CHARLES R. McCLURE

The Planning Process:

Strategies for Action

Planning is the process of identifying organizational goals and objectives, developing programs or services to accomplish those objectives, and evaluating the success of those programs vis-à-vis the stated objectives. The importance and purposes of planning as a means to increase organizational effectiveness are stressed. A model of the planning process is presented, and the various components of the model are described in terms of implementation. The paper concludes with the author suggesting some pragmatic strategies and considerations that may facilitate the implementation of organizational planning in an academic library.

"**P**LANNING? Naw, we don't have enough time for planning. We don't even have enough staff or support to perform the basic services. How can we plan?" This sentiment is frequently encountered in many library organizations regarding the planning process. Indeed, a current state of crisis management is likely to be a direct result of *not* developing an organizational planning process. Continuous efforts to solve yesterday's problems make planning for tomorrow even more difficult. Development of goals and objectives as part of an organizational planning process is absolutely necessary if the library is to respond effectively to the information needs of its environment.

Planning is a process of identifying organizational goals and objectives, developing programs or services to accomplish those objectives, and evaluating the success of those programs vis-à-vis the stated objectives.[1] A plan is a written document formalizing the planning process. It determines which objectives and which services will be allocated various resources. Plans and the planning process recognize the fact that organizations cannot do everything;

therefore, they must allocate resources on a priority basis to do those activities that lead to the effective accomplishment of goals and objectives.

The word *effectiveness* must be stressed, as it implies the ability of the organization to accomplish stated goals and objectives. Effectiveness asks the question, "What is the organization doing?" Efficiency, on the other hand, implies the ability of the organization to accomplish a task in the least amount of time with less cost. Efficiency asks the question, "How well are we doing it?" Organizations may be doing things well (efficiently) that need not be done (ineffective) or vice-versa. Planning addresses both the effectiveness and efficiency questions but places primary importance on effectiveness: What is the organization doing?[2]

For too long a time planning has been seen as a responsibility only of top administration. If administrators chose not to develop formalized mechanisms for planning or failed to develop formalized planning documents, such was their prerogative. However, planning is much too important to be left to the discretion of library administrators. All organizational members—especially other professional librarians—have a responsibility to develop a planning process as well as formalized plans for their given areas of responsibility.

Charles R. McClure is assistant professor, School of Library Science, University of Oklahoma, Norman.

The purpose of planning is to facilitate the accomplishment of organizational objectives. Planning has primacy in terms of organizational effectiveness; without goals, without plans, no rational indicator of effectiveness can be determined. Planning is pervasive; it can and should be done at all organizational levels; it can and should be done with all organizational members; and it is an ongoing, continuous process.[3]

In these times of economic difficulties for many academic libraries, the need for a planning process takes on significant importance in six general areas.

First, planning provides for a rational response to uncertainty and change. Although the organization cannot control its environment, it may be able to manipulate it—assuming there is an objective to be accomplished.

Second, planning focuses attention on goals and objectives. Does your organization have a written set of goals and objectives? If not, dysfunctions, departmental competition, and ineffective resource allocation are likely.

Third, planning is important as an aid to resource allocation by establishing priorities for funding. Which services can be provided at the least cost and for the most benefit?

Fourth, planning also serves as a basis for determining individual, departmental, organizational, or program accountability.

Fifth, planning facilitates control of organizational operations by collecting information to evaluate the various programs or services.

Finally, planning orients the organization to a futuristic stance. Instead of always *reacting* to problem situations, the organization attempts to foresee and mitigate against future problems *before* they become crises.

Some academic librarians already may have witnessed the results when the planning process is ignored and formalized plans are not developed. Typical management styles in such situations may be described as laissez-faire—organizational members basically "do their own thing." Laissez-faire management styles can digress into crisis management—the problems from yesterday are never solved, only elongated. Without planning, snap decisions replace deliberate decisions in terms of organizational activity.

And lastly, no planning will be evidenced by uncoordinated, piecemeal activities encouraging internal organization competition for scarce resources.

