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bibliography of one-hundred forty-one references, arranged by author,
make up the review. (Author)

LIBRARY GOALS AND OBJECTIVES:

LITERATURE REVIEW

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Washington, D.C.

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view.

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I. PURPOSE AND PROCEDURE

This literature review is built upon a paradox -- while the vital importance of goals and objectives is widely accepted in the library literature, few libraries have well-structured and operationally useful formulations. Consequently, even fewer documentations exist on how librarians actually formulate effective goals and objectives. Likewise the academic community so far has offered few conceptual bases for the formulation process.

The scarcity of useful literature makes identification and assessment of what is available even more essential. Moreover, the considerable pressures on university and public library planning may soon produce positive contributions to the goal/objective setting process. These fiscal, social, and other pressures are elaborated upon later.

The search procedure has been to delve deeply into library planning and administration and range widely over a broad array of possibly helpful subjects such as education, business planning, systems analysis, budgeting, and the broad planning and methodological areas. The focus is upon university, public and special libraries with limited attention to school libraries. Emphasized are overall goals and objectives with very limited coverage of lower-level   and state or other area-type goals. The aim is to be comprehensive but not exhaustive. Every effort, however, is made to include all significant viewpoints, approaches and contributions.

Most references are from 1960 to date, with the majority for the last five years. Significant contributions from the 1940's and 1950's are included. Monographs, periodicals, reports, theses, documents, and other forms are represented. It has, however, not been possible to explore the foreign literature except for representative contributions from England.

The major aim is to help two groups: first, those in university, public and special libraries involved in formulating overall goals and objectives; and secondly, those in the academic and/or professional community seeking to develop a conceptual foundation for goal and objective formulation.

II. COMMENTARY ON THE LITERATURE

The literature is relatively small -- while several hundred references have been scanned, only about 200 have been identified with some relevancy. Of the 141 references in the Bibliography, only a score deal with the formulation process in any substantive manner. While all attest to the importance of establishing goals and objectives, all too many offer only vague and generalized guidelines or concepts. Bone[14] presents the nearest to a case history of how a public library set about formulating its goals and objectives. McGrath[88] fully documents the planning experiences of Cornell University Library during the first year. Several theses are useful, especially the 1967 one of Kemper[78] on strategic planning. Wasserman's 1960 thesis attempted to develop an empirical basis for formulating public library goals but was largely exploratory.[128] Several theses -- Davis [35], Speller[114], and Young[133] -- are currently listed as being in-progress but are worthy of early review.

The literature clusters around these broad facets: definitions and contextual relationships; importance; contributing trends; surveys; difficulties of formulation; background factors; steps in formulation; and needs for future research. More has been written on goals and objectives for public libraries but much of it relates to broad societal-type goals and is accordingly, less useful for purposes here. Lack of consistency in terminology is a continuing problem -- the frequent interchange of "goal" and "objective" being the prime example.

In summary, the literature is modest in amount but widely scattered among many subject fields. It is usually within larger sources and often is either highly vague and generalized or highly specific to a particular function or situation. Practically no conceptual work has been reported while only a few chronicles exist of how libraries formulated goals and objectives. In spite of these limits, a review is appropriate because of the importance and increasing interest in the subject. First to be considered are some definitions.

III. DEFINITIONS

Goals and objectives are essential components of the planning and administrative processes. Ackoff carefully defines planning as a

> ... process that involves making and evaluating each
> of a set of interrelated decisions before action is
> required in a situation in which it is believed that
> unless action is taken, a desired future state is not
> likely to occur, and that if appropriate action is
> taken, the likelihood of a favorable outcome can be
> increased. [1(4)]

Kemper defines the strategic planning process,

> ... the process of deciding on goals of the library,
> on changes in these goals, on the resources used to
> obtain these goals, and on the policies and strate-
> gies that are to govern the acquisition, use, and
> disposition of these resources. [78(216)]

A "Total Planning Framework" is developed by Kemper in which he lists various types of objectives under strategic planning, operational planning, and task programming. For corporate planning, Ackoff distinguishes between tactical and strategic planning:

> 1. The longer the effect of a plan and the more diffi-
>   cult it is to reverse, the more strategic it is.
> 2. The more functions of an organization's activities
>   are affected by a plan, the more strategic it is.
> 3. Tactical planning is concerned with selecting means
>   by which to pursue specified goals. [1(4-5)]

One of the earliest and most fundamental steps in planning is the definition of the organization's mission. Sellers defines mission as

> ... the broadest and most inclusive statement concern-
> ing its central and ongoing purpose. If a library
> does not understand its mission, its reason for exist-
> ence, it cannot adequately set its objectives. [110(72)]

2

Mission statement for Cornell University Libraries is ...

> To provide bibliographical, physical, and intellectual
> access to recorded knowledge and information consistent
> with the present and anticipated teaching and research
> responsibilities and social concerns of Cornell Univer-
> sity.[88(136)]

An expansion of the mission statement is Beliefs or Guiding Principles.
These further detail and specify organizational policy and ethics. Examples
of these for Cornell are the following:

> Cornell University Libraries (CUL), both as an institu-
> tion and as a community of individuals, is committed to
> excellence in its activities.
>
> CUL participates in cooperative library programs to sup-
> port its mission.
>
> CUL subscribes to the spirit of the American Library Assoc-.
> iation Library Bill of Rights.[88(137)]

In a total planning effort such as Cornell's there may be additional steps
before reaching goals and objectives themselves. These may include basic policies,
strengths and weaknesses, challenges and opportunities, crucial problem areas,
key result areas, and environmental factors. These are fully documented in the
McGrath report and will not be expanded upon here.

Although there are no universally acceptable definitions of goals and ob-
jectives, Howard's statement is accepted as a working basis for this review:

> A goal is a statement of broad direction or intent that
> is general and timeless and is not concerned with a par-
> ticular achievement within a specified time period. An
> objective is a desired accomplishment that can be meas-
> ured within a given time and under specifiable conditions.
> The attainment of the objective advances the system to-
> ward a corresponding goal. [64(8-9)]

What the American Management Association terms "Continuing Objectives" is sub-
stantially "goals" and their "Specific Objectives" is "objectives" as used above:

> CONTINUING OBJECTIVES: Qualitative or quantitative state-
> ments of continuing intent of the organization which de-
> scribe what results the enterprise wants to achieve and
> what it wants to become.
>
> SPECIFIC OBJECTIVES: Explicit quantitative statements, con-
> sistent with continuing objectives which specify the results
> to be achieved at a definite point in time and can be
> measured in terms of accomplishment. [88(103)]

3

Writers frequently reverse the above definitions of goals and objectives and goals become the more specific targets instead of the broader purposes for the organization. For example, Hamburg does this while differentiating between library standards and "objectives":

> Standards are neither objectives nor performance measures. Objectives are general statements of purpose and performance measures are a quantitative means of relating benefits (outputs) to costs (inputs). Library standards are either descriptive rules for 'proper' management or are quantitative rules for 'minimum' inputs of materials, personnel, and physical facilities. However, they are often considered to be objectives or performance measures or both.[56](123-4)

Martin, it should be noted, has traced the evolution of library standards and suggested the need for a different type:

> The answer is a foundation of clear and explicit objectives and a functional prescription of what is needed to achieve objectives -- in other words, 'program' standards to go along with program budgeting.[91](175)

Goals and objectives can be pursued by various means varying from the most specific (a course of action) through practises, procedures, and programs, to the most general (policies). Perhaps Goldhor and Wheeler have tied these together most succinctly:

> Unified goals lead to policies. Policies govern programs and procedures. Policies are general directions as to what activities shall be undertaken, on what scale, with what emphasis. Programs are the framework for activities, showing how in general the latter are to be planned, organized and managed. An activity is a specific operation or event undertaken or sponsored by the library. Procedures relate to operational details of activities. Standards are officially adopted or widely accepted measures by which to evaluate results; they may be derived from reliable data, or they may be rule-of-thumb dicta based on trial and experience.[47](2)

Webster in his review of library policies, distinguishes between "program", "policy" and "procedures" and relates them to objectives:

> A program is a defined course of action taken to achieve objectives and includes an indication of required resources. The policy statement, then, gives guidance to be used in developing and following the course of action to reach these objectives. Procedures refer to the step-by-step details of execution of specific tasks set up as parts of the course of action within the policies.[129](2)

IV.TYPES OF GOALS AND OBJECTIVES

Goals and objectives are of such a wide variety that they are best considered as a hierarchy. They range from the parent organization's goals through the over-all goals of the entire library, program (or service) objectives, sub-program (or sub-service) objectives, and objectives for particular activities within a program or service.[25] Gross notes the importance of differentiating between personal and organizational goals:

> A personal goal is a future state that an individual de-
> sires for himself -- a definition akin to the psychologi-
> cal concept of motive. This meaning may be distinguished
> from what a particular person desires for the orgzanization
> as a whole, which may or may not correspond to the organi-
> zation's group goals.[53(5)]

Gross goes on to develop this idea by stating:

> ... although an organizational goal is not necessarily
> the same thing as a personal goal or as a goal that a
> particular person desires for an organization, the
> nature of organizational goals is evident to some ex-
> tent in the assertions of its members about what they
> think the organization's goals are.[53(6)]

Related to this is the warning of La dendorf --

> There is never any such thing as an organization; there
> are only groups of people engaged in a continuing pro-
> cess of organizing. This proce s involves constant pro-
> cedural readjustments, as well as regular goal redefi-
> nition.[80A(275)]

Baker develops a model of a university library which divides goals into three broad types:

> User-oriented goals, defined according to the servicers'
> perceptions of the users needs.
> Funder-oriented goals, defined according to the servicers'
> perception of funders' criteria and constraints.
> Servicer-oriented goals, defined according to the needs and
> aspirations of the servicers.[7]

Fry distinguishes between internal and external objectives:

> ... in addition to officially stated missions... each ...
> will have developed either explicitly or implicitly its
> own objectives, tasks, sub-tasks, work units, etc., which
> it conceives to be necessary and appropriate to the ful-
> filling of the externally imposed requirements.[44]

5

Rayward distinguishes between real and ostensible goals:

> One may obtain through sampling and interview techni-
> ques some idea of what people at various levels in a
> library, or in many libraries, consider to be the most
> general goals of libraries; the future goals of their
> library; it's immediate goals; the goals of their sec-
> tion in it and of their own professional activity. If
> these goals are described as ostensible or public
> goals, a third kind of goals may be described as real,
> private or even as system goals. These are the goals
> the library or groups of its personnel may be said
> actually to operate by at any given moment.[103(325)]

There are numerous other ways of classifying goals and objectives, only
some of which can be listed here. A common one is by time frame such as
immediate, short term, intermediate, and long term. Lowry, a special librar-
ian, for example, comments,

> There are long-range goals and immediate goals, and
> in between there is a spectrum of variables as to
> what is desired and what is possible.[86]

Bowler contrasts specific and general goals -- the latter being "... broad in
concept, spreading over a long and possibly indefinite period of time" [19(77)]
and the former are short range (usually) with definite time limits and which
"... should be established as needed to achieve the overall goals of the li-
brary.[Ibid.] Tangibility is another variable with the highly idealistic or
intangible and the very concrete at opposite ends of the spectrum.

