Series) would become (Series: Census monographs), the name of the series coming from the collation line of the LC copy.

(3) Call number. The LC call number should be written on the lower left edge of the shelf list card. If more than one call number is given, copy them both, being careful to record the series note.

Example: Q 11 .N5 vol 12, art. 16 (N.Y. Acad. of Sci. Annals, v.12, art.16)
BF 397 .C7 copy 2

If the call number of our edition cannot be found, the call number of another edition is acceptable but should be identified as that of a specific, different edition. If no call number is given and no other edition can be located, put a dash just to the right of the hole at the bottom of the shelf list card. If the copy in the printed catalog is an NUC entry, write NUC to the right of the hole; if the title cannot be located, place a zero.

Appendix D: Reclassification progress sheet

Truck no: 62 | No. on truck: 128

Old classification: 520 | No. to bindery: 4

Date of start: 3-31-67 | No. of volumes (total): 132

Date of completion: 3-28-67 | No. of titles: 115

Record the date in the left margin as each step is completed

3-22-67	1.	Truck assembled; no. assigned to the truck.
3-22-67	2.	Temporary main entries prepared.
3-22-67	3.	Temporary main entries filed, old main entries pulled.
3-23-67	4.	All added entries pulled from catalogs.
3-23-67	5.	Sets of cards examined for completeness; all but shelf list and main entry are destroyed.
3-24-67	6.	Main entries prepared for duplication.
3-24-67	7.	New pockets and book cards typed; new spine labels prepared.
3-24-67	8.	New set of cards duplicated on Xerox.
3-24-67	9.	Books revised and relabeled.
3-24-67	10.	Volumes counted and recorded above; books forwarded to Circulation desk.
3-28-67	11.	New catalog cards typed.
3-28-67	12.	New catalog cards revised and sorted for filing.
3-28-67	13.	New main entries filed in catalog and temporary entries pulled and destroyed.
3-28-67	14.	Old shelf list cards counted, recorded above, and stored.

Appendix E
(a sheet of uncut Xeroxed temporary main entry slips on 10" by 10" green paper, shown here reduced to 70% of the original size)
Not reproduced here due to marginal legibility

Appendix F: Book pocket and card, Sel-in label (stuck to a square of waxed paper), Dewey and LC shelf list cards.

BF
149
.R85
copy2

142923

Russell
Frontiers in
psychology

DATE	ISSUED TO

BF
149
.R85
copy2

142923

Russell
Frontiers in
psychology

CC
159.904

Russell, Roger W *ed.*
Frontiers in psychology. General editor: Roger W. Russell. Contributing editors: Vytautas J. Bieliauskas [and others] Chicago, Scott, Foresman [1964]
200 p. illus., diagrs. 25 cm.
Bibliography: p. [196]-209.

141518 [2.38,C&H,3-19-64, Psych.] – not yet avail.
142923 c2 [2.15, publ, 6-30-64, psych]
1. Psychology—Addresses, essays, lectures. I. Title.

BF149.R85 63-20554

Library of Congress [5]

BF
149
.R85 Russell, Roger W *ed.*
Frontiers in psychology. General editor: Roger W. Russell. Contributing editors: Vytautas J. Bieliauskas [and others] Chicago, Scott, Foresman [1964]
200 p. illus., diagrs. 25 cm.
Bibliography: p. [196]-209.

141518 c1 [2.38, C&H, 3-19-64, Psych.] – still marked CC 159.904
142923 c2 [2.15, Publ, 6-30-64, Psych.]

1. Psychology—Addresses, essays, lectures. I. Title.

BF149.R85 63-20554

Library of Congress [5]

BF
149
.R85
copy2