The purpose of this paper is to present the reader with a general overview of the planning process in an academic library setting. A model of planning will be suggested and explained in such a way that organizational members in an academic library can use the model as a means of improving the planning process in their organization.

The three components of planning, i.e., the mission statement, program development, and evaluation, will be discussed, followed by some strategic considerations for successful organizational planning. No attempt is made to provide a comprehensive review of the literature although relevant sources will be referred to as needed. The author is less concerned with the voluminous writings on the subject and prefers a pragmatic approach: developing strategies for planning to be implemented and formalized in the academic library.

OVERVIEW OF PLANNING

Systems thinking has been used as a basis for developing the planning process in organizations by a number of management scientists.[4] Such a view is also used by this writer as a basis for developing the planning process. Additionally, it is based on the writings and research of Ernest R. De-Prospo, who has been instrumental in the formulation of a planning process for the library environment.[5] Although much of his work has been done in the public library setting, many of his concepts can be extended to the academic library.

An overview of the planning process is provided in figure 1. This overview suggests specific activities that can be part of the planning process in the academic library organization. It is intended to provide both a conceptual description of planning and practical procedures for developing written plans as a basis for organizational, departmental, or specific program activities.

Within the paradigm of systems thinking, it must be recognized that planning takes place within a context or environment. That environment includes the social, political, and economic milieu in which an organiza-
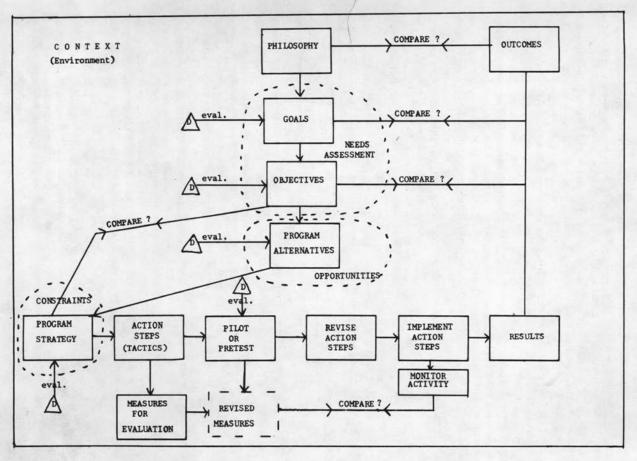
Fig. 1
GENERALIZED MODEL FOR
PROGRAM PLANNING

tion struggles for survival and effectiveness. Open systems thinking stresses the flow of resources (information) between the organization and the environment in which it operates. Recognition of this relationship is critical to the development of both input and feedback throughout the planning process.

Mission Statement

The first component of the planning process is the development of a mission statement. A mission statement is a formal written document developed by the members of the library under the leadership of the organization's administration. Typically, the document begins with a brief statement of the historical background of the library as well as its current activities; significant dates and developments in the history should be included. The purpose of this section is to recognize the origins of the library, draw upon its historical strengths, and identify critical experiences in its development.

A typical mistake made by the organization when beginning the planning process is to begin immediately with statements of goals and objectives. In such instances the philosophical assumptions held by the organizational members regarding "appropriate" roles of the organization in its environmental context and "appropriate" values to determine organizational activities are not made explicit.[6] A statement of organizational philosophy must be developed to form a basis or agreement among organizational members *from which* goals and objectives logically can follow.

The assumptions within the organizational philosophy usually are of two varieties. The first includes assumptions regarding the role of the institution in the environment and recognition of the factors that appear to have significant implications regarding future operations of the organization. This first set of assumptions may deal with topics such as technology, intellectual freedom, societal responsibility of the library, or information/knowledge production.

The second set of assumptions are value decisions as to "appropriate" responses to the first set of assumptions for services to be provided by the organization. Issues regarding the type of "appropriate" library services as well as their degree of implementation should be raised here. Topics included in the second set of assumptions include the role of the librarian during library decision making and program development, identification of "appropriate" user groups to be served, and "adequate" services to be provided. Both types of assumptions must be made explicit. Key terms and concepts should be defined to ensure that all organizational members agree upon various aspects of value-laden words such as *service, information, reference,* etc.

