ED 119 562   HE 007 301

AUTHOR   Schroeder, Roger G.
TITLE   An Approach for Improved Planning in Colleges.
INSTITUTION   Minnesota Univ., Minneapolis. Graduate School of
                Business Administration.
PUB DATE   Apr 75
NOTE   31p.; Paper presented at the Spring Meeting of The
                Institute of Management Science and the Operations
                Research Society of America (Chicago, Illinois, April
                30-May2, 1975)

EDRS PRICE   MF-$0.83 HC-$2.06 Plus Postage
DESCRIPTORS   Educational Administration; Educational Development;
                *Educational Planning; *Higher Education;
                *Information Systems; Institutional Research;
                Manuals; *Methods; Models; *Systems Development

ABSTRACT
        Planning and management systems for colleges should
be tailor-made to fit each particular college. The approach suggested
here is flexible so that it can be adapted to individual
circumstances in a variety of colleges. What is being suggested is an
approach to planning rather than a technique. The approach results in
two types of output documents: (1) a planning procedures manual, and
(2) a planning book consisting of college plans, unit plans, and
regular planning information. If the approach is successfully
implemented, an institution should have less crises oriented
management, more effective resource utilization, and a better means
of adapting to its environment. This document describes the proposed
approach in some detail, and it indicates how to proceed with
implementation. (Author/KE)

Center for Academic Administration Research

of the

College of Education and the

Graduate School of Business Administration

UNIVERSITY OF MINNESOTA

OFFICE ADDRESS

Center for Academic Administration Research
BA 717
University of Minnesota
Minneapolis, Minnesota 55455

AN APPROACH FOR IMPROVED PLANNING

IN COLLEGES

Roger G. Schroeder
Director, Center for Academic Administration Research
Associate Professor of Business Administration
University of Minnesota
Minneapolis, Minnesota 55455

April 1975

1.

ABSTRACT

This paper develops an approach for the improvement of planning in colleges. The approach consists of three parallel tracks:

(1) Definition of a planning process

(2) Development of plans for the college and its units

(3) Development of a planning information system

The tracks are mutually supportive, and implementation of all three tracks is essential for effective planning. The approach results in two types of output documents: (1) a planning procedures manual and (2) a planning book consisting of college plans, unit plans, and regular planning information. If the approach is successfully implemented, an institution should have less crises oriented management, more effective resource utilization, and a better means of adapting to its environment. This paper describes the proposed approach in some detail, and it indicates how to proceed with implementation.

INTRODUCTION

Background

Many college administrators are becoming increasingly aware that they must improve planning in their institutions [1]. However, in doing so they are confronted with a bewildering array of technical jargon, techniques, and systems. Faced with this situation, administrators are not sure how to proceed. Therefore, it is important that broad approaches be constructed to improve planning in colleges. These approaches should be sufficiently general so that a large number of colleges can use them. Such an approach is developed in this paper.

One of the premises underlying this paper is that planning and management systems for colleges should be tailor-made to fit each particular college. The approach suggested here is flexible so that it can be adapted to individual circumstances in a variety of colleges. What is being suggested is an approach to planning rather than a technique. Specific techniques can be utilized within the approach, when they are appropriate for the college concerned.

Another premise underlying this paper is that planning is a political process. While analytic methods can be part of a planning process, the nature of planning is still fundamentally political. The suggested approach deals with both the political and analytic aspects of planning.

1

In the past five to ten years an enormous amount of effort has been expended in developing analytic techniques such as PPBS, cost simulation models, management by objectives, cost analysis, mathematical models, and so on. Yet the use of these techniques in colleges is practically non-existent. In the author's view, implementation of techniques is inappropriate unless a process of planning is also established. The approach suggested in this paper emphasizes process development together with appropriate technique implementation.

The nature of college planning has changed in the last decade. In the sixties, college planning was aimed at growth. In the seventies and eighties, planning is needed in many colleges to cope with the steady or declining state. Questions of resource allocation and efficient resource utilization are crucial. Many colleges need to learn how to plan in the present and future climate.

The proposed approach is designed to help a college achieve the following objectives:

(1) Less crisis oriented management through better foresight.

(2) A clearer understanding of goals and priorities by the college community as a whole.