V. USES AND IMPORTANCE

Gregory summarizes the uses quite well:

> Objectives are essential in the establishment of specific
> goals, the preparation of budgets, and the development of
> policies. They provide the impetus for united effort in
> all units of an organization. They are the starting point
> for the preparation and maintenance of procedure manuals.
> They serve as directives for coordinated planning. They
> aid in restoring program balance at times when a single
> goal may be receiving undue emphasis. The statement of
> objectives is particularly useful to new administrators,
> staff, and trustees in getting an overview of the scope
> and direction of the institution's programs and activi-
> ties.[51(56)]

Although Gregory writes from the viewpoint of public library cooperative
systems, similar thoughts are often expressed by special and university
librarians. For example, Galin comments,

> The determination of objectives is the starting point
> for the practise of management, and objectives and
> goals must be established in order to intelligently
> and effectively manage a scientific and technical in-
> formation system. [45]

6

Rogers and Weber discuss the axiomatic importance of establishing goals for university libraries. They continue,

> ... there has to be in the midst of a sea of complex issues someone who harbors a general vision of where the library is headed and attempts to shape individual decisions towards a long-range target. Such a target may be the aspiration to move a third-rate library into the first rank in size and distinction with all that this implies in collections, buildings, and staff; or the target may simply be to maintain excellence in a library of distinction, a task that can be as difficult as striving for excellence if one is surrounded by complacency. [106(10)]

Clear identification of goals and objectives is of prime importance to the library budget and resource allocation function. Again, Rogers and Weber comment,

> In summary, the budgetary process relies to an extraordinary extent on objective information and well-defined and accepted goals. The library director who has developed his goals on a broad base that includes general university administrative agreement, who has taken the trouble to isolate ratios that are widely accepted or that can be honestly demonstrated on analogy with other libraries... is likely to get an even break for the library. [106(100)]

Gregory stresses the importance for public libraries:

> The librarian who stimulates a board to establish specific goals will be supported by trustees who know where they are going and are willing to defend their budget requests. ... The budget should be a plan to spend money to reach set goals that will carry out established objectives. [51(63)]

Implicit in meaningful goal and objective-setting activity is the need for structuring goals and objectives so that progress can be measured. Two special librarians state this well, first Wasserman:

> Without a clearly conceived rationale for its existence, the library in industry is on shaky ground. The library is only one of many agencies in a larger complex. As the total organization strives to achieve its goals, so the internal agencies reflect these goals in a program of activities aimed at achieving these total objectives. Until the objectives of any library are clearly and unequivocally set out, ultimate assessment or evaluation of performance is impossible. [126A(377-8)]

7

Next Ladendorf writes,

> Evaluation should be an attempt to measure institu-
> tional progress toward specified goals. These goals
> must be defined before good evaluative measures can
> be worked out. What most libraries seem to lack is
> middle level goals. 80A(274)

She goes on to describe these as goals between those outlining the general
mission and those which are "very specific, low level goals".

The problem of using most commonly stated goals and objectives for evalu-
ation is described by Hamburg.[56] Wessel attempts to develop a methodology for
evaluating library effectiveness by relating mission and objectives:

> SCORE analysis determines the extent to which the li-
> brary administrator manages his resources to provide
> the combination of services and products which give
> optimum support to the library mission, goals, and
> objectives. 120c

This report by Wessel is one of three produced by the John I. Thompson & Com-
pany with the purpose of developing evaluative criteria for the Army Techni-
cal Libraries.

Somewhat related to evaluation is the importance of goals and objectives
to collection building. Bone writes,

> A final very fundamental problem in the past has been
> the lack of overall institutional objectives. Anyone
> who feels that an intelligent identification of the
> nature of the urban library collection can be made
> without understanding of the library's purpose will be
> misguided. Those who might be in the process of
> building a library collection, without first under-
> standing what the collection is for, are merely squan-
> dering money which might better be spent on other urban
> priorities. In addition to providing overall direction
> to the institution, the objectives lay the groundwork
> for that cornerstone without which any collection
> building will suffer -- the acquisition policy. 13(630)

If goals and objectives are to be met, the librarian must implement
them with appropriate decisions. Not a great deal has been written on
decision making in libraries. However, Bundy analyzes critical decisions
made in libraries and remarks ...

> The cumulation of these decisions over a period of
> time, however, determines to a great extent the effective-
> ness of the library in meeting its goals; or, in fact,
> where its goals have never been precisely defined, these
> decisions account for the function which the library ful-
> fills in the community. 23(15)

Sel.om mentioned in library literature but frequently in business and edu-
cational literature is improved staff motivation and morale resulting from par-
ticipation in setting organizational goals. This is the MBO or Management-by-
Objective thrust which is discussed briefly in the next section. The benefits
of MBO are somewhat controversial at the present time, but perhaps its intelli-
gent application may be one antidote to the tendency noted by Bundy for library
departments to develop their own goals which conflict with other departments.[22(254)]
Dutton writes of the meaning and value of staff participation:

> What is meant by staff participation? It is essen-
> tially an active co-operation between manager and sub-
> ordinates in the setting up and pursuit of agreed
> job-related objectives.
> The unit's overall long-term objectives within any
> larger organization will need to be determined init-
> ially, but once this has been done the medium term
> objectives and the short term improvement targets
> must come from the staff themselves.[40(115)]

In addition to the preceding positive benefits of clear goals and objec-
tives, there is the avoidance "benefit" of not allowing policies to become
objectives by just evolving from practise rather than being established by
the library administration. Closely related is "goal displacement",

> ... when an organization substitutes for its legiti-
> mate goal some other goal for which it was not created,
> or for which resources, were not allocated, or for
> which it is not known to serve.[131(9)]

In summary, properly formulated and implemented goals and objectives can be
of vital importance to library management, gaining public and staff support,
library planning and budgeting, as well as in specific library functions such
as acquisitions.

VI. CONTRIBUTING TRENDS

Program-Planning-and-Budgeting (P.P.B.)

Since about 1967 a number of libraries have been attempting to formulate
goals and objectives as an essential part of the PPB system. Perhaps the
below definition is as good as any of the many in the literature:

> The principal components of program budgeting, are a
> structure which categorizes the activities of an orga-
> nization by their objectives and the programs for ob-
> taining them; the use of formal analysis systematically
> to examine the costs and gains of programs and their alter-
> natives; and control and reporting for implementing policy
> decisions and measuring progress toward their achievement.[21]

First applied on a large scale in the Department of Defense in the early
1960's, President Johnson in 1967 directed all civilian departments and
Federal agencies to begin using PPB. There followed considerable efforts

to apply PPB to state and local governments including a rather rapid and wide-spread movement to apply the process to education. Hatry's survey of the status of PPB in local and state governments notes the lack of progress in operational measurement of objectives.[61] Although PPB ended as a formal requirement with the issuance of OMB Revised Circular No. A-11 on June 21, 1971, many of the essential planning techniques continued to be applied. A recent article by Schick assesses the current status of PPB and its prospects for the future.[108]

Although the rush to PPB was definitely slowed by 1970 and few libraries operate under a PPB system currently,[3(6)] the PPB movement contributed considerably to a planning climate for many libraries. Allen examines the key problems of applying PPB to the academic library environment and concludes,

> Basically, the difficulties stem from the fact that
> a large academic library is not a free standing struc-
> ture but is dependent on a university or state parent
> for operational guidelines. The new staffing require-
> ments are foreign to libraries. A foreign profession
> is introduced into a closely knit family that has been
> universally librarian. This in many cases, could be
> likened unto an unwanted in-law... [3(18)]

Two other sources relating PPB to academic libraries are de Genaro[36] and Young[133]. Buckman provides a survey paper on the history, essential characteristics, contrasts with traditional budgeting methods, and studies and applications of PPB in university, national, and large public libraries.[21] Schofield has written a thoughtful statement on the problems of applying PPB to university libraries.[109]

The earlier and less critical literature includes the fifteen reports resulting from the Institute on Program Planning and Budgeting Systems for Libraries held at Wayne State University, Detroit, in 1968. One of these by Burness is on the objective-setting process and is quoted extensively in Section 9 on formulation guidelines.[25] Howard[65] and Jenkins[70] write of the application of PPB to public libraries. A PPB workshop of the Santa Barbara High School District resulted in a report covering program goals and objectives for school libraries.[107] Bromberg provides some practical guidelines for beginners in applying PPB to libraries.[20] Summers places PPB into context from a budgetary viewpoint.[116]

Systems Analysis and Design/ Operations Research.

Parallel in many ways with PPB has been the increased use of systems design and analysis which often accompany library automation programs. The criticality of defining long-term goals is often emphasized, for example by Chapman:

> The next step, critical in planning and conducting this
> study, is the study staff becoming fully conversant with
> the library's overall goals in relation to the problems
> to be studied. Goals are those factors that the manage-
> ment of the library determines to be important for accom-
> plishment;... [32(487)]

Bellomy has likewise noted the keystone position of objectives in systems:

> A system is an assemblage of interdependent things and
> ideas necessary to achieve a set of related objectives.
> It is characterized by inputs which are processed to
> produce the outputs required to achieve specified ob-
> jectives.[9](1122).