The development of goals and objectives takes place in an atmosphere of needs assessment. This term may be defined as the difference between where we are (what we're doing now) and where we want to be (what we want to be doing). The needs assessment process is input for the development of goals and objectives. Many methods can be used for needs assessment: previous surveys, organizational reports, or other written documents; community analysis; or other means of gathering empirical data. The point is that needs assessment provides environmental input into the process of goal and objective identification. Based on the needs assessment, organizational members agree upon goals and objectives through discussion and compromise or a more formalized method such as the Delphi technique.[7]

One must recognize the difference between goals and objectives—they are not the same. Goals provide long-range guidelines (five years or more) for organizational activity; they might never be accomplished, and they are not measured. In contrast, objectives are measurable, short-range, and time-limited; specific responsibility is given to individuals for accomplishment of an objective. Figure 2 suggests some criteria for judging the validity of an objective.[8]

Differentiating between goals and objectives is especially important because many academic libraries include sizable numbers of branch libraries scattered about campus. Each branch may operate in an environment somewhat different from the main library and may need goals and objectives to accommodate such differences. Therefore, each branch may have different goals and

1. Is it, generally speaking, a guide to action?
2. Does it suggest alternative courses of action?
3. Is it explicit enough to suggest certain types of action?
4. Can it be measured?
5. Is it time-limited?
6. Is it ambitious enough to be challenging?
7. Does it support both the goals and the institutional philosophy?

Fig. 2
Criteria for Judging the Validity of an Objective

objectives, but they all will stem from the same organizational philosophy. The primary consideration to be recognized is that all parts of the organization must develop goals that are mutually supportive. Such an occurrence is more likely when there is agreement as to organizational philosophy.

The combination of the historical background, philosophy, definitions, goals, and objectives forms a document which may be described as a mission statement. The development of such a document is the initial, and perhaps most important, step in the planning process. An excellent example of a mission statement for a public library recently appeared in *American Libraries*.[9] Whether one agrees or disagrees with the substance of this document, it contains a straightforward explication of historical development and assumptions (philosophy), followed by definitions, goals, and objectives.

Thus the statements of organizational philosophy, goals, and objectives should be developed as a written document that may be called the mission statement. It is this document that forms the basis for identifying and selecting programs to accomplish the objectives. Additionally, it is on the basis of this document that organizational units develop strategies to accomplish goals, cooperate in resource allocation, and take *action*.

Programs for Action

Organizational goals and objectives in themselves are of little value until they are translated into a program (or service) that will accomplish the stated objectives. It is in this translation of objectives into actions that the library responds to the wants of its patrons as well as addresses the information needs of its environment. Here a stance of

action, of formulating plans to accomplish the objective, is developed.

Program development for academic libraries must consider (1) information constituencies and (2) information services. An examination of these two concepts in a matrix format (see figure 3) suggests four specific strategies that may be used as a basis for program development.[10] This procedure is one method of examining the environment for opportunities. Opportunities are a favorable set of circumstances that can be exploited to help accomplish a given objective. A technique that can be used to identify opportunities is forecasting—the process of identifying critical changes and developments in the environment that may affect organizational goals and objectives.[11]

Forecasting assumes that mere mortals can indeed foresee *some* of the future changes and factors that may affect the organization. Both empirical information and subjective information are used in the process. A typical forecast for the next three to five years may include possible trends or changes in terms of technology, economy, politics, and society. Although it is recognized that *all* trends or changes cannot be foreseen, some can be identified. Development of programs that anticipate *some* trends or changes has a greater likelihood of success than programs developed in an environmental vacuum.

Once the objective is agreed upon, an attempt should be made to develop alternative programs that may accomplish the objective. Developing alternatives encourages the creative and innovative aspect of program development. One finds more possible alternatives than originally expected if alternatives are explicitly and consciously sought. Development of alternative programs forces us, then, to choose or rank the programs on some kind of rational basis.