(3) Improved allocation of available resources.

(4) Greater efficiency in the utilization of resources.

(5) A better means of adapting to its environment.

Summary of the Approach

The proposed approach consists of the following three tracks or segments:

(1) Definition of a planning process

(2) Development of plans for the college and its units

(3) Development of a planning information system

Each of these tracks is essential for good planning. The tracks must be developed simultaneously because they are interrelated; the success of any one track depends on the others. The main thrust of this paper is to define these tracks, and to indicate how the resulting planning approach can be implemented. A brief summary of the three tracks is given next.

Track one defines how planning will be done in the college including responsibilities, interfaces with the existing organization, and a planning calendar. The result of this track should be an effective planning process. The process should be documented by a planning procedures manual that describes how planning is going to be done, who will be involved, and when activities have to be completed. A clarification and definition of the planning process is essential to efforts in the remaining two tracks.

Track two deals with specifying plans for the college and its units. In general, these plans include an assessment of the situation, goal statements, and means for goal achievement. The resulting plans can be helpful in budgeting, communications, clarification of responsibilities, and evaluation of results.

Track three develops the information system for planning. It includes two parts: (1) identification of information needs, and (2) production and use of the necessary information. Information needs are expressed in terms of regular and special reports (data elements). Production of the necessary information hinges on the development of computer programs or manual methods,

development of an analysis capability and construction or revision of the database. The use of information depends on integration of the information produced with planning activities. The result of this track should be a planning information system that supports the planning process.

The documents produced by tracks II and III might be combined into a single planning book which indicates institutional purposes, plans, and information that is used regularly in planning. The approach will be successful, however, only if this planning book is regularly updated and utilized for decision making.

Comparison With Other Approaches

It is appropriate at this point to highlight several other approaches or techniques for improved planning. This effort will set the proposed approach in perspective. Figure 1 summarizes the relationship between several other techniques or approaches and the one proposed here:

Figure 1

Technique/Approach	Logical Relationship to Proposed Approach
Management by Objectives [6]	part of Track II
Long Range Planning [4]	parts of Track II and III
Policy Analysis [2]	part of Track III
NACUBO Planning & Budgeting System [8]	Track I and part of III
PPBS [5]	parts of Track II and III
Information Systems Methods [3]	Track III

NOTE: After each technique the [ ] indicates a reference.

The figure indicates that other techniques or approaches only deal with a portion of the content of all three tracks. It should be noted that none of the above techniques are an integral part of the proposed approach. However, techniques could be adopted within the various tracks where they fit. Our approach thus allows for incorporation of appropriate techniques, but does not require any specific ones. For a survey of techniques see [11].

The next three sections of the paper define each of the tracks in some detail. After that, a section is provided on the implementation of the approach. The final section of the paper offers some conclusions.

Figure 2 is a summary of the content of the three track approach. It is also an outline of the material to be covered in the next three sections.

TRACK I: DEFINE THE PLANNING PROCESS

In track one the planning process is defined. This track consists of three elements:

(a) Responsibilities. Who is going to be involved in planning? What are the responsibilities of each of these groups and individuals?

(b) Inferfaces. How does the new or revised system interface with existing processes, such as budgeting, and with the college organization?

(c) Calendar. What is the calendar of activities for the new planning process? This calendar must recognize those responsibilities and interfaces defined in (a) and (b) above and schedule the accomplishment of all planning activities.

Figure 2

Summary of Three Track Approach

Track I: Define the planning process

    a.   Specify responsibilities

        1.   Planning bodies
        2.   Staff support

    b.   Clarify interfaces with existing organization

        1.   Budgeting, long-range planning, faculty groups,
            administrators and departments

    c.   Develop a calendar for planning

Track II: Development of plans for the college and its units

    a.   College-wide plans

        1.   Mission and goals for 1-5 years
        2.   Plans for next budget year

    b.   Organizational unit plans

        1.   Unit mission and goals for 1-5 years
        2.   Unit plans for the next budget year

Track III: Develop the Information System for Planning

    a.   Define information needs

        1.   Recurring reports
        2.   Special analysis and reports

    b.   Produce and use needed information

        1.   Computer programs or manual methods
        2.   Develop special report and analysis capability
        3.   Database revisions

The written output of this track should be a planning manual which describes the process in terms of the three elements described above. Such a manual will clarify how planning is going to be done, who is going to be involved, and when activities have to be completed. It is the author's observation that many attempts at improved planning fail precisely because the planning process is not sufficiently well defined.