Burns[26], Herner[62], Chamis[30], and King[79] discuss the role of goal and objective-
setting in systems design and analysis.

Although not dealing with the goal and objective formulation process _per se_,
the largely operations research (OR) work of the Cambridge University Library
Management Research Unit[99], the Project for Evaluating the Benefits from Univer-
sity Libraries (PEBUL) at the University of Durham [39], and the University of Lan-
caster Library systems analysis effort[82] all illustrate an important trend in
library planning efforts.

Library Legislation.

Some literature has resulted from the Library Services & Construction Act
Amendments of 1970. This law stipulated that every state library agency must
submit a 'long-range program' by July 1, 1972, in support of its request for
federal funds. This means

> ... a comprehensive five-year program which identi-
> fies a state's library needs and sets forth the activi-
> ties to be taken toward meeting the identified needs...
> (p.2-3 of of LSCA Act)

Many of these state plans are now becoming available through ERIC; the one for
California is included as a sample.[28]

The future prospects for this program appear dim since the Nixon Administra-
tion plans elimination of all federal aid to libraries for Fiscal Year 1974.
What planning funds, if any, become available through the "Better Schools Act
of 1973" is highly uncertain.[113]

Financial Pressures.

Sellers describes funding problems during the early 1970's:

> Often faced with frozen or shrinking budgets, physical
> facilities in need of updating or expansion, and con-
> stantly spiraling labor and material costs, many li-
> brary administrators are being forced by circumstances
> to deeply analyze and evaluate their operations.[110](70)

This pressure to cut costs and improve efficiency cuts across university, pub-
lic as well as special libraries. This trend is superimposed upon the long
run trend of increasing complexity of libraries -- larger collections, coopera-
tive systems, centralization, and greater variety of services. Both trends
mean added management problems wherein clarification of objectives becomes ever
more critical. Evidence is in a survey by the Association of Research Library's
Office of University Library Management Studies in September 1972 -- of eighty-
nine libraries contacted...

Seventeen have, or are in the process of establish-
ing, a distinct administrative officer with major
responsibilities for coordinating and promoting
long-range planning.[6(2)]

Holley in his survey of urban university libraries noted similar trends:

The institution of academic planning on many cam-
puses, the encouragement of more precise definitions
of objectives and goals by higher education boards,
and the prospect of a levelling off of support in
the seventies, have suggested to many librarians the
need for a new look at the way libraries are organized
and managed.[63(178)]

Social Pressures.

The frequent social pressures and frustrations of the 1960's forced many
libraries to reassess institutional goals and objectives. A number of writers
such as Wasserman[126], Bone[14], and Bundy[24] see a critical need for a major shift
in objectives and goals of public libraries if they are to survive as viable
institutions. Another school of thought, however, is that is isn't so much
the goals that need changing but rather a changed emphasis upon their implemen-
tation.[51(53)] At a more specific level, Lipsman's book on library service to
the disadvantaged devotes a full chapter to "Program Objectives and Implementa-
tion".[85]

In the university field, McAnally and Downs describe the increasingly
"hot seat" position of university library directors because of pressures from
the president's office, library staff, faculty and students, with a declin-
ing ability to meet user needs, lack of cohesive planning, and an institu-
tional inability to accomodate change.[87]

Additional Trends.

Harrigan has attempted to carry over the educational accountability con-
cept to libraries.[58] There has been a vast amount written on management-by-
objective (MBO)[29,67] but as noted before, not much has been directly applied to
libraries. Dutton is one example, however.[40] There has been limited carry-over
to libraries from organizational analysis, for example see Rayward[103] and
Swanson[117].

Summary: Contributing Trends.

PPB, though now in eclipse, has contributed considerably to a planning cli-
mate in libraries. The same can be said for systems analysis and design, but the
long run trend is up because of the increasing complexity of library operations.
Library legislation has peaked in its influence because of the revenue sharing
trend. Social pressures are quieter than during the 1960's but may resurface.
Financial pressures are probably the strongest force making for goal and ob-
jective-setting.

12

VII. GENERAL SURVEYS

Libraries are creatures of the society in which they function and will survive only so long as they satisfy that society's needs. It is, therefore, necessary to understand goals and objectives of libraries at the broadest level since individual libraries engage in setting their goals and objectives in this context. Only major contributions can be covered, however.

The considerable historical changes in public library objectives are noted by Bowler[19](78-9) and Goldhor[47]and Wheeler . The Public Library Inquiry,1950, general report had a chapter on "The Library Faith and Library Objectives". Their approach was by three routes --

> First was a review of library history to locate the librarian's traditional sense of purpose. Second was a synthesis of the statements of public library objectives promulgated in recent years by official library leadership. This combined statement of current objectives was verified by submitting it to a representative sample of librarians and was found to reflect a consensus of librarian opinion. Third a survey of the whole contemporary machinery of public communication of which the library is a part in order to see what role the public library might most appropriately play in the light of what is being done by other agencies.[83](222)

The recent study by the ALA's Public Library Association headed by Martin summarizes the above public library objectives -- general definition of objectives, fields of knowledge and interest to which the public library should devote its resources, and the library means for attaining the library objectives.[88A](12-13) The Martin report also comments upon the dichotomy of thinking about the usefulness of societal goals:

> Critics of public libraries emphasize the necessity for clearly defined universal goals and deplore the vagueness and haphazard formulation of present existing objectives. Others say universal goals are not practical or desirable, except in the broadest sense. Instead, each library must develop its own goals which are determined by the needs of the particular community.[88A](31)

Hamburg found numerous recorded statements identifying public library objectives. He used thirteen sources and developed a list of twenty-seven grouped under informal educational objectives and three under educational objectives.[57] Morey analyzed returns from a questionnaire which listed an array of possible goals and charted the most commonly accepted goals of public libraries in ranked order while goals mentioned only once were categorized separately.[94]

In the special library field, several surveys are noteworthy. Wessel requested mission statements from eighty-eight Army libraries with seventy-two responses received, and sixty-nine used for analysis.[120b](28) Galin, in his STINFO survey, did a field check of what librarians said their objectives were compared with what the literature stated and concluded that

there was a close match.[45(137)] A survey of public libraries, however, found a divergence between what public librarians said their library goals were and their real operating goals:

> Librarians perceived the public library as providing
> service to all people irrespective of income, educa-
> tion, occupation, size of community, etc., but user
> statistics, however, show that a small minority of all
> people actively use public libraries. And this minori-
> ty is not a representative cross section of people in
> our society.[98]

Although no similar listing was found for university libraries, the recent Booz, Allen, and Hamilton report on university libraries took note of the com- mon failure of such libraries to clearly define program areas and objectives.[16] In its recent review of planning activities in academic and research libraries, the Association of Research Libraries (ARL) said,

> Emerging research library planning practises are still
> to a large extent, in an experimental stage, involving
> efforts to apply proven management methods to academic
> situations.[6]

Hamburg did survey university library objectives but without listing them and concluded that all lacked the explicitness required to be "... of direct assistance to management in   planning and decision-making for libraries".[57(Pt.1,ix)]

In summary, although a number of surve.. and official statements have been made about goals and objectives, the great majority of libraries operate with- out any formalized ones.   This is well stated by Kemper:

> ... library objectives tend to be informally approved
> and lack criteria for evaluation. The process of
> long-range forecasting is not highly developed; typi-
> cal library plans are made for a three-to a six-year
> period, and key assumptions and objectives are gen-
> erally not circulated to the institutional organiza-
> tion during the planning process. The evaluation of
> results of library planning was found to be done on
> an informal basis. Relatively few libraries use stra-
> tegic plans as guidelines for operational activities
> of the library. [77]

VIII. FORMULATION -- DIFFICULTIES AND BACKGROUND FACTORS

One author has stated that no step in the procedure to apply PPB to libraries[116(1177)] has caused more difficulty than the first step of defining goals and objectives. Wasserman has summarized the overall difficulties in this way,

> The process of deciding on goals is not simple. It
> can be a painstaking and difficult one. It may un-
> cover basic differences of attitude, stir up funda-
> mental disagreements, and unleash violent winds of
> internecine rivalry. Yet out of this process can
> come forth compromise based upon understanding... .[127(114)]

The same author in his Ph. D. thesis lists eight barriers to the formulation of public library goals:

1. The dilemma of the public library serving "educacational" versus "recreational" community needs and interests.
2. Ambivalence in the attitudes of public librarians as between the quality standards proposed by their national professional body and the practical day-to-day demands of library users.
3. The pluralistic composition and the pluralistic attitudes of the public library's clientele.
4. The pluralistic patterns of library service officially prescribed by the national professional associations.
5. The absence of a philosophy of public library service which might reinforce the position of each library.
6. The dilemma of a public service institution which seeks to be all things to all men.
7. The public library has no line structural relationship to aid in identifying its objectives.
8. The potential strategic dysfunction of a singly clearly articulated set of institutional objectives.[128]

Among the key problems is how to obtain common agreement among the major stakeholders in the library -- parent organizational officials, professional staff, library users, etc. The Bundy article noted earlier is worthy of review.[22] Although written primarily for urban planners, Young points out some reasons for differences:

> Briefly, differences -- in spite of commonly held goals -- arise when: a) there is a lack of agreement as to whether a goal should be regarded as a means or end; b) there is a lack of agreement as to the end-goals which a mean-goal serves; or c) there is a lack of agreement as to the relative value that should be assigned to the end-goal. Other difficulties arise, of course, when goals are not commonly held or goals are basically antagonistic to other goals. In the latter case further controversy can arise between those who do not hold the antagonized goals in common or when there is a lack of universal realization that this situation exists.[134] (79)

There must be later evaluation if goals and objectives are to have real meaning. This requires that goals and objectives be stated in explicit terms. They must be real and operable and this takes careful analysis. Wasserman has stated,

> Exactly what is the level, extent, and type of informational need to be met -- does it include research, fact-finding, recreation? [126A] (378)

15

Closely related to the explicitness difficulty is the ever-present problem of interrelatedness of objectives and goals and the frequent conflict between them. Hamburg noted this in his survey of public and university library goal and objective statements.[56] Assuming this barrier is removed, there still remains the critical problem of ranking in order of importance or priority. Librarians usually find it necessary to pursue several goals simultaneously.