Figure 4 presents a typical library objective and includes three alternative programs which may all help to accomplish that goal. Once alternatives are suggested, they can be compared and contrasted based on a set of criteria that include organizational constraints. Although criteria and constraints will vary among organizations and programs selected, such a comparison is a rational basis to evaluate the various alternatives and

INFORMATION SERVICES

		Present Information Services	New Information Services
INFORMATION CONSTITUENCIES	Present Users	1. Market Penetration	2. Information Services Development
	New User Groups	3. User Group Expansion	4. Diversification

1. *Market Penetration:* The Organization Seeks Change through Increasing Its Share of Present User Groups from Its Present Services

2. *Information Services Development:* The Organization Seeks Change by Developing Improved or New Services for Its Present User Groups

3. *User Group Expansion:* The Organization Seeks Change by Taking Its Present Services into Different Types of User Groups

4. *Diversification:* The Organization Seeks Change by Taking New Information Services into Different Types of User Groups

Fig. 3
Strategies for Program Development*

*Adapted from Phillip Kotler, *Marketing for Nonprofit Organizations* (Englewood Cliffs, N.J.: Prentice-Hall, 1975), p.166–67.

ALTERNATIVE PROGRAMS

CRITERIA	1. Provide Evening and Weekend Reference Service	2. Provide Document Delivery Service to Faculty	3. Provide Instruction on the Use of the Library
1. Target Audience Description			
2. Target Audience Size			
3. Potential Number of Contact Hours			
4. Staff Hours for Planning			
5. Staff Hours for Program Operation			
6. Facilities Needed and Est. Cost			
7. Promotion and Public Relations			
8. Impact (Social, Political, or Economic)			
9. Program Evaluation Measures			
10. Risk of Failure			
11. Other			
Program Rank			

Fig. 4
Evaluating Alternatives
(Objective: To Increase Contact Hours between the Librarians and the Patrons)

determine which programs will be implemented.

The process of identifying opportunities and alternative programs and then selecting the "best" programs for action assumes: Program strategies are more likely to succeed when alternatives are compared and contrasted; for every objective there are at least two (and probably many) alternatives; identification of opportunities and alternative programs fosters creativity and innovation; and the better the decision maker can recognize and anticipate constraints critical to attaining an objective, the more clearly and accurately can the best program alternatives be selected.

Once the programs have been selected, action steps should be developed for activating the program. Action steps simply are a set of procedures which, when followed, will accomplish a given objective. One should be able to describe every program by a set of action steps; if this is not possible the nature of the program should be reconsidered. Furthermore, adequate publicity, advertisements, and program announcements should be distributed to appropriate media to ensure that potential users are aware of the program.

Each program also must contain a tentative budget. At a minimum level, the budget contains cost categories such as (1) personnel, (2) equipment, (3) contracted services, and (4) supplies and support material. Depending on the complexity and length of the program, the budget may be more or less detailed and subdivided within the above (or other) cost categories.[12]

One method to determine the viability of the program is to conduct a pilot study or pretest. A pilot is a scaled-down version of the actual program—a trial of its procedures to determine their usefulness and accuracy. The purpose of the pilot is to determine which parts of the program can be improved before the program is actually implemented. Potential problems identified at this stage are easier to correct than during full-scale implementation. Based on such a pilot, the program can be revised and modified.[13]

Finally, the program is implemented and put into action. At this stage, it is essential that all participants know what they are supposed to do, how it is to be done, and when it is to be done. Additionally, specific responsibilities for completion of specific action steps by specific individuals must be clearly delineated. Written task and scheduling charts such as a Gantt chart or flow process chart will be useful at this point.[14]

As figure 1 suggests, the program is selected from a list of possible alternatives and judged in light of opportunities and constraints affecting the organization. The program is revised as a result of a pilot project or pretest, and action steps are specified. Task responsibilities are clearly delineated before implementation of the program. All of these decisions must be set forth in a written document for the sake of clarity as well as for evaluation.

Evaluation

As suggested earlier, a possible mistake an organization can make when developing a planning process is to begin with goals and objectives without first examining organizational philosophy. A second typical mistake is for the organization to consider the planning process complete upon implementation of the program. At this point, the planning process is still incomplete. The last and significant portion of organizational planning is the evaluation of the planning process and the success of the selected programs.

