DOCUMