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Effective Resource Allocation
in Library Management

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Issue Editor

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Introduction

H. WILLIAM AXFORD

As every editor of an issue of Library Trends knows, it is inevitable that the final result is nowhere as cohesive as the optimistic vision one had at the start of the project. It would be a rare occurrence indeed if eight to ten librarians could be found who could author a series of articles that would have the intellectual and organizational integrity of a well-written book. This is not to say that collections of articles by different authors dealing with a single theme should not be attempted. As a matter of fact, given the working environment of most librarians, such a publication offers a means of communicating ideas and experiences which might otherwise never come into print, for the simple reason that time for reflection and writing on a major scale is not as much an integral part of our responsibilities or aspirations as it is in other professions.

In the early stages of developing the theme for this issue, the Library Trends Publications Committee suggested as a title, “Library Management in an Age of Economy.” As editor, I objected on the basis that the issue I had in mind had to deal with something more significant in its consequences and more optimistic in its outlook than simple budget trimming, a process which inevitably starts by attempting to identify programs of marginal value and eliminate them, but which generally ends up in across-the-board cuts which reduce total program quality. I hoped the issue I envisioned would bring to the profession ideas and experiences of demonstrated or potential value in upgrading program quality in spite of a long-term budget crisis. The central thematic thrust of such an issue would, by nature, have to be effective resource utilization. In other words, it would have to come to grips with such generally shied-away-from topics as performance evaluation—the whole problem of accountability, if you like.

Quite honestly, I viewed the issue to some extent as a vehicle for conveying my own beliefs that the first step toward ameliorating the present long-term budget crisis faced by all types of libraries must be
the re-establishment of our management credibility with those agencies which control library funding, and that, in order to move in this direction, budget presentations in the future are going to have to pay far more attention to documented performance than they have in the past. The question of whether or not this was a legitimate prerogative of the issue editor is left to the reader, as is the question of whether or not the issue itself confronts in any constructive way the present budget crisis which the profession as a whole is facing. If it does not, only the editor is accountable.

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The Interrelations of Structure, Governance and Effective Resource Utilization In Academic Libraries

H. WILLIAM AXFORD

Ever since its debut on television, I have been an avid devotee of the video version of Richard Hooker’s novel, M*A*S*H. As you may know, M*A*S*H is the acronym for Mobile Army Surgical Hospital, a front-line medical unit which entered the U.S. Army’s table of organization during the Korean War. Operating within the range of enemy guns and aided by the blessings of modern technology such as new antibiotics, advanced surgical methods and helicopters for quick evacuation of the wounded, M*A*S*H units achieved a level of performance unique in the annals of military surgery.

The central story line of each weekly episode is the effort of two dedicated, sensitive, highly skilled, and totally iconoclastic army surgeons—Captains Benjamin Franklin Pierce (Hawkeye) and John McIntyre (Trapper)—to concentrate on the unit’s mission in the face of more or less constant harrassment from two of their colleagues—Majors Frank Burns and Margaret Houlihan—who, in spite of their medical credentials, are confirmed military bureaucrats. Although the fictional M*A*S*H probably resembles its real-life counterparts in only a superficial way, and the bizarre antics of Hawkeye, Trapper, and their colleagues are exaggerated for the sake of audience appeal, the series does have serious overtones which illustrate the irrationality of war.

Viewed only as entertainment, M*A*S*H is little more than an escapist interlude in which broad and bawdy comedy is superimposed upon one of the grimmest realities of war—the struggle to save the lives of its mutilated victims. However, for anyone who has a serious theoretical interest in the emerging problem of academic library
governance, especially as it relates to the effective utilization of human resources, the series can be instructive as well as entertaining. Seen through this focus, it is Colonel Henry Blake, the commanding officer of M*A*S*H 4077, not Hawkeye or Trapper, who emerges as the dominant figure. Without Blake's steadfast insistence on the primacy of individual and organizational performance—even though to achieve it under the circumstances in which his unit must function he must close his eyes to constant violations of standard military operating procedures—these two hellraising, but very productive, mavericks would soon be reduced to embittered professional drudges totally at the mercy of the military bureaucracy for the duration of the war. As it is they are key members of a smoothly functioning team whose leader can tolerate almost any kind of unmilitary conduct as long as to do so contributes to the furtherance of the unit's mission.

Colonel Blake succeeds in creating an effective organization because he recognizes the counterproductive forces latent in a situation where highly trained specialists are forced to work within a rigidly structured bureaucracy and takes the proper steps to neutralize them—i.e., eliminating or ignoring any bureaucratic procedure which does not directly contribute to the welfare of the wounded flowing into the hospital from the front. He demands high standards of performance, but will tolerate almost anything in the way of outrageous behavior—e.g., the phony transvestite Klinger—as long as these are met. Consequently, M*A*S*H 4077 functions reasonably uninhibited by the layers of bureaucracy and the strict chain of command which are the essence of a military organization. Herein lies the key to Blake's success as a leader and administrator and the unit's outstanding level of performance. His management style is best illustrated in the novel when he first meets Hawkeye and Trapper after they have been assigned to his command. "You guys," he says, "look like a pair of weirdoes to me, but if you work well I'll hold still for a lot and if you don't it's gonna be your asses.”

At this point, the reader might well ask what all of this has to do with the problem of resource allocation and utilization in academic libraries. The answer is simply this: M*A*S*H 4077 and an academic library have more in common than might first meet the eye, and the performance levels achieved and the manner in which they are achieved by the former might be very instructive for the latter. Both organizations exist to provide unique and essential services: M*A*S*H for repairing war-torn bodies, the academic library for challenging and expanding the human mind. Both are very labor-intensive organizations requiring a large cadre of highly trained, well-educated specialists to carry out their respective missions. Consequently, the key factor controlling the performance of both is the effective allocation and use of human resources. Herein, however, ends the similarity.
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Colonel Blake's approach to human resource utilization is to create an organization in which performance is the standard against which all else is measured, an organization that values vitality more than order and which, therefore, releases rather than frustrates the creative energies and dedication of the staff. He sees administration as a kind of necessary evil to be reduced to the absolute minimum required to hold the organization together with as little demand on the time, energies and nerves of his team of specialists as possible. In short, he seeks to create an organization which will maximize the flow of available human energy outward to those dependent upon the unit for medical attention and minimize the amount devoted to internal housekeeping and paying allegiance to traditional military protocol. Management, in Blake's view, is a resource which creates the conditions which enable his staff to get on with the organization’s mission, not something that in and of itself is directly responsible for delivering medical services.

In contrast, academic library administrators generally tend to view management as the real strength of the organization, with its prime role being the establishment and maintenance of consistent internal procedures. Consequently, they have, in general, tended to create organizations that are more oriented toward authority than performance, and more concerned with order and stability than vitality. As a result, academic libraries more often than not exhibit most of the traits of the classic public service bureaucracy. This is a situation sanctified by tradition, perpetuated by a reward system which values bureaucratic accomplishments more than creative and individual interface with users and, until recently at least, more attuned to the basic attitudes and aspirations of the rank and file of academic librarians than most of us are willing to admit.

In the mid-1960s, several signs appeared on the horizon which gave hope to the belief that academic libraries might move toward new organizational concepts which would place more stress on individual initiative and performance than on the integrity of the traditional power structure. Articles began to appear in the literature on the relevance of business management theory to academic library administration, and a few administrators began to move cautiously in this direction, propelled partly by conviction and partly by the need to come to terms with the militant iconoclasm of several generations of graduates from professional schools and the first indications that funding agencies and governing boards were becoming increasingly aggressive in demanding documentation on institutional performance as budgets continued to spiral upward. A concomitant development was a growing interest among many academic librarians in the benefits of full faculty status, which in turn supplemented and complemented increasing pressures for a more participatory or consultive working.
environment and which held out the promise of an enhanced professional image based on recognized individual performance.

These significant developments seemed to point toward radical changes in the traditional library bureaucracy which would revitalize the organization and channel more of its available manpower into programs directly affecting user needs and interests. They promised less complex organizations with fewer administrators, particularly at the middle level, and more direct involvement, consultation and information sharing between top administration and key personnel at all levels. Finally, they gave rise to hopes for a totally new working environment for the highly trained and educated library specialist, an environment rich in opportunities for individual creativity and professional development. In short, toward the last half of the twentieth century, academic librarianship seemed at last on its way to becoming a true profession and consequently a full-fledged partner in the total concerns of the academy.

Unfortunately, there are disturbing indications that these promising trends may succumb to bureaucracy's almost impenetrable defenses against assaults on its sovereignty. All three of the potentially progressive developments of the mid-1960s—the embracing by academic library administrators of management theory and new management techniques developed for and by the private sector; the pressures for a professional working environment more in tune with the requirements for appointment, promotion and retention (coming largely from a new type of graduate from the professional schools); and the aspirations of academic librarians for full faculty status—operationally seem to have coalesced in such a way as to be working against rather than for the advancement of service programs. All seem to be contributing to a trend toward more rather than less complex internal organizations in which the power structure and managerial attitudes of the traditional bureaucratic hierarchy remain largely intact but encumbered by clumsy accretions which inhibit rather than enhance its ability to make timely and effective decisions with respect to changing patterns of user needs and a reversal of what has been an upward trend in funding for almost two decades. It is ironic that developments which promised much in the way of upgraded institutional performance when they first made their appearance now seem to be propelling academic libraries in the direction of becoming more self-serving than service organizations as more and more time and energy are spent on problems of internal organization and the articulation of intraorganizational tensions. This
is a process that can become so all-absorbing that its long-run costs to the user of the library often escape detection. Simply put, the mission of the organization tends to be unconsciously subordinated to the interests of those working within it.

This trend, coupled with the inevitable tendency of all types of organizations to become more complex during a prolonged period of growth, has contributed to a situation in which the administrative overhead costs of academic libraries have risen out of proportion to their positive impact on user services. In the halcyon days of the 1960s this phenomenon was obscured by the exhilaration brought on by constantly upward-spiraling budgets. Outlays for books and other materials reached unprecedented levels, magnificent new buildings blossomed on campuses across the country, and an array of new service programs came into existence. The general euphoria which resulted gave rise to a feeling that the funding trend would continue upward indefinitely with the result that any sustained interest in developing management skills in the area of measuring effective resource utilization was seriously inhibited.

This was a period when management at all levels in higher education was a relatively easy occupation for the simple reason that a positive response to most of the problems which arose was readily at hand in the yearly infusion of new money coming from a variety of sources: increased state appropriations, federal programs and private contributions. This is not to say that it was always a bed of roses, but any way one views it the management trauma associated with a period of rapid, sustained growth is far easier to cope with than the trauma which sets in when budgets stabilize or decline. In some respects it is only in the latter situation, when the cost/benefit problem has to be squarely faced if the vitality of the organization is to be maintained, that management has an opportunity to come into its own.

Several years ago, the author interviewed for a position at a major university, where the provost discussed the joys of being a graduate dean during the great outpouring of federal funds and increased state support for higher education which occurred during the 1960s. Although the resources available to him at any given time were never sufficient to fund all of the programs and projects that a creative faculty could conceive, he nonetheless was able to respond with a budget allocation for most of them and satisfy the remainder with promises based on budget expectations for the next and succeeding years. He received his real baptism in administration and management, he said, when he moved from graduate dean to provost.
at approximately the same historical moment when the federal largess began to dry up and state support started to level off. Suddenly, decision-making which in different circumstances had seemed relatively simple became excruciatingly complex and difficult when the expedient of relying on a constantly expanding budget was no longer available. Institutional priorities had to be established and funding decisions had to conform to them. The result was a complete reversal of his image across the campus. No longer was he a valued colleague in the intellectual enterprise who could shake the money tree almost at will, but "that administrator" isolated in the bowels of the administration building who was no longer able to sense the pulsing throb of the intellectual life of the university and identify with it. Administration and management, he said, suddenly took on sobering new dimensions as he found himself in a pivotal position in a situation where institutional aspirations had not even started to adjust to new budgetary realities.

One of the inevitable results of a prolonged period of growth in both business and nonprofit institutions is a tendency to gradually proliferate middle management positions. With respect to business and industry, Peter Drucker recently noted that during the economic boom of the 1960s, middle management positions increased at three times the rate of total employment. An indication of the depth of the present economic recession can be seen in the rising level of unemployment among middle-level managers, a group that generally is not too hard hit unless the downward trend in the economy is severe. The increasing unemployment among this group reflects business's recognition that while administrative corpulence can be tolerated to a certain extent during periods of sustained growth, it becomes a distinct liability when the trend is in the opposite direction. Its remedial response is predictable, drastic and dictated by its instinct for survival. The organizational fat is simply trimmed by the issuance of the traditional pink slip.

Such a response is not possible in the case of an institution such as an academic library for a variety of reasons, the most important being that, in the environment in which it functions, the academic library really does not have to perform to survive.

This is true primarily because the academic library is a monopoly, meaning that there are few if any realistic alternatives open to its clientele. Consequently, it tends to foster managerial attitudes which automatically assume that the level of services it offers at any given moment is the maximum that can be squeezed out of existing resources.
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and that any major improvements must come from additional funding. The result often is a kind of unconscious but nevertheless irritating managerial arrogance whose response to user suggestions, complaints, or frustrations frequently takes the form of lectures on the limitations of the budget or a truculent defense of hallowed traditions, rather than a hard, critical look at how effectively existing resources are being used. The discipline of the market place in the long run forces institutions which have to live off earned profits (performance) into the latter kind of response (except, of course, institutions such as Lockheed, General Dynamics or the Pennsylvania Railroad, which receive government subsidies out of consideration of national interests). This discipline just is not operative on the college or university campus where the reaction to a budget crisis is primarily political rather than managerial, i.e., placing the burden of solving the university's budget problems almost entirely on outside agencies. It is the defensive and political nature of this response, based as it is on the assumption of maximum operational effectiveness, which is becoming increasingly irritating to both those who use academic libraries and those ultimately responsible for their funding. What is operative here is the frustration generated by constantly increasing budgets providing less than adequate services, compounded by a managerial attitude which maintains that the only way to improve the situation is through further infusions of additional funds. The analogy does not fit perfectly, but this is an attitude similar in many ways to the myopia with respect to exploring acceptable alternatives which prolonged the agonies of the Viet Nam War.

Although he was not speaking specifically about academic libraries, but about public service institutions in general, Roland N. McKean, an economist at the University of Virginia, expressed an opinion which was carried by the Associated Press wire service in the spring of 1974, with which many users of academic libraries might identify. He was quoted as saying, "as a consumer I do feel put upon regarding the quality of my goods—but not so much because my hotdogs are 30 percent chicken and bread crumbs; it is because my public goods often seem to be 70 percent baloney."

Angry frustration such as this, slowly working its way upward through a labyrinth of political channels, is the motive force behind the paranoia which has permeated every public body which has anything to do with the financing and control of public service institutions of all kinds in recent years. This phenomenon has been particularly visible in the field of higher education where governing boards, coordinating...
comissions, and legislatures have been increasingly wont to ask such
difficult questions as: Just what does the university or college produce
and what is it costing to produce it? A natural consequence of this
attitude has been increasing pressures for institutions of higher
education to "become more businesslike" in their operations, meaning
that far more attention than before should be paid to effective resource
utilization, including documentation, with respect to results in terms of
society's considerable investment in the enterprise. Parenthetically, it
might be added that these pressures from outside agencies, which can
be lumped together under the term "accountability," are probably a
stronger factor motivating change in institutions of higher education
than any internal desire to really come to terms with changing times,
circumstances, technology and societal needs. One might cite as
examples the whole array of affirmative action and equal-pay
problems with which higher education is presently reluctantly
struggling, and the increasingly vocal pressures for networking and
resource sharing among libraries within a single system or a definable
geographical area.

Behind the reluctance of academic library administrators to move
generously into the field of performance measurement is the heady
experience of the past two decades, which fostered managerial
attitudes which measure institutional and individual success in terms of
the magnitude of resources commanded, not in terms of how
effectively they are used. The assumption, of course, is that a larger
budget will invariably result in more and better services. In general,
this is probably valid. However, the real question (often overlooked) is
whether or not services have been upgraded proportionally to the real
increase in budgets. The case of the U.S. Post Office in recent years
should provide cause to reflect on the proposition that institutional
performance is simply a matter of pouring in more money. Parkinson's
classic study of the growth of the British Admiralty between 1914 and
1958 is also a case in point. He noted that in 1914, at the height of an
arms race and when Great Britain had the largest navy in the world, it
required only 4,366 officials to keep it in operation. Fifty-three years
later, however, when the Empire was a fading dream and Great Britain
no longer a great power, 33,000 civil servants were "barely sufficient to
administer," as he put it, "the navy we no longer possess." Lest it be
assumed that what Parkinson described was an isolated phenomenon
rather than a predictable behavior pattern of bureaucratic
organizations, it might be worth noting that, under the goading of
Governor Jimmie Carter of Georgia, the U.S. Navy recently admitted
that of the 3,584 captains on its rolls, only 182 actually command fighting ships. This is ninety less than the number behind desks in the Pentagon and only 5 percent of the total roster.\(^8\)

There is no questioning the fact that academic libraries, having experienced their own sustained boom in the 1960s reacted institutionally in a manner similar to both industry and the military with respect to the gradual accumulation of unproductive administrative overhead costs. Ironically, what is presently viewed in industry as middle-management fat to be trimmed off as quickly as possible, represents in the academic library environment a resource of very significant proportions if the imagination and the will exist to convert it to the energy needed to revitalize and upgrade service programs during a period of stabilized or declining budgets. In some respects, it almost seems as if Divine Providence may have interceded in preparing academic libraries for the difficult period which lies ahead by providing a camel-like mechanism for storing energy during a period of abundant sustenance which can be called upon later when times are difficult. Unfortunately, the library's body chemistry is not the same as the camel's, which automatically converts the fat stored in its hump to water and food as the grazing becomes scarce and the water holes further apart. Consequently, there is no guarantee that the reasonably complex internal organizations which are the product of a twenty-year period of sustained growth will be seen as a significant source for the manpower needed to augment old and mount new service programs during a time when few, if any, new positions will be forthcoming.

In what may have been one of the most significant articles in recent years on the management of academic libraries, Arthur McAnally and Robert Downs called attention to the declining status of library directors, particularly at large, research-oriented institutions.\(^9\) Although the authors entitled their article "The Changing Role of Directors of University Libraries," it was the disturbing evidence of the directors' declining status and influence within the university's organizational hierarchy which was the focal point of their concern. In attempting to explain this phenomenon, they cited a wide variety of historical and sociological developments affecting higher education within the recent past which have significantly complicated the library administrator's life and which are mostly beyond his or her control. More importantly, in several key sections the authors provide more than a hint that the declining status of library directors might somehow be related to something far more personal—a declining confidence
within the top echelons of the host institution in their ability to achieve a level of managerial competence equal to the radically changed circumstances in which higher education presently finds itself. Put another way, university administrators pressed from without and from within on the issue of accountability, and struggling to maintain program quality in the face of reduced budgets, possibly expect a level of leadership from library directors which often has not been forthcoming—something which transcends more elaborate documentation for increased budgets. This is not to say that the problems cited by McAnally and Downs are not real, nor that they can all be alleviated without some real expansion of base budgets; it says only that some of them can, and that library directors are not totally at the mercy of forces beyond their control. Furthermore, there is every reason to believe that a dynamic, successful effort to find and document more effective ways to utilize present resources is the surest way to (1) re-establish the managerial credibility and status of library directors, and (2) lay the groundwork for more sympathetic budget hearings both on and off campus.

In some respects, the most important aspect of the McAnally-Downs article is its reflection of an increasing awareness among a significant number of library directors that higher education, along with academic libraries, has entered a new phase in its history in which many of the shibboleths of the past will be inadequate. Perhaps the clearest manifestation of this is to be seen in the interest shown among directors of large research libraries in the Management Review and Analysis Program (MRAP) developed by the Association of Research Libraries' Office of Management Studies.

The MRAP evolved out of a management study of the Columbia University Libraries, conducted by the firm of Booz, Allen and Hamilton, and sponsored by the Association of Research Libraries (ARL) and the American Council on Education. MRAP is the most sophisticated effort to date to bring about fundamental change and improve the management of research libraries.

The MRAP began in the summer of 1972 with a pilot program involving three libraries. By the end of 1974, two more groups of libraries (totalling fifteen) had committed themselves to the program whose basic objective—to bring about the internal changes needed to make research libraries more responsive to the needs of present and future users—can hardly be quarrelled with. It proposes to accomplish this objective through an intensive self study of present management practices and procedures, utilizing a great deal of staff involvement at
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all levels. In essence, the MRAP was conceived as an instrument for creating an open, supportive and consultive—as opposed to an authoritarian—working environment which would in turn foster better utilization of total staff capabilities leading to upgraded institutional performance.

Participation in the program requires a substantial commitment of manpower and other resources on the part of the participating library. In this respect, it is similar to any other in-depth self-study. In a typical situation in a large research library, from forty-five to sixty people will be actively involved as members of the study team and its task forces for from seven to eighteen months (in some cases even longer). For the second group of libraries to undertake the program, the direct manpower costs “averaged about 200 manhours per month per library.” Considering the fact that most academic libraries claim to be suffering shortages of personnel, an investment of five FTEs over an extended period indicates the level of expectation—with respect to results—of those who have committed their institutions to the program. In addition, because of its costs, the MRAP will naturally and inevitably command the time and energies of the best people on the staff, as managing an investment of this magnitude cannot be delegated to other than “the best and the brightest” without running a serious risk of failure.

The overall impact of the direct and indirect costs of the MRAP on a library’s service programs during the period of its implementation is probably difficult to determine. The impact is probably significant however, since when the main organizational concern is focused inward for any appreciable length of time it is inevitable that service programs will suffer to some extent. This subject seems to have been ignored in what attempts there have been to assess the MRAP’s effectiveness. At the moment, its advocates seem content to accept its basic a priori assumption that once the intensive self-analysis of internal procedures is set in motion the inevitable long-range result will be a significant improvement in institutional performance. Again, as in the case of its impact on service programs during its implementation, there has not been much in the way of published research which puts solid foundations under the castles which have been built in the air.

What have been the results of the program to date? From the evidence available at the time this paper was being researched—eight reports of the MRAP study teams and the material distributed by the ARL’s Office of Management Studies—there is disappointingly little hard evidence to indicate that the program has moved the
participating libraries toward the kind of substantive internal changes, both attitudinal and structural, which would lead to a better utilization of resources. What emerges from the reports of the study teams is a picture of highly structured, intensive exercises in group participation in dissecting and analyzing internal policies and procedures, during which the articulation of a host of major and minor grievances relating to working conditions emerges as a predominant theme. The importance of this aspect of the study-team reports should not be minimized as it suggests that in application, the MRAP has a built-in potential for creating an organizational structure that could be more cumbersome and less capable of making timely and effective decisions than the traditional bureaucracy it seeks to modify, and consequently more expensive to operate.

The problem lies in the MRAP's basic methodology—an intensive, prolonged self-study which by design excludes any attempt to measure institutional performance in terms of effective resource allocation but limits itself to a critique of internal management policies and procedures. This approach, concentrating as it does on the general conditions of the internal working environment, inevitably opens up the possibility of the MRAP becoming an expensive mechanism for focusing all of the latent discontent, justified and unjustified, which exists in any large library, no matter how well managed. The cathartic and therapeutic effects of such an exercise can be considerable, and probably have been, in the participating libraries. Indeed, it is one of the goals of the MRAP to set just such a process in motion. However, the danger with respect to the crucial problem of resource allocation lies in the difficulties of stopping it once it has been set in motion.

The MRAP is in effect a two-stage program with implementation committees replacing the original study teams and task forces once their recommendations have become a matter of record. Inherent in this process is the distinct possibility of transforming what were conceived to be temporary organizations with a specific limited purpose into a more or less permanent alternative power structure paralleling the traditional bureaucracy and in competition with it. This process would tend to develop to a greater degree in a situation where, for any number of reasons, a positive response to study-team recommendations was not forthcoming in a relatively short period of time.

Even interpreted in the best possible light, i.e., as an example of a type of participatory management, an organization thus encumbered would be extremely inefficient in terms of making timely and effective
decisions for the simple reason that information-sharing and decision-making have become organizationally confused, resulting in a situation where, so to speak, a touchdown cannot be scored unless all eleven members of the team have a hand on the ball when it crosses the goal line. A number of years ago, Roy Pearson, Dean of the Andover Newton Theological School, pointed out the dangers which arise when the distinctions between participating in the deliberations leading to a decision and decision-making per se become blurred. “It seems obvious to me,” he wrote, “that we have made a fetish of togetherness, elevated group dynamics to the status of a holy cult, and by insisting that every forward step be taken by a team, guaranteed that some of the most important forward steps will never be taken at all.”

Nothing in the above should be construed as a blanket condemnation of the MRAP. The purpose is to create an awareness of the difficulties involved in utilizing group dynamics as a management tool in an environment where there is no automatic or built-in mechanism for forcing a concentration on institutional performance and no overwhelming interest in developing such a mechanism; in other words, there is no mechanism as effective as avarice and survival are in the private sector for eventually assuring due attention to effective resource utilization. Because it specifically limits itself to a study of internal relationships and procedures, there are serious questions regarding the MRAP's potential for producing the attitudinal structural changes necessary to make academic libraries more effective in resource utilization, and through this, more responsive to user needs during a prolonged budget crisis. In some respects, the MRAP reflects the fact that in spite of the blossoming romance between academic library administrators and modern management theory and techniques, it has not as yet produced the all-consuming passion for constantly monitoring performance which will guarantee their effectiveness. Lacking this catalyst, the romance has not really matured into the productive marriage it was anticipated to be.

Unfortunately, the two other trends affecting manpower utilization which were mentioned earlier in this paper—the movement toward full faculty status for academic librarians and the pressures for a more consultive or participatory environment—also seem to exhibit this weakness and are consequently propelling academic libraries to some extent in the direction of more complex and more labor-intensive administration infrastructures. Operationally, both tend to proliferate committees, task forces, and administrative and policy councils, whose
major concerns all too often are matters of governance rather than service programs. The result inevitably is a siphoning off of energy from service programs. This process has been imaginatively described by Lawrence Clark Powell as a “kind of library incest, an activity which takes librarians from fertile intercourse with library users into sterile intercourse with each other.” Peter Drucker is equally blunt, albeit without Powell’s literary flair or economy of words: “Another common time-waster is malorganization. Its symptom is an excess of meetings. Meetings are by definition a concession to deficient organization. For one either meets or works... . There will always be more than enough meetings. Organization will always require so much working together that the attempt of well-meaning behavioral scientists to create opportunities for ‘cooperation’ may be somewhat redundant.”

What the events of the past ten years seem to indicate clearly is that it is possible to have an academic library which is efficiently administered, in which the full rights and privileges of faculty status are accorded to professional librarians, and in which the total staff is literally awash in a sea of collegial and participatory bliss, and still have a library with a low capability in the area of effective resource utilization. Unfortunately, an argument can be made that this is the direction in which the three trends discussed here seem to be propelling academic libraries at the present time. Consequently, the question has to be faced as to whether modern management theories and techniques have the potential to solve the academic library governance problem in a manner which will not only reduce internal tension and dissatisfaction but also ensure a higher level of services to users.

I believe that they have this potential, but only if as a profession we can muster the courage to sally forth from the bastions of bureaucracy so meticulously constructed over many decades in search of a solution to this problem. Building the ramparts higher or stronger through the processes described above will only serve to perpetuate the fortress mentality which for too long has inhibited individual professional growth and institutional performance. There is no questioning the fact that the problem of governance is rapidly emerging as the single most important issue in academic librarianship. However, it is doubtful that there is any significant awareness of the fact that the manner in which it is solved will have a long-term effect on a library’s ability to mount and sustain adequate service programs, particularly when higher education is entering a period of stabilized funding. To the extent that
this is true, what is at stake is nothing less than the validity of our claim to be a service-oriented profession.

Figures 1 and 2 represent pragmatic attempts, one of them still on-going, to get at the central problem of governance through a radical restructuring of the internal organization of two large research libraries. Both show the relationships between the library faculty and the library administrative office. Figure 1 involves an institution with a centralized reference service in the main library and three branch libraries. Figure 2 depicts an institution with a subject/divisional arrangement in the main library and four branch libraries.
In interpreting the figures, three important administrative concepts should be kept in mind: (1) the responsibilities of the individuals or groups inside the doughnut rings labelled "University Librarian" are primarily staff rather than line in nature; (2) the university librarian and his support staff are conceived of as a resource whose primary purpose is to create the kind of working environment which will encourage a high level of performance on the part of highly educated and trained professionals; and (3) the lines of communication between the library faculty and the university librarian are direct, almost entirely unimpeded by the layers of middle management and supervision characteristic of the traditional bureaucratic hierarchy.
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Another important, operative concept represented in the figures is that to a significant extent all members of the library faculty are called upon to be managers—managers of the most important resource at their disposal, their own time and talents. In other words, it is the library administration’s responsibility to create a professional working environment. It is the individual faculty member’s responsibility to exploit it to the best of his or her ability.

Both figures reflect the view that some traditional middle management and supervisory positions in academic libraries are really not full-time occupations. In a sense, they have become technologically obsolete. This shows up most clearly in Figure 1 where in that particular library, during the time when the organizational concept represented was operative, there was no head of reference, no head of cataloging, no assistant director for public service and no assistant director for technical services. It probably should be added that this was a library serving an institution with an enrollment of 30,000 students, a book budget in excess of $700,000, and a collection of over one million volumes.

To say that certain traditional positions are no longer full-time occupations due to advancing technology and other factors, e.g., new types of graduates from the professional schools, is not to say that all of the functions associated with them can be totally dispensed with, but simply that they do not require a full-time person to carry them out. In the case of Figure 1, operationally it was the university librarian who filled in on an ad hoc basis when the occasion demanded. This occurred most often in instances where inter- or intradepartmental agreement could not be reached on policies or procedures, instances where relations with outside agencies or groups were involved, instances where personnel policies and budgets needed to be discussed, or instances where additional resources were needed for particular programs or projects.

At the institution represented by Figure 2, this concept is undergoing further development. Specifically, it involves tapping the person on the library faculty who is best qualified to handle a particular problem or project which would normally be handled by an assistant or associate director. This approach has survived one very difficult operational test in the library represented in Figure 2. Briefly, it involved temporarily calling upon the head of the humanities section to steer through the faculty library committee a potentially explosive program of critical importance.
The point here is that within a large library there are individuals who can be called upon for specific, temporary administrative assignments without permanently detaching them from the area where they can make their optimum contribution to the library's mission. This approach has at least two major merits worth considering: (1) it is possible to match talents and problems in a very specific manner, and (2) superb librarians who should be functioning at the daily interface between the library and its clientele are not permanently co-opted by the bureaucracy and set to doing the kinds of things that bureaucrats must do to justify their existence. Put another way, temporary administrative assignments avoid the on-going administrative overhead costs of permanent positions which are not really needed.

Figure 3 shows the organization of the catalog department as it existed in the institution shown in Figure 1. The day-by-day affairs of
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the department were managed by a catalog council composed of all six professional catalogers, four of whom were section heads and two of whom were responsible for special original cataloging assignments. The council's chairman rotated monthly in alphabetical order. The chairman's responsibilities beyond the obvious were to be the contact person for anyone having business with the department and to take care of the middle-level drudgery inherent in any sub-organization, e.g., sickness, absence and vacation reports, and scheduling problems.

No claim is made that these attempts to develop a radically new library infrastructure have produced any fundamental truths with respect to library organizational theory. On the other hand, examples of a new organization vitality were and are certainly evident. These stem partly from the faculty attempting to adjust to a situation where individual performance is valued above traditional organizational lore and where the concept of supervision as traditionally understood is no longer applied to faculty. In essence, the environment symbolized by the organization charts provides opportunities for a good deal more individual initiative than was the case in the past. By the same token, individual responsibilities are also greater. In a very important sense, this latter aspect may very well turn out to be the most important by-product of this approach, since the natural corollary of an organizational structure which is less hierarchical and less bureaucratic is a reward system based on individual performance and achievement irrespective of administrative or supervisory responsibilities. In the last analysis, it is this aspect of the concept which seems to be the most promising in that it provides a framework within which the opportunities and the responsibilities for individual professional performance and growth can be roughly equalized. If this is true, the way would seem to be open for the academic library profession to break out of its bureaucratic mold and exploit the opportunities inherent in full faculty status, both individually and professionally, secure in the knowledge that to do so will result in better institutional performance.

Through the directness and informality of its communication network and its emphasis on individual performance and development, the kind of organization symbolized in the figures provides an alternative to the group dynamics approach to the governance problem advocated by the MRAP. Consequently, it has a better chance of avoiding the costly organizational rigidity which seems to be MRAP's inevitable offshoot—i.e., committees and task forces concerned with internal problems—and its almost inevitable tendency to turn into organizational rigor mortis. The demands on the entire
library faculty, especially the university librarian, are more rigorous in some respects than those of the traditional organizational structure. On the other hand, the rewards are also greater, particularly with respect to an enhanced individual and institutional self-image based on achievement.

As a final note, it should be added that the linchpin of the concept has to be the basic approach of the university librarian to the governance problem. If he or she can emulate M*A*S*H's Colonel Blake and "hold still for a lot" during the period of adjustment to a new set of professional relationships in the name of upgraded institutional performance, the academic library profession's latent Hawkeyes and Trappers will respond accordingly. As with institutions of all kinds, the key to performance is leadership at all levels. The type of organization discussed above at least holds out hope for encouraging its development.

References

2. In these days when information, data and document delivery appear to be the major concerns of the academic library profession, it is sometimes forgotten that one of the essential functions of a research library is to ask as well as to answer questions, to teach as well as to provide the tools of instruction. This was never better stated than by Ernst Cassirer in a letter to Anton Warburg: "For the past three decades, the Warburg Library has quietly and consistently endeavored to gather materials for research in intellectual and cultural history. And it has done much more besides. With a forcefulness that is rare, it has held up before us the principles which must govern such research. In its organization and in its intellectual structure, the Library embodies the idea of the methodological unity of all fields and all currents of intellectual history... May the organon of intellectual-historical studies which you have created with your Library continue to ask us questions for a long time." In Ernst Cassirer. The Individual and the Cosmos in Renaissance Philosophy. Mario Domandi, trans. New York, Harper & Row, 1963, p. xiii.
4. Many of the ideas expressed in the following paragraphs were brought into clear focus by: Drucker, Peter. "Managing the Public Service Institution," Public Interest, Fall 1973, pp. 43-60.
5. For an interesting study of the negative service attitudes fostered by the conflicts between the intellectual and moral commitment of the professional and the demands and constraints of a bureaucratic organization, see Wasserman, Harry. "The Professional Social Worker in a Bureaucracy," Social Work, 16:89-95, Jan. 1971.
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Basis for Resource Allocation:
Analysis of Operations in a
Large Library System

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There is considerable indication of an awareness among libraries and library systems of the need for systematic examination and evaluation of their operations. This is a fairly recent concern which has been exacerbated by the financial constraints imposed by the "steady-state" syndrome in education, especially higher education. This concern has been expressed in one system, the California State University and Colleges (CSUC), through the development of a series of cost studies designed to identify and analyze specific library operations as a basis for decision-making among alternatives. Since there is little evidence of large-scale approaches to library system operations analysis, it seems appropriate to report the CSUC efforts to date.

The literature relating to the analysis of operations in library systems has been primarily concerned with the identification of unit costs for specific activities and functions in specific libraries, and some guidelines for the design and implementation of systematic studies in this vein do exist, most notably in the publications of Dougherty and Heinritz,¹ and Morse.² In Great Britain, Aslib³ has done considerable work in task analysis and unit costing, but since the focus is upon the provision of information services in small special libraries there does not exist a one-to-one transferability to large libraries or to library systems.

Within the past year, two very significant publications related to resource allocation and management decision-making have appeared.
One is a recent issue of Library Trends, devoted to the "Evaluation of Library Service." No extensive review of the literature will be provided here, as the topic is more than adequately covered in that issue. The second, Morris Hamburg's Library Planning and Decision-Making Systems, is too recent a publication to allow for evaluation of the applicability of the analytical models presented therein to actual library situations. Cursory examination indicates that an admirable synthesis has been made of previous quantitative methods and studies in designing statistical information systems appropriate for the gathering and analysis of library management data. These systems are designed for large public and university libraries, but any library interested in self-evaluation can make use of the procedures described by Hamburg.

While it must be admitted that the major reason for evaluation and performance measurement in libraries is far too often the concerned interest of funding bodies, nevertheless there is increasing evidence that the library profession and individual libraries themselves are committed at least to self-examination, if not self-evaluation. They may well be guided by these remarks of Fussler: "In choosing new or modified information—or library—systems designs there tend to be conflicts between the priorities to be given to cost-efficiency objectives and performance objectives. It is evident that choices or priorities in these areas may, unless one is very careful, lead to different and incompatible solutions. The elusiveness of cost/benefit data in relation to information access is not a barrier to the development of new capabilities, but it does make the justification for such capabilities more difficult."

LIBRARY STUDIES IN THE CSUC

The CSUC system consists of nineteen campuses located throughout California with clusters in the Los Angeles and San Francisco Bay areas. The oldest of these campuses dates from 1857; the newest began operation in 1970. All of the campuses offer master's degree programs and several offer joint doctorates with the University of California. While instructional emphasis is historically strongest in the fields of education and the liberal arts, the system also includes two polytechnic universities, and the instructional emphasis is changing throughout the system.

As might be expected from the diversity of location, size, age, and academic programs—ranging from inner-city commuter campuses with over 25,000 students to small, rural residential ones—there is considerable variation among the nineteen CSUC libraries. This
variation may be characterized for any one library according to the
nature of the collection, its age and size, number and distribution of
staff, as well as the diversity in organization and operational style which
represents the individual needs of each campus. Taking budget and
collection size as determining factors, the system may be described as
consisting of six large libraries, seven medium-size libraries, and six
small libraries.

Although joined under a common chancellor, following the same
fiscal regulations, and sharing a uniform personnel package, the
campuses—and consequently the libraries—have long cherished their
autonomy and have resisted any inroads made upon it. Therefore,
while informal cooperative arrangements and consultation have taken
place among the libraries, it was not until 1970, when the position of
Associate for Library Development and Services was established in the
Office of the Chancellor, that formal outlines of a library system began
to emerge. It is still in the process of emerging and will probably never
be elaborated beyond that of a confederation. The office of the
associate is a staff position and has no line authority; its function is to
coordinate and assist, rather than to lead. The major responsibility in
these recent years of increasingly stringent budgets has been to
facilitate collection development through the identification of
resources and cooperative endeavors.

Early in 1971, the Board of Trustees of the CSUC formally accepted
library automation as one of its priorities, and budgeted funds for
system-wide implementation. One of the results of this action was the
creation of an additional position in the chancellor's office, that of the
Associate for Library Automation. This position was filled in the spring
of 1972 and system-wide planning for carrying out the trustees' mandate was undertaken.

At the same time that the trustees of the CSUC were making a
commitment to library automation, the Department of Finance of the
State of California was undertaking a study of the libraries of the two
systems of public higher education within the state—the University of
California and the CSUC. As might be expected, the focus of these
studies was upon budgetary and fiscal aspects of library operations,
although different areas were emphasized in the two system studies.

The University of California study7 was concerned primarily with the
function of the research libraries, their relationship to existing and
future graduate programs, and the problems of acquisition of
expensive and frequently esoteric publications. This emphasis upon
collection development, and especially upon collection duplication,
was repeated and reinforced in the CSUC study. The report of the CSUC study is entitled *Library Cooperation: A Systems Approach to Interinstitutional Resource Utilization*, and deals primarily with the interlibrary loan (ILL) function. A rapid, courier-based ILL network is proposed which will presumably reduce collection development through the sharing of "low-use" items. Unfortunately, no formula is proposed by which libraries may identify low-use items prior to acquisition.

The action of the trustees and the studies of the Department of Finance helped to convince the CSUC Council of Library Directors that the operations of the individual CSUC libraries should be examined in a systematic manner so as to provide a basis for decision-making relating to the financial constraints and demands being made upon them. Existing and forthcoming budget restrictions would require thorough, on-going analyses of all facets of library service, but the primary concern at this point was the implementation of automation.

Although there is a large body of literature describing various library automation projects, the information available was not in sufficient detail to allow CSUC to reach the "make or buy" decision. To obtain this necessary information, a contract was let to Inforonics, Inc. of Maynard, Massachusetts, to survey operational systems within the United States and Canada. Phase I of their report consists of an inventory of such systems, and Phase II is an in-depth analysis of selected systems thought to be transferable to the CSUC environment.

It has been recognized that successful automation depends upon a thorough understanding of the existing manual procedures and their rationale. Only through these means can an estimate of the possible cost/benefits be achieved and a smooth transition to the new system be assured. Consequently, in October 1971 the Steering Committee of the CSUC Council of Library Directors recommended that an analysis-and-cost study of technical processing operations in all nineteen libraries be undertaken. The purpose of this study was to provide CSUC librarians with accurate cost figures for their own operations as well as a means of comparing costs based on a standardized methodology. The study was to facilitate comparisons of similar functions in several libraries as well as between current manual operations and projected operations in a computerized mode. The immediate impetus for this decision was the report prepared for the Steering Committee by Wood (Associate for Library Development and
A Large Library System

Services) and Martin (CSU, Sacramento) on the alternatives to centralized processing available to CSUC.

TECHNICAL PROCESSING

The Technical Processing Cost Study (TPCS) team was established under the general direction of the Associate for Library Development and Services and proceeded to develop a methodology based upon that used for the Colorado Academic Libraries Book Processing Center feasibility study. The major difference between these two—aside from minor changes in activity titles and definitions—was that in the CSUC study, personnel were not to account for all working hours, but only time actually spent in performing the defined tasks; this reflected the concern of the project team that the study be task-oriented and not personnel-oriented. The level of detail in the study (which on the basis of later experience was considered to be perhaps too fine), produced a large mass of raw data which has still to be effectively analyzed.

The Report of the TPCS is in two parts: one is a detailed chart for each library, presenting time and costs for four levels of library staff—professional, library assistant, clerical, and student assistant—engaged in ninety-three separately defined activities; the second is a summary presentation of production units and labor unit costs for each library and for twelve distinct aspects of technical processing, and the total for the ordering and cataloging function.

Unit costs for ordering ranged from $.60 to $5.37, with the average being $1.08; unit costs for cataloging ranged from $.68 to $2.76, with an average of $2.05; physical processing ranged from $.44 to $2.14, with an average of $1.03 per unit. Within these categories, the individual library's costs cluster around the average figure, with the exception of the upper figure for ordering. It is probable that some error occurred in either reporting or calculating this data. During the period of the study, 101,542 titles were ordered by the nineteen libraries, and 128,441 titles were cataloged. Some further analysis, primarily in the area of staffing comparisons, has been undertaken, but this information is not yet widely available to the individual campuses.

In retrospect, the flaws in the TPCS seem very obvious. One of the most serious is one over which the project team had no control—there was no test run of the data compilation and no opportunity to correct errors made in coding or in compilation. However, because of the length of time during which the data was collected (ten weeks), and the
amount of data collected, these errors were probably averaged out in
the final totals.

A series of computer programs were written to summarize and
display the data collected in the TPCS, and these were subsequently
published as a *Library Labor Cost Accounting System*. This system
generated considerable interest throughout the library community as
it was designed to consist of general purpose programs, capable of
handling input from library functions other than technical processing.
Unfortunately, for a variety of reasons, this system has not been
utilized again either within CSUC or by any of the institutions which
requested the report and/or program documentation.

It is quite possible that the major benefits accrued from the TPCS
had little or nothing to do with the reported results; they came from the
act of self-examination itself. Because of the diversity of operations and
staffing patterns among the nineteen libraries it was impossible to place
them on a scale, with one library performing at an obviously more
productive level than another. Many of these variations were dictated
by circumstances over which the libraries had little or no control. As
these same circumstances occur elsewhere, a serious question must be
raised as to the validity of comparing cost-study results, even when the
same methodology is employed. Thoughtful analysis seems to indicate
that it is only the individual library which benefits from such studies.
Making decisions for a group of libraries based upon the results of such
studies should be approached with considerable caution.

A survey of the nineteen CSUC libraries taken a year after the TPCS
Report was published indicates that such is the case within this system.
The one tangible result was that the use of the average cost for
acquisition and cataloging ($5.65) was adopted as the systemwide
replacement cost for a lost book. This should be revised regularly,
however, in view of the increased costs of both labor and materials.
Some of the libraries have used the results of the TPCS as a baseline
from which to measure various aspects of their operations, with the
emphasis being upon file management. The dissemination of
information regarding staffing patterns has caused some libraries to
review their organizational arrangements and consequently to shift
personnel for more effective utilization. In general, however, it must
be admitted that the TPCS has had little impact upon the daily
operations of the studied libraries.

The original purpose of the TPCS was to determine costs of manual
operations prior to automation, and then to repeat the study after
implementation in an effort to demonstrate cost/benefit effectiveness.
This plan is still viable, although unavoidable delays in carrying out the automation of various functions within the libraries may invalidate some of the conclusions to be drawn from such a comparison.

INTERLIBRARY LOAN

The next activity of the CSUC libraries to be investigated was the interlibrary loan function. This was a direct outgrowth of the report of the Department of Finance, which recommended more effective collection utilization through the use of a courier-based ILL network. It also represents another facet of the on-going analysis of library operations being conducted in CSUC.

As in the TPCS, an existing study—performed by Westat for the Association of Research Libraries—was modified for implementation, rather than repeating the design process. Not only does this procedure save time and make use of professional expertise, but it is hoped that it will provide some basis for comparison of the results. The CSUC ILL study consisted of two parts: the determination of the times and associated personnel costs involved in activities required in the borrowing and lending of library materials; and an analysis of the ILL transaction itself—type of material involved, user classification, time-lag, etc. The study was conducted in the spring of 1973 and included twelve of the nineteen libraries, eight of which were conducting an experiment with the use of telefacsimile for the transmission of ILL requests and reports.

The mean labor cost for an ILL transaction, filled or unfilled, was found to be $4.73—the sum of the mean borrowing cost ($3.47) and the mean lending cost ($1.26). As in the TPCS, there was a wide range of personnel involved in this activity, which made comparisons among libraries difficult. There was also considerable variation in the number of transactions per library during the study period, ranging from 56 to 741 ILL requests processed in an individual library.

While the identification of costs associated with the ILL activity is of value, the analysis of the ILL transactions themselves provided the most significant management information. Of the 3,490 requests analyzed, 41 percent were within CSUC, 41 percent were with other academic libraries (including the University of California), and 18 percent were with other types of libraries—public, special, governmental. An unexpected result of this analysis was the emphasis upon book material, with 42 percent of the requests being for this form, and upon comparatively recently published items, since 48
percent of the requests were found to be for material published in the decade 1963-73.

Although the borrowing library has no control over the length of time it takes to receive a requested item, 41 percent of these requests were filled within nineteen days from the date of sending the request. However, 42 percent of the borrowing requests remained unfilled at the end of the study, which covered a five-week period. The majority of requests to CSUC libraries for loans were filled promptly, 63 percent within nine days of receipt of the request. The use of telefacsimile to transmit requests did not appear to speed up transactions in an appreciable manner, but perhaps with faster and less expensive equipment it may be possible to transmit ILL material itself, thus justifying its use.

As has been emphasized previously, the improvement of any ILL network depends upon the availability of better and more comprehensive finding tools. This was demonstrated in this study by a title-by-title examination of periodicals borrowed from the University of California; later publication of the CSUC Union List of Periodicals indicated that all of these were available on at least one CSUC campus. (The question as to whether or not they were actually available—or in use, at the bindery, missing, etc.—was beyond the scope of this investigation.) The forthcoming CSUC machine-readable shelf list will greatly enhance the ILL capability of the system.

The major thrust of the Department of Finance’s recommendation for a courier-based ILL network between CSUC and the University of California was economic; by sharing resources and eliminating collection duplication, acquisition budgets could at least be held in a steady state if not actually reduced. The emphasis on the lending and borrowing of recently published book material, as revealed in this study, makes this assumption questionable. It would appear that there is far less duplication among collections than was supposed, and that much of the material requested via ILL falls into the “high-use” category. These findings have implications to be seriously considered by library directors and collection development librarians in allocating resources.

A very positive side effect of the ILL study was the establishment of a CSUC committee to study ILL policy within the system and to make recommendations for a uniform, system-wide policy which would considerably liberalize restrictions now placed upon the borrowing and lending of materials. This committee’s report has been presented to the CSUC library directors and is currently being revised.

[580]
The first major library function within CSUC to be automated is that of circulation control. As with the TPCS, a cost study is to be made of the existing manual systems, then repeated after implementation of the automated system. The first installation is planned for 1975 and design of a cost study is currently being undertaken.

For some years, several of the CSUC libraries attempted automation of circulation control systems. The larger libraries, such as San Diego and Northridge, currently have partial systems in operation; smaller campuses, such as San Luis Obispo, have made some progress in this direction. In all cases, the libraries are dependent upon the local campus computer center for assistance in implementation and operation of the systems. Announcement of plans to implement a circulation control system at California State University (CSU), Sacramento, focused the attention of the chancellor’s office on the desirability of installing compatible circulation control systems on all nineteen campuses. Installation of compatible systems is thought to be cost-beneficial in that it will allow for rapid exchange of data among the campuses. The creation of a machine-readable union shelf list for use in circulation control might also expedite interlibrary loan transactions and resource sharing, as well as provide an effective tool for use in collection development in the various libraries.

The activities associated with the charging and discharging of library materials are similar to an assembly-line production, except that the work flow is erratic with frequent periods of idle time. However, the techniques of time and motion study seem most appropriate for the measurement of this activity. Accordingly, an experimental study was funded at CSU, Sacramento, to test this hypothesis.

The time/methods study was conducted at Sacramento between November 1973 and February 1974. It was agreed that procedures associated with charge-out, charge-in (discharge), overdues, and holds would be studied at both the main circulation facility and the separate reserve book facility, whereas procedures associated with availability check would be studied at the main circulation facility only.

The first step in the study concerned detailed descriptions of each activity and development of a taxonomy of activity tasks and task elements. The second step was to observe and measure the direct person-minutes spent on each element by using stopwatch time-study techniques. As much detail as possible was included in activity descriptions so that benefits of improvements resulting from
automation might be easily computed by determining which tasks and task elements were deleted and/or modified. Since some tasks are usually performed by student assistants and some by full-time staff members at several levels, the detailed taxonomy allows for accurate estimates of operational costs in library circulation control. While the concepts behind time/methods study are well known in industry, their application in service and nonprofit organizations is rare. This project was in a real sense an experiment to determine the feasibility of using an old technique in a new setting, even though a previous study of circulation had utilized a similar technique.\textsuperscript{17} The results indicate that the experiment was successful.

In considering the transferability of the methodology to other environments, it should be kept in mind that the basic purpose of the study was to isolate functions that are done manually now and will be done mechanically when the automated circulation control system is operable. No effort was made to study all circulation activities, or to account for all working hours of the staff being studied. Determination of unit cost was not a goal in this particular study, as it was in the TPCS, but rather determination of a method for capturing model unit time spans. With this basic information, individual administrators might then apply local personnel cost rates and determine actual operations costs.

IMPACT OF THE STUDIES

The Technical Processing Cost Study was the first effort of the CSUC to gather system-wide data on specific operations involved in ordering, cataloging, processing and related activities. Emphasizing that the study was “task-” rather than “personnel-” oriented, the data were gathered to cover time involved in tasks performed by a variety of people in each campus library, but was not to account for each staff member’s full work day.

Following the data-gathering period, activity details were provided for each campus library, as well as a system-wide summary of the data. The raw data and summary tables were published in February 1973\textsuperscript{12} for use by individual libraries in assessing their own productivity and related costs. In a follow-up inquiry conducted in May 1974, none of the participating libraries reported having made extensive use of the data, primarily because no follow-up interpretation had been provided.

Six of the nineteen libraries retained a favorable reaction to the
concept of system-wide cost analysis; most of the others implied that system-wide studies would continue to be less than productive. Among the reasons stated were the ranges in size, function and geographical relationship of the nineteen campus libraries. While each of the libraries serves the instructional program of its campus, there is no doubt that there exists a wide divergence in management philosophy expressed and implemented by each of the library directors.

Another difficulty expressed was the lack of a body of data from other systems with which the CSUC studies could be compared. The literature indicates some effective studies within individual libraries, but there appears to be no comparable data on systems of diverse institutions. There appears to be considerable interest in direct cost accounting, largely politically motivated, but thus far no one has successfully implemented such a procedure.

Nine of the campus libraries declared that the TPCS had no impact whatever on their operations; four libraries indicated some unspecified impact; four libraries found the report useful in analyzing the level of personnel assigned to specific tasks, and made changes in classification of employees as a result. Three libraries reported indirect impact in such matters as reorganization of files and twelve libraries reported that, inspired by their participation in the TPCS project, they have conducted or plan to conduct individual campus studies.

There were secondary benefits gained by conducting the study, in spite of the lack of definitive data. The TPCS experience brought with it the realization that as libraries grow in size, and cooperate in a network mode, they must formalize their approach to operations. Something more than a “gut-level” feeling must be the basis for operational decisions which involve a large expenditure of funds and personnel. While most of the librarians state now that they would not support a system-wide effort again, twelve of the libraries are inspired to conduct similar studies within their own libraries.

The ILL study involved not only a study of time and costs of loans, but also investigated the types of materials requested and lent, and the kinds of borrowers. The study provided some extremely useful data as well as some surprises. While the data on the cost of interlibrary loans more or less confirmed management suspicions that this was not an inexpensive method of providing users with needed materials, the revelation that a high proportion of loans involved books of fairly recent publication date had been unexpected. This confirms the need for further investigation as to what constitutes “high use” and “low use” with regard to library materials, and the implications of such concepts.
for collection development. The study will undoubtedly be a major input to future discussions of interlibrary loan policy within the CSUC and in its relationships with other sources of materials. The study further emphasized the basic requirement for improved finding tools, both within the CSUC and among other library systems.

The circulation control analysis described above is another example of a system-wide effort to gather data for comparative purposes. Specifically, it will be used in the CSUC system to justify the cost/benefit of conversion to automated circulation control methods. A useful by-product, of course, is the provision of a system-wide data base for specific, limited operations that will be of value to the administrators of the several libraries in the CSUC system.

While the findings of the TPCS and other similar studies may be unpalatable to library staff members because of the exposure of internal operating information, they do provide a baseline by which the studied operations may be assessed under differing conditions. The conduct of such studies creates in itself a receptive environment for further analysis and self-evaluation.

This analysis, however, cannot lead to institutional introspection unless there is a standard—system-wide, regional or national—against which an individual library’s operation can be measured. At present no such standard exists, nor are there standard measuring instruments. The design and implementation of more extensive studies along the lines of those undertaken by CSUC may lead to the development of these much needed standards.

References


A Large Library System


Additional References


The library literature has produced a steady stream of calls for and techniques for the analysis of library operations in such a way as to discover the "true" or "real" costs of each activity performed in the library. Hayes and Becker, and Kountz—perhaps the most articulate writer on the subject—have produced standard essays on cost accounting and method analysis. Examples of specific applications can be found in articles by Mount and Fasana, and Axford.

In almost all of the writings, whether by explicating the technique of analysis or by giving actual examples, the personnel costs are indeed among the highest of all of the factors making up the total cost of any operation. This is, of course, most easy to demonstrate when reviewing the annual library statistics, wherein the operating costs of libraries are clearly heavily weighted to personnel costs. Savings of any kind are hard to achieve in a library and, in fact, may only be achieved when a retrenchment is forced either because of the economic conditions or by a decision on the part of the parent institution or governing body to actually reduce the library's budgets. However, reallocations of budgets are possible through analysis.

The reason for the inability of libraries to reduce budgets, of course, is that most of the libraries which are not "special libraries" have a vast reservoir of unmet needs. Whenever one reads of or otherwise examines new circulation systems, new library buildings or remodeled quarters, additional branches, increased book budgets, or any other expansion of library facilities or services, it is almost always mentioned that startling and dramatic increases in use appear. Whenever one examines the introduction of new methods of cataloging or acquisition, increases in service can again be demonstrated. It is, of course, very difficult to discover whether these increases are generated by new

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facilities and systems themselves, or whether the needs for such services have existed all along and are, for the first time, being at least partially met. One tends to believe the latter since it is so often the case that it was the perceived and articulated unmet need which led to the implementation of the new building or the new system.

Personnel costs, already the largest of library expenses, are also often understated—especially in the case of academic and municipal libraries—by concealing unreported expenses. In universities and municipal institutions many of the fringe benefits are not attached to the library personnel costs. Contributions to retirement systems, sick leave, and insurance of various kinds are often regarded as institutional overhead and are thus an additional and greater cost than is reported. On the other hand, there are certain overhead costs with machine systems which are also unreported—the same fringe benefits in the personnel administrative costs, etc. But these are far more often explicit than the unreported costs for personnel. No one connected with any supervisory position in any institution—library or other—has the slightest doubt that the administration and overhead when dealing with personnel problems occupy an enormous portion of any institution's time and expense. Whether or not institutions can socially or politically realize the savings in this area when personnel savings are accomplished is open to question, but given a strong will and motivation such may be accomplished.

A personnel budget represents the costs of people—costs rising at a rapid rate despite the current recession. For the past five years, the costs of clerical labor, excluding fringe benefits, have been rising in central Ohio at a rate of approximately 13 to 15 percent per year. Even with the most optimistic projections calling for a leveling of this rate, one must expect the rise to continue at a rate of at least 8 to 10 percent, going to a 6 to 8 percent rate at the end of the next five years.

The costs of computer technology are most certainly falling. That is not to say that a central processing unit will rent for less in 1975 than it did in 1970, although in fact it may, but that the technology itself has expanded at such a rapid rate that the activities performed by computers have become much cheaper. The costs of storing, transmitting and displaying a bit of information have decreased dramatically; at the same time, computers are now able to store, transmit and display more information, and do it faster. And, despite inflation, terminal costs have been decreasing, as have input costs, especially those divorced from personnel, such as optical scanning. Table 1 illustrates this dramatic decline in computer costs (IBM data).

OVERALL, ANY PERSONNEL SAVINGS WHICH CAN ACCRUE ON THE PROFESSIONAL LEVEL WILL BE DONE THROUGH SHARED-INTELLECTUAL ACTIVITY. OBVIOUSLY, THE SHARING OF LIBRARY OF CONGRESS CATALOGING INFORMATION HAS FOR SOME TIME ENABLED LIBRARIES TO SAVE PROFESSIONAL CATALOGING PERSONNEL COSTS. THE RISE OF COMPUTER-BASED NETWORKS WILL OBVIOUSLY CONTINUE SUCH SAVINGS AND WILL, BY PROVIDING SUCH ACCESS TO SUCH SHARING WITHOUT THE INTERVENING ROUTINE ARRANGEMENT OF THE INFORMATION, PROVIDE THE ABILITY TO EVEN FURTHER SHARE AND SAVE PROFESSIONAL COSTS AS WELL AS CLERICAL EFFORT.

THAT COMPUTERIZED SYSTEMS CAN RESULT IN ACTUAL PERSONNEL SAVINGS EVEN ON THE MOST LOCAL LEVEL IS BEST DEMONSTRATED BY KOENIG'S ANALYSIS OF THE SCOPE SYSTEM FOR SERIAL CONTROL AT PFIZER.6 THE ELIMINATION OF ROUTINE AND REPETITIVE TASKS BY COMPUTER ARRANGEMENT AND DISPLAY RESULTED IN CLEAR AND IDENTIFIABLE TIME-SAVINGS OF LIBRARY PERSONNEL.

CIRCULATION IS A FUNCTION WHICH HAS BEEN TRADITIONALLY VIEWED AS CLERICAL, ALTHOUGH OFTEN REQUIRING PROFESSIONAL SUPERVISION. AS REPORTED IN THE LITERATURE, THE ON-LINE SYSTEMS AT OHIO STATE UNIVERSITY,7

TABLE 1

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<tr>
<td>Cost of executing one million instructions</td>
<td>$40.00</td>
<td>$2.00</td>
<td>$0.40</td>
<td>$0.11</td>
<td>$0.08</td>
</tr>
<tr>
<td>Cost of storing one million instructions</td>
<td>$135.00</td>
<td>$88.00</td>
<td>$25.00</td>
<td>$7.00</td>
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Source: Personal communication from IBM, Data Processing Division, Marketing Force, Columbus, Ohio.
Eastern Illinois University, and Northwestern University did not result in the elimination of any position. Each description tends to point out the improved service, faster and more accurate recording of circulation, and other activities such as delivery of material or catalog access. Each institution reports increased circulation—large increases in fact. However, at Ohio State, two years after the system was implemented, external budget constraints forced the elimination of approximately two clerical positions in that area, a step which could not have been taken without the automated system and which did result in a reduction of personnel cost.

The cost of any circulation system or any system requiring much routine activity should be measured against the manual systems it replaces. At Ohio State University, approximately one-half of the cost of each circulation is attributable to either the terminal or the central processing units, the other one-half is attributable to personnel, supervision and other traditional activities connected with the charging, discharging and shelving of materials. The personnel costs of each transaction have been rising at approximately the same rate as before—13 percent per year. The machine costs have decreased slightly. Hence, had the system been entirely manual, the increase in the last five years would have been twice that which actually occurred. One can assume that such will be true of most computer-based systems.

The effect of personnel cost reduction has often been left inexplicit by the library administration. The explicit changes, if any, which are necessitated by the reduction are often left to the working unit. If the staff in circulation is to be reduced, the library administration usually has a rough sense of what changes in service and procedure will result, but typically the circulation department must work out the details. It is assumed, not always correctly, that all members of the staff have the same basic goals and that therefore the “right” cutbacks will usually be made.

The computer-based system does demand that any modifications be explicit; for instance, if the system is to be changed it cannot be changed by sloppy record-keeping in the evening, doing less training with the clerks, filling out only one-half of the McBee card, filing charges only once a day rather than twice, etc. All changes must be made to the program and must be made explicitly. The traditional ways of modifying cost, such as those just mentioned, cannot be used, so the activity itself continues unchanged unless the program is obviously changed. The lowering of personnel expenditure in an automated system will either result in changes to the operation of the
nonautomated activities within the department, such as shelving, or the number of patrons served will decrease, or, as is most likely in a large system, the unaccounted-for slack in actually expended work effort will be cut. It is probably impossible to remove all such slack since a library’s employees, as well as its patrons, are human and not robots, but this very humanity, when replaced by machine systems, accounts for the greatest savings.

One should remember that while well-planned automation can relieve library staff of dull, routine tasks and provide the ability for more effective human interaction between the staff and the patrons, it is basically a dehumanizing change. Such dehumanizing is at once a strength and a weakness. Machines seldom tire; they almost always work at the same speed; computers do not need coffee breaks and leisure time. Such human needs are built into all functioning labor-based systems. When systems are transferred to machines, people previously employed in them lose both the drudgery and the ameliorating slack.

When Ohio State University (OSU) joined the Ohio College Library Center (OCLC) at its inception—when it was the Ohio Cooperative Library Center—OSU’s library administration realized that the future would bring increased costs, but made only vague plans for meeting those costs. In 1971 when the first of the true membership fees for on-line service were presented for payment, the library was forced to implement the OCLC system in such a way that it could pay some $40,000 for the membership from its current budget. The university neither wished, nor was in the position, to fund the increased cost being incurred by the library. Therefore, three professional positions were eliminated when the cataloging services were reorganized in order to take full advantage of the new center. The original cataloging was separated from the unit which was to use the data base provided by OCLC, as was all other copy editing. The money for those three positions was then transferred to the operating budget to pay the yearly membership bills to OCLC. Since the system itself enabled so much more cataloging to be performed, the number of items reaching the shelves actually increased within two years. Thus, while personnel costs were saved and an equal cost was added for the center’s fees, the unit cost did decline.

editing—are added, the 1972 cost was $5.012, and the 1973 cost, $4.874. The items produced by original cataloging in 1973 cost $5.329 per volume without the miscellaneous additional costs noted above, and $7.920 with the additional costs.\textsuperscript{10}

The average cost per item cataloged went down dramatically in the ensuing three years. However, as personnel costs have risen and productivity remained even or increased but slightly, the costs of original cataloging have risen at a time when the total costs of cataloging have dropped. The experience was an enlightening one proving the theoretical contention of the effects (noted at the beginning of this article) of increased personnel costs at the same time there are decreasing machine costs.

However, there are serious problems when one attempts to actually implement plans for reducing personnel costs. In most institutions there are hidden motivations to not implement such plans even though transfers from personnel to other expenses are often to the obvious advantage of the institution. Most institutions have complicated financial control systems which may require detailed and cumbersome justifications, permissions, and forms in order to make such transfers of funds. In addition, most institutions, especially universities and municipal and state-supported libraries, have personnel funds reallocated on a year-to-year, line-by-line basis; i.e., personnel increases are either negotiated or allocated, based on the number of positions assigned. Such a system seems to result in library personnel budgets increasing faster than library operating budgets. The only thing that comes close to such increases are the book budgets in those universities which are primarily concerned with the size and quality of their library collections. The transfer to the operating budget of personnel money should be done at the last moment, or as soon after the end of the fiscal year as possible, in order to take advantage of any automatic increases in institutional budgets.

In many libraries, personnel policy—whether affected by collective bargaining or not—will not allow the free elimination of personnel positions. Even if the library administration is relatively free to eliminate positions, the politics and sociology of the local situation may well not allow such activity without extensive consultation and agreement. It is obviously prudent to save or accumulate vacancies from which the funds may be transferred to the operating budget.

As described above, Ohio State University’s experience in transferring vacancy allocations to the operating budget in order to pay the OCLC assessment was based not only on the analysis of the
actual productivity under both the old and the new systems, but also on the demands for reallocation imposed by the new activity. If the decision had been to keep a stable number of items going to the shelves—i.e., to not increase the number of items cataloged—further reallocations could have been made. It is clear in retrospect that the implementation of the on-line computer-based circulation system could have resulted in personnel transfers. However, at the time we could not prove it to ourselves, much less prove it to the library staff, and it was not until the demands for retrenchment were made by the parent institution that one was able to impose such on the library.

In the examples of cost analysis given by Axford, many of the routines identified and costed by him could be done more cheaply by using computer-based systems. However, the efficiency of such systems must be proved not only in general but in particular application on the local scene.

Until such systems are actually implemented or until the budgetary constraints are obviously and clearly noted by the entire staff, personnel savings will rarely be effective. One should not simply assign such to the intransigency of the library staff or to lack of imagination by library administrators, or to the general stodginess of the academic establishment. It is simply, as Ellsworth Mason has noted, that computer systems do not always work. Although Mason did not strongly point out that they do work sometimes, the fact remains that systems have evolved which have the potential, at least, for personnel savings.

For the future, the most likely spheres for personnel savings are those which contain the elimination of redundancy. The redundancy that is endemic in libraries exists on a national level, i.e., locally, files which are produced elsewhere—but which lack the ability to display the same records in multiple locations—are reproduced over and over again. It is to this problem that OCLC is addressing itself, and it has been relatively successful in the display of machine-readable cataloging at multiple locations from a single data base.

The sharing of this activity is most clearly an opportunity for personnel savings, but on any large campus or in any large library system, municipal or state, library records such as serial records and circulation files are kept both centrally and in the location where the materials are housed. The unique ability of machine-readable records to be displayed at multiple locations gives libraries, for the first time, the ability to end the redundancy of the “central serial record” and the local record. That is, a journal housed in the agriculture library need
no longer be checked in by both the central serial record and the agriculture library; the record, once made, can and will serve both locations. If such check-in is on a regional or statewide basis throughout a network, the Union Catalog activity is automatic.

Almost all libraries have redundancy built into their book selection, order, in-process, catalog, and circulation files. If the same record can be carried through all the files, modified as it progresses through them, an enormous personnel savings can again result.

Until a few years ago, the old and heartfelt wish of interlibrary cooperation was a matter of faith; it is now a matter of intense practical economic necessity.

References

The National Role in Resource Allocation

DONALD J. URQUHART

The allocation of resources within a system is conditioned by its objectives. These are determined to a great extent by the way those in control look at their problems; this is conditioned by their experiences, which are in turn conditioned by the allocation of resources in the past. There is thus an inherent internal stability of the arrangements within a system. This stability, however, can be destroyed by some major external force. In the library world such a force is now apparent—the continuous growth in the output of publications. This force has begun, but only just begun, to change the approach to library problems.

For instance, not long ago it was regarded as a confession of failure in some British university libraries to have to borrow a publication from elsewhere. That period has now passed. Today it is recognized that no library, not even a university library, can be an island. But this change in the United Kingdom is so recent that there is no generally accepted philosophy as to when a library should rely on its own resources and when it should rely on those of others. This article will try to formulate such a philosophy. It is written with the conditions in the United Kingdom in mind, but it will attempt to consider the problem in general terms. It will, however, approach the problem from the viewpoint of academic libraries.

I will assume that it is axiomatic that the local resources of an academic library are limited. I also assume that the total resources of a national or a regional library system will be limited. The questions to be discussed relate to the division of functions (and hence of resources) between libraries designed to serve particular institutions and libraries designed to serve a wider audience. The discussion will be primarily concerned with the cost effectiveness of a library system as a whole.

Despite the risk of over-simplifying the problem, let us consider that an academic library is concerned with meeting the needs of its students,

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staff and research workers. The students are mainly undergraduates who in general need a relatively small number of publications, but in any institution they may well need multiple copies of a number of titles. In general such students will need the books they want quickly or, due to the competing pressures on students, they may never in practice have time to read the specified items. The extent to which it is the responsibility of the students themselves to provide the publications they need is outside the scope of this article.

The needs of the staff and the research workers are qualitatively quite different from those of the students. First, they need to know what exists which might be useful to them and, second, they need to be able to obtain any publication they would like to see.

These, in brief, are the objectives to be considered for a total library system. These aims give rise to three activities: creating guides to what exists, making these guides available and helping readers to use them, and supplying the items the readers require. The question thus arises about the division of functions between local and national organizations with regard to these activities. This discussion will be more concerned with what this division of functions should be than with what can immediately be achieved using the existing financial arrangements.

To proceed, let us look at what happens in an academic library. It selects and orders publications for the library with or without the faculty's assistance. The library maintains some sort of record of the publications it receives, and it assists readers in discovering what they want to read.

The selection, however it is carried out, is the result of many arbitrary decisions. It should secure the items for which there is any appreciable demand but, as a rule, these are only a small fraction of the total input. The selection process is mainly concerned with making a number of arbitrary decisions about the items which might be required only occasionally. The fear that a library will not be able to supply an item if it is wanted results in its spending whatever resources it can secure for this purpose. Rarely is the acquisition decision process reviewed in light of the subsequent use of the items selected, in spite of appreciable evidence to indicate that a great many of the acquisitions of an academic library are very rarely used. The justification of this situation is that it is the duty of a library to supply a publication when it is wanted. It cannot rely on a slow and uncertain interlibrary service except to supplement local resources. Such a service is only used when the local acquisition policy has failed through lack of resources or
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foresight. The interlibrary service possibilities are not taken into account in deciding acquisition policy.

However, if the interlibrary service is able to provide most of what is wanted quickly, a new situation arises and a new philosophy is needed. There appear to be two possible bases for such a philosophy. The first is quite simply a question of cost—with regard to the cost of acquisition, storage and issuing, and the cost of interlibrary loans, which will be the cheaper? Undoubtedly, using this basis many large academic libraries would be much smaller than they are at present. This approach to the problem has considerable attraction for those who control the purse strings, but most librarians consider it to be too crude. To resist it, it is necessary to have some other basis than the ancient philosophy that each library should aim to be as large as possible. The only alternative appears to depend upon using “success on demand” or availability factors.

This second approach is strangely alien to librarians. Undoubtedly there is the technical difficulty of measuring availability in an open-access collection, but this difficulty is not insuperable. The real difficulty seems to be the survival of the ancient belief that a library’s purpose is to have everything on hand when it is wanted. Whatever the difficulties, it is the responsibility of the management of a service—to measure the performance of the service it purports to offer.

The use of availability factors would provide not only a rationale for deciding when to rely on central services, but also a measure which would indicate how the local needs and resources are changing. This is important; at present most academic librarians feel that their services are deteriorating but they are unable to cite any figures on this which are meaningful to users. Availability factors could be meaningful to library users.

Availability, however it is measured, is made up of two essential elements: that which is available and the speed with which it is available.

Different systems have been tried for supplementing local resources. In brief, it seems that the systems which depend on union catalogs and library cooperation are inherently slow and uncertain. On the other hand the National Lending Library (NLL) demonstrated that a central loan collection can not only provide a satisfactory service, but can also create confidence in the users that it can provide such a service.

The question inevitably arises as to where the financial resources needed by a central service should come from. Logic might suggest that the libraries which benefit from a central service should pay for it.
However this would require an academic library not only to admit that it did not have sufficient resources to have everything, but also to give up some of its limited resources to the central service. This line is not likely to be successful. The slow development of the Center for Research Libraries (CRL) as a library for libraries is probably an illustration of this. From afar it looks as though the development of CRL has also been hampered by the idea that it should not collect items which were usually available in members libraries.

The alternative approach is to secure direct support from central government funds. This approach was possible for the National Library of Medicine in the United States and the NLL in the United Kingdom. Because in the United Kingdom the NLL’s resources came from the central government, there was an inherent obligation to serve all libraries. This eliminated the technical difficulty that CRL faces of identifying but not collecting the serials held by the large academic libraries. It also made it possible for the NLL to adopt from the beginning the policy set down by K. D. Metcalfe: “One final warning if we are to make mistakes, as we are bound to do. Let us try to make them, in the case of most libraries, by not getting enough, because the law of diminishing returns will come to our aid. But, and this is a large but, let us make the mistake on the side of getting too much in the National Libraries. The total cost to the library world of this method will be less, and nationally only a drop in the bucket.”

The policy of collecting all “worthwhile” publications not only eliminated the technical problem of discovering what other libraries held or were likely to obtain, it also solved another technical problem which was not generally appreciated. The commonly held publications are the ones for which there is the heaviest demand in the libraries which hold them. They are consequently the publications that libraries are the least willing to lend to other libraries; at the same time, within the total library system they are generally the publications for which there is the heaviest interlibrary demand. Thus, the inclusion of such items in a central loan collection facilitates the working of an interlibrary loan system which depends upon the cooperation of other libraries. It reduces the chance that they will be asked to lend the items they do not really want to lend.

A combination of a set of historical accidents and some logic led to the central government making sufficient resources available to start the NLL. As the library developed, its costs were to an appreciable extent covered by some consequential savings in other organizations, many of which were financed from the public purse. This became most
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apparent with regard to special libraries. The savings here, however, did not arise from any obvious reduction in the expenditure on acquisitions, but from a reduction in the expenditure on increasing storage capacity and in the true costs of making and handling interlibrary requests. Such savings are of the hidden variety which would not predispose a library to make a contribution to the creation of a central collection.

It would be difficult to evaluate these hidden savings for U.K. academic libraries, as in recent years nearly all academic institutions have been expanding in student numbers and in subject coverage. This has inevitably resulted in a substantial increase in the size of academic libraries. There is evidence to support the view that the existence of the NLL gave considerable help to the development of the research activities of the newer academic institutions, but in general these spend less on acquisitions than the older and larger academic libraries. There is no doubt that, relatively speaking, the latter have benefited least from the creation of the NLL; thus these institutions would have been the least likely to have contributed to the creation of the NLL collection. Moreover, if charges had been made on a service basis for items supplied, the large academic libraries would not have contributed a great deal. Consequently an attempt to develop a central loan service by relying primarily on the support of the larger academic libraries would not have been successful in the United Kingdom.

In fact, initially the NLL only charged U.K. users for the costs of postage and of making photocopies. More recently, the NLL has begun to move in the direction of making its charges cover the cost of handling requests (as distinct from the costs of acquiring and storing its collection). However, so far this level of charging has only been achieved for the overseas photocopying services. It now looks as though this level of charging would be acceptable for the NLL's U.K. services, but that to go beyond this would require the broad acceptance of a new philosophy based on cost-effectiveness and availability concepts.

Once a new philosophy of the sort envisaged here develops, librarians will begin to regard their libraries less as independent units and more as local branches of a national system. This will make it possible for librarians to take a new approach to library records. No longer will it be assumed that an academic library should have a comprehensive guide to the publications it holds. This assumption is now so widely held that it is rarely questioned. By tradition most libraries make subject guides to their monographs. They have quietly
and unconsciously abandoned the idea which Panizzi once had that a library should make a similar guide to the contents of its periodicals. They are quite happy to use guides to the contents of periodicals which have been made by others, so why do they persist in making, at great expense, homemade guides to their monograph collections? Of course the homemade guides—usually called catalogs—say where the publications have been shelved. But could not a much simpler location guide be made? Have the technical possibilities of using computers to make the sort of records which were considered necessary in the past distracted attention from the more fundamental question: What sort of records will be necessary in the future? Are the published guides to monographs less adequate than the guides to periodicals or is it that the traditions of librarians do not die easily? One thing is certain: a research worker is usually more interested in what exists anywhere on a particular subject than in what exists in a particular library. The bibliographical guides to what exists can clearly be prepared on a national or an international basis. There is no reason why a library should prepare a bibliographical guide to one of its collections unless that collection is fairly comprehensive and the guide has more than local significance—i.e., it is part of the overall plan for guides to what exists.

This approach would mean that most library catalogs could cease to attempt to be complete bibliographical descriptions of the contents of particular libraries. Instead, they need only be simple guides designed to provide a rapid, but not necessarily a 100 percent, access to what is available locally.

This notion runs counter to what most librarians seek to do. Nevertheless, it seems to fit in with a cost-benefit approach and the mood of users. The latter is illustrated by the popularity of MEDLINE, which is mainly concerned with making rapidly available references to only a fraction of the existing medical literature.

One can conclude simply that the continuous increase in the output of publications has reached the point at which the approach of librarians to their problems must change. Objectively, the situation requires the development of central services—of libraries for libraries, etc. But, beset by the pressures on their existing resources, librarians are unlikely to make available cooperatively the resources needed to create the central services. However, once such services exist and can demonstrate their effectiveness, librarians would be more ready to rethink their aims. This would make them more willing to contribute to the maintenance of the central services. Thus, initially, the allocation of
funds from some central source to create these central services is essential.

Within the scope of this general proposition it is now possible to discern some priorities. First, since it is the increase in the output of publications which demands action, the first task is to create a central library supply system to supplement local resources. The existence of such a system would in time create a new approach not merely to acquisition policies but also to library records. The introduction of a revised library recording system in the noncentral libraries would be a consequential development and hence should be a second priority.

Reference

The Impact of Serving the Unserved on Public Library Budgets

JOHN T. EASTLICK
and
THEODORE A. SCHMIDT

American cities of the 1920s and 1930s were very concentrated with well-defined borders, with a few suburban towns for the wealthy. The rural expanse was relatively immense, to be traversed by the few who owned an automobile or by those who would travel by inter-urban trolley or railway.

The urban situation remained relatively static until the decade of the 1940s, when a major migration took place as many factory jobs opened in northern cities. Rural people, black and white, poured into the urban areas to staff the burgeoning war industries of World War II. These people settled into housing assigned to them a priori because of their skin color and/or economic situation. This housing usually consisted of already existing apartments or reconverted single-family buildings which were divided into multi-family apartments. Invariably, this pattern of unskilled workers, inadequate housing, and lack of mobility due to skin color and/or education led to the development of pockets of urban slum.

While the late nineteenth century and early twentieth century city can be characterized by its centralization of government, industry, cultural institutions and adequate public transportation, the latter half of the twentieth century has been and will continue to be characterized by decentralization. Following the influx of the rural poor, the middle-class and upper lower-class working people moved to the new suburbs ringing the urban area. In its search for expansion, industry discovered that land was cheaper in the rural areas and that it was more efficient to build on one expansive story than to add on to existing urban factories. There was a shorter travel distance to and from the

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factory for the newly suburbanized working force, and the government would accommodate industry's rural expansion by developing new transportation routes to connect urban centers via the rural and suburban rings.

The two decentralizers, roads and industry, have had a major impact on public libraries and on the central city in general. Cities ringed and bisected by high-speed highways and public transportation systems allow for a more mobile population. With jobs located in the city or in the suburbs, a commute of eighty miles per day to and from the city or between suburban communities is not unthinkable. Not only do the high-speed highways physically isolate sections of a city, but they make it possible for people who live in the suburbs to commute to their white-collar positions in town and commute back out again without contributing to the central city coffers for services used.

This picture has been amplified by the fact that urban and suburban growth has been so abrupt. In 1900 urban population constituted 40 percent of the total U.S. population, while in 1960, 68 percent of the population was urbanized. Suburban growth has been equally as striking: during the decade 1940-50 the suburban population grew three times faster than in the decade 1930-40. The growth of the black population in the cities has been fear inducing to many. The 1970 census showed that in urban areas (Standard Metropolitan Statistical Areas) of 500,000 or more people, 12.5 million whites and 762,000 blacks had moved to the suburbs since the 1960 census. The suburban black population increase was .3 percent over the 1960 census figure. On the other hand, the urban influx of blacks was an increase of 5 percent (18 percent in 1960, 23 percent in 1970). During the decade 1960-70, 3.4 million black people moved into the central cities as opposed to the 2.5 million white people who moved out. The prospect for 1985 as projected by former Senator Paul Douglas is that “by 1985, an additional 53.9 million whites will live in the suburbs, an increase of 104 per cent. The nonwhite suburban population will go up from 2.8 to 6.8 million, but this represents only a 1 per cent increase in the total.”

Similarly, aged people make up larger percentages of central city populations. Chicago, for example, is considered a “young” city because 45 percent of its total population is under twenty-five years of age. But Chicago also has an elderly population of 10 percent who are sixty-five years of age or older. In both age groups, the ability to contribute to city tax support is either low or fixed by retirement. These groups are heavy users of library services, but can afford to pay relatively little in property tax.
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The situation, then, within the large urban areas of the United States is this: (1) the urban flight of the wage and salary earning middle class to the suburbs has exacerbated the decay of buildings and services in the central core, and (2) the people who have filled the vacuum created by those fleeing the city are less educated, in poorer health, usually in need of immediate housing, and obliged by skin color or economic contingency to take substandard housing. The resulting population requires and demands better services ranging from welfare agencies and day-care centers to fire and police protection. They also are the least able to contribute to the initiation and maintenance of these services.4

Kenneth Beasley sees the urban situation as one of physical and social changes occurring much faster than the individual’s or government’s ability to alter the existing economic and social relationships.5 The conclusion that was drawn during the turbulent 1960s was that libraries were being irrelevant by avoiding their adult constituency. Librarians felt this, and launched a massive program of trying to reach their unreached constituency.

The emergence of the civil rights movement of the 1960s forced white America to face its record of voter registration “irregularities,” separate and unequal education, and housing and job discrimination. The result was a massive outlay of federal funds for a “War on Poverty” designed to upgrade the housing, nutrition and education of the nation’s poor.

How did libraries fit into the developments of the mid-1960s? Perhaps public librarians recognized that their tradition of providing book resources generally acquired by the library had no meaning to the ghetto adult who could not read. Perhaps they saw their “mission” as being a practical failure in the political arena where quantifiable results counted with dollar-doling city councilmen and few ghetto residents were passing through library doors. Perhaps librarians recognized that their service to and for the middle class would not ingratiate them to the new black mayors in new black-majority cities such as Washington, Los Angeles, Atlanta, Gary, and Cleveland, which had majority constituencies that were decidedly not middle class.6 Whatever the reason, urban librarians actively sought out the unserved in their communities.

They found people who not only lived in the physical ghetto of homogenous race, economic situation and educational attainment, but also lived in a psychological ghetto. Symptomatic of the psychological
ghetto was the reluctance of blacks to participate in white-offered and white-administered community programs even though the offer had been made. Ralph Conant suggests that beneath the black's attitude is the unspoken reaction of a black reflected in the passage from James Baldwin's Go Tell It On the Mountain: "they would look at him with pity."

Librarians found people who were dysfunctional in the historical perspectives of urban mobility. Pre-1950 urban areas were characterized by the opportunities they offered for economic, social, and political upward mobility. Highly visible, urban blacks were color barred, value barred, and acceptable-language barred from moving upward through political, job, or housing ranks. The machinery never functioned for them—schools did not educate, politicians did not communicate.

Library service for the disadvantaged had a very low priority since the disadvantaged traditionally placed little value on books per se. That does not mean they placed little value on education. In surveys of ghetto residents the question of aspiration for one's child was answered by the hope that the child would be educated enough to be a lawyer or doctor. The problem arose when the residents were questioned as to how they would accomplish their dream of educating their child for these professions; they rarely knew. Also, the ghetto residents were misinformed about charges for library service. Finally, ghetto residents lacked the finances to travel to and from the library, or for a babysitter to mind the children.

The statistics concerning those termed "disadvantaged" might seem numbing to some, but to many librarians they were the standards of the enemy, waiting to be torn down in battle. The 1960 census revealed the following: 77 million, or 40 percent, of the U.S. population were living below the poverty level; 10½ million families had an annual income below $4,000, and 4 million individuals had an annual income below $2,000. From a population of 99 million persons 25 years and older, 8 million had completed less than 5 years of schooling, 13 million had completed 5-7 years of schooling, and 17 million had completed 8 years of schooling; in other words, 40 percent of the population had completed 8 years or less of schooling.

Claire Lipsman's analysis of library use among the disadvantaged discovered that fully two-thirds of the users were 19 years of age and younger and one-third of the users were elementary-school age. The vast number of disadvantaged over 19 were nonusers of libraries.

If a relationship exists between the statistics on library use and
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defining the disadvantaged, it exists in identifying why the library is not being used more. In the disadvantaged community the library maintains its function as an educator of children, a recreation and meeting place for youth, and an irrelevancy to adults. While the library once held a monopoly on communication by controlling the print media, television, newspapers, and the ubiquitous paperback have introduced new information sources to the adult community. While the library as a part of the education complex promised and delivered upward mobility to early immigrants through acculturization, it failed to deliver for the Blacks, Chicanos and native Americans.¹¹

“If there is to be meaningful change in the lives of these people, it must come about through finding and using the methods by which their own latent power as human beings can be mobilized, organized, and directed toward constructive social action and desired social change.”¹² This answer to an unwritten question on how to help is offered as a generic solution by Kenneth Clark. While the idea applies to all segments of government and society in a very general way, it has a particular relevance to librarianship. Forgetting the logistical difficulties of implementing such a difficult task as “finding and using . . . latent power as human beings,” Clark pinpoints the solution. Massive infusions of funds into existing programs (mental health clinics, welfare case workers) will not get the job done unless a basic revision of attitudes towards the poor as human beings is undertaken. Once this attitudinal shift has been completed, the program implementation can begin.

How does one go about organizing a library program to aid the urban disadvantaged? Optimally, the planning would follow the tenets of Program Planning and Budgeting (PPB)—a recent arrival in library budgeting procedure. This method was very rarely followed; pre-1970 budgeting was usually done on the basis of supplying funds for categorical costs or line costs. Another reason why the optimal plan of program planning was rarely used is that the funding source necessitated speed in developing a proposal in order to beat the competition to the funding trough; therefore, adequate planning was not accomplished. Also, the funding was usually limited to one or two years with little hope of renewal. The typical program had to be of a demonstrative or experimental nature, and often little research prefaced the proposal. For example, a favorite program would be to develop a “nontraditional” library collection for ghetto youth and adults. Rather than interrogate the target community on what it thought were necessary materials, the librarians proposed books on the
basis of where they thought the community was and should be. After one specific program had been funded and implemented, the Neighborhood Youth Corps began requesting material in calculus, advanced electronics, and cybernetics. Did the library have these materials? Of course not!13

Lipsman’s analysis of library effectiveness pointed to another salient benefit of community analysis. Her study of variables controlling library usage revealed that formal schooling is a very strong motivator of library usage.14 This variable extends beyond elementary, secondary, and advanced schooling to include vocational and informal training. The issue here is not whether a library should directly enter the education field (although there is discussion of the liabilities and assets of such a proposal15), but rather the awareness that the library has to have “feelers” in the community to update the staff on educational needs within the community.

While these general comments apply to most programs, unique methods were applied to specific community programs. The New York public libraries have been at the forefront in developing service projects for the unserved. The Queens Borough Public Library conceived of the Operation Head Start program in 1963 as a method of introducing children to books, and books to families which had little previous contact with any printed matter. A narrative report of this program has been done by the Bank Street College of Education.16

The Queens Borough Public Library also sought to meet the needs of another unserved group by developing a Central Library Teenage Project. This program provided a space in the permanent library for after-school use of audiovisual equipment and paperbacks. To augment this program, mobile units which served the community during the summer as Tell-A-Tale-Trailers, were converted to mobile reference libraries which traveled to community junior and senior high schools to act as after-school homework centers during the school session.17

The Brooklyn Public Library created innovative outreach programs by expanding the amount and number of locations of its story-telling programs. By utilizing trained community volunteers, the library was able to reach the unreached at churches, day-care centers, housing projects, and schools. As significant as the quantifiable group of people reached is the fact that by working in liaison with the administrators of the organizations where outreach programs were held, libraries began coordinating their information-handling capabilities with other community agencies.18
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Equally as radical as breaking out of its shell to cooperate with other agencies was the Brooklyn Public Library's 1967 revision of its book selection policy. This revision stressed the need for each neighborhood agency to review its rejected title list with emphasis on neighborhood relevancy. Such activities as the Bushwick Branch Bash brought the library completely out of the print/nonprint media into the sponsorship of a neighborhood fair. Held June 13-14, 1968, the Bash was an example of community cooperation to accomplish a nonlibrary function. The community coordinator for the Bushwick Branch identified community agencies (police and fire departments, social security office, welfare department, etc.) and individuals (having abilities in crafts-making, cooking, native dancing, etc.) who were willing to donate time to the fair. While the success of the venture is reflected in its 7,000 participants, no information was given about any surge in library use.

The High John Project, sponsored by the University of Maryland's School of Library and Information Services and by Prince Georges County (Maryland) Public Library, received sizable press coverage from its inception on October 23, 1967, to its demise. Its history is a case study in funding for library programs for the disadvantaged. Originally, funds were sought from the Library Services and Construction Act, Title I, to establish a traditional library service program for people in an unserved area. Ancillary to this proposal was the opportunity to train librarians in a rarely seen environment. The Office of Education and the Office of Economic Opportunity were interested in the concept but found that the project did not fit in with their overall plans. Enough latitude prevailed in the plan to allow the secondary purpose, training librarians, to become the primary purpose. The new objective of the program was to reverse the assertion that “library schools and library practice have been and continue to be middle class in their orientation.” Money was quickly found by the sponsoring University of Maryland School of Library and Information Services from the Higher Education Act of 1965, and the program began. The program tempered the idealism of new librarians by exposing them to a culture with behavioral patterns which they had never seen. While the outreach for the library school students was, perhaps, more unusual than the outreach to the community, a unique library did arise. When the federal grant was terminated, the University of Maryland discontinued its sponsorship but Prince Georges County Public Library retained its sponsorship. The High John Library never again received an adequate level of funding, and the project terminated.

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when the staff went on strike against the inadequate funding for paving, lighting, and book stock.\textsuperscript{23}

Toledo, Ohio and Chicago, Illinois both sponsored a type of outreach which is unique—bus service to and from the library on a scheduled basis. The Toledo Public Library chartered new city buses to serve different sections of the city by giving free rides on Tuesday and Thursday evenings for one month in 1969. A library staff member would ride the bus answering questions about library holdings, organization, and services. The cost for this was $140 per week and it was discontinued when not enough people made use of the service.\textsuperscript{24}

The Chicago busing experience was twofold. A 1971 Model Cities Grant of $181,000 was used to bus 9,000 school children from ten schools to local branches, while a second program—similar to the Toledo program—transported citizens to the main library. Cost-effectiveness figures were not included in the surveys.\textsuperscript{25}

The relationship between the Chicago population and library use deserves comment. The 1960 central-core population was approximately 3,257,000. Only 22.3 percent (734,584) of this group were registered library users. Fully 60 percent of this user group were 19 years of age and younger, and over 50 percent of the user group were students enrolled in formal schooling.\textsuperscript{26} To rectify a situation in which only 12 percent (approximately 254,000 people) of the user group are adults not engaged in formal schooling, the Chicago Public Library actively sought a new constituency. The thrust of the programs was away from middle-class service for school children and best-seller-seeking matrons, and toward attracting the previously unattracted residents of the southside and westside slums. One component of this effort was the opening of twenty to twenty-five storefront information centers which served as exchanges for community service agencies, as cultural centers, and as homework/study centers. Staff assignments were tripled and many in-community people were trained to do the clerical jobs. Two task forces, one for the southside and one for the westside, were created to coordinate branch and storefront programs. Each task force contained a children's library specialist, a young-adult specialist, an adult specialist, an audiovisual specialist, and a community worker. Through the cooperative efforts of a number of librarians, small collections of reference and basic reading materials were distributed to neighborhood bars and barbershops, welfare centers, medical clinics, and juvenile court waiting rooms. Small, van-like bookmobiles delivered topical information on welfare rights, job information, and
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consumer protection to the ghetto neighborhoods. A "republication office" operated to repackage useful hardbound material into leaflet or pamphlet form for distribution through community agencies.27

The Los Angeles Public Library System has long recognized the need for outreach programs, if only for self-survival: "When the Watts riot leveled the buildings along the length of South Central Avenue in Los Angeles, the Vernon branch library was almost alone on that street to remain intact. Its survival in this devastation is an indirect tribute, perhaps, to the program of community service that started three years ago, when, ironically, the Vernon Branch was to have been closed."28 Utilizing a $519,536 LSCA grant, the Los Angeles system developed a two-year, four-phase program to aid the disadvantaged. Phase I brought bookmobile service to a poorly served area in the southern region of Los Angeles. The few existing branch libraries were significantly under-used. Phase II coordinated an extensive staff retraining program, and Phases III and IV developed service in individual communities, e.g., the bilingual community.29 The success of the program can be measured by the fact that 95 percent of the patrons attracted by the bookmobile service had never previously used the library.

The above review of selected library service programs to the unserved has been presented to demonstrate the fact that such programs during the 1960s were mainly supported by federal funds. The federal role in library support began in 1946 when the American Library Association began lobbying for rural library development programs. The culmination of this effort was the Library Services Act (LSA) of 1956. A 1964 amendment to the LSA eliminated the rural-only bias by erradicating the 10,000-or-less population limit. A 1966 amendment to the now-termed Library Services and Construction Act (LSCA) made demands on the recipient states to provide matching funds and state plans. The 1965 Elementary and Secondary Education Act (ESEA) aided urban public libraries by providing funds for the development of elementary, secondary, and college libraries. This absorbed a portion of the traditional public library role as an ancillary agency of the education system. With the advent of the War on Poverty, a number of other federal acts were authorized which had ramifications for public libraries. The Model Cities Act and the Higher Education Act of 1965 had spinoffs which affected urban public libraries. The Economic Opportunity Act of 1964 called for the establishment of libraries in Job Corps Centers and for the initiation of work-study programs designed to recruit children...
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from economically disadvantaged backgrounds in various professions (including librarianship) through the use of grant money. The Manpower Development and Training Act (MDTA) of 1962 demanded that libraries re-evaluate their collections which served MDTA recipient groups. The act provided funds for purchasing new and relevant materials for these collections.30

The majority of programs of service to the disadvantaged were funded by LSCA Title I money. Lipsman reports that thirteen of the fifteen city libraries she visited had received federal money for the initiation and maintenance of their programs. Eleven of the fifteen had received their money from LSCA, and ten of the eleven had received $100,000 or more per year per city.30

The local government assumption of funding library programs was not a popular concept. In 1966 no city of 100,000 or more population was committing more than 2 percent of its total municipal expenditure for support of its libraries.31 The funding situation had degenerated to the point that Lipsman reported that of the fifteen cities she studied, eight city administrators answered with an unqualified "no" her question on their interest in expanding local financial support to library programs for the disadvantaged.32

As the Johnson administration promoted the philosophy of "The New Federalism," funds from various federal sources seemed rather secure. The tenets of new federalism included the "recognition that disparities in the fiscal and other capacities of state and local governments make them unable to meet the national need for equality of opportunity without help from Washington."33 However, at the end of the Johnson administration changes in the federal role began to be evident. Gradually the administration's budget recommendations for library programs were reduced, authorized funds were impounded, and federal funds were not able to support programs previously established.

Not all federal funds were eliminated. In 1971, LSCA federal expenditures totaled $37,941,068 (including carry-over funds from FY 1970 under the Tydings Amendment). Of this amount, 75.9 percent, or $28,275,826, was allocated to LSCA administration of all titles including Grants-in-Aid, strengthening of state agencies, statewide library programs, centralized processing programs, training, and other programs of general priority. Only 24.1 percent, or $8,965,242, was allocated to specific priority programs such as programs for the disadvantaged (7.9 percent), and titles III, IV-A and IV-B of the then-constituted LSCA.

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That there was a shift in priorities is indicated by the pattern of expenditures of LSCA funds for fiscal year (FY) 1972. While there was a larger sum available in FY 1972 ($48,865,410 including carry-over funds from FY 1971 under the Tydings Amendment), the distribution changed. General priority expenditures were reduced to 52.9 percent of the total sum available and specific priority expenditures were increased to 47.1 percent. Programs for the disadvantaged reserved 16.8 percent ($8,234,286) of the specific priority funds. However, many of the other specific programs are related to the unserved population. Programs such as services to the physically handicapped, the institutionalized and the aging, and for early childhood education, career education, migrant education, drug-abuse education, the Right-to-Read, and other specific priority programs received 30.3 percent of the funds.34

While the LSCA Title I authorization for FY 1973 was $117,600,000, only $30,000,000 was appropriated. Never in the history of LSCA did the amount appropriated equal the authorization. But this FY 1973 budget casts grave doubts on the future federal role in supporting public library programs.

Since the explosion of library programs to serve the unserved in the mid-1960s, the sophistication of the urban library in planning more meaningful and relevant programs has increased. Now some very significant programs are in operation. The following is a representative list of programs trying new approaches to serving the unserved: Langston Hughes Community Library and Cultural Center, Queensborough, New York; Phillis Wheatly Community Library, Rochester, New York; Philadelphia Action Library, Philadelphia, Pennsylvania; Dallas Public Library Independent Study Project, Dallas, Texas; Cleveland Public Library Research and Implementation Program, Cleveland, Ohio; Philadelphia Free Library Social Service Directory, Philadelphia, Pennsylvania; and Enoch Pratt Community Action Program, Baltimore, Maryland.

Some of these, such as the Cleveland Public Library Research and Implementation Program, still operate on federal grants.35 But it is believed that the urban public library is now directing more of its own resources into programs for the unserved. Because of lack of statistics, specific figures cannot be given. But it is logical that as more previously-unserved people move into an urban area, the urban library would reach out with its own resources to reach them. Edwin Castagna has indicated that while the Enoch Pratt Free Library's outreach program was supposedly totally funded by the federal government
from 1965 to 1969, considerable support from the library as a whole undergirded the program. It is believed that this has generally been true in all urban libraries. Even though the primary funds emanated from the federal government, supplementary effort and services were rendered by the library operating the program.

Since 1969 it has been believed that the costs of outreach programs have been gradually incorporated into regular operating budgets. Castagna reports that "there is no question but that outreach programs are being incorporated into the regular institutional programs. This may be because so much of the city has become 'inner city' and we are benefiting from what has been learned through the Community Action Program and other efforts made in inner city branches. If I had to make an estimate of the cost of our services to the disadvantaged, I'd say it would be well above one-third of our budget total, or close to $3,000,000." 

The urban library generally has several types of outreach programs aimed at those specific groups or communities which were previously unserved or only minimally served. It cannot be assumed that only the poor or the ethnic minority were unserved. Sometimes the businessman operating a small plant was unserved, as well as the researcher, the architect, or other special "communities" of the urban city. Urban libraries are learning to reach out to all, and because program budgeting is so infrequently used in urban libraries, the cost of such outreach programs of any type cannot be determined.

References
7. Ibid., p. 22.
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32. Lipsman, "Public Library Service..." *op. cit.*, p. 197.
Upgrading Performance Through PPBS in School Media Centers

LUCILE HATCH
and
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The adventure of building a satisfying and humane, decent and orderly life in the world of mass affluence, modern technology, and bureaucratic organization is as challenging a task as our society has faced from its beginning. And what we do or fail to do in education will have a great deal to do with the outcome.¹

Accountability as a concept in education is as old as the first teacher with a genuine concern for the educational experience of his pupils. Accountability as an educational term is of much newer origin—somewhat less than ten years old. It is the result of the growing restiveness of a society that has found itself pressured on all sides for more and more money for what has seemed less and less "quality education."

In the expanding economy of the 1950s and early 1960s, an electorate unmotivated to challenge the decisions of professional educators and inured to tax increases by salaries which generally compensated for rising costs voted for the bond issues school administrators insisted were necessary for the "quality education" everyone deemed desirable. Conditioned to a fiscal pattern which based future expenditures on previous ones, the need for ever-increasing budgets was widely accepted. Funds for the National Defense Education Act, the Elementary and Secondary Education Act and other similar federal programs were enthusiastically appropriated by Congress. States quickly followed suit with state grants, and school

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districts initiated programs—particularly in the area of media services—which had never before been considered possible.

By the mid-1960s, however, the climate had changed and the electorate began to feel the financial stress of continuous bond issues and tax increases as new schools and new programs proliferated. As Robert Roush, School of Medicine, University of Southern California; Dale Bratten, Columbia Junior College, Columbia, California; and Caroline Gillin, U.S. Office of Education, pointed out in an article entitled “Accountability in Education: A Priority for the 70’s”:

On every front there is an exigent sense of immediacy for the full justification of educational policy decisions and program operations. The sometimes raucous, but legitimate demands of the various publics served by education make the expedient resolution of our problems imperative. This is evidenced by the large number of school bond issues that have failed in the past few years, the growing militancy of teachers, the rising disconsolation of our youth, the increasing conservatism of legislative bodies, the spiraling inflationary costs of education relative to rather static revenue sources, and the overall malaise which characterizes much of American education.\(^2\)

School administrators, jolted by rejected bond issues, and state legislators, sensitive to the mood of the public, looked around for answers and discovered the much-touted McNamara Planning, Programming, Budgeting System (PPBS) which had brought some organization out of the chaos in the unwieldy Department of Defense.

According to David Novick in a paper read at the First National Conference on PPBS in Education in 1969, “the program budget has a rather ancient and hoary origin and it did not start in the Department of Defense. There are two roots of this concept and method: one in the federal government itself where program budgeting was introduced as part of the wartime control system by the War Production Board in 1942; the other root—an even longer and older one—is in industry.”\(^3\)

In the area of government the Controlled Material Plan initiated in 1940 became one of the first attempts to provide a comprehensive look at needs and resources. This was followed by a plan developed by Dr. David Novick known as the Production Requirements Plan. The purpose was to identify the material and component requirements for contracts that were being placed by the military and to measure the inventories and capacities of America’s
production industry. It was an interim step on the way to a program budget in that it provided the first overall picture of the United States' needs and resources for war.\(^4\)

In the field of industry the General Motors budget contained some components of a program budget system in 1924, and Dupont had been using such a system even earlier than General Motors in the early 1920s. Another company with an important role in the development of the concept of planning for programs and budgets was the Rand Corporation, which became involved in weapons systems analysis no later than 1949. "They utilized not only the traditional standards for choosing among preferred means of warfare (for aircraft—bigger, faster, more payload) but they also took into account social, political and economic factors." Further research led to the development of a program budget plan that won the approval of the Kennedy Administration as a possible approach to the analytical treatment of the military components of the federal budget. "In 1961 the initial effort in PPBS was launched in the Defense Department and has been continued since that time. In August of 1965, President Johnson announced that this system which had been so successful in the Department of Defense would now be applied to all the executive offices and agencies of the United States Government."\(^5\)

President Nixon extended this approach to education in his 1970 message to Congress on education reform in which he said:

As we get more education for the dollar, we will ask the Congress to supply many more dollars for education . . . . From these considerations we derive another new concept: accountability. School administrators and school teachers alike are responsible for their performance, and it is in their interest as well as in the interests of their pupils that they be held accountable. Success should be measured not by some fixed national norm, but rather by the results achieved in relation to the actual situation of the particular school and the particular set of pupils.\(^6\)

President Nixon's justification for accountability in education, according to Roush, et al., was that the concept might help to preserve and enhance local control. Hence, he stated in his 1970 message on education reform, "Ironic though it is, the avoidance of accountability is the single most serious threat to a continued, and even more pluralistic educational system. Unless the local community can obtain dependable measures of just how well its school system is performing
for its children, the demand for national standards will become even
greater and in the end almost certainly will prevail."6

James E. Allen, Jr., formerly United States Commissioner of
Education, speaking to the same point, declared that:

There has been a lack of hard data about the productivity of our
schools, and their evaluation has thus been more in terms of what
goes into the process of education rather than its outcomes. This lack
of simple accountability hampers efforts to reform public education at
all levels. The need to develop and support the procedures to permit
accountability in public education is one of the most important tasks
facing both the President's Commission on School Finance and the
proposed new National Institute of Education.7

Robert Finch, former Secretary of Health, Education and Welfare,
further reinforced this concept in a memorandum to the Office of
Education in which he listed thirteen operational objectives to be
implemented by the Office of Education in fiscal year 1971: "There
were no fewer than eighteen separate references to performance
evaluation in the memorandum. Perhaps the most inclusive statement
was 'to introduce performance contracting into all Federal
discretionary programs whether the discretion lies with the Office (of
Education), the regions, or the State agency or institution.'"7

The later Secretaries of Health, Education and Welfare and
Commissioners of Education have not stressed this concept in their
speeches but it has continued to be a basic principle underlying federal
attitudes toward education.

Just what is accountability? Roush, et al., define it as:

Conceptually defined and in its simplest form, accountability is a
definitive delineation of the goals and functions of education, each
of which is qualitatively described in measurable objectives which are
either directly or indirectly related to student performance.
Operationally defined, accountability requires the reporting of
achievement against promised accomplishment. But according to
Leon Lessinger, formerly an associate commissioner of education
with the U.S. Office of Education, the definition is a lot less
important than the spirit of the thing—and the fact is that the spirit
has permeated the highest levels in Washington and is spreading
throughout the country.8

Unfortunately, it is one thing to talk about being accountable; it is
another to prove accountability without destroying the essence of the
learning that the system is designed to nourish and effectuate. Various systems of measurement—from competitive letter grades to individual letters to parents and parent-teacher conferences—have been used in the past to evaluate the learning experience of the child. None of these evaluate the effectiveness of the teaching operation, nor do they evaluate the relationship of the result to the dollars expended, which is the heart of the problem as seen by the tax-paying parent and the tax-appropriating legislator. Both have sought a cost-determinant formula of some type. The legislator has sometimes turned to laws, as in the state of Colorado where Article 41: Educational Accountability has been enacted.

The general assembly hereby declares that the purpose of this article is to institute an accountability program to define and measure quality in education, and thus to help the public schools of Colorado to achieve such quality and to expand the life opportunities and options of the students of this state; further, to provide to local school boards assistance in helping their school patrons to determine the relative value of their school program as compared to its cost.

The general assembly further declares that the educational accountability program developed under this article should be designed to measure objectively the adequacy and efficiency of the educational programs offered by the public schools. The program should begin by developing broad goals and specific performance objectives for the educational process and by identifying the activities of schools which can advance students toward these goals and objectives. The program should then develop a means for evaluating the achievements and performance of students.

The article then spells out the duties of the State Board of Education and the responsibilities of the Local Accountability Programs, which are elaborations of the principles set forth in the introductory paragraphs quoted above.

In Roles of the Participants in Educational Accountability, a publication of the Cooperative Accountability Project—a seven-state, three-year project initiated in April 1972—and financed by funds provided under the Elementary and Secondary Education Act of 1965 with Colorado as the administering state, Wilsey and Schroeder state: "In Chapter 1 we defined 'accountability' as the condition of the public schools being answerable or liable to the citizenry in general for the efficient use of resources in achieving the goals which have been established by the people, or by their official representatives, for the public schools."
Basic Assumptions

Inherent in the above assumption are a number of assumptions, including the following:

Goals and objectives can be identified and agreed upon by the people or their representatives. The schools can, in fact, achieve the goals and objectives for which they are held accountable. Progress toward these goals and objectives can, in some acceptable manner, be measured. Efficiency in the educational process can be measured. The relative impact or influence of each participant in the educational process on the achievement of goals and objectives can be measured in some acceptable manner.

Recognition can be given in some tangible form to the participants in the process according to measures of their efficiency in achieving goals and objectives.

The process by which these assumptions are to be achieved is a major concern and has led, in the different states that have enacted accountability laws, to a variety of plans: performance contracting, management by objectives, local or statewide testing programs, personnel evaluation programs, program auditing, and PPBS.

The most comprehensive of these programs and the one that offers the greatest possibility of success in programs with varying requirements is PPBS which, consequently, has been adopted by a number of school districts across the country. There are as many PPBS models as there are writers on PPBS, but each basically contains the following elements:

1. identification of district-wide goals and objectives;
2. identification of programs and activities to be planned;
3. identification of outcomes and costs of programs;
4. generation of alternative programs and activities;
5. selection of desired alternatives;
6. implementation and evaluation of alternatives;
7. feedback of information to the system; and
8. repetition of the total program.

In generating goals, most agree that a cross-section of the total public, including administrators, teachers, parents and students, should be involved. In the Pearl River (New York) School District, whose budget was defeated in 1968, the school board appointed twenty-five citizens to serve as an advisory committee.
The committee consisted of a cross section of the community and included some of the most outspoken critics of past budgets. Unlike previous citizen advisory committees, this committee began during the initial stages of budget preparation. During their review of prior years' budgets, the committee repeatedly expressed frustration over the lack of relevance of expenditures to the educational program. It was at this point that PPBS was presented to the Budget Advisory Committee. Initially, there was some apprehension by the committee that the adoption of a new budgeting system might further confuse an already complex area. But there was agreement that PPBS promised more relevant and detailed data. Therefore, the Budget Advisory Committee endorsed the PPBS concept and immediately began developing its plan of action.11

Major programs—e.g., language arts, social studies and physical education—were reviewed by the entire committee; other program memoranda were evaluated by sub-committees and findings were presented in written reports to the entire committee as a basis for the final recommendations to the Board of Education for a K-12 program budget. Separate written recommendations were submitted at the same time by the administration. The two reports proved to be comparable, with minor exceptions, and a final budget was prepared for presentation to the public. With members of the committee able to explain the proposed expenditures in relation to educational objectives, the vote resulted in “the greatest margin of ‘yes’ votes [67 percent] in the recent history of school budget elections.”11

Goals must be based on community concerns and aims, and priorities must be established for the final selection of the goals and objectives to be implemented. To prevent proposing “the impossible,” specific, measurable objectives with (1) stipulated acceptable standards of performance, (2) criteria for measuring the success achieved, and (3) deadlines for achievement must be developed in relation to the students, the teachers and the resources of the school district.

With priorities established, current programs must be analyzed to determine discrepancies between present outcomes and stated goals and objectives. Feasible alternative programs and activities must be identified and evaluated through cost-effectiveness analysis and research studies. Questions such as the following would be pertinent: How much is it costing to run the present tape recording program? How much would it cost to improve it by adding more tapes, more recorders, and more listening stations? What would be the cost of the
substitution of a dial-access system? Which dial-access system, A, B, or C, would provide the level of services required at the most reasonable cost? What are the relative merits of a centralized processing system? Could the same or better results be obtained by contracting for service from another library? If so, what are the relative costs? Would service be improved and costs pared by setting up a cooperative processing center with two or three other school districts? Could such a center obtain individuals with the appropriate knowledge and skills at cost-effective salaries to staff the operation? Would catalog cards prepared by a commercial cataloging agency be acceptable? If so, can the company provide the stipulated percentage of the cards needed within an acceptable time limit at a lower cost than the district can by doing its own cataloging?

As such questions are pondered, current programs must be revised to make them more proficient and new plans designed to fulfill identified unmet needs. This may well necessitate a staff in-service program to develop the requisite problem-solving skills and the ability to use rational analysis in the determination of appropriate ways of achieving the district's educational goals efficiently and economically.

Once programs and activities have been selected and designed, media resources and services can be allocated to each unit according to its priority. Purchase of appropriate media and the necessary supportive media equipment; duplication of demand materials; and allocation of staff to individual, small-group and large-group services become mandatory as the media center establishes its role as an integral component in the accomplishment of district goals and objectives.

Concurrently with the identification, analysis, evaluation and selection of programs and activities, program accounting and budgeting procedures must be developed by the district. If PPBS is to succeed, a constant input of data on the costs of services, staffing, resources and facilities must be available for each proposed program. So extensive is this need for a variety of statistical data that PPB systems were not possible until the advent of computers and of program evaluation and review techniques. As Wilsey and Schroeder point out: "The development of knowledge and skills in program accounting and in the field of computer utilization, or the application of electronic data processing to the school setting, is essential if the necessary cost data are to be generated. The quantities of data required by PPBS dictate some degree of automation even for the smaller district."\(^{12}\)

The Program Evaluation and Review Technique (PERT) was used to determine and guide the thirty-five steps needed to implement the
program budget created for School District 68 in Skokie, Illinois.\textsuperscript{13} Integral to the system was the use of the computer in ten of the thirty-five steps.

As a result of this procedure, the library program became the eighth largest item in a 48-item budget, with an allocation of 3.08 percent of the budget. Five of the seven items that received a larger appropriation were connected with administration or buildings and grounds: building construction and improvement (32.33 percent), debt service (8.39 percent), land acquisition and use (6.51 percent), plant operations (6.40 percent), and general administration (4.20 percent). Only reading (4.16 percent) and mathematics (3.38 percent) in the curricular area exceeded the allocation for library services.\textsuperscript{13}

Much work remains to be done to complete District 68's PPBS. Still needed are (1) a better program outline, which will follow after more detailed objectives have been established; (2) more time devoted to planning with special attention to long-term and alternative plans; (3) more techniques for cost accountability so that the same technique used for measurement of cost application can be used to allocate resources; and (4) program analyses and cost-effectiveness studies to determine the best allocation of resources when weighed against the benefits.\textsuperscript{14}

"While much remains to be done in Skokie District 68, the limited application has been a valuable and refreshing experience in school budgeting. We now know, more accurately than ever before, what it is we are trying to accomplish, and how much we are spending in the attempt."\textsuperscript{15}

Kent concludes his report by saying that the district now has a tool to measure the cost of various pursuits and to weigh the benefits against the costs. Already several individual programs have been selected for detailed study, and useful results have been obtained as a basis for further study and experimentation.

The final and most important step is the evaluation of achievement in relation to the goals and objectives for students, faculty and the school district as a whole. What objectives were achieved at the level deemed acceptable? What objectives were not met? Was the failure partial or whole? Why? Was the objective unrealistic in terms of the staff and facilities available? Did the media center undertake to schedule all classes wishing to use the center when it has space for only one or two classes at a time? Did it promise to provide individual reference service for each class scheduled when the staff consists of only one full-time professional media specialist? Or did the objective prove invalid and/or lose its priority as the year progressed so that the
media center simply did not attempt to implement it? Evaluation of the relative effect of various influences—staffing, resources, facilities, time—on the achievement of objectives is still in a very primitive stage and will require, in most districts, development of staff capability in the art of evaluation before this vital step in PPBS is fully implemented. Needless to say, until the program can be properly monitored and the results truly assessed, PPBS will not reach its maximum potential for improving the quality of the learning experience.

With the evaluation complete, a report must be made to the public. Then the whole process begins again, based this time on the additional inputs of the past year’s experiences, successes and failures. Goals and objectives are revised and refined in light of new knowledge. Activities and programs are redefined and restructured. The PERT chart is redrawn to reflect a more realistic time sequence. Staff are instructed in the skills of planning, programming and evaluation.

Many articles dealing with PPBS can be cited from the educational literature but, in fact, PPBS as an accounting practice is still just in its infancy. Only a few districts have seriously tried to implement the total process for, as Weiss says in his article, “PPBS in Education,” many feel that “PPBS requires too much computation, form filling, data processing, and paper shuffling—all at great expense.” In states where an accountability act has been passed, progress towards its accomplishment has been slow because, according to Weiss, doubters and detractors feel that:

1. It is impossible and undesirable to force everyone in the district to agree on goals and values.
2. The school board will not understand the system and will therefore reject it as a viable approach to school district budgeting.
3. Formal planning stifles creativity and innovation.
4. Many good educational results are unmeasurable.
5. There is not enough community (or student, or teacher) involvement.

For each of these objections Weiss has an answer. He concludes with this summary:

Public school planning and budgeting should be evaluated on criteria of responsiveness and effectiveness. Without the major elements of PPBS, it is impossible for the decision makers in any school to respond systematically to any need or influence, and, further, impossible for them to decide whether the schools have
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been effective in achieving any of their purposes. If administrators, teachers, and parents believe their own homilies about the mission of the schools, then they must, logically, advocate planning reform.17

Although the literature abounds with references to accountability in the schools, little has been said about the role of the media center in assisting the school to achieve its goals. Examples given of how accountability might be achieved usually relate to language arts or the social sciences. However, a few articles have appeared recently in library journals which touch in general terms on this new approach to budgeting.

William Summers says that performance budgeting in anything like a pure form never caught on very widely in libraries because it is very costly to switch to a performance budget, and the process of auditing is substantially complicated. He found, in talking to librarians who had tried PPBS, that formulation of satisfactory objectives had proved very difficult and that the staff lacked the requisite skills in evaluation that are so important to the effectiveness of PPBS. The great advantage to libraries, he concluded, was that departments would quickly learn that they cannot operate in isolation from one another.18

Diana Lembo, in “Approaches to Accountability,” states that it is vital in the implementation of a PPBS design for the school administrator to recognize the value of having the media specialist participate fully in (1) the overall planning of the educational goals for the school, (2) each program array—whether by grade or by subject area—to integrate the media center’s supportive services, (3) the development of alternative methods of allocating resources, (4) the actual program budgeting, and (5) the final evaluation and reporting to the public. Despite the adoption of program budgeting, however, the media specialist may find it necessary to also utilize fiscal budgets for “the operation of the media center administrative unit to control overlapping among the services to each program array.”19

Jane Hannigan presents thirteen “programmatic units” among which priorities may be designated for a PPBS design. She believes that “it would be most advisable to institute within each building a requirement that the media program be submitted in terms of PPBS or a parallel systems approach,”20 but she wisely cautions that:

it is essential to realize that personnel reflect a variety of talents, people who have strengths and weaknesses. Some personnel in media centers are capable of instituting a PPBS approach and successfully reporting. Others will find it strenuous and difficult.
Still others will find it totally insurmountable. In some instances it will be better to refrain from assigning responsibilities and expecting performance in areas for which a staff member has no training or experience which authority suggests he should have. Above all else, it is essential that the child is not penalized due to the ineptitude of the human resources within a given system.20

"There are many aspects to be taken into consideration when shaping programs for school media centers—educational, demographic, organizational, and legal," states Robert Wedgeworth.21 He believes a model for such plans should contain a combination of each of the following aspects:

1. the most effective combination of programs and services to support the general educational program and to provide for individual learning experiences at the appropriate level;
2. trends in school population (size, age, family composition, and characteristics) and other change-producing influences;
3. forecasts of the availability and level of funding sources;
4. alternate program combinations depending on the availability of funds, personnel, equipment, etc.;
5. controls on programs and services which provide the means for evaluating the costs and benefits at regular intervals; and
6. a clientele (e.g., teachers and principals) at both the building level and the district level who are convinced of the value of the program and will support it.

James Liesener, in "The Development of a Planning Process for Media Programs," has reacted to the "facts" and principles outlined above by formulating nine very concrete steps designed specifically for the media specialist faced with the need or the desire to implement a PPBS design. The process, developed with the cooperation of the Maryland State Department of Education, Division of Library Development and Services; the Montgomery County Public Schools; and the School of Library and Information Services, University of Maryland, is clear, easy to understand, and appropriate to the needs of the media specialist, who recognizes that accountability-conscious administrators and school boards will require systematic, rational, responsive media programs with adequate documentation of what was done, why it was done, and what resources and services were required. For each step the objective is defined, and suitable techniques are described along with an explanation of results that may be expected.22

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To supplement *A Systematic Planning Process for School Media Programs,* Lisesner has prepared a very practical instrument packet which includes: (1) an Inventory of School Library/Media Center Services, (2) a Form for Determining Preferences for School Library/Media Center Services, (3) a School Library/Media Program Data Collection Guide, and (4) a School Library/Media Program Costing Matrix. With the book and the instrument packet, any media specialist can play a very dominant role in a school district's PPBS program.

PPBS, as far as school media centers are concerned, is a concept whose time has not yet arrived for the great majority of school districts in the United States. It is, however, a vital idea that is growing rapidly. Not only have the tools (computers, PERT charts, and a variety of PPBS designs) for successful planning, programming, budgeting and evaluating now been provided for the school administrator and the media specialist, but the public is beginning to demand a logical, rational, workable approach to evaluating the learning experience of its children in relationship to society's goals and objectives and the financial expenditures involved. If media specialists believe that the media program is vital to the achievement of the district's educational goals, then each and every media specialist must be intimately involved with every aspect of whatever PPBS design the district adopts.

References

8. Ibid., p. 113.
LUCILE HATCH and RALPH A. FORSYTHE


Additional References


The Use of Formulae in Resource Allocation

F. WILLIAM SUMMERS

The postwar era has seen a significant growth in the use of formulae of various kinds to direct the allocation of expenditures for a variety of public and private purposes. At the national level formulae have been written into legislation to provide for the allocation of funds to the states. For example, Library Services and Construction Act funds are allocated to the states on the basis of a formula written into the act. The greatest and most widespread use of formulae in a library context has been in the appropriation of funds for public higher education in a number of states.

Before discussing the details of formula budgeting it may be necessary to provide some definition of the term. In the simplest sense formula budgeting is the allocation of resources based upon some known or assumed relationship between two or more variables which are pertinent to the service to be rendered. For example, a formula relating the appropriation of library funds to student enrollment obviously assumes that there is a relationship between the number of students enrolled and the need for library services.

Utilizing this definition, many standards—such as those prepared by professional units of the American Library Association (ALA)—have the elements of formulae. In fact, it could be argued that one of the objectives in preparing such standards is that they will be used for the purpose of allocating resources. The ALA Standards for School Media Programs provide, for example, “It is recommended that the media center have one full-time media specialist for every 250 students, or major fraction thereof.”

This standard assumes that there is, in fact, some relationship between the number of students in the school and the number of librarians which should be provided. Standards of this type can be found in the statements issued by most of the professional elements of the ALA and many other professional bodies. Similar standards are

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also issued by many state agencies and by regional and specialized accrediting agencies.

In general, with the exception of accrediting agencies, standards or formulae of this type have not had a significant impact upon the allocation of resources by governmental agencies. The reasons for this are beyond the scope of this article, but for the most part the bodies issuing such standards have not been in a position to bring sanctions against those appropriating authorities who ignore, or fail to meet, the standards. Further, professional groups issuing quantitative standards have not been able to demonstrate that the standards have empirical validity; e.g., it has not been possible to demonstrate that children in a school which meets the standards cited above learn more or derive more benefit than children in a school which does not meet the standard.

Regardless of the reason, professionally derived formulae have not had significant acceptance as a means of allocating resources for library services. Only when failure to meet such standards is linked to the loss of something of value—such as accreditation or the award of grants—have the standards had acceptance, and even in these cases the standard has been only grudgingly accepted as a guide for the allocation of resources.

**Development of Formulae for Resource Allocation**

The development of formulae for the allocation of resources has followed a relatively predictable path since the end of World War II. Appropriating bodies faced with demands from burgeoning institutions of all kinds have increasingly sought more objective determinations of need and justification of expenditures. For the last quarter-century a readily available justification has been an increase in the work load of the organization requesting additional funds. Increases of students, users, persons to be served, have been translated into the need for additional or sustained appropriations. In many cases these increasingly specific and objective justifications have become the formulae used by the appropriating agency to detail the amount of dollars which should be made available for the given factor.

This tendency has had its greatest development in the field of public higher education. Faced with rapidly growing enrollments in frequently competing institutions, appropriating bodies (usually legislative) have demanded that the allocation process be made more rational and that some basis for adjudicating claims of competing institutions be provided. A variety of advantages are claimed for
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allocations based upon a formula. In one of the few monographs to appear on the subject, Miller suggests the following advantages:

1. A reduction in the paper work in the budgeting process will result.
2. A simple formula will eliminate extraneous details which cloud issues.
3. Comparisons between institutions are facilitated.
4. Comparisons from year to year are facilitated.
5. The term formula connotes an air of mathematical infallibility.

Formulae are not limited to use in higher education. One of the most common and long-established uses has been in the allocation of state funds to local school districts. The amounts of resources to be so allocated are determined in several states by the number of students registered and attending school in the given district. A number of these formulae use the average daily attendance to determine the grant. In many states these formulae are adjusted to provide an “equalization” element which seeks to insure that the poorer districts of the state are not seriously disadvantaged and are able to offer an educational program meeting a minimum level specified by the state. In a few states, funds for library services in schools are earmarked and allocated according to the same formula.

Similarly, in a number of states grants for public library services are distributed to local libraries based upon some formula. In many cases there is simply a per-capita grant based upon the most recent census or some official estimate of current population. These grants are also frequently based on a formula which contains some element designed to provide equalization, so that poorer areas are not penalized and are aided in reaching a level of funding thought necessary to provide basic services. Equalization formulae are based upon a number of criteria and frequently require the local government to make a maximum legal effort before equalization applies. Since the reapportionment of state legislatures has resulted in greater representation for urban areas there has been a gradual shift away from equalization efforts in favor of per capita grants, based on the theory that the state should provide no greater aid to a citizen in one area than in another.

**FORMULAE IN HIGHER EDUCATION**

As noted earlier, the most extensive use of formulae in the allocation of resources has been in the state support of public higher education. The remainder of this article will discuss this development and its implications for library services.

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During the period 1948-54, formula budgeting made its appearance in six states: Indiana, California, Oklahoma, Texas, New Mexico and Kentucky. Subsequently, beginning about 1957, formulae were developed in Florida, Colorado, Mississippi and Tennessee. At least eight other states have used formula-like devices; these are Alabama, Georgia, New York, North Carolina, Ohio, Oregon, Washington and Wisconsin. Subsequent to 1965, formulae have been developed in Iowa, Nebraska and Utah, and in many other states as well. It is difficult to determine exactly how many states use formula budgeting. In some cases the formulae are employed in the appropriations process based upon statistical data provided by the institutions. In others the budgets submitted by institutions are prepared using formulae prescribed by the state budgeting agency, or by a commission on higher education or some similar body. In a report issued by the Carnegie Commission in 1972, it was indicated that approximately one-third of all public institutions used some form of Planning, Programming, Budgeting System (PPBS) and it would be logical to conclude that virtually all of these relied upon formulae to at least some extent. It would probably also be fair to assume that at least one-half of the states now utilize formulae to some degree in the allocation of resources to higher education.

A significant and frequently discussed formula used in allocating funds for academic libraries is the Clapp-Jordan formula proposed in 1965. This early formula illustrates one of the problems frequently arising in formula development: it relies upon experience in libraries to derive the recommended levels of materials. A similar difficulty is reported in Axford’s account of efforts to develop a formula for library services in Florida.

The problem of basing formulae upon experience or past history presents serious difficulties. Current and recent budget levels in institutions are often the product of a variety of factors, very few of which are objective. To reflect past decisions into a formula will serve to a degree to perpetuate current differences or inequities. Institutions also vary in terms of the priority of local objectives. The primary objection to experience-based formulae is the fact that current conditions may not be a guide to conditions which ought to exist. If library service has been underfunded, and most librarians at least would feel that it has, experience-based formulae will perpetuate such inequities.

As Axford suggests, “any system-wide approach to library budgeting becomes immediately involved in the political struggle of the ‘haves’
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and 'have nots' for the limited resources available, and budgetary realities are lost in a welter of parochial interests.17

An alternative to using experience as a guide in the development of formulae is to make an effort to determine objectively what the budget of a library or an institution "ought" to be. Obviously, such a task is enormously difficult. Institutions, especially complex ones, are comprised of a large number of interest groups, and each of these groups is certain to have very fixed convictions about its proper degree of support. When many institutions are involved, the problem becomes even more complex. During the course of this study the author has been privileged to examine the comments of the presidents of the institutions in a single state on proposed changes in the state's formula. It was clear that each of these officers commented from the viewpoint of his particular institution and stressed those factors which were peculiar to or of significance in that institution. Not only did the presidents differ on the details of the formula but each of them felt that it should contain elements which would benefit his particular institution or type of institution.8

It might be expected that the standards of relevant professional organizations would provide a guide for the preparation of formulae in the various states. As far as could be determined only one state, Florida, has used the ALA standards in the preparation of its formula, and in this case the standards were modified. Here the formula uses the standards as a guide and leaves to the budgeting authorities the decision of what proportion of the recommendations will be funded.9

At least one state, South Carolina, recognizes that a formula may not adequately respond to outside pressures such as accreditation bodies, and permits institutions to request funds in addition to those provided by the formula to bring library collections up to minimum accreditation standards.10 It is quite likely that other states also respond to the demands of accrediting agencies, either by special provision or by permitting agencies facing demands from accrediting agencies which are not covered by the formula to request additional special appropriations.

The state of Washington has utilized the Clapp-Jordan formula, with some alterations, as the basis for funding its libraries. The University of California formula for staffing was also utilized in Washington. In attempting to apply the Washington formula in Florida, Axford reported that it produced increments in resources and staff which were believed to be politically unwise and impractical, and the formula was modified to fit the perceived political circumstances.11
The problem of adjusting the formula to political realities appears to be a very real one and may eventually eliminate the value of formula budgeting. Frequently the legislature will agree to fund a percentage of the costs generated by the formula. Since the formula is usually developed in the executive branch, the legislative body normally does not alter the formula to fit the circumstances, but instead provides something less than 100 percent of the funds called for by the formula. Some legislative bodies have, however, directed that portions of the formula be restudied and revised to bring the results into closer conformity with the fiscal capabilities of the state. The National Commission on the Financing of Post-Secondary Education reports: "It is true, however, that these budget devices [formulae] are frequently ignored during the appropriations process, when budgets are adjusted to reflect the actual amount that the legislatures can or will appropriate." The process of adjustment involved may obviate one of the frequently claimed advantages for formula allocation—the elimination of political decision-making in the budget process. Formulae are seen as devices for increasing the rationality of the budget process and eliminating institutional favoritism and parochialism. The degree to which subjectivity can be eliminated depends upon a variety of factors and almost all of these factors are political in nature or at least susceptible to some manipulation.

For example, the elements of a formula may be used to benefit some institutions and not others. Institutions which are growing will favor recognition of growth factors in formulae, while those which are static or declining will prefer to base formulae upon elements more favorable to their situations. Institutions in rural settings with large portions of their students in residence will favor different elements than institutions in urban areas with large commuting populations. Institutions which engage in extensive public and community service activities will want these activities recognized and encouraged in the formulae, while those without such activities will want them eliminated or de-emphasized. Institutions with large graduate programs will favor a formula which provides higher per-capita amounts for graduate students, while those with few or no graduate students will favor an across-the-board approach to student per capita elements in the formula. Given these differences, it is not surprising that the development and revision of formulae are highly political areas in which institutions negotiate with one another and with appropriating bodies much as they did in the era of direct appropriations to each institution.
The Use of Formulae

The same kinds of processes can be expected to occur in the allocation of resources for library materials. Institutions with large rare-book holdings, for example, may be expected to insist that formulae recognize the unique character of such holdings and their atypical cost factor. Institutions without rare-book holdings can be expected to downgrade their value and to favor elements which are more favorable to their particular circumstances.

The claim that formulae can rationalize the allocation process and make it more objective probably cannot be sustained in the face of the many differences between institutions and the likelihood that each institution will assert the particular array of differences most favorable to its case. Appropriating bodies are probably in no better position to adjudicate competing claims about the composition and validity of formulae than they were to adjudicate the competing claims for dollars in the pre-formula era. It is still quite likely that those institutions with the most or best-placed supporters in the legislature will do better than those without such support, and the old rule of "them that has gets" will prevail except when that rule runs afoul of new political realities such as increased urban representation in legislatures. It is predictable that urban-based state-supported institutions will do better over the next several years than will rural-based state-supported institutions simply because the former will have far more strength in the legislative process than will the latter. Key states in which to observe this phenomenon will be Florida, Illinois, North Carolina, Virginia, and generally any state in which the system of higher education reached its maturity, in terms of the establishment of institutions, rather late.

Formulae may not eliminate political decision-making from the budget process, but it is possible that their use inhibits the effects of favoritism. Once a formula is decided upon it is applied in the same way to all institutions, which may in the long run aid institutions without strong political resources. Throughout discussions of formula allocation, there run claims that the process is more objective and more scientific than other methods. This claim is hard to substantiate in view of the fact that formulae are born of political environments, are based almost always upon the experiences of the past, and do not reflect any actual measures of need or costs.

It is apparent as one talks to librarians, university presidents and fiscal officers, that there is currently some disillusionment with formulae allocations. In evaluating these feelings it must be recalled that most formulae were born in an era of unparalleled expansion and growth in higher education, when all of the growth curves were
upward and when even a grossly drawn formula could be expected to produce significant new inputs each year. Higher education, and indeed the society as a whole, is clearly no longer in such a situation. One is reminded of Galbraith's brilliant analysis of the flaws of financial leverage and its fatal attraction in time of growth and equally fatal inevitability of downward push in time of recession. The same formulae which were producing significant growth five years ago are in many cases today producing static or decreasing budgets. A recent study by Baumol and Marcus indicated that professional staffs in libraries have declined relative to number of students, numbers of volumes held and added, and size of the nonprofessional staff. If such decreases have occurred during a period of rapid growth, one can only conjecture fearfully about the impact of a sustained period of no growth or decline.

If the use of formulae for allocating resources existed alone as an isolated phenomenon it is likely that ways would be found to overcome their flaws and to exploit their advantages without great harm to those who depend upon them. Unfortunately such is not the case. Formulae have been primarily a creation of various centralized state agencies for higher education, frequently called commissions on higher education. These agencies usually have the overall responsibility for the coordination and control of higher education. Increasingly these bodies have moved toward greater and greater reliance upon management information systems designed to provide full reporting on all relevant aspects of institutional characteristics and performance. These efforts have produced demands for higher levels of "productivity" on the part of faculty, increased space utilization in buildings, and a plethora of other measures designed to ensure maximum return for each dollar spent. Return has generally been measured in terms of increased outputs in a numerical sense, e.g., more students taught, a greater percentage of space utilized, etc.

Libraries in state institutions have been affected, sometimes negatively, by these developments. In one state the management system produced a recommendation that the various institutions of the state should drastically limit the duplication of materials. In another the utilization of professional librarians was challenged. The Baumol and Marcus study indicates that library services can be expected to demand larger and larger percentages of institutional funds primarily because libraries are labor intensive organizations, or at least have been up until now. It is very likely that libraries will come under increased pressure to devise performance criteria and to demonstrate increased
"productivity," and the traditional argument that the real value of the library cannot be measured is not likely to overcome the pressure to measure. A recent issue of the Chronicle of Higher Education dealt exclusively with this issue and reported on an effort to develop nationwide measures of institutional performance which could be applied to a wide variety of institutions. It is also likely that, as institutional budgets become static or grow with far less rapidity, the library's claim to funds will increasingly be resisted by many of its former supporters, not the least of whom will be the faculty. Faced with a choice of maintaining the book budget or receiving a salary increase, most faculty would quickly choose the latter and press that choice upon the administration.

From the foregoing it should be clear that there are serious questions about the viability and utility, from the library's point of view, of the use of a formula for the allocation of resources, particularly in light of the conditions affecting the society and higher education today. Most, if not all, formulae were formulated with the expectation of allocating the financial proceeds of growth among competing demands, and therefore are questionable instruments for dealing with long periods of limited or no growth. Many institutions whose budgets have declined or remained static are now caught in a crush between the demands of external bodies for adherence to formulae which have been "objectively" established, and the need for adjustments required by rapidly increasing costs and shrinking or static student growth rates.

In some cases the formulae are becoming devices for budget preparation only, with the institutions then free to pursue the same political processes used in the past to redress imbalances caused by economic and social factors. The formulae to this extent may be becoming less deterministic than in the past.

Other Uses of Formulae

One of the longest-standing and seemingly widely-accepted uses of formulae has been in the allocation of resources from one level of government to another. Federal grants to states and state grants to county and local governments have long used formulae, frequently written into legislation, to control the transfer of funds. The alternative has been various kinds of grants which were the product of some kind of executive decision-making process, i.e., "discretionary" grants. During the last two decades there has been a significant expansion of both discretionary and formula grants. Most programs for federal grants to states have been formulae grants, while those given to
particular local governments and institutions have been discretionary. In librarianship the best-known formula programs have been the Library Services and Construction Act and the Elementary and Secondary Education Act, which have provided funds to the states according to formulae written into the acts. The Higher Education Act is an example of a discretionary program, especially grants under Title II which are awarded to institutions on a discretionary basis by the U.S. Office of Education. Neither the amounts of the grants nor the institutions to receive grants are automatically determined, but are subject to administrative action. Title I grants are apparently allocated on a discretionary basis according to eligibility formulae established by administrative action.

The choice of either formula or discretionary funding for programs would appear to be the result of a number of factors including constituent preference, congressional preference, and relationships between administrative, congressional and constituent groups. In higher education, with a tradition of autonomous institutions, it is not surprising that there has been a preference for discretionary funding of programs. Given the rise of state-level agencies for coordinating higher-education activities, it is predictable that future federal funding of higher education will show a preference for formula-based programs which provide funds to the states for further allocation to various institutions by an appropriate state-level agency.

It is equally predictable that professional organizations will continue to utilize per capita formulae and formula-like quantitative measures, not because of a preference, but because of a lack of acceptable alternatives. Most librarians, in individual discussion, are quite quick and frank to comment upon the inadequacy of professional standards, but are equally quick to recognize that, lacking valid objective measures, such standards as have survived some degree of professional scrutiny and debate are embraced as the only available alternative. It matters little that professionally developed standards have had limited acceptance and credibility. Librarians faced with justifying operational decisions about budgets, programs and personnel simply do not have other weapons in their arsenals with which to wage the battle.

**Needed Research**

It can apparently be taken as axiomatic that the future will hold no less insistence upon quantification and measurement than does the present and recent past. It is also likely that no segment of the
profession will be immune from such pressures, although considering the large amounts of resources involved, higher education will likely continue to feel the brunt of the effort to quantify and measure.

This being the case, libraries and library schools desperately need a strong effort to develop empirically based measures which will have some comparability between institutions within a single state and between states. The Baumol and Marcus study provides one such approach which should be carefully studied. Another is represented by the recent ALA study of public library measurement. The author is aware of at least one effort to replicate this study in a university library and certainly others should be attempted.

School librarianship, which thus far has had the best record for acceptance of quantitative, professionally developed standards, can expect to receive increasing scrutiny and skepticism. Research efforts aimed at identifying the salient characteristics of exemplary programs will probably not be sufficient to meet the needs of the immediate future. Instead we must soon face the heretofore avoided questions: What difference does it make whether a school has a library/media center? and Does the degree of support of that center make a difference in student learning? Research on school media programs from a measurement point of view has been almost totally ignored and should quickly be undertaken.

Accreditation standards have long been the ally of professional groups seeking acceptance and recognition, but this long-time bulwark is showing a new vulnerability to external pressures and to local priorities. Governing boards are showing an increased reluctance to fund a given activity simply because accreditation standards demand it, and are asking instead for justification of the validity of the accreditation standards.

There is no more pressing problem before the profession than the development of clear, empirically tested measures of library service quality and the application of these measures to the problem of resource allocation. It would appear that both the measurers and the wolves are at the door and librarians must decide which to admit.

References

7. Ibid., p. 103.
8. Observations are based upon confidential memoranda made available to the author.
Resource Allocation in University Libraries in the 1970s and Beyond

C. JAMES SCHMIDT

Until recently, university libraries grew and increased several fold in size and cost of collection and of staff. Data available from fifty-one academic research libraries (i.e., members of the Association of Research Libraries) indicate that from 1951 to 1974 collections increased 158 percent, acquisitions expenditures increased 810 percent, expenditures for salaries and wages increased 880 percent, and total library expenditures during this twenty-four year period increased 770 percent for the fifty-one libraries.¹

According to Richard de Gennaro, “the last two affluent decades may well have been a temporary aberration or perhaps the glorious end of an era in the history of the growth of research libraries.”² (Emphasis added.) Various ingenious devices were developed to impose some measure of rationality on the allocation of this growth.³

However, since 1968, universities have passed from a period of what Kenneth Boulding has called “growth and grandeur” through bombs, bricks and barricades to a period of at least stable if not declining resources. A comparison of volumes acquired by Association of Research Libraries’ (ARL) members reveals the following trend since 1968:

<table>
<thead>
<tr>
<th>Year</th>
<th>% Change</th>
</tr>
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<tbody>
<tr>
<td>1967/68</td>
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</tr>
<tr>
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<td>−2.63</td>
</tr>
<tr>
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<tr>
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<td>+1.36</td>
</tr>
<tr>
<td>1973/74</td>
<td>−8.53</td>
</tr>
</tbody>
</table>

In 1973/74 ARL libraries added 8.53 percent fewer volumes than in the preceding year. This percentage represents 692,201 volumes.

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APRIL, 1975
As Boulding has pointed out:

The present generation of educational administrators at all levels have grown up in this period of rapid growth and have been selected presumably because they were well adjusted to it and capable of dealing with it. Perhaps the most serious immediate problem facing education, and especially facing higher education, is that many skills which were highly desirable and which were selected in the last thirty years may no longer be the skills which are needed in the next thirty years. One of our first priorities, therefore, should be to raise up a new generation of administrators who are skilled in the process of adjusting to a decline. Yet we know so little about decline that we are not even sure what these skills are.4

This article will assert the following propositions: that university libraries will in fact be dealing with the management of decline for the remainder of the twentieth century; that a change in priorities from ownership (holdings) to access has to some extent begun and will continue; that this shift in priorities will allow for major redeployment of staff; that resource allocation will become less focused on acquisitions and more on personnel; and that unionization and faculty status will make redeployment of staff more complex and difficult.

The Management of Decline

There seems to be general agreement that enrollments in higher education will peak by 1980 and will decline thereafter. The most frequently cited figures indicate that enrollments will be one-third less in 1985 than in 1980. Lest there be any doubt about these projections, consider the following three arguments.

First, it seems unlikely that the proportion of the college-age cohort (18-22 years) attending schools will increase significantly. Nationally, approximately fifty percent of this cohort attends college and in some states (e.g., New York) it is over sixty percent. As the percentage increases, the differential reward for persons who continue their education decreases, so that there ceases to be an economic incentive for doing so. The effect of a decline in incentive is compounded by the state of the present job market for degree holders.

Second, broadly available postsecondary education has generally failed to produce any relative redistribution of per capita real income. Census data indicates that the relative distribution of real income is about the same in 1971 as it was in 1947. In other words, the same
Resource Allocation

proportion of the national income goes to the same proportion of the
national population.\textsuperscript{5}

Third, the differential reward theory for the degree holder is being
questioned. Suppose, for example, that an amount equal to the cost of
tuition, books, and room and board for four years were deposited at
the going rates of interest for forty years. An individual retiring at age
sixty would have a sizeable sum against which to balance a possible
difference in income as compared with a degree holder during the
working years.

It seems probable, therefore, that if the demographic projections are
correct and the arguments raised above valid, enrollments in higher
education will decline in absolute numbers in the 1980s and beyond.
When this decline occurs, libraries in universities cannot escape its
effect. It may be the case that the data from ARL libraries cited above
indicate the beginning of this decline.

Change in Priorities from Ownership to Access

In 1967, the National Advisory Commission on Libraries made the
distinction between bibliographic and physical access. In his inaugural
speech as president of ARL, de Gennaro spoke of the distinction
between holdings and access. More recently he has put this issue in
these words: "The traditional emphasis on developing large local
research collections must be shifted toward developing excellent local
working collections and truly effective means of gaining access to
needed research materials wherever they may be."\textsuperscript{6} (Emphasis added.)

In the two decades following World War II, the first priority for
academic research libraries was clearly collection development. At least
implicitly, and sometimes explicitly, these libraries espoused the
objective of self-sufficient collections. With hindsight, it seems that no
one ever realized this goal. In fact, as libraries grew, so did their need
for interlibrary borrowing.

It seems that the search for the grail has ceased and instead we search
for Excalibur, for as the priority shifts from ownership to access,
quality and size of service staff become paramount. It is hard enough to
provide prompt and precise access to materials owned. It takes
ingenious, wit and alertness to provide access to materials in other
locations. Fortunately, as acquisitions decline, personnel can be shifted
from work generated by acquiring materials to work involved in
providing adequate access to unowned materials.
It seems clear that in the past libraries have allocated staff in ways which confirm the theory that a major portion of the workload is attributable to acquisition of materials. One has only to think of the variety of tasks and files involved in selecting, ordering, receiving, paying for, cataloging and maintaining catalogs for materials acquired. Two forces are at work which seem likely to affect and change this pattern. The first, discussed above, is the shift in priority from ownership to access with its obvious consequences in the form of at least constant if not reduced acquisitions on individual campuses. The second force is technology, specifically computer technology. The experience of a number of libraries with on-line cataloging demonstrates clearly that the impact of these systems is profound in the changes imposed on the nature and amount of work performed by people. One simple example may suffice: it is not uncommon for on-site catalog card production to be reduced by more than one-half by an on-line cataloging system. In academic research libraries such a reduction in workload may well affect as many as ten to twenty people. Redeployment of this dislocated labor force is the obvious alternative, except that certain individuals may not be suited to other tasks.

Suitability aside, questions arise as to what size labor force is needed in other major functional areas in the library. For too long, technical services and, to a lesser extent, circulation services have been the measured (i.e., quantified) operations. As redeployment of staff becomes possible and necessary, the search for indicators of how many of which kinds of personnel are needed will begin anew and will focus especially on functional areas which have not yet been satisfactorily measured. Whether they can or will be remains to be seen, although one might expect that they will be, for better or worse.

Unionization and Faculty Status

As the priority shifts from acquisition to personnel, and as allocation or reallocation of resources focuses increasingly on personnel, academic research libraries will experience increasing constraints on redeployment of personnel. Unionization in these libraries, now relatively uncommon, is certain to become the rule rather than the exception. As this occurs, the formalization of certain terms and conditions of employment into contract language may well preclude certain kinds of redeployment. Consider, for example, the employee in technical services who is suited to and able to be transferred to a public
services position. Is the change in hours of work attendant upon such a transfer subject to the contract? If so, what are the constraints—increased security, shift differential pay, change in classification and/or grade or rank?

Another constraint on redeployment will be job security. Is permanent appointment, by whatever name, attached to the person or to the position? If permancy is a function of faculty status for librarians it would seem that permanency is attached to people, not to positions, although few university libraries with faculty status have had to face this issue. But in several institutions the de facto situation seems to be that permanency is attached to positions, regardless of the de jure policy.

It seems certain that academic research libraries will face at least stable if not declining resources. As the priority changes from ownership to access, personnel resources will become more prominent budgetarily, more redeployable because of the combined impacts of stable or reduced acquisitions and computer technology, and more subject to constraints as a result of collective bargaining. The formulae and matrices devised during the period of growth and grandeur will be of small comfort and little use for the problems ahead. The resource allocation problems in the future will, in the final analysis, be human problems, i.e., how to utilize optimally the available labor force to maximize library services.

Having asserted such a view of the future, one caveat is in order: "There are two equally important principles to be guided by in all matters affecting the present and the future. (1) It is utterly impossible to predict the future. (2) It is utterly impossible to avoid trying to predict the future."

References

1. These data are available on punched cards from the Instructional Media Research Unit, University Libraries and Audiovisual Center, Purdue University.

6. de Gennaro, op. cit., p. 920.

An Historical Look at Resource Sharing

BASIL STUART-STUBBS

In 1634 a French humanist, Nicolas Claude Fabri de Peiresc, attempted to arrange for the interlibrary lending of manuscripts between the Royal Library in Paris and the Vatican and Barberini libraries in Rome. He failed. It was a portentous beginning.

After two centuries of industrial and political revolutions, interlibrary loan was still a concept rather than a practice until one day, on September 4, 1876, the Librarian of the Worcester Public Library in Massachusetts penned a letter to the editor of the new Library Journal. The librarian was Samuel Swett Green, a native of Worcester, a Harvard graduate, and a minister by training. Just one month later, at the first meeting of the American Library Association in Philadelphia, he would deliver a paper on personal relations between librarians and readers and thereby establish the philosophical ground on which reference service has been based ever since. But in September he was unwittingly founding something else.

"It would add greatly to the usefulness of our reference libraries," he wrote, "if an agreement should be made to lend books to each other for short periods of time. . . . I should think libraries would be willing to make themselves responsible for the value of borrowed books, and be willing to pay an amount of expressage that would make the transportation company liable for the loss in money should the books disappear in transit. . . . Reference libraries, it is true, all have exceptionally valuable books that they would not be willing to lend." In making this proposal, Green introduced some notions that were later to be codified: first, that the borrowing library should be responsible for both the cost of items lost and the cost of transportation, and second, that some types of material would not be available through interlibrary loan.

Green's suggestion appears to have been ignored. Worse, it was forgotten. In 1892, the Library Journal printed another letter on the
subject, this one from Bunford Samuel of the Ridgway Library in Philadelphia. “Some hesitation must be felt in developing a new idea,” he began modestly. “But why should not libraries enter into an agreement in virtue of which books may be furnished by any institution, a party to said agreement (of course under its own rules as to loaning books), upon request through another, for use within (or for loan by) the latter?” Sketching out the arrangements, he suggests that, “The institution making request guarantees safe return of book and at the same time protects itself by agreement with individual on whose behalf book is borrowed; and the latter pays cost of transmission, etc., and any charge that the requisitioned institution is accustomed to make for use of its books, or that may be otherwise agreed upon. . . . Rarities, etc., could be reserved from the operation of the agreement.”

The editor coldly replied that: “The lending of books between American libraries is not unexampled. Harvard College Library and the Boston Athenaeum have often been drawn upon in that way. The tacit agreement is that outlined above; but we do not know of any case in which a written agreement has been made.”

Bunford Samuel, having absorbed the editor's comment, wrote again: “Will you permit me a line further in explanation? My proposal looked to a general union of the various libraries of the country—or at least the more important ones—in the agreement proposed. Such an agreement would not, as it seems to me, be necessarily in writing. But a mutual understanding on the subject would, of course, be necessary among the institutions concerned, such as I do not think at present exists.”

Samuel did not go so far as to advocate an interlibrary loan code, but the idea was gestating. Responding to Samuel's first letter, Green broke sixteen years of silence on the subject to point out that a written agreement was necessary when books were borrowed from the National Medical Library, and that the agreement stipulated the duration of the loan, means of shipment, and payment of charges by the borrowing library.

Any interlibrary lending that was taking place appears to have been local. However, the National Medical Library had already initiated a direct mail service, and this was cited by an editorialist in the Boston Post as an example to be followed:

There seems to be no good reason why the system of circulating libraries should not be extended beyond its present limits. The National Medical Library, at Washington, one of the best in the
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world, is a circulating library. Books are sent to anyone who deposits $50 as security. . . . Why should not the Congressional Library, which is a national library in name, be made one in fact, and packages of books be sent out, under certain guarantees, to poorly equipped libraries, or to societies or associations that might apply?8

The writer did not get his wish; the Library of Congress is still Congress's library, and will only lend books which cannot be supplied by any other library.

Other libraries were volunteering their collections by mail, thus becoming the precursors of "the resource center." One example was the Boston Public Library, which loaned books to other libraries in New England during the 1890s. A special form was printed and made available to borrowing libraries. Some thought had been given to the conditions put upon the process, conditions which were to be spelled out in future codes:

1. The book asked for must be one out of the ordinary course—not such as it is the ordinary duty of the applicant library to supply;
2. It must be required for purposes of serious research;
3. It must be a book which may, without injury, be sent by express;
4. It must be a book which may be spared, for the time being, without inconvenience to our local readers.9

On the other side of the continent, the Librarian of the University of California, Joseph C. Rowell, noted that "the growing demands of scholars, incapable of satisfaction by any one library, and the economical management of library finances, unitedly prompt a closer relation, a vital union, between the larger libraries of our country." To this end, he announced his willingness to enter into an agreement with any libraries in the United States "which are willing reciprocally to loan books to the University of California Library."10 His conditions were roughly identical to those stipulated by the Boston Public Library, but he added a requirement that receipt of a book by either the borrower or the lender should be promptly acknowledged.

These two initiatives were noted by the Cooperation Committee of the ALA, which reported on them briefly on July 5th, 1898, at the Chautauqua Conference. The Chairman, Clement W. Andrews of the John Crerar Library, hinted that the committee had something special up its communal sleeve regarding interlibrary loan, but had been frustrated: "The council has forestalled a proposition which the
committee intended to make by placing the subject in the program of the College and Reference Section.”

But perhaps that was not a bad thing. Green’s idea was now twenty-two years old, and was being taken up in a piecemeal fashion by individual libraries. And while Green was not a member of the Cooperation Committee, he was a member of the College and Reference Section. Although absent from the conference, he was nevertheless present in word. At nine o’clock Thursday evening, July 7th, A.S. Root, Librarian of Oberlin College, read to the closing session of the College and Reference Section a paper by Green, which began in a tone of resignation: “Twenty-one or 22 years ago I sent a communication to the first number of the Library Journal to awaken an interest in inter-library loans. Today, after having, as a librarian, borrowed books from other libraries and lent books to other libraries for 20 years, and having done so extensively, I am again to present the subject to librarians.” He told of his experiences with other libraries, and spoke of the advantages of interlibrary loans to patrons. Then: “I am decidedly of the opinion that the plan of inter-loaning has not yet been carried anywhere so far as to become a nuisance. . . . I am of the opinion that the system of library inter-loaning should be more widely extended, and that small libraries should lend to one another, as well as the smaller libraries borrowing from larger ones.”

In this last remark, he foresaw that there could be problems for net lenders in an expanded system of interlibrary loans. “But is not the plan of inter-loaning a one-sided affair? Do not the large libraries do favors without return?”

His answer to this rhetorical question, as his concluding statement on the subject, was not one that would satisfy today’s net lending libraries: “I feel very sure, however, that college and city libraries, in the long run, will find substantial returns for kindnesses rendered to investigators in small places through libraries, resulting from the kind feelings engendered by generosity among persons of small means, perhaps, but of large influence.”

Meanwhile, Ernest C. Richardson, the Librarian of Princeton University, was dwelling on the problem of how to rationalize collections and save a little money in the process. He had a solution which he presented at the Tri-State Library Meeting in Atlantic City on March 17, 1899. He called his solution “a lending library for libraries,” and suggested that this might be the Library of Congress, or an independent organization. Speaking of his proposed national lending library (his term), he said that it would lead to the “direct
encouragement of scientific research, a very large national economy in removing unnecessary duplication of purchases, and an improvement of existing libraries, in removing the strain of competition and of effort to cover the whole ground.” It was such a good idea that it is still being discussed seventy-five years later.

Following Richardson’s remarks, a Mr. Warrington introduced the notion that inexpensive copies of extracts from books could be substituted for the original. For the moment, nothing came of this idea.

As it happened, Richardson was in that year the chairman of the ALA’s College and Reference Section, and he took the opportunity of placing himself on the program at the Atlanta conference to deliver a paper on cooperation in lending among libraries. Richardson pointed out that there were three impediments to research in America: (1) many works were not to be found in North American libraries, (2) there were difficulties in locating titles held in libraries, and (3) traveling to libraries was expensive. He proposed ways of eliminating these impediments under four headings: cataloging, purchasing, specialization and lending. In effect, he called for the development of union catalogs, for the rationalization of collections and the adoption “of some practical scheme whereby, without hardship to the larger libraries, the great expense of travelling to books may be eliminated, so far as American libraries are concerned, by sending books from one library to another.”

In preparing his paper, Richardson had methodically checked the holdings of American libraries against Bolton’s Catalogue of Scientific Periodicals. He found that of the 8,600 titles listed, only 3,160 were held in American libraries. Acknowledging that of the balance some would be of “secondary value,” nevertheless he maintained that all should be available somewhere. But he foresaw difficulties if the work were left to libraries in general. “Shall five hundred colleges continue in an indiscriminate way to struggle towards an ideal 8,600 periodicals, all of which some one will want some time, but not one in 20 of which some of them will want once in 20 years, or shall we look forward to some sort of definite cooperation, and the sooner the better?”

He roughly calculated the waste of $250,000,000 through “the present go-as-you-please every-one-for-himself principle. We are duplicating every year a great many sets of periodicals, as we would not need to do under some system where all were free to borrow.”

Then he proposed his grand idea again: “Now, the ideal way of meeting this situation both for economy and for convenience is undoubtedly a central, national, lending library of the least frequently
needed books—a library having, perhaps, a central library in Washington with branches in New Orleans, San Francisco, Chicago and New York.”

But Richardson was a practical man and saw—very correctly as it turned out—that it might take several years to develop a national lending library. Until that happy day arrived, cooperation was to be the answer. “Cooperation in specialization and co-operation in cataloguing will at least receive an immense new impetus, while co-operation in purchasing will logically and inevitably follow in the basis of the co-operative work in cataloguing. In a practical age, in a practical land, with the example of great combinations for personal gain before us, it ought to be possible to devise suitable machinery and secure extensive adopting of this machinery.”

He raised the shades of computer-based processing and the problems of standardization. He suggested that Bolton’s list might be used to develop a union list of locations, to serve both as a location and an acquisition tool.

In concluding, he brought up two new issues. “In the dim futurity, perhaps, a paternal government may step in and help the matter by lightening still farther the expense of sending such books by mail.”

Thus he foresaw the desirability of external subsidization of the interlibrary loan process. He also foresaw possible objections from another direction. “For the benefit of those members of our association who look at the matter from the standpoint of the dealer, let me say that this need in no wise reduce the business or the profits of the book dealers. American libraries, for a long time to come, are going to use with eagerness every dollar they can get for the purchase of books.”

In anything librarians undertake, time has a way of slipping by, and six years elapsed before anyone paid much attention, in print, to the question of interlibrary loans. Then Richardson, this time speaking in Portland, Oregon as the President of ALA, called again for “co-operation in purchase and distribution,” “cheapening of the postal rates” and the development of “co-operative lists.”

As is often the case, the conference then went on to consider almost everything except the urgings of the president.

Somewhat grudgingly, the Librarian of Congress, Herbert Putnam, produced a policy governing interlibrary loans. It fell far short of hopes. “The duty of the National Library,” he said, “is to aid the unusual need with the unusual book.” The policy is couched in negatives: loans were to be for purposes of “serious research” only; loans would not be made of books “that should be in a local library” or “which [are] in constant use in Washington.” Genealogies and local
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histories were not to be loaned, and "only for very serious research can the privilege be extended to include volumes of periodicals."22

Since his appointment at McGill University, Charles H. Gould had regularly attended meetings of the American Library Association, an organization of which he would become president in 1909. He had followed general developments in librarianship closely, and had introduced a number of then-revolutionary practices at McGill, such as small "traveling" libraries. In 1908, he submitted an article to the Library Journal in which he put forth his ideas on what he called "regional" libraries. Echoing Richardson's sentiments, he asked:

Is the immense total energy now expended on the libraries of this country being so applied as to produce the best possible results? Is there anywhere unnecessary and, therefore, unproductive and wasteful duplication of effort or of expenditure? Has not library development on this continent now reached a stage at which more thorough co-operation and co-ordination, perhaps, at times, even a certain degree of judicious concentration, would lead to results larger and more satisfactory than those which are now achieved? In fine, the library world has hitherto been occupied with the evolution of single libraries. Is not the twentieth century to see the welding of all these separate entities into one complete system?23

Gould hadn't used the word, but he was talking about a network. He parted company with Richardson and others who called for the creation of a single national lending library.

Let us suppose the whole continent to be divided into a few great regions, or districts, and that in each, after careful consultation and due consideration, a truly great library is developed out of existing resources, or is established de novo. Each of these regional libraries would serve as a reservoir upon which all the libraries of its district might freely draw. They would co-operate unrestrictedly with each other in matters of exchange, loan, purchase of rare or particularly costly works. . . . It would seem equally reasonable that they should act as clearing houses and on this account, as well as because of their size, they would materially help to dispose of, if they did not completely solve the vexed question as to storage of so-called "dead" books.23

How should these regional libraries come into being? Here, Gould begged off. "I say nothing as to the means to be adopted for maintaining them. Yet the difficulties on this score, though not slight,
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do not appear to be by any means insuperable." He was too optimistic, apparently. In 1975 the identical concept is still being urged.

Gould's remarks appeared in the June 1908 issue of Library Journal. On the twenty-third day of that same month, the Librarian of Harvard University, William Coolidge Lane, spoke at the dedication of the new library building at Oberlin College. His topic: a central bureau of information and loan collection for college libraries, which turned out to be a more detailed description of the kind of facility Gould had in mind. Lane's opening sentence struck a familiar chord. "Co-operation in acquisition, in record, in use, and perhaps in storage, is the problem with which we have to grapple." He then proceeded to describe the functions of a central bureau. "As a Bureau of information, its first task will be to collect whatever records already exist relating to the books in other libraries." This could be done, he said, by obtaining all available catalog cards and book catalogs. "The next step will be to obtain information from libraries supplementary to that already in print in catalogs and reports." He saw this as being accomplished by a number of bureau "agents," "prepared to take notes systematically of what they find." Nevertheless, he was edging toward the concept of a national union catalog.

Assuming a location record to have been created, "another important duty will be to become familiar with the conditions and the rules of the principal libraries that can be depended upon for lending. . . . It might be in addition a Lending Bureau, itself arranging loans, especially from libraries in its own vicinity, to those at a distance. . . . If in addition it is to be itself a library, lending its own books as well as those of others, its usefulness will be correspondingly increased, and its endowment must be strengthened in proportion."26

In considering the nature of the bureau's collection, Lane showed an understanding of the ways in which scholars use libraries.

The Library would not attempt to accumulate masses of material in regard to special topics. . . . I mean books which must be used, so to speak, en masse, books which are not asked for one by one from previous knowledge of them, but books which the student must run through more or less thoroughly one after the other in patient search for the facts which interest him. Such books can only be used on the spot and together, and their collection is the duty of the college libraries themselves. The central library should only collect such books as the student is naturally referred to by bibliographies and other guides; such books as he knows in advance that he wants, but
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cannot find. . . . The works of this kind which first occur to the mind are sets of periodicals and society transactions, collections of historical documents and sources.27

Thus Lane agreed with his colleague Richardson at Princeton. Lane’s closing remarks could easily have been uttered by Richardson: “I am confident that the full plan, worked out in complete detail, under the advice of an interested and progressive committee, and adequately endowed, would be of the highest service to American scholars, and would lead to a substantial modification of the book-buying policy of college and reference libraries in general. Its whole tendency would be to bring about a closer union and a better understanding among libraries which have much to gain from working together.”28

Then, in 1909, it was Charles Gould’s turn. In that year he had become the first Canadian president of the American Library Association, and like his predecessors in that office, he took the opportunity to stress the importance of co-ordination in cooperation. Harking back to his article on regional libraries, he suggested that with the turn of the century, libraries had entered a new era. “The problems which now confront us are different from the earlier ones. They no longer have to do with libraries as final terms in a series, but as first terms in a new series of larger proportions. The twentieth century has the task of evoking method and order among rather than within libraries. It must discover a classification not for the volumes on the shelves . . . but for the libraries themselves, grading them as it were, and welding them into a complete system.”29 Pressing his point, he carried on: “I point you to the fact that combination and organization are among the strongest tendencies, the very watchwords of the age. How should librarians, then, keep aloof from them? I point you also to the trend of library opinion as evinced in recent professional literature. . . . A system such as has been mentioned . . . would dispose of most of the questions that are now pressing on us for solution.”30

But Gould was already beginning to understand the singular quality of librarians. In beginning a survey of cooperation up to 1909, he commented: “your sufferings on account of it would be short. For, though a good deal has lately been written on the subject, it would not take many minutes to tell what has actually been done.”31 He added:

Let us now look at one particular aspect, as it relates to the supply and distribution of books. This is, perhaps the ultimate and crowning purpose of co-ordination. . . . Though inter-library
loans have been going on for years, and have now grown very usual, they are still effected chiefly between the greater libraries; while the books lent are restricted, in the main, to those needed for serious study or research. . . . In any system which may be devised, there must be provision for widening the scope of inter-library loans, until they include other than scholarly works. We all of us have a great respect for the scholar, but his are not the only interests to consider.32

After speaking about the need for including medium and small libraries in his proposed system, he reintroduced his concept of “regional” libraries:

Might it not then be feasible to provide a certain number of book reservoirs to which all the libraries of a particular district or locality could turn in time of need? These reservoirs, existing for the express purpose of serving other libraries, might have great latitude in the matter of lending, while at the same time they might combine the function of a storage warehouse and clearinghouse with other services as yet hardly spoken of. . . . Suppose the entire continent has been laid off into a few such districts or regions, and that in each region there has been established a great reservoir—let us call it a regional library—placed at a central point which has been selected after a careful study of the region, its lines of communication, distribution and character of its population, the size and location of its other libraries, with the kind and number of books these already possess. The regional library may have been developed from an existing library. . . . or even from a group of libraries, or it may have been established de novo, examination having shown the necessity for it.33

Gould saw the system developing by blocks. First, the regional libraries would establish lines of communication with all libraries within their respective areas; then, links would be created among the regions, and with the national libraries. The regional libraries might also establish branch libraries and “call into requisition all the most approved means of distribution, from travelling libraries to book wagons.” Among the regional libraries, some kind of rationalization would be attempted: “Though each Reservoir Library would necessarily aim at a large and comprehensive collection, each would specialize to the exclusion of all others, in certain directions. . . . They would constitute the natural storage libraries of their district, receiving and making accessible the overflow, whatever its nature, of their
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affiliated libraries. . . Thus in addition to being storage libraries they would almost inevitably become clearinghouses."34

Then Gould took another giant leap. "As a matter of course, regional libraries would also become the reference libraries of their district. . . . They would be equipped with correspondence research departments, and bibliographic bureaux from which would issue, at reasonable tariff rates, certified copies of articles, answers to specific requests for information, or even for more extended bits of research."35 He added: "Canada seems to be ideally placed for making an initial experiment of this nature."36 The experiment still waits to be performed.

In the discussion that ensued, Richard Rogers Bowker, the editor of the Library Journal, rose to speak: "Mr. President, like ‘le bourgeois gentilhomme’ of Molière, who really had been talking prose all his life without knowing it, we have really been discussing co-ordination for a great many years without knowing it by that name. . . . I wish to suggest, Sir, that the Executive board could do nothing better during the coming year than to appoint a committee of weight and importance to deal with this question."37 A committee on coordination was established, with Gould as its chairman; one of its members was William C. Lane of Harvard, who also served as chairman of a separate committee on co-ordination among college libraries.

Later in his remarks, Bowker brought up the matter of a union catalog again: "We should develop some system that will enable a library first of all to know where a book ought to be found, and secondly, if there is no special place for it, some means of asking who has it."38

Later that year the superintendent of the reading room at the Library of Congress, William Warner Bishop, decided it was time to take a position on behalf of his institution. He had some questions of his own to raise about interlibrary loan. "What is its present status? To what extent are our libraries borrowing books from one another? What, also, is the theory in which the practice finds its justification?"39

As for numbers, Bishop bemoaned the fact that: "the actual number of books lent and sought by libraries is not easily ascertained. There exists no compilation of statistics on the topic so far as I am aware."39 The situation is no different today, unfortunately. But Bishop did have statistics of loans from the Library of Congress. In 1909 1,023 volumes were loaned to 119 libraries; forty-nine academic libraries accounted for 521 loans, and forty-four public libraries for 244 loans. The library
was unable to fill 357 requests which it had received, principally because the items were not in the collection.

After reviewing the Library of Congress's regulations, as they had been laid down by Putnam, Bishop then drew the attention of his readers to an aspect of the interlibrary loan process which was being overlooked. "The inter-library loan is an expensive process . . . one wonders whether the time spent in borrowing and lending between libraries does not represent in money value a good many times the value of the book lent. . . . In all this reckoning nothing has been said of the cost of carriage, which is frequently excessive." Then he moved to the attack:

Last spring the librarians of Harvard set forth in new form and with great force a plea for a central storage library and bureau of information for college libraries. . . . But now I desire to submit a few points in opposition to any such scheme for a lending library organized under the American Library Association. In the first place, the national library already lends very freely, and is prepared to continue this policy. . . . On the lending side there seems already in hand and in operation the necessary machinery in connection with the largest collection of books in the country.41

He went on to point out that "the beginnings" of a central bureau of information were also at the Library of Congress, in a collection of printed catalogs of American libraries, and in a file of printed cards submitted by a number of major libraries. He pointed out that the library conducted reference service by mail and concluded by asking: "If then the Library of Congress will try to do these things for individuals and for libraries, it is not on the way toward becoming a national lending library and bureau of information—for libraries?"42 Perhaps Bishop's article succeeded in diverting or delaying the efforts of librarians to carry out some of the proposals of Lane, Richardson and Gould. In any case, the Library of Congress did not completely fulfill the role Bishop proposed for it.

For his part, Bowker decided to test the opinion of librarians on the matter of coordination, and as editor of Library Journal created another milestone: he distributed the first questionnaire on interlibrary loan. There were only six questions:

1. What are the classes of demand within the library for books which it cannot supply?
2. How far are these demands filled by the extension of these methods and to what extent; is it undesirable to fill them?

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3. Would a uniform blank for requesting interlibrary loan, that could be sent successively to different libraries until the book should be found be desirable for general use throughout the country?

4. Does the plan of a central lending library seem preferable to the development of the present facilities of the national library, the assignment of regional functions to important libraries in the several sections and the use of special university libraries?

5. Is the present cost of the inter-loan system prohibitive in many instances? And how can this difficulty be obviated?

6. How can the small libraries be of use to the large libraries in coordination?

The results of the survey were reported in the March and May 1910 issues of Library Journal, under the title "Symposium on Coordination or Affiliation of Libraries," and Bowker provided a summary of the results in the form of an editorial:

Inter-library loan . . . represents a decided economic advantage in library administration. It is evident that the demand of inter-library loans is and should be confined to a few classes of books or to individual books so rare that only a few libraries have or can have them. . . . It is not wise to cumber the shelves in any library with books seldom called for, provided they can be borrowed elsewhere when required, or to use funds for costly books outside the usual field of the library.

The trend of library opinion . . . is evidently toward the development of the inter-library loan system by the Library of Congress and other existing libraries, rather than in the establishment of a reservoir or other new forms of libraries for the special purpose.

The limitations to library-loan development are practically those of dollars and cents, both to the library loaning and to the user borrowing. . . . With the ultimate development of the system the larger libraries, supplying wider demands, will have to meet the question of cost. . . . Of course this question may be partly met by a fee charged to the individual borrower, but the use of the library loan system is unduly limited now because of the considerable cost of transportation which the individual borrower must pay.

The question of cost is still with us.

That summer, Charles Gould presented the report of the committee on coordination to the Mackinac Island Conference of the ALA. He
had been impressed by a report on the activities of European libraries, delivered at the International Conference of Bibliography and Documentation in Brussels in 1909. There he had found described a situation in Norway which greatly appealed to him: "All libraries subsidised by the State are considered members of one vast body, the parts of a network which extends over the whole country and through which the books circulate. The purchasing and cataloguing of books, and the registration of borrowers are all performed in one central office."45

The committee had discussed the possible adaptation of European models to the American situation, and noted that:

The national library and other important libraries are steadily extending more and greater privileges to sister institutions less fortunate than themselves, and are placing their resources more and more completely at the disposal of others. The service of a Bureau of bibliographic information for the country as a whole, undertaken several years ago by the national library, is being rapidly developed; and within the past few months the same library has issued a tentative statement of the conditions under which it will print copy furnished by libraries outside the District of Columbia.46

The committee had two recommendations to make. One dealt with a system of "inter-library readers' cards," but the second was of greater significance: "That certain libraries, which are now lending, or are willing to lend to others, adopt uniform rules for lending . . . and that the rules thus adopted be printed and circulated with the addition of the names of the libraries that have adopted them."46 The move toward a code had begun.

The year 1910 is an appropriate point at which to conclude this review of early schemes for the sharing and rationalization of library resources. If the word network wasn't prominent in the vocabulary of our pioneers, the concept was there. In fact, although the centennial of Samuel Swett Green's proposal for interlibrary lending will be celebrated next year, and although the dimensions of cooperation among libraries have increased enormously, there have been few intellectual innovations in the interim years. Wherever the spirits of our predecessors now abide, they must be waiting for the realization of their ancient hopes.

This article is taken from *A Survey and Interpretation of the Literature of Interlibrary Loan*, by B. Stuart-Stuubs, K. Nichol, M. Friesen and D. McInnes, performed under contract to the National Library of Canada, to be published later this year by the National Library of Canada.
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Forthcoming numbers are as follows:

July, 1975, *Federal Aid to Libraries*. Editor: Genevieve M. Casey, Professor, Division of Library Science, Wayne State University, Detroit, Michigan.

October, 1975, *Regional Cooperative Endeavors*. Editor: Pearce S. Grove, Library Director, Eastern New Mexico University, Portales, New Mexico.