Evaluation is the accountability aspect of planning and represents a measurement of effectiveness in reaching some predetermined goal.[15] Failure to include evaluation as part of the library planning process may result in the creation of a self-serving bureaucracy, increased distance between information and users, ineffective allocation of resources, poor credibility with governing bodies, reinforcement of status quo, and, most important, the continuance of programs that should have been ended because they no longer contribute to the accomplishment of organizational goals and objectives.

It is useful to suggest that evaluation may be one of two kinds. The first is generally referred to as *formative* evaluation. Formative evaluation is an ongoing and continuous process and generates information that can be used to modify a system while it is in

operation. *Summative* evaluation occurs at the end of an operation and is product oriented. The difference between the two can be summed up by saying the purpose of summative evaluation is to *prove;* the purpose of formative evaluation is to *improve.* Both types of evaluation have a role in the planning process, and one is not intrinsically better than the other.[16]

Referring again to figure 1, one finds that there are two key areas for evaluation to take place. The first is during the development of the program itself. During this development, planners are most interested in formative evaluation as they strive to improve the program strategy. Methods for such formative evaluation are stressed as a result of comparing alternative programs and developing a pilot or pretest of the program. Based on these techniques, the program may be revised or improved before it is actually implemented.

In a more limited sense, formative evaluation also takes place in examining the goals and objectives. The needs assessment can be seen as a technique of formative evaluation during the development of goals and objectives. These more limited, but not less important, formative evaluations are represented in figure 1 with a "D" for *decision* inside a triangle connected to that planning component where formative evaluation takes place.

The evaluation during program development is *process* oriented; it examines the program in terms of how it can be improved on an ongoing, continuous basis. In order for this function to be performed, information must be collected and analyzed about the process. Three steps must be considered to accomplish this. First, one delineates or determines what pieces of information are needed to evaluate the process; second, one obtains that information via a data collection technique; and third, one provides the information to the decision makers in order for the evaluation decision to be made.[17]

The second key area for evaluation is product oriented and takes place in two basic areas of the planning process. Returning to the program development, it is critical to know if, in fact, the program is a success or a failure. Thus, during program de-

velopment, measures for summative evaluation are devised. These measures, perhaps increasing librarian-patron contact hours by 25 percent, are then used as a basis to determine the success or failure of the program. It should be stressed that multiple evaluation measures for each component as well as the total success of the program should be developed.[18]

Similar to the formative evaluation aspect of planning, the summative evaluation also depends on delineating, obtaining, and providing information to make the evaluation decision. This information collection is usually done as part of the monitoring function (see figure 1). By comparing the information from the monitoring activity of the program to the predetermined measures for program success, summative evaluation of the program is accomplished.

The second aspect of summative evaluation is accomplished when the results or output from the program are compared to the organizational goals. The question being asked is, "To what degree did this program achieve the stated organizational goals and objectives?" This summative evaluation is effectiveness oriented—"Did we achieve what we wanted to accomplish?" If yes, the program may be judged a success. If no, the program may be judged a failure and either dropped from further use or modified to better accomplish the objective.

Finally, the planner must consider the outcomes from the program. Outcomes may be differentiated from outputs (results) in that outcomes are the impact of the outputs on the environment. If the reference librarians initiate extensive instructional programs about the use of the library, the *output* may be better-educated users who have substantial competence about the services of the library. However, the *outcome* of the instructional programs may be a marked increase in the use of the library's materials and services. If there are not enough materials or staff to accommodate the additional demand, the outcome may be dysfunctional to library goals and objectives. Typically, the library as an organization fails to consider the outcomes, or impacts, of its programs on the environment.