Responsibilities

As the first part of track one, a college should assign persons or groups with the responsibility for planning. At the college-wide level, one or more persons and groups may be designated. Some colleges have formed a planning council, consisting of administrators, faculty and students, for college-wide planning. This council is typically responsible for missions, goals, objectives, and major programmatic and resource decisions. Other colleges have designated two groups for college-wide planning, e.g. NACUBO [8]. The important point here is that planning responsibility must be clearly assigned in some way. Each college should choose the particular type of arrangement that is best suited for its needs.

Another important aspect of responsibility is to determine what type of staff support will be available. Most colleges recognize the need for at least a one-half time planning assistant. This position is often filled by someone from within the institution who is familiar with the organization. The planning assistant generally reports to the president,[1] and

---

[1]The Dean of the college in case the college is part of a university.

is responsible for facilitating planning in a staff role. The responsibility
for doing planning rests on the line-officers of the institution and the
appropriate faculty and nonfaculty bodies. The question of whether a
planning assistant position will be designated and the job description for
that person needs be resolved in Track I.[2]

Interfaces

Under part (b) of track I, interface questions are resolved. Explicit
statements should be developed on how the proposed planning organization
relates to the current organization and its decision processes. For
example, planning and budgeting should be connected. There are many ways
to make the connection. One possibility is to state that plans and budgets
will be submitted together to the college board of trustees. This makes it
clear that plans and budgets must match, and that the plans are simply a
reflection of what is going to be accomplished with the budgeted funds. It
is good to make this type of concrete connection, so that planning and
budgeting processes do not drift apart.

Another interface might be with a long-range planning group. It is
possible that the long-range planning function could be absorbed by new
groups, or the long-range planning group could assume a broader role con-
sistent with the planning organization being specified. Such options need
to be considered as part of the interface problem.

Other interfaces that might be important are with the faculty as a
whole and with its subcommittees. This is particularily important because

---

[2]NACUBO strongly recommends such a position for their system of
planning [8].

there may be college constitutional issues involved. In this case it is best that the new system recognize constitutional rights and deal with them fairly. It is suggested that planning processes be devised to fit within the existing constitution. Trying to constitutionalize a planning system in the beginning could bog down the whole effort.

Finally, the relationship needs to be clarified between the planning process and the operating organization (administrators, departments, etc.). Persons or units with operating responsibility should be involved in planning that affects them. Operating units should have the right to deal with planning problems that fall entirely into their area of responsibility. It is very important to specify and clarify relationships between the operating organization and the planning process.

The essential point about interfaces is that all of the appropriate ones must be clarified. The appropriate interfaces may vary from one college to the next. The ones mentioned above are common examples from the author's experience.

Calendar

Finally, track I requires a consideration of calendar. After responsibilities and interfaces are defined, a calendar can be constructed that designates a regular cycle for planning. The type of planning discussed here is not a one-time exercise; it should be done on a recurring basis. The cycle would probably be annual with some of the elements not being done every year (e.g. mission statement). The calendar should indicate all of the planning activities, when they start and when they are completed, who is responsible, and how these activities relate to each other. It is

difficult to construct such a calendar because one must have a good grasp of the college operation and the proposed planning process. Nevertheless, a calendar is essential to the specification of a clear planning process.

TRACK II: DEVELOP PLANS FOR THE COLLEGE AND ITS UNITS

It is widely recognized that a plan should consist of three elements:

    (1)   Where are we now? (the environment, the situation and assumptions)

    (2)   Where do we want to go? (mission, goals and objectives)

    (3)   How do we get there? (strategies and means)

To accomplish planning, a college must not only recognize these three elements; it must also determine exactly how the elements will be implemented at the college-wide and at the unit level. This implementation problem is best resolved by specifying the types of planning documents that will be produced. Some illustrations of documents are presented below, but first the distinction between mission, goals, and objectives is given.