The necessity for keying library goals and objectives to parent institutional objectives has been mentioned in connection with PPB, but this possible barrier is worth emphasizing with this quote from Munn:

> For some reason, academic librarians insist on writing about academic libraries as if they were semi-autonomous units with very considerable freedom to establish their goals. No academic library can long pursue policies of any consequence which are contrary to those of the parent institution. In the final analysis, it is the university, not its library, which decides how much and what kind of cooperation it will support.[96]

To the foregoing might be added any number of additional barriers to the formulation process. However, only one other will be mentioned -- the human tendency to prefer talking about specific operating details or particular requirements of the moment rather than thinking in terms of longer range goals.

Background Factors.

As Lowry states, "Goals don't exist in isolation and neither do information centers".[86(164)] Therefore, it is appropriate to provide listings of background factors important in the goal and objective formulation process. Kemper has noted the overall need to look at the three major systems -- external environmental, institutional, and internal --

1. The external environmental system sets forth the broad social, cultural, political, competitive, and economic parameters within which the library must operate.
2. The institutional organizational system sets forth the organizational structure, competitive relationships for the particular institution in which the library operates.
3. The internal organizational system indicates the library organizational structure, objectives and policies, and operational relationships which make the library a unique system. [78(40-1)]

On a more specific level, several authors have listed major background factors determining the nature of library goals and objectives. Howard, for example, shows the following in order of importance:

1. Financial support.
2. Governmental and legal conditions.
3. Ideals and philosophy of the librarian.
4. Organization.
5. Other institutions.
6. Nature of the clientele. [66(327)]

Graham lists the following background factors:

1. The parent organization and its characteristics.
2. The place of the library in the organization.
3. Management's concept of the library function.
4. The personnel using the library.
5. Library facilities, staff, and budget. [48](367-8)

Bowler shows these:

1. Library law.
2. Financial support.
3. Population.
4. Schools, churches, and cultural facilities.
5. Business and industry.
6. Climate and natural resources.
7. Geographic factors.
8. Factors within the library. [19](77-8)

Gregory recognizes increasing social concerns in her listing:

1. Laws and government.
2. Available or potential funding.
3. Population characteristics
4. Problems of a mobile, demanding, and confused society.
5. Economic and cultural gaps.
6. Quality of human relations in the community.
7. Barriers in communication and cooperation.
8. Citizen response to shifts in morality and mores.
9. Change in educational methods and curriculum content.
10. Existence or lack of opportunity for continuing education.
11. Rights of majorities and minorities in age of high taxes, group
    pressures, and fears for the future. [51](5)

From these listings, it is important to enlarge upon one key factor -- the values
and attitudes of the librarian. Although not a great deal has been written upon
exactly how these librarian characteristics are reflected in library goals and ob-
jectives, they undoubtedly can have the profoundest impact upon the direction in
which the library moves and the way it operates. Goldhor and Wheeler write,

> Goals, or objectives, should derive from many sources:
> from the librarian's knowledge of present trends and
> problems in society; from his awareness of what goes
> on, nationally, in education and in cultural and in-
> tellectual fields; and from national and local library
> leaders who have the background of discussion, debate,
> observation and experience. [47](4)

The proper role of the public library director has been expressed in this way
by Joyce:

> He will not only study and formulate policies for the
> board to weigh, but will define long-range goals and
> their alternatives. He will know how to keep his own

and the board's eye off the minutiae of library operations
and on the realization of these goals. He will pursue no
goal merely because it is there, but will search constantly
for new and more valuable objectives.[73](3388)

In summary, there are a number of background factors as well as barriers to
keep in mind before and during the process of formulating goals and objectives.
Certainly all through the process, the librarian must remind himself of the pur-
pose, philosophy, and needs of the library and its parent institution.

IX. FORMULATION GUIDELINES

The following guidelines attempt to structure the major points of the litera-
ture of the "how-to-do-it" variety. The major source tapped is Burness' paper
presented to the Institute on Program Planning and Budgeting Systems for
Libraries at Wayne State University in 1968.[25] These assume an operating library
but some authors have considered goals and objectives for libraries and infor-
mation centers being planned -- for example, see Graham[49], Knox[80], Taylor[118], and
Wasserman[125]. Obviously the following should not be considered definitive in any
sense; their application undoubtedly will vary widely depending upon the individual
library situation. They are listed here for a convenient preview:

1. State mission.
2. Write set of guiding principles.
3. Identify and articulate real objectives.
4. Be specific, distinctive, and brief.
5. Use commonly understood terms.
6. Develop meaningful measures of expected accomplishments.
7. Make goals and objectives challenging.
8. Get involvement.
9. Determine objectives for all library levels.
10. Balance set of goals and objectives.
11. Establish order of priority.
12. Produce draft, discuss and then redraft.
13. Agree, recommend and obtain approval.
14. Publish and publicize.
15. Put objectives to practical use.
16. Review and re-examine periodically.
17. Modify as necessary.

1. State mission.

"Mission" has been defined and illustrated in   Section III on Definitions.
It is important to remember to make it the most inclusive statement possible.
Although Ackoff is referring to objectives below, the same idea holds good
for the mission statement --

The higher the level at which objectives are formulated,
the more inclusive they are likely to be. We can better
evaluate the carpenter's behavior if in addition to know-
ing that he is trying to build a frame for a door, we
also know that he is trying to build a house.[1](34-5)

18

2. Write set of guiding principles.

    These also have been defined in Section III on Definitions.

3. Real objectives. Identify and articulate real ones.

    They should have operational meaning or some way of measuring the degree of success in achieving the goal or objective.

> The objectives should not be regarded as just
> 'public relations' statements but as critical
> guides for future actions.[25]
>
> Tangible goals should be a guide to action and
> sufficiently explicit to suggest a certain type
> of activity. They should be helpful to decision-
> making and not pious statements.[55]

4. Be specific, distinctive and brief.

> The set of objectives should be specific and
> distinctive to the particular situation, pro-
> gram or service.[25]

5. Use commonly understood terms.

> Terms should be valid, defined clearly, inte-
> grated logically with one another, and used
> consistently and uniformly and used through-
> out the organization and the process.[25(65)]

6. Develop meaningful measures of expected accomplishments.

> Tangible goals should suggest tools to measure
> and control effectiveness.[55(1574)]

7. Make goals and objectives challenging.

> The goals should be challenging. It is the
> goals which create organizational vitality.
> It is necessary to distinguish between the
> possible and the impossible, but to be will-
> ing to get close to the latter.[55(1574)]

8. Get involvement.

    The librarian must take the lead, but others can and should be involved.

> In some instances, library committees have
> been employed. In other instances, the goals
> have been developed out of extended discus-
> sions between information personnel and man-
> agement officials. ... The more widespread
> the involvement of as many of the organiza-
> tion interested personnel, the more widespread
> will be the understanding of the aims of the
> information program, once established.[127(114)]

19

If the administration has not told people where
the library is going, and hopefully allowed
them to take part in this decision-making pro-
cess, then the administration should not be sur-
prised if the people have done some thinking for
themselves as to the library's future.110(71)

9. Determine objectives for all library levels.

This includes overall, program, sub-program and activities.

Just as the library's objectives must contribute
to the achievement of the objectives of the parent
organization, so too must the objectives of the
major library programs contribute to the achieve-
ment of the overall library objective. When ob-
jectives for program elements are identified these
too, must contribute to the objectives of the pro-
grams, and so forth on down to the lowest level of
activity in the program. In other words, there is
a hierarchy of objectives, although they are sel-
dom discussed in these terms.8

Bellomy goes on to show a portion of this hierarchal arrangement for a
university library. Galin takes a somewhat more flexible position con-
cerning the importance of observing the "unity of objective" between
the library and its parent organization --

It is not necessary that higher level objectives
have been clearly defined, but only that the ob-
jectives of the STINFO do not materially contra-
dict important company or research objectives.45 (136)

10. Balance set of goals and objectives.

The whole set of goals should make sense. With rare
exceptions, there is no single, overriding goal.
Goals should be balanced in relation to one another.55(1574)

... it should be remembered that goals should be
realistic and timely; realistic in the sense that
they may be desirable from the standpoint of the
community served or of being achievable within a
reasonable planning projection, such as a genera-
tion. Objectives which fail to meet these two
standards will lead to repeated failure in achieve-
ment, with attendant frustration and even contro-
versy.95(358)

11. Establish order of priority.

The widest range of objectives is possible in any
special library; hence the need to derive priorities
and to translate them into resource allocation
terms. Since it may not be possible to achieve
every goal simultaneously, such ranking and rela-
tive weighting is the only rational course. 125(411)

12. Produce draft, discuss and then redraft.

Formalizing aims and objectives has a surprising
way of clarifying them -- even for the library
and its staff.123(68)

It is the function, indeed it is the responsibility,
of their information specialist to develop a writ-
ten survey and plan of action, formulated through
consultation within the organization and its manage-
ment and among representatives of various divisions,
so that agreement can be achieved upon the organi-
zation's requirements for information service.127(114)

It is important to get a maximum of understanding --
preferably of agreement also, but most vitally to
gain understanding. If there are semantic "hang-
ups", try to resolve them or compromise them. If
there are issues, real issues of substance, face
them -- either work them out or find a basis for
recommended decision on how they should be dealt
with.25(71)

13. Agree, recommend and obtain approval.

Make it some sort of official action that is a
practical guide for the planning, programming
and budgeting that is going to govern the re-
sources in total magnitude and the allocation of
resources, whatever type they may be -- let the
objectives be before you with the maximum of agree-
ment and determination. 25(72)

14. Publish and publicize.

They should be distributed somehow, in memorandum
form or otherwise. Do include them in annual re-
ports and brochures -- not in a trivial public re-
lations way, but as real indications of what our
organization intends to do. By all means, let the
staff know -- after they have participated they
are entitled to know what has been concluded.25(73-4)

The university librarian should articulate in
writing the role of the library in support of the
university's academic program. He also should ex-
plore the responsibility of the library for the
continued development of established areas of li-
brary excellence and its responsibilities as an
information resource for the community, state,
region and nation.16(46)

A contrasting viewpoint on the wisdom of publicizing university library
objectives is the following:

When it is borne in mind that the significant in-
puts to the library plan are gleaned, almost through
an undercover intelligence network, from such circum-
stantial sources as hearsay, as things unsaid rather
than said, as raised eyebrows and twitching lips, and
from remarks made in absolute confidence by one of
two opposing factions of the community -- faculty and
administration -- that are essentially locked in end-
less combat, it would be foolhardy for the librarian
to lay his plan on the line publicly or even to per-
mit so little as a glimpse of it by either faculty or
administration. 75(212)

15. Put objectives to practical use.

It is good discipline to insist on people doing what
they ought to have been doing all along: really de-
cide what it is you intend to accomplish and then
gear your planning, develop your program, and produce
your budgets to do what you intend to accomplish --
not something else, and not just volume statements
of 'more' specifics about what you're going to buy,
etc. 25(75)

There are many opportunities and occasions when con-
scious reference to objectives may be the point that
tips an administrative or operating decision in one
direction rather than another. We should make opera-
ting decisions not just by a whim of the moment but
by conscious reference to what we intend to accom-
plish and examination of what that means for tomorrow
or next week or beyond. Ibid.