Admittedly, identification—to say nothing of measurement—of outputs and out-

comes is difficult. But until we recognize their existence, we cannot identify them; and until we identify them, they cannot be measured. Such measures must be user oriented—determined only in the context of the information environment of the users of the program.[19] It is likely that measures such as awareness can be identified and measured. Identifying and measuring the outputs and outcomes are the challenge of tomorrow for academic library planning.[20] At present there are researchers, such as Douglas Zweizig, who stress the importance of measures of output or services and suggest possible indexes by which such measurement can be made.[21]

The evaluation process—both summative and formative—is an integral part of organizational planning. Planning without evaluation is like taking a test and never knowing how well or poorly you did. The evaluation component in organizational planning provides organizational members with important feedback to improve the total effectiveness of the organization as a service agency responding to the needs and wants of its patrons.

STRATEGIES FOR SUCCESS

The overview of planning in an academic library that has been presented in this discussion is intended to serve as a general conceptual guide to the planning process as well as a set of suggestions for procedural implementation. Because various library environments are different, readers are urged to develop specific procedures for their library situation. There is no specific set of instructions for the prospective planner to follow that will take into consideration all the various contingencies inherent to a specific library situation. In short, this overview is a tool by which organizational members can build a planning process whose use will facilitate the effectiveness of academic library organizations and their responsiveness to the information environments they serve.

However, before members utilize a total approach to organizational planning, some questions need first be asked. Are organizational members willing to accept the responsibilities of the planning process? Are they willing to grow and develop on both a professional and a personal basis? Are they willing to take risks and to implement strategies for change? Are they willing to step outside the library in an attempt to determine user and nonuser needs and wants?

Academic library administrators may wish to consider some questions as well. Do you have confidence in your staff to learn how to participate in the planning process? Have you established effective and open channels of communication for information dissemination among all organizational members? Are you willing to experiment with the delegation of authority to organizational members? Are you willing to take a personal role of leadership in developing an organizational planning system?

Furthermore, library staff members should be aware of their responsibilities during the planning process. Planning assumes that organizational members can agree on "appropriate" goals, objectives, programs, and evaluation measures; planning assumes that the staff can direct the activities of the organization to respond to environmental needs; planning assumes that the staff is willing to experiment with organizational change; and, finally, planning assumes that librarians can measure the degree to which change takes place, the degree to which objectives are accomplished, and the impact of various programs on the environment. The experiences of this writer suggest that the vast majority of academic librarians would welcome such responsibility.

Superimposing an organizational planning system on a library organization unwilling to work under these assumptions or unwilling to accept the responsibilities inherent in the planning process will end in frustration, false expectations, and, ultimately, failure. Such failure is not an indication of the value of planning; rather it is an indicator of the degree to which the organizational members were prepared and committed to implementing a planning process.

For organizations where ongoing planning has not been the rule, a wise strategy might be to spend some months discussing at an organizational level of analysis the importance and framework of planning in that academic library. It is essential that organizational information which is to be used in

the planning process be readily available to all organizational members. Furthermore, administrators must develop a leadership stance in terms of preparing organizational members to take on the various skills and responsibilities needed for successful planning.

To facilitate this preparation, an organizational member (preferably an administrator) who is knowledgeable about planning can be appointed or elected as planning officer. This person then would serve as a catalyst for preparing the organizational members for new responsibilities as well as serving as the person responsible for organizational planning once the planning process is implemented. This strategy would demonstrate management's seriousness with the planning process as well as providing a person for organizational members to contact should questions arise during the planning process.

The planning officer's first task is preparing the organization for the planning process. A second task for this officer is to lead the organization through the process of developing a mission statement. After the mission statement has been completed, task forces can be created to deal with specific concerns facing the organization by developing programs to accomplish specific objectives and evaluating the results.

Excuses for not planning abound: too few staff, not enough time, too little money, dispersed geographical locations, too many projects already, too busy solving yesterday's crises, etc. These conditions are continuous facts of life for typical library operations and are likely to be with us for some time to come. Changing these conditions begins with *making time available* for the development of an organizational planning system.

The development of organizational planning in a systematic and ongoing fashion is crucial for the effectiveness of the library both on an internal and external basis. Internally, planning encompasses the entire span of organizational activities, identifies program priorities, encourages rational resource allocation, and provides a framework of challenge and responsibility for all organizational members. Externally, planning provides a means to respond to environmental changes and suggests specific actions to satisfy the needs of various user groups. Perhaps even more important, planning provides proof positive to the library's governing bodies of rational decision making and organizational purpose.