Mission, goals, and objectives are all statements of purpose. The distinction between them is usually based on the level of specificity of the statements with mission being the least specific, goals somewhat more specific, and objectives the most specific statements of purpose [7] and [9]. A mission statement is broad, enduring, and it can usually be expressed in one or a few paragraphs. A goal statement indicates general direction. An objective should be precise so that one can tell when it is achieved. All three of these statements of purpose should be incorporated into planning documents.

In organizing track II, it has been divided into the following two parts:

(a) <u>College-wide plans</u>. This part deals with developing plans for the college as a whole.

(b) <u>Organizational unit plans</u>. This part deals with developing plans for individual units of the college and for managers charged with specific responsibilities.

Each of these parts is described in more detail below.

College-wide Plans

In developing this track a college should specify the form of the plans to be produced. Two types of documents are suggested:

(1) Mission and goals for 1-5 years

(2) Plans for the next budget year

Notice that detailed long-range plans or long-range budgets are not listed above; they usually turn into "dart board" projections. However, it is very important to formulate mission and goals for 1-5 years. Such statements of long-range purpose are a great help in developing plans for the next budget year.

Plans for the next budget year should contain considerable detail. However, it is wise to concentrate on plans for only a few areas of college-wide priority, not for every aspect of the operation. A suggested procedure is as follows: A college-wide planning body could develop a list of perhaps ten college problems or goals that need attention during the next budget year. Examples are: to increase the number of freshman recruited; to move

toward more career-oriented education; and to establish better relations with the local community. These problems or goals would be assigned to college officers or departments for development of detailed plans of action. The plans of action should include a refined statement of the problem(s), and a suggested approach to be implemented. The resulting plans should be approved by the college body as being consistent with their initial statement of the problem, and budget funds would be provided, as needed, to support the plans. These ten planning documents together constitute the college-wide plan for the coming budget year. The above procedure is an illustration; each college should determine for itself exactly what types of plans are needed at the college-wide level.

Organizational Unit Plans

It is clear that planning is also needed at the organization unit level, so that the operation of units will conform in some sense with the college mission and goals. Unit planning would typically be done by the units themselves within the framework of college planning. A prerequisite to unit planning should be the college mission and goal statements mentioned above; otherwise the units will be planning in a vacuum.

The form of unit plans could be the same as the college-wide plans:

(1)   A statement of unit mission and goals for 1-5 years

(2)   Unit plans for the next budget year.

The unit plans for the next budget year might contain statements of specific objectives plus some idea of how those objectives will be achieved. These unit plans should help each unit identify special areas of emphasis or improvement for the next year. Many of the ideas of MBO [6] can be helpful to a college when it is formulating its own unit planning formats and processes.

A review mechanism is needed for unit plans to insure conformance to college-wide mission and goals. The exact review mechanism should be defined by each college.

The result of track II will be plans for the college as a whole and for organizational units. These plans should focus primarily on the next budget year within the framework of longer range mission and goals. These plans would assist in the process of budgeting, communications, clarification of responsibilities and orderly review of progress. It is absolutely essential that colleges get a better grasp on purposes and plans in order to reduce crisis oriented management and to move toward more effective resource management.

It is also essential that a feedback mechanism be established to review progress on each action plan during the year. Such reviews will help indicate that the plans are important, and not merely paperwork exercises to be put in the drawer and left there. The review schedule should be included in the planning calendar of track I.

TRACK III: DEVELOP THE INFORMATION SYSTEM
FOR PLANNING

It is widely recognized that an important ingredient of planning is an adequate information system. This track presumes that an information system is available for producing routine operating information. It builds on the operational information system to extract information which is suitable for planning purposes. It also utilizes external information as an important source.

There are two essential parts to this track as follows:

(a) Define Information Needs. This part identifies regular

and special reports (or information elements) that are

needed in the planning process. It defines what infor-

mation will be made available for specific uses and users.

(b) Produce and Use Required Information. This part develops

the computer programs (or manual methods), the special

analysis and the database revisions that are needed to

produce and use the required information. It is supportive

of the information needs defined in part (a).

The result of this track would be an information system that is capable of

suppling regular and special planning information needs. This system should

support not only the formulation of plans in track II, but also other planning

processes, such as, budgeting.