16. Review and re-examine periodically.

Look at the objectives again: are they current? Do
they really express what we intend to accomplish?
Have events overtaken them? Has the situation changed?
Do we have a new set of circumstances? 25(75-6)

It should be compared with current developments else-
where, but not distorted by temporary fads and enthus-
iasms. 47(4)

Nor must any blueprint for action once evolved become
a fixed and rigid mandate. Periodic review of goals and
program are as essential as the original concern about
goals, lest the program become stale and obsolete. 127(114-15)

17. Modify as necessary.

The objectives will not be carved in stone and they
should not become static. They are the product of
the best effort, but they should not be immutable.

> This means change or modification with a good
> reason, not for whimsical reasons, e.g. 'We
> just don't like it.' -- but we should change
> when there is good reason.[25](76)

The foregoing seventeen guidelines are intended as an exploratory check-
list for librarians facing the task of formulating goals and objectives. It
would be helpful to have case histories of librarians using such a list or
similar ones , and from such experiences to hopefully develop a more definitive
approach to goal and objective-setting.

Two documentations do exist and are worthy of careful study. Bone has described
the formulation process at the Memphis Public Library and Information Center. He shows
the steps of forming an original committee, summarizes their deliberations,
acceptance by the head librarian, presentation to the Library Board, and final
approval after some revisions. The included objective statement shows, "Library
Functions to be Served" on one side and "Groups of the Public to be Served"
across from it. The implementation of the objectives is being carried out on a
regular basis and is documented in committee minutes made available to the author.[93]

The best documented case in the university field is that of Cornell University
Libraries at Ithaca, New York. Funded by the Council on Library Resources and
assisted by the American Management Association, Cornell's planning experience
of the first year has recently appeared as a report by McGrath.[88] This report
describes, chronicles, and evaluates experience in developing a planning team,
a dynamic long-range strategic plan, participative management, and the planning
process itself. Such planning documents as "Continuing Objectives", "Specific
Objectives", "Guiding Principles", "Basic Policies", "Levels of Priority",
"Strategies", and "Structure of the Continuing Planning Process" are included.
Sellers, the Planning and Budget Officer at Cornell, has explained his planning
philosophy and technique in a recent article.[110]

The University of Illinois Library recently issued a statement of its goals
and objectives.[69] The library sets the following major goals:

> 1. Effective organization and administration.
> 2. Adequate financial support.
> 3. Continued rational development of the collections.
> 4. Strong staffing and staff development.
> 5. Quality and efficiency of operation.
> 6. Effective services to users.
> 7. Adequate physical facilities.

Objectives designed to assist in achieving the above goals are then described ...

> Although some rather specific statements are in-
> cluded, the objectives set forth in this document
> tend to involve general statements of principles
> and philosophy and are intended to provide the
> base from which future, more specific decisions can
> be made. There is deliberate avoidance of formu-
> lae, time-tables and other attempts at quantifi-
> cation.

Another library statement worthy of careful attention is the "Long Range Plans for Tulsa City-County Library".[122] Included are statements on purposes, goals, and priorities as well as goals for Tulsa.

Additional references may help other types of librarians formulate goals and objectives. A model for state library objectives is the Booz, Allen & Hamilton study for Hawaii.[15] Although many library surveys are weak in establishing goals and objectives [12], the Martin survey of the Chicago Public Library is an outstanding exception and merits careful study by those formulating goals and objectives in major urban libraries.[90] School libraries contemplating a PPB approach may wish to review the experience at Santa Barbara.[107] An article on the John Deere Company Library includes a list of its goals and objectives.[4]

X. SUMMARY AND CONCLUSIONS

The literature of library goals and objectives is now relatively small and unsophisticated, but the prospects are good for increasingly substantive contributions that will be useful for evaluative and other planning purposes. The basis for this assessment lies in the "pressure points" described in the "Contributing Trends" section -- especially the continued financial pressures on all types of libraries. Increasingly, university libraries -- and perhaps large public libraries -- will set up distinct long-range planning functions. From these will hopefully be developed more refined procedures to establish goals and objectives which will fill a more useful and realistic function.

A possible nucleus for this ferment is the work of the Management Studies Office administered by the Association of Research Libraries (ARL) and funded by the Council on Library Resources. The stated mission of this office is to ...

> assist university research libraries in effectively
> serving the academic and research community through
> sound management of the resources available to them.[5]

Perhaps its most important current task is the Management Review and Analysis Program the intent of which is ...

> to help librarians better achieve unit objectives.
> ... a clearer, more precise view of the objectives
> of the library and the relationship of its pro-
> gram objectives to the constraints present in any
> university environment. Ibid.

The first issue of this group's "ARL Management Supplement", December 1972, takes the theme of planning activities in academic and research libraries. Objectives are mentioned frequently within a discussion of four areas:

1. The library in university planning.
2. New organization and staffing patterns.
3. Procedures and methods for securing planning data.
4. Experience with long-range planning methodology.[6]

Less pronounced in the literature is sign of ferment among public libraries. Nevertheless, there is renewed interest since the release of the Public Library Association's A STRATEGY FOR PUBLIC LIBRARY CHANGE: PROPOSED PUBLIC LIBRARY GOALS-FEASIBILITY STUDY.[88A] Four task forces are at work to implement the report's recommendations.

XI. FURTHER RESEARCH RECOMMENDATIONS

Of first importance is a basic manual describing goal and objective setting procedures as now understood. This could follow almost exactly the outline of the recent ARL publication on library policies.[129] Such a manual would provide a framework for the formulation, implementation, and communication of goals and objectives.

Apparently libraries have lagged far behind schools in involving staff, community, and other interested stakeholders in the goal-setting process. Perhaps librarians need to remind themselves -- "In cutting a stone, each sees himself building the cathedral".[115] Certainly the educational literature offers some helpful insights on how to involve staff and possibly community. This can result in a more highly motivated input of ideas and enthusiastic acceptance of the final statement. One such report attempts to marry PPB with some organizational development concepts in order to improve the motivational climate.[102] Another author describes various methods of securing staff input to goals and objectives -- e.g., traditional conference, boss-subordinate conference, goal confrontation, and use of the Delphi method.[97] The last method replaces the "... committee with a sequence of individual interrogations and interspersed feedback of information". Borko has recently used this technique in identifying research targets in library education.[17]

Not enough appears on how the values of library managers affect the goal and objective formulation process. Steiner has written of businessmen values and their effect on objective-setting and defines values as "something like attitudes but more fixed, ingrained and stable in nature"[115] Just how do librarians' attitudes and values affect the formulation, adoption, and implementation processes?

A continuing major need is for research to develop appropriate and meaningful evaluative criteria and methods. Hamburg's research points out the impracticality of utilizing present public and university library objective statements if evaluation is to be conducted. However, what are the practical implications of using Hamburg's concept of "document exposure time"

In summary, the prospects for more attention to the library goal and objective formulation process appear promising, but much research and wider experience followed with careful documentations and evaluations will be required before the state-of-the-art reaches the level now available in some schools and businesses. In ending it is well to remind ourselves of the limits to research:

> In the final analysis, objective determination will rest upon value assumptions which defy scientific justification. The ultimate goals of public policy are dictated by wisdom and scientific method can not distinguish appropriate or inappropriate values. But research may prove to be the only feasible means for reconciling the conflicting value positions and while it may not be expected to provide answers directly, it can be

expected to contribute to better understanding of
alternatives by offering the factual empirical
data on which such decisions may be based.[128(135)]

XII. BIBLIOGRAPHY *

1. Ackoff, Russell L.
   A CONCEPT OF CORPORATE PLANNING.
   New York: Wiley-Interscience, 1970.   158p.

2. Alioto, Robert F. and J.A. Jungherr.
   OPERATIONAL PPBS FOR EDUCATION; A PRACTICAL APPROACH TO EFFECTIVE
   DECISION MAKING.
   New York: Harper & Row, 1971.   325p.   pp.51-73.

3. Allen, Kenneth S.
   CURRENT AND EMERGING BUDGETING TECHNIQUES IN ACADEMIC LIBRARIES,
   INCLUDING A CRITIQUE OF THE MODEL BUDGET ANALYSIS PROGRAM OF THE
   STATE OF WASHINGTON.   Sponsored by the Council on Library Resources.
   April 1972.   53p.   ED 071 726.

4. Anderson, Charlotte L.
   "The Knowledge Revolution and Deere".
   ILLINOIS LIBRARIES   50 (2): 121-27   February 1968.

5. Association of Research Libraries.   Office of University Library Manage-
   ment Studies.
   LIBRARY MANAGEMENT REVIEW AND ANALYSIS PROGRAM: A HANDBOOK FOR
   GUIDING CHANGE AND IMPROVEMENT IN RESEARCH LIBRARY MANAGEMENT.
   Washington, D.C.:   May 1972.   4p.

6. _____ _____ _____.
   "Review of Planning Activities in Academic and Research Libraries".
   ARL MANAGEMENT SUPPLEMENT No. 1   December 1972.

7. Baker, N. R.
   "Descriptive Model of Librarian/User/Funder Behavior in a University
   Environment".
   DREXEL LIBRARY QUARTERLY   4: 16-30   January 1968.

8. Bellomy, Fred L.
   "Management Planning for Library Systems Development".
   JOURNAL OF LIBRARY AUTOMATION   2 (4): 187-217   December 1969.

9. _____, _____.
   "Systems Approach Solves Library Problems".
   ALA BULLETIN   62 (9): 1121-5   October 1968.

10. Bendix, Dorothy, Ed.
    "When is a Social Issue a Library Issue: A Symposium".
    WILSON LIBRARY BULLETIN   45 (1): 43-61   September 1970.

11. Blasingame, Ralph.
    "Libraries in a Changing Society".
    LIBRARY JOURNAL   97 (9): 1667-70   1 May 1972.

12. _____, _____.   and F. William Summers.
    STATE AND REGIONAL LIBRARY STUDIES.   REVIEW SERIES, NUMBER 3.
    June 1970.   LI 001 866.

* Citations carrying AD and PB numbers may be obtained from the National Technical
  Information Service (NTIS), Springfield, Virginia 22151;   ED citations from
  ERIC Document Reproduction Service, LEASCO Information Products, Inc., P.O. Drawer O,
  Bethesda, MD. 20014; and dissertations from University Microfilms, 300 North Zeeb Road,
  Ann Arbor, Michigan 48106.

13. Bone, Larry Earl and T.A. Raines.
    "The Nature of the Urban Main Library: Its Relation to Selection
    and Collection Building".
    LIBRARY TRENDS   20 (4): 625-39   April 1972.

14. Bone, Larry Earl.
    "Study in Renewal: A Library in Search of Itself."
    LIBRARY JOURNAL   97 (5): 844-47   1 March 1972.

15. Booz, Allen, & Hamilton, Inc.
    PLANNING FOR LIBRARIES IN HAWAII: A COMPREHENSIVE STATEWIDE PLAN-
    NING AND FEASBILITY STUDY FOR PUBLIC LIBRARIES AND JOINT SCHOOL
    AND PUBLIC LIBRARY FACILITIES.
    Honolulu, State of Hawaii: Office of Library Services, 1968.   290p.

16. _____, _____.
    PROBLEMS IN UNIVERSITY LIBRARY MANAGEMENT.
    Chicago, Illinois: Association of Research Libraries, 1970.   63p.   ED 053 727.

17. Borko, Harold.
    "Predicting Research Needs in Library Science Education" In
    Borko, Harold, Ed.
    TARGETS FOR RESEARCH IN LIBRARY EDUCATION.
    Chicago: American Library Association, 1973.   239p.

18. Botner, Stanley B.   —
    "PPB Under Nixon."
    PUBLIC ADMINISTRATION   32 (3): 254-5   May/June 1972.

19. Bowler, Roberta.
    LOCAL PUBLIC LIBRARY ADMINISTRATION.
    Chicago: The International City Managers' Association, 1964.   375p.

20. Bromberg, Erik.
    SIMPLIFIED PPBS FOR THE LIBRARIAN.
    Paper Prepared for the Dollar Decision Pre-Conference Institute,
    Sponsored by the Library Administration Division of the American
    Library Association, Dallas, Texas, June 17-19, 1971.   13p.
    ED 047 751.

21. Buckman, Thomas R.
    "Planning-Programming-Budgeting Systems in University, National,
    and Large Public Libraries in the United States."
    LIBRI; INTERNATIONAL LIBRARY REVIEW AND IFLA COMMUNICATIONS.
    22 (3): 256-70   1972.

22. Bundy, Mary Lee.
    "Conflict in Libraries."
    COLLEGE AND RESEARCH LIBRARIES   27 (4): 253-62   July 1966.

23. _____, _____.
    "Decision Making in Libraries."
    ILLINOIS LIBRARIES 43 (10): 780-93   December 1961.

24. _____, _____.
    "Urban Information and Public Libraries: A Design for Service."
    LIBRARY JOURNAL   97 (2): 161-69 15 January 1972.

25. Burness, Carl G.
        DEFINING LIBRARY OBJECTIVES.
        Paper Presented at an Institute on Program Planning and Budgeting
        Systems for Libraries, Wayne State University, Detroit, Michigan,
        Department of Library Science, Spring 1968. 1968. 30p. ED 045 116.

26. Burns, Robert W., Jr.
        "Generalized Methodology for Library Systems Analysis."
        COLLEGE AND RESEARCH LIBRARIES 32 (4); 295-303 July 1971.

27. California State Department of Education.
        PLANNING, PROGRAMMING, BUDGETING SYSTEM MANUAL FOR STATE OF CALIFORNIA
        SCHOOL DISTRICTS; AN EDUCATIONAL PLANNING AND EVALUATION SYSTEM.
        Sacramento, California: 1970. 2nd Preliminary Edition. 113p.

28. California State Library.
        LONG RANGE PROGRAM, LIBRARY SERVICES AND CONSTRUCTION ACT; CALIFORNIA
        STATE LIBRARY FISCAL 1973-77.
        Sacramento, California   1972. 94p. ED 070 452.

29. Carroll, Stephen J., Jr.
        MANAGEMENT BY OBJECTIVES: APPLICATIONS AND RESEARCH.
        New York: Macmillan   London: Collier-Macmillan   1973. 216p.

30. Chamis, Alice Y.
        "The Design of Information Systems: The Use of Systems Analysis."
        SPECIAL LIBRARIES 60 (1): 21-31 January 1969.

31. Chapman, Edward A., et al.
        LIBRARY SYSTEMS ANALYSIS GUIDELINES.
        New York: Wiley, 1970. 226p.

32. _____, _____.
        "Planning for Systems Study and Systems Development."
        LIBRARY TRENDS 21 (4): 479-92 April 1973.

     Cornell University Libraries. See McGrath

33. Coughlin, Robert E., et al.
        URBAN ANALYSIS FOR BRANCH LIBRARY SYSTEM PLANNING.
        Contributions in Librarianship and Information Science, No. 1.
        Westport, Conn.: Greenwood Publishing Co., 1972. 167p.

34. Crum, Norman J.
        "Resource Planning and Evaluation in Company Libraries."
        SCI-TECH NEWS 24 (1): 9-14 Spring 1970.

35. Davis, Hiram L.
        EXPLORATORY STUDY OF THE IDENTIFICATION OF UNIVERSITY LIBRARY GOALS
        AS A DESCRIPTIVE COMPONENT IN STUDYING THE OPERATION AND UNDERSTANDING
        THE FUNCTIONS OF SELECTED UNIVERSITY LIBRARIES IN THE STATE OF MICHIGAN.
        Dissertation in Progress, University of Michigan, School of Library Science.

36. De Genaro, Guy Joseph
A PLANNING-PROGRAMMING-BUDGETING SYSTEM (PPBS) IN ACADEMIC LIBRARIES:
DEVELOPMENT OF OBJECTIVES AND EFFECTIVENESS MEASURES. Unpublished
Ph. D. Dissertation, University of Florida, Gainsville, Fla., 1971. 146p.

37. Doherty, Victor.
GOALS AND OBJECTIVES IN PPBS.
Portland, Oregon: Portland Public Schools, September 1970. 39p.
ED 044 815.

38. Drucker, Peter.
"The Objectives of a Business."
In READER IN LIBRARY ADMINISTRATION, Edited by Paul Wasserman and
Mary Lee Bundy. Washington, D.C.: National Cash Register Co., In-
dustrial Products Div., 1968. p.126-138.
(Original source: Drucker's THE PRACTISE OF MANAGEMENT. New York:
Harper & Row, 1954.)

39. Durham. University.
PROJECT FOR EVALUATING THE BENEFITS FROM UNIVERSITY LIBRARIES, FINAL
REPORT. October 1969, Var. Pag.

40. Dutton, B. G.
"Staff Management and Staff Participation."
ASLIB PROCEEDINGS 25 (3): 111-25 March 1973.

41. Dyer, C., et al.
THE ROLE OF SCHOOL LIBRARIES IN EDUCATION.
Hamden, Conn.: Archon Books, 1970. 181p.

42. Emery, Richard.
"Philosophy, Purpose and Function in Librarianship."
LIBRARY ASSOCIATION RECORD 73 (7): 127-9 July 1971.

43. Fasana, Paul J.
"Systems Analysis."
LIBRARY TRENDS 21 (4): 465-78 April 1973.

44. Fry, Bernard M., et al.
DESIGN STUDY FOR LONG-RANGE RESEARCH PROGRAMS.
Indiana University, Research Center for Library and Information
Science.
Bloomington, Indiana: April 1969, 117p. ED 044 122.

45. Galin, Melvin P.
THE MANAGEMENT OF SCIENTIFIC AND TECHNICAL INFORMATION SYSTEMS
IN INDUSTRY.
D.B.A. Thesis, Indiana University, Graduate School of Business,
Bloomington, Indiana: 1967, 351p.

46. Goddard, Haynes C.
"An Economic Analysis of Library Benefits."
LIBRARY QUARTERLY 41 (3): 244-55 July 1971.

47. Goldhor, H. and Joseph Wheeler.
    PRACTICAL ADMINISTRATION OF PUBLIC LIBRARIES.
    New York: Harper & Row, 1962. 571p.
    (Chapter 1: "Objectives and Functions of the Public Library")

48. Graham, Earl C.
    "Administrative Policies for the Special Library -- An Inventory."
    SPECIAL LIBRARIES 45: 367-70 November 1954.

49. Graham, Ronald A., et al.
    "The Creation of a New Technical Information Center for a Diversified
    Chemical Corporation."
    JOURNAL OF CHEMICAL DOCUMENTATION 8 (2): 60- 66 May 1968.

50. Granger, Charles H.
    "The Hierarchy of Objectives."
    HARVARD BUSINESS REVIEW 42 (3): 63-74 May-June 1964.

51. Gregory, Ruth W. and Lester L. Stoffel.
    PUBLIC LIBRARIES IN COOPERATIVE SYSTEMS: ADMINISTRATIVE PATTERNS
    FOR SERVICE.
    Chicago: American Library Association, 1971. 315p.

52. Griffen, Agnes M. and John H.P. Hall.
    "Social Indicators and Library Change."
    LIBRARY JOURNAL 97 (17): 3120-23 1 October 1972.