The suggestions in this paper can serve as one possible approach to implement organizational planning. Those academic libraries interested in new techniques to meet the current and future challenges of providing information services in a complex environment are likely to be more effective with a specific approach to organizational planning than libraries making decisions on a day-to-day basis. Ultimately, the planning process provides a means for the library to take a leadership role as an integral and dynamic force in accomplishing the educational goals of the college or university.

REFERENCES

1. Fremont E. Kast and James E. Rosenzweig, *Organization and Management: A Systems Approach* (2d ed.; New York: McGraw-Hill, 1974), p.437–40.
2. Ernest R. DeProspo and James W. Liesener, "Media Program Evaluation: A Working Framework," *School Media Quarterly* 3:290 (Summer 1975).
3. Harold Koontz and Cyril O'Donnel, *Management: A Systems and Contingency Analysis of Managerial Functions* (6th ed.; New York: McGraw-Hill, 1976), p.130–33.
4. Fremont E. Kast and James E. Rosenzweig, "General Systems Theory: Applications for Organization and Management," *Academy of Management Journal* 15:447–68 (Dec. 1972).
5. Ernest R. DeProspo and Alan R. Samuels, *A Program Planning and Evaluation Self-Instructional Manual* (New York: College Entrance Examination Board, 1977).

6. Archie Donald, "On the Starting of Goals," *Journal of Systems Engineering* 4:89–95 (Jan. 1976).

7. Kevin D. Reilly, "The Delphi Technique: Fundamentals and Applications," in Harold Borko, ed., *Targets for Research in Library Education* (Chicago: American Library Assn., 1973), p.187–99.

8. Charles H. Granger, "The Hierarchy of Objectives," *Harvard Business Review* 42:64–65 (May–June 1964).

9. American Library Association, Public Library Association Goals, Guidelines, and Standards Committee, "A Mission Statement for Public Libraries: Guidelines for Public Library Service, Part I," *American Libraries* 8:615–20 (Dec. 1977).

10. Adapted from Phillip Kotler, *Marketing for Nonprofit Organizations* (Englewood Cliffs, N.J.: Prentice-Hall, 1975) p.166–67.

11. Koontz and O'Donnel, *Management*, p.180–86.

12. For additional information on developing a program budget, see Stephen J. Knezevich, *Program Budgeting* (Berkeley: McCutchan Publishing Corp., 1973).

13. Nan Lin, *Foundations of Social Research* (New York: McGraw-Hill, 1976), p.199–200.

14. A brief explanation of a Gantt (for Henry L. Gantt) and PERT (Program Evaluation and Review Technique) chart may be found in G. Edward Evans, *Management Techniques for Librarians* (New York: Academic Press, 1976), p.254–59.

15. Edward A. Suchman, "Action for What? A Critique of Evaluation Research," in Carol H. Weiss, *Evaluating Action Programs* (Boston: Allyn & Bacon, 1972), p.53.

16. Carol H. Weiss, *Evaluation Research: Methods of Assessing Program Effectiveness* (Englewood Cliffs, N.J.: Prentice-Hall, 1972), p.16–17.

17. Daniel L. Stufflebeam, "The CIPP Model of Evaluation," in David D. Thomson, ed., *Planning and Evaluation for Statewide Library Development: New Directions* (Columbus: Ohio State Univ. Evaluation Center, 1972), p.34–42.

18. An excellent handbook here is Irwin Epstein and Tony Tripodi, *Research Techniques for Program Planning, Monitoring, and Evaluation* (New York: Columbia Univ. Pr., 1977), p.35–110.

19. Douglas L. Zweizig, "With Our Eye on the User: Needed Research for Information and Referral in the Public Library," *Drexel Library Quarterly* 12:55 (Jan.–April 1976).

20. DeProspo and Samuels, *A Program Planning and Evaluation Self-Instructional Manual*.

21. Douglas L. Zweizig, "Measuring Library Use," *Drexel Library Quarterly* 13:3–15 (July 1977).