Define Information Needs

In defining information needs it is possible to simply ask the users

what they want. We reject this approach as being too simplistic. The

identification of information needs should include an element of educating

users on the type of information that is potentially available. Identification

of needs should, therefore, involve a substantial input of expertise aimed at

identifying and utilizing more sophisticated types of information for decision

making. The ultimate decision on "needs" should, of course, rest with the

user.

In defining information needs, two types of reports (or information

elements) can be identified, recurring and special. Recurring reports

are tied to regular processes, such as budgeting. Special reports might be related to more strategic issues or policy matters that do not recur frequently.

Examples of planning information are listed below. An indication of whether the information would be recurring (R) or special (S) is also given.

(a) cost analysis for budgeting decisions (R)

(b) environmental information for goal setting (S)

(c) program evaluation information (academic and nonacademic programs) (R and S)

(d) enrollment forecasts (R)

Many budget processes could be improved greatly by the addition of cost analysis information. Examples are: unit costs and cost ratios. To make sense of these costs; comparisons between units, over time and possibly with other institutions are useful. It is the purpose of track III part (a) to determine just what information would be appropriate for a particular college. No preconception of a certain type of cost information is intended, although some of the literature is useful in suggesting possibilities.

Many information systems largely ignore external information because they are focused on data that can be produced by a computer. For planning purposes, external data is crucial. This could include follow-up on students, reasons why students select a particular college or do not select it, community attitudes, and trends in the educational "market place."

Many institutions have some program evaluation data, but they would in general like more [1]. Assuming evaluation is based on goals, program

evaluation data cannot be assembled until statements of purpose in track II
are available. An idea of goals and objectives will help define the basis
for evaluation.

Finally, forecast data is key to planning. Many institutions have
methods of enrollment forecasting, but there is usually room for improve-
ment. In some cases more detailed forecasts by majors and forecasts of
employment opportunities could be utilized.

We have mentioned a few types of planning information above as
examples. The important point is that a systematic effort should be mounted
to identify information needs for support of planning. Whatever type of
information is selected it should meet the needs of the institution concerned;
the information system should be tailor-made.

Produce and Use Required Information

In producing information that is needed there are three areas of
development:

(1) Develop computer programs (or manual methods). This
    development will provide the regular reports.

(2) Develop special reporting and analysis capability.
    This area would involve some type of an institutional
    research function or its equivalent.

(3) Database revisions. The database may have to be
    developed or modified to produce the desired infor-
    mation.

These information producing parts must be kept in proper perspective
to the rest of the three track approach, both in terms of effort and

financial commitment. In the past, some efforts aimed at improved planning
have come at the problem entirely from the information producing end. The
result is usually a disaster, because the organization does not know how
to use the information that is generated. In the author's experience,
information producing capability in many organizations exceeds information
using capability. Under those circumstances additional producing capa-
bility must be tightly constrained by legitimate needs.

Regular reports can be produced by either computer or manual methods.
The question of whether a computer should be used or not is a question of
efficiency -- is it cheaper to produce the reports by computer? Although
the criterion of efficiency is simply stated, the application of it is
complex. Part of Track III is supposed to answer the question of how to
produce the regular reports required.

The development of a special reporting and analysis capability is
difficult for small colleges. Many cannot afford an institutional research
capability. If this is the case, special analysis would have to be con-
ducted by line officers and by whatever help might be available from
faculty. The availability of resources will seriously constrain what
can be done in the area of special report analysis.

Finally, the information producing component must provide for whatever
database revisions are needed. If systems are computerized, modification
is usually more difficult and expensive. Many institutions have sub-
stantial amounts of data available, although the form may not be quite
right. Over time the database can be evolved to support information
needs.

IMPLEMENTATION OF THE APPROACH

Up to this point, the paper has conceptually defined an approach for improved planning in colleges. It is appropriate now to discuss how one could go about implementing this approach at a particular college. There are many ways to proceed; the author has picked one way as illustrative of the main issues.

Organizing for a Planning Improvement Project

It is assumed here that a separate project will be organized to give the improvement effort some visibility and credence. It is doubtful that an improvement effort can succeed without being designated as a separate project.

Some of the very first things that a college should do when beginning a planning improvement project are listed below.

(1) Secure Top Management Support. The president (or dean) must be behind the project from the beginning and for the duration of the project. Planning begins and ends with the president (or dean) of a college — there is no substitute. Other key officers must also support the project. For research on the importance of top management support, see [10].

(2) Identify and Secure a Source of Financial Support. Based on past experience, from $25,000 to $100,000 is needed to support a project of this type. This amount includes costs of personnel, consulting, supplies and secretarial support. Some of this cost might be absorbed by utilizing internal resources.

(3) <u>Identify a Source of Management Expertise.</u> Generally an outside consultant should be retained to provide some expertise and an outside point of view. Most colleges do not have the expertise on their staff or faculty to implement the approach.

(4) <u>Plan on a 2-3 Year Time Period for the Approach.</u> This amount of time will be needed to define and actually implement a better planning process. A meaningful improvement in planning cannot be quickly achieved.

(5) <u>Establish a Steering Committee for the Duration of the Project.</u> The membership should include senior administrators, the consultant, internal staff involved in the project, and perhaps, faculty and students. This committee should have budget authority and responsibility to see that the project does not drift off the main approach. The group should meet periodically (e.g. monthly) to monitor the project.

After these prerequisites are met, a college is ready to start on the approach itself. In executing the approach it is useful to recognize two phases for each track as follows:

(1) <u>Initial Definition Phase.</u> During this phase the specific approach to be taken in each track is defined. In defining these approaches, the existing processes, available techniques, organizational preferences and constraints are taken into account. The result is a definition report for each of the three tracks.

(2) Operation and Development Phase. During this phase

the proposed process is operated and refined. If the

initial definition phase results in a perfect definition

of the process, it can be operated as defined. Usually

many changes will be made as the process is refined to

accommodate unforeseen needs. Thus the name, operation and

development phase, describes the evolving nature of this

phase. At the end of the operation and·development

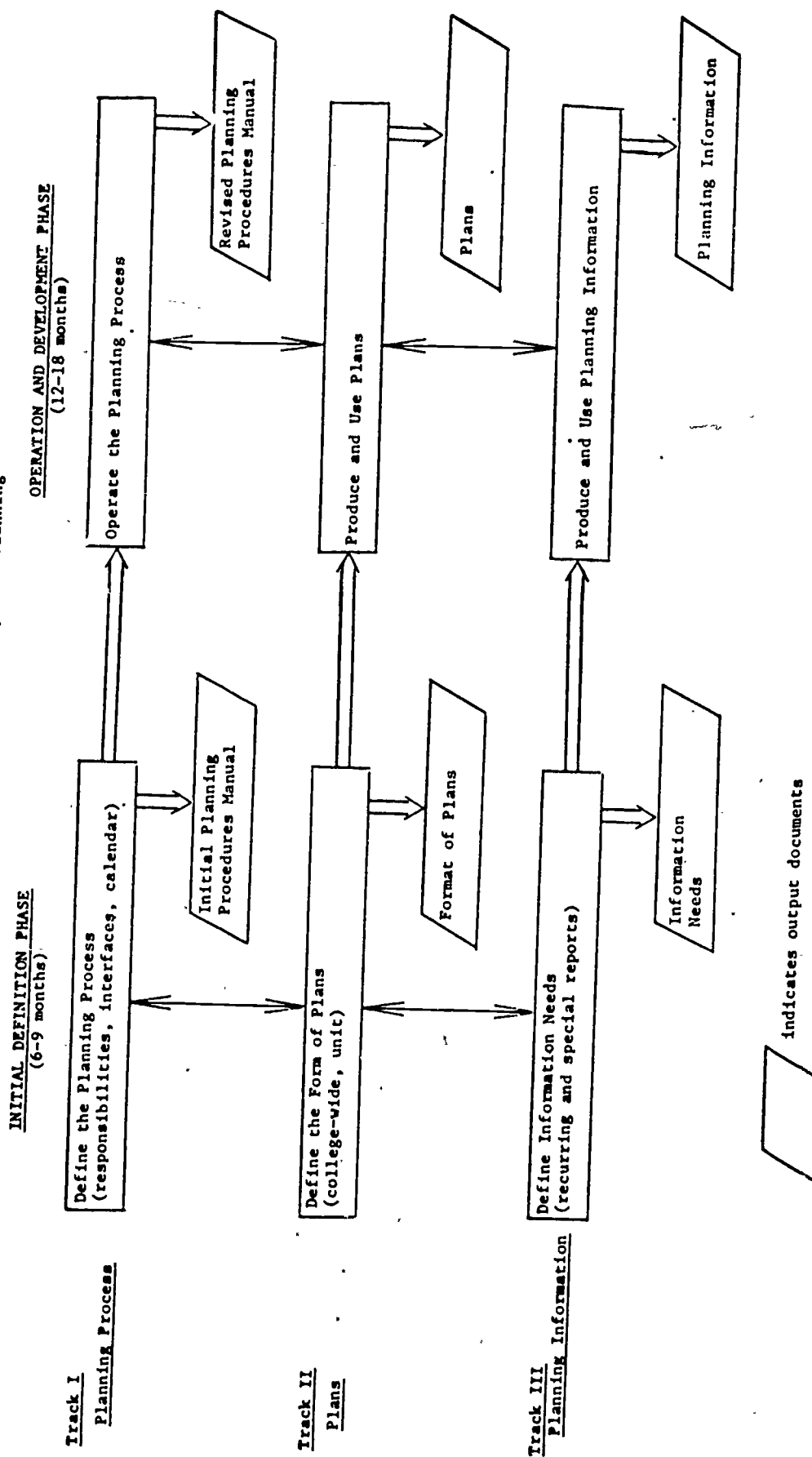phase a well-defined planning system should be operating.

A schematic of the two phases and three tracks is shown in Figure 3.

It indicates that the initial definition phase proceeds in all three tracks

simultaneously, followed by operation and development in all three tracks.

It is estimated that the initial definition phase will take from 6-9 months,

followed by an operation and development phase of 12-18 months. Each of

the phases is described in more detail next.

Initial Definition Phase

In beginning the definition phase it is suggested that a team or

person be assigned for each track, probably by the college president (or

dean). The appropriate person(s) are those who would be affected by each

of the tracks. A report would be produced for each track at the end of the

definition phase (6-9 months).

The consultant should work with persons assigned to each of the three

tracks on a regular basis. The consultant should not be responsible for

deciding on the report contents. However, the consultant could provide

substantial help in gathering information and in writing the reports.

Figure 3

Schematic of the Approach for Improved Planning

Track I
Planning Process

INITIAL DEFINITION PHASE
(6-9 months)

Define the Planning Process
(responsibilities, interfaces, calendar)

Initial Planning
Procedures Manual

OPERATION AND DEVELOPMENT PHASE
(12-18 months)

Operate the Planning Process

Revised Planning
Procedures Manual

Track II
Plans

Define the Form of Plans
(college-wide, unit)

Format of Plans

Produce and Use Plans

Plans

Track III
Planning Information

Define Information Needs
(recurring and special reports)

Information
Needs

Produce and Use Planning Information

Planning Information

indicates output documents

The consultant should also work with the steering committee in monitoring the entire approach. It is essential that the steering committee and the consultant take an active role in directing the project.

After initial definition is completed, there should be a review of the three definition reports, and approval by the project steering committee and the college. The review should include a study of integration between the reports, feasibility of the proposed processes, resource implications and so on. Ideally, many of the potential problems with the reports will be resolved by consultation, while the definition phase is in progress.

It may be helpful to briefly summarize the kinds of issues that are addressed and the result produced from each track during the definition phase. Track I should address issues of responsibility, interfaces and calendar in its report. The report should be an initial draft of the college planning procedures manual. The initial draft of the manual should act as a guide in establishing the process.

The report from track II should address how the college is going to produce and use college wide and organizational unit plans including examples of the types of plans that are desired. This track should also develop training documents that can be used to explain the proposed system to those who will eventually participate.

The report for track III should identify information needs for various users and a development plan for meeting those needs. This report will provide a basis for refining actual needs, producing the information and using it during the operation and development phase.

Operation and Development Phase

At the beginning of this phase, a reassignment of persons responsible for each track may be necessary. Ideally, there would be continuity between the two phases — the same person or groups would continue.

Consultant input is still necessary during this phase because it is assumed there will be substantial evolvement of the process and methods. The consultant should also continue to assist the steering committee in monitoring the entire approach as well as the individual tracks. The importance of direction from a steering committee cannot be overemphasized.