53. Gross, Edward and P. V. Grambsch.
    UNIVERSITY GOALS AND ACADEMIC POWER.
    Washington, D.C.: American Council on Education, 1968. 164p.

54. Haak, John R.
    GOAL DETERMINATION AND THE UNDERGRADUATE LIBRARY.
    San Diego: California University Library, 1970. 28p.
    ED 042 474.

55. _____, _____.
    "Goal Determination."
    LIBRARY JOURNAL 96 (9): 1573-78 1 May 1971.

56. Hamburg, Morris, Leonard E. Ramist, and Michael R.W. Bommer.
    "Library Objectives and Performance Measures and Their Use in
    Decision Making".
    LIBRARY QUARTERLY 42 (1): 107-128 January 1972.

57. _____, _____.
    A SYSTEMS ANALYSIS OF THE LIBRARY AND INFORMATION SCIENCE STATIS-
    TICAL DATA SYSTEM. Part I. TEXT. Part II THE RESEARCH INVESTI-
    GATION. Interim Report. U.S. Dept. of Education, Bureau of Re-
    search Project No. 8-0802.
    Philadelphia, Pa: University of Pennsylvania, 1970.
    Pt. 1, 109p. Pt. 2, 273p.

58. Harrigan, Joan.
    LIBRARY ACCOUNTABILITY. Paper Presented to the Faculty of the
    Graduate School of Librarianship, University of Denver.
    1971, 43p. ED 060 851.

59. Harrigan, Joan.
    SUGGESTED LONG-RANGE PLANNING FORMAT FOR COLORADO LIBRARIES.
    Denver, Colorado: Colorado State Library, 1970. 14p.
    ED 046 418.

60. Harrison, J. Clement.
    "Administration."
    In ENCYCLOPEDIA OF LIBRARY AND INFORMATION SCIENCE, Edited by
    Allen Kent and Harold Lancour.
    New York: Marcel Dekker, Inc., 1968. Vol.1, p.83-

61. Hatry, Harry P.
    "Status of PPBS in Local and State Governments in the United
    States."
    POLICY SCIENCES 2 (2): 177-89 June 1971.

62. Herner, Saul.
    "Systems Design, Evaluation and Costing."
    SPECIAL LIBRARIES 58 (8): 576-581 October 1967.

63. Holley, Edward G.
    "Organization and Administration of Urban University Libraries."
    COLLEGE AND RESEARCH LIBRARIES 33 (3): 175-89 May 1972.

64. Howard, Edward N.
    "Planning-Programming-Budgeting System -- A Glossary of Suggested
    Working Definitions."
    Prepared for the Dollar Decisions Preconference, American Library
    Association, Dallas, Texas, 1971.

65. _____, _____.
    "Towards PPBS in the Public Library."
    AMERICAN LIBRARIES 2 (4): 386-93 April 1971.

66. Howard, Paul.
    "The Functions of Library Management."
    LIBRARY QUARTERLY 10 (3): 313-349 July 1940.

67. Hughes, Charles L.
    GOAL SETTING -- THE KEY TO INDIVIDUAL AND ORGANIZATIONAL
    EFFECTIVENESS.
    New York: American Management Association, 1965. 157p.

68. Huse, Edgar F. and J. L. Bowditch.
    BEHAVIOR IN ORGANIZATIONS: A SYSTEMS APPROACH TO MANAGING.
    Reading, Mass., Menlo Park, Calif.: Addison-Wesley Pub. Co., 1973. 500p.

69. Illinois. University. Library.
    STATEMENT OF GOALS AND OBJECTIVES OF THE LIBRARY OF THE UNIVERSITY OF
    ILLINOIS AT URBANA-CHAMPAIGN.
    Urbana-Champaign, Illinois: 25 October 1972. 20p.

70. Jenkins, Harold R.
    "The ABC's of PPB."
    LIBRARY JOURNAL 96 (17): 3089-93 1 October 1971.

71a. Johns Hopkins University.
        OPERATIONS RESEARCH AND SYSTEMS ENGINEERING STUDY OF A UNIVERSITY
        LIBRARY. Progress Report, by R. H. Roy, et al.
        Baltimore, Md.: Johns Hopkins University, Milton S. Eisenhower Li-
        brary, 1963. PB 163 087.

71b. _____.
        Progress Report, 1965.   PB 168 187.

71c. _____.
        Final Report, 1968. PB 182 834.

72.   Jones, Arthur.
        "Criteria for the Evaluation of Public Library Services."
        JOURNAL OF LIBRARIANSHIP 2: 228-45 October 1970.

73.   Joyce, Charles.
        "Goals, Myths and Realities."
        LIBRARY JOURNAL 92 (17): 3385-3388 1 October 1967.

74.   Kaser, David.
        THE DEVELOPMENT OF A LONG-RANGE STRATEGIC PLAN FOR A UNIVERSITY
        LIBRARY. A Proposal to the Council on Library Resources from the
        Cornell University Libraries. Appendix A: p. 75-88 In
          McGrath, William E. DEVELOPMENT OF A LONG-RANGE STRATEGIC PLAN FOR A
          UNIVERSITY LIBRARY: THE CORNELL EXPERIENCE; CHRONICLE AND EVALUATION
          OF THE FIRST YEAR'S EFFORT.
          Ithaca, New York: Cornell University Libraries, February 1973.

75.   _____, _____.
        "Planning in University Libraries: Context and Processes."
        SOUTHEASTERN LIBRARIAN 21 (4): 207-12 Winter 1971.

76.   Keller, John E.
        "Program Budgeting and Cost Benefit Analysis in Libraries."
        COLLEGE AND RESEARCH LIBRARIES 30 (2): 156-60 March 1969.

77.   Kemper, Robert E.
        "Library Planning: The Challenge of Change."
        In ADVANCES IN LIBRARIANSHIP, Edited by Melvin J. Voigt.
        New York: Academic Press, 1970. Vol. 1, p.207-21.

78.   _____, _____.
        STRATEGIC PLANNING FOR LIBRARY SYSTEMS.
        D. B. A. Thesis, University of Washington, Business Administration.
        Seattle: 1967.311p(University Microfilms O/No. 68-3858)

79.   King, Donald W. and Edward C. Bryant.
        THE EVALUATION OF INFORMATION SERVICES AND PRODUCTS.
        Washington, D.C.: Information Resources Press, 1972. 306p.

80.   Knox, William T.
        "Administration of Technical Information Groups".
        INDUSTRIAL AND ENGINEERING CHEMISTRY. Part 1.
        51 (3): 48A-61A March 1959.

80A   Ladendorf, Janice.
        "Information Service Evaluation -- The Gap Between the Ideal and the Possible."
        SPECIAL LIBRARIES 64 (7): 273-9 July 1973.

81. Lamkin, Burton E.
    "Systems Analysis in Top Management Communication."
    SPECIAL LIBRARIES 58: (2): 90-4 February 1967.

82. Lancaster. University. Library.
    SYSTEMS ANALYSIS OF A UNIVERSITY LIBRARY; FINAL REPORT ON A RE-
    SEARCH PROJECT. M. K. Buckland, et al.   University of Lancaster
    Occasional Paper, No. 4.
    Bailrigg, Lancaster: University of Lancaster Library, 1970. 57p.

83. Leigh, Robert D.
    THE PUBLIC LIBRARY IN THE UNITED STATES; The General Report of the
    Public Library Inquiry.
    New York: Columbia University Press, 1950. 272p.

84. Library Association. Public Library Research Group.
    London and Home Counties Branches.
    "Public Library Aims and Objectives; A Basis for a Nationally
    Adopted Standard."
    LIBRARY ASSOCIATION RECORD 73 (12): 233-4 December 1971.

85. Lipsman, Claire K.
    THE DISADVANTAGED AND LIBRARY EFFECTIVENESS.
    Chicago: American Library Association, 1972. Chapter 5.

86. Lowry, W. K.
    "The Goals of Information Center Administration."
    In TECHNICAL INFORMATION CENTER ADMINISTRATION (TICA) CONFERENCE,
    Edited by Arthur W. Elias. p.163-8.
    Philadelphia, Pa.: Drexel Institute of Technology, June 15-17, 1964.
    Washington, D.C.: Spartan Books, Inc., 1964.

87. McAnally, Arthur M. and Robert B. Downs.
    "The Changing Role of Directors of University Libraries."
    COLLEGE AND RESEARCH LIBRARIES 34 (2): 103-25 March 1973.

88. McGrath, William E.
    DEVELOPMENT OF A LONG-RANGE STRATEGIC PLAN FOR A UNIVERSITY LIBRARY:
    THE CORNELL EXPERIENCE; CHRONICLE AND EVALUATION OF THE FIRST YEAR'S
    EFFORT. Ithaca, N. Y.: Cornell University Libraries Feb. 1973. 185p.
    LI 004 230.

88A Martin, Allie Beth.
    A STRATEGY FOR PUBLIC LIBRARY CHANGE: PROPOSED PUBLIC LIBRARY GOALS-
    FEASIBILITY STUDY. Chicago: American Library Assoc., 1972. 84p.

89. Martin, Lowell.
    "The Future of the Urban Main Library: II."
    LIBRARY TRENDS 20 (4): 774-87 April 1972.

90. _____, _____.
    LIBRARY RESPONSE TO URBAN CHANGE: A STUDY OF THE CHICAGO PUBLIC LIBRARY.
    Chicago: American Library Association, 1969. 313p.

91. _____, _____.
    "Standards for Public Libraries."
    LIBRARY TRENDS 21 (2): 164-77 October 1972.

92. Mason, D.
    "Programmed Budgeting and Cost Effectiveness."
    ASLIB PROCEEDINGS 25 (3): 100-110 March 1973.

93. Memphis Public Library and Information Center.
    Committee for the Implementation of the Objectives.
    MINUTES, Various Meetings, May 1972 - January 1973.

94. Morey, George E.
    THE IDENTIFICATION OF COMMON LIBRARY GOALS, OBJECTIVES, AND
    ACTIVITIES RELATIVE TO A PLANNING, PROGRAMMING, BUDGETING
    SYSTEM.
    Kalamazoo, Michigan: Western Michigan University, June 1970.
    80p.   ED 048 876.