The activity in each track during the operation and development phase is described next.

In track I the process of planning itself is being evolved. Changes in responsibilities, interfaces and calendar would be made, as necessary, while the process is operated and developed. At the end of this phase a revised planning procedures manual should be issued.

In track II, plans are actually being produced and used for decision making. Any significant procedures developed should be incorporated into the planning procedures manual. The result of this track is a document containing college-wide and unit plans.

In track III, a planning information system is being developed and operated. The result of this track is a set of reports (special and regular) that are produced and used. It has been previously suggested that the plans from track II and the regular reports from track III be combined into a planning book for the college.

CONCLUSIONS

Many of the details mentioned in this paper are merely suggestions; they are not essential to the approach. The approach itself is supposed to be flexible. What then is essential to the approach? This is best described by Figure 3 -- the three tracks, the two phases and the various output documents shown are essential. If a college has done these things, it has followed the approach.

This paper has been mainly conceptual and descriptive. Experience in actually using this approach is just beginning to develop. Four colleges have adopted the approach, or something very similar to it, within the last year. The reaction of administrators was very favorable. They felt the approach was suitable for their colleges and were willing to commit resources to it. The favorable response of these administrators has prompted the writing of this paper, so that the approach can receive wider dissemination. It is anticipated that some field test experience will be available within two years; it will be reported separately.

If the approach seems obvious, you should be congratulated. In the four colleges mentioned above, most administrators did not conceptualize their problem in this way, although they readily identified with the concept once it was presented. Secondly, many operations researchers and systems analysts have not gone about improving planning in the manner suggested here. As explained in the introduction, most approaches only pick up a part of one or two tracks and many of them emphasize techniques rather than more general approaches.

The proposed approach is not suitable for all colleges. There are several preconditions that should be met:

(1) A philosophical agreement with the kind of goal-oriented and information-based planning described by the approach.

(2) A need to engage in more formal planning. This need is sometimes brought on by regents mandate, financial crisis, declining enrollments, new administrators or desire for change.

(3) A sound operating system based on good management and good procedures.

(4) The ability to finance the approach and to obtain the necessary consulting expertise.

(5) A relatively stable environment during the two years of the approach, i.e., low turnover of administrators and low faculty and student unrest.

It is hoped that this approach or some variant of it will be helpful to those who want to improve planning in colleges.

REFERENCES

1   Adams, Carl R., T. E. Kellogg and R. G. Schroeder, "Current and Desired
       Status of Information, Analysis, and Decision Processes in a Sample
       of Small Colleges," Research Report, University of Minnesota,
       Minneapolis, Minnesota, December 1, 1973.

2   Balderston, F. E. and G. B. Weathersby, "PPBS in Higher Education
       Planning and Management: Part III, Perspectives and Applications
       of Policy Analysis," Higher Education, Vol. 2, pp. 33-67, 1973.

3   Couger, J. Daniel and Robert W. Knapp (eds.), Systems Analysis
       Techniques, New York: John Wiley and Sons, Inc., 1974.

4   Eurich, Alvin C. and Sidney Tickton, "Long-Range Planning and Budgeting
       at Colleges and Universities," Academy for Educational Development,
       Washington, D.C., Paper 6, 1973.

5   Knezevich, Stephen, Program Budgeting, McCutchan, 1973.

6   Lahti, Robert E., "Implementing the System Means Learning to Manage
       Your Objectives," College and University Business, February 1972.

7   National Association of College and University Business Officers,
       College and University Business Administration, 3rd ed.,
       Washington, D. C., 1974.

8   _____, "A College Planning Cycle, People, Resources and Process, A
       Practical Guide," Washington, D. C., 1975.

9   Ohio Board of Regents, Management Improvement Program, "Planning -
       Universities," Management Division - Academy for Educational
       Development, July 1, 1973.

10 Radnor, Michael and Albert Rubenstein, "Implementation in Operations
       Research and R & D in Government and Business Organizations,"
       Operations Research, Vol. 18, No. 6, November-December 1970,
       pp. 967-991.

11 Schroder, Roger G., "A Survey of Management Science in University
       Operations," Management Science, Vol. 19, No. 8, April 1973.