95. Mumford, L. Q. and Rutherford D. Rogers.
    "Library Administration in Its Current Development."
    LIBRARY TRENDS 7 (3): 357-367 January 1959.

96. Munn, Robert F.
    "On Library Cooperation." (letter).
    LIBRARY JOURNAL 97 (15): 2668 1 September 1972.

97. Oregon. University, Center for Advanced Study of Educational
    Administration.
    HANDBOOK OF ORGANIZATIONAL DEVELOPMENT IN SCHOOLS.
    Richard A. Schmuck, et al.
    Palo Alto: National Press Books, 1972.   436p.

98. Pfister, Richard L. and Jerome W. Milliman.
    ECONOMIC ASPECTS OF LIBRARY SERVICE IN INDIANA.
    Sponsored by Indiana State Library, Indianapolis.
    Bloomington, Ind.: Indiana University, Graduate Library
    School, 1970.   151p.   ED 044 136.

99. Plumb, Philip W.
    "The Cambridge University Library Management Research Unit."
    LIBRARY ASSOCIATION RECORD 73 (10): 187-8 October 1971.

100. Prostano, Emanuel T. and Joyce S.
    THE SCHOOL LIBRARY MEDIA CENTER.
    Littleton, Colorado: Libraries Unlimited, Inc. 1971.
    256p. ("Budgeting the Program", p.164-179)

101. Raffel, Jeffrey and Robert Shishko.
    SYSTEMATIC ANALYSIS OF UNIVERSITY LIBRARIES: AN APPLICATION
    OF COST-BENEFIT ANALYSIS TO THE M. I. T. LIBRARIES.
    Cambridge, Mass.: M. I. T. Press , 1969.   107p.

102. RAND Corporation.
    A SYMPOSIUM ON EDUCATIONAL PLANNING AND PROGRAM BUDGETING:
    AN ANALYSIS OF IMPLEMENTATION STRATEGY.   P -4675.
    Santa Monica, Calif.: October 1971.   74p.

103. Rayward, W. Boyd.
    "Libraries as Organizations."
    COLLEGE AND RESEARCH LIBRARIES 30 (4): 312-26 July 1969.

104. Reilly, Kevin D.
    "The Delphi Techniques: Fundamentals and Applications", p.187-99
    In Borko, Harold, Ed. TARGETS FOR RESEARCH IN LIBRARY EDUCATION.
    Chicago: American Library Association, 1973. 239p.

105. Robinson, F.
    "Systems Analysis in Libraries: The Role of Management."
    In INTERFACE: LIBRARY AUTOMATION WITH SPECIAL REFERENCE
    TO COMPUTING ACTIVITY, edited by C.K. Balmforth and N.S.M.Cox.
    Cambridge, Mass.: M. I. T. Press, 1971. p.101-11.

106. Rogers, Rutherford and David C. Weber.
    UNIVERSITY LIBRARY ADMINISTRATION.
    New York: H. W. Wilson, 1971. 454p.

107. Santa Barbara Elementary and High School District.
    P. P. B. S. AND THE LIBRARY: GOALS, OBJECTIVES, PROGRAM.
    Report of the Librarians' Workshop...
    Santa Barbara, Calif.: 137p. ED 050 776.

108. Schick, Allen.
    "A Death in the Bureaucracy: The Demise of Federal PPB."
    PUBLIC ADMINISTRATION 33 (2): 146-56 March/April 1973.

109. Schofield, J. J.
    "PPBS and Some Related Management Systems in Great Britain."
    LIBRI 23 (1): 75-9 1973.

110. Sellers, David Y.
    "Basic Planning and Budgeting Concepts for Special Libraries."
    SPECIAL LIBRARIES 64 (2): 70-5 February 1973.

111. Shera, Jesse H.
    THE FOUNDATIONS OF EDUCATION FOR LIBRARIANSHIP.
    New York, Los Angeles: Becker and Hayes, Inc. (Subsidiary
    of John Wiley & Sons,Inc.) 1972. 511p.

112. Special Libraries Association.
    "Objectives and Standards for Special Libraries."
    SPECIAL LIBRARIES 55 (10): 672-80 December 1964.

113. "Special Revenue Sharing and Libraries -- An Analysis".
    AMERICAN LIBRARIES 4 (6): 341-2 June 1973.

114. Speller, Benjamin.
    THE FORMULATION OF OBJECTIVES FOR ACADEMIC LIBRARIES AS PER-
    CEIVED BY PERSONNEL INVOLVED IN THE DIRECTION OF LIBRARIES:
    THREE CASE STUDIES. Dissertation in progress, Indiana University,
    Graduate Library School.

115. Steiner, George A.
        TOP MANAGEMENT PLANNING.
        Studies of the Modern Corporation Series.
        New York: Macmillan, 1969. 795p.

116. Summers, William.
        "A Change in Budgetary Thinking."
        AMERICAN LIBRARIES 2 (11): 1174-80 December 1971.

117. Swanson, Rowena W.
        "Organization Theory Related to Library Management'.
        CANADIAN LIBRARY JOURNAL 30 (4):356-64 July-August 1973.

118. Taylor, Celianna L.
        "The Information Center: Considerations in Planning." p.29-39
        In COMMUNICATIONS FOR DECISION, 38th Annual Meeting,
        American Society for Information Science, Denver, Col.,
        November 7-11, 1971.
        Westport, Conn.: Greenwood Pub. Co., 1971.

119. Taylor, Robert S.
        THE MAKING OF A LIBRARY: THE ACADEMIC LIBRARY IN TRANSITION.
        Hampshire College Working Paper No. 2 .
        New York, Los Angeles: Becker and Hayes, Inc., 1972. 250p.

120a John I. Thompson & Co.
        CRITERIA FOR EVALUATING THE EFFECTIVENESS OF LIBRARY OPERATIONS
        AND SERVICES. Phase I: LITERATURE SEARCH AND STATE OF THE ART.
        (ATLIS Report, No. 10). C.J. Wessel, and B.A. Cohrssen.
        Washington, D.C.: 1967. 64p. plus appendices. AD 649 468

120b   . Phase II: DATA GATHERING AND EVALUATION.
        C. J. Wessel, et al. (ATLIS Report, No. 19)
        Washington, D.C.: 1968.   AD 676 188. 109p.

120c   . Phase III: RECOMMENDED CRITERIA AND METHODS FOR
        THEIR UTILIZATION. C. J. Wessel, et al. (ATLIS Report, No. 21)
        Washington, D.C: January 1969. 95p. AD 682 758

121. Tudor, Dean.
        "The Special Library Budget."
        SPECIAL LIBRARIES 63 (11): 517-   November 1972.

122. Tulsa Public Library.
        LONG RANGE PLANS FOR TULSA CITY-COUNTY LIBRARY.
        Tulsa, Okla.: 32p.

123. Waldron, Helen J.
        "Business of Running a Special Library."
        SPECIAL LIBRARIES 62 (2): 63-70 February 1971.

124. Wasserman, Paul.
        "Development of Administration in Library Services: Current
        Status and Future Prospects."
        COLLEGE AND RESEARCH LIBRARIES 19 (4): 283-294 July 1958.

125.   Wasserman, Paul.
        "Library and Information Center Management". In
        ANNUAL REVIEW OF INFORMATION SCIENCE AND TECHNOLOGY, Edited by
        Carlos Cuadra. American Society for Information Science.
        Chicago: Encyclopedia Britannica, Inc, William Benton, Publisher,
        1969. Vol. 4   p.405-38.

126.   _____, _____.
        THE NEW LIBRARIANSHIP -- A CHALLENGE FOR CHANGE.
        New York and London: Bowker,   1972.   287p.

126A.   _____, _____.
        "Measuring Performance in a Special Library: Problems and Prospects".
        SPECIAL LIBRARIES 49 (8): 377-82 October 1958.

127.   _____, _____.
        "The Role of the Information Specialist in Industry."
        In MANAGEMENT INFORMATION SYSTEMS AND THE INFORMATION SPECIALIST,
        Edited by John M. Houkes. Proceedings of a Symposium Held at Pur-
        due University, July 12-13, 1965.
        Lafayette, Indiana: Purdue University, Krannert Graduate School of
        Industrial Administration, 1966. p.104-122.

128.   _____, _____.
        TOWARD A METHODOLOGY FOR THE FORMULATION OF OBJECTIVES IN PUBLIC
        LIBRARIES: AN EMPIRICAL ANALYSIS.
        Ph. D. Thesis, University of Michigan, School of Library Science,
        1969. 200p.

129.   Webster, Duane.
        LIBRARY POLICIES: ANALYSIS, FORMULATION, AND USE IN ACADEMIC LI-
        BRARIES. Occasional Papers No. 2.
        Washington, D.C.: Association of Research Libraries, 1972. 40p.

130.   _____, _____.
        PLANNING AIDS FOR THE UNIVERSITY LIBRARY DIRECTOR.
        Occasional Papers No. 1.
        Washington, D.C.: Association of Research Libraries, December 1971. 27p.

131.   West Virginia. University.
        AN ANALYSIS OF THE GOAL TRANSFORMATION PROCESS IN A STATE DEPART-
        MENT OF EDUCATION. Henry R. Marockie. Research Report.
        Morgantown, West Virginia: 1969. 202p.   ED 033 463.

132.   Wolcott, Merlin D.
        "Identifying Objectives for a Public Library."
        In QUANTITATIVE METHODS IN LIBRARIANSHIP: STANDARDS, RESEARCH, MANAGE-
        MENT, Edited by Irene B. Hoadley and A. S. Clark.
        Proceedings of an Institute Held at Ohio State University, August 3-16,
        1969. Westport, Conn.: Greenwood Press, 1972. p. 74-7.

133.   Young, Harold C.
        EXPLORATORY STUDY OF PLANNING, PROGRAMMING, BUDGETING SYSTEMS (PPBS)
        IN UNIVERSITY LIBRARIES HAVING A MEMBERSHIP IN THE ASSOCIATION OF
        RESEARCH LIBRARIES. Dissertation-in-Progress, University of Michigan,
        School of Library Science.

134.   Young, Robert C.
        "Goals and Goal-Setting."
        JOURNAL OF AMERICAN INSTITUTE OF PLANNERS 32 (2): 76-85 March 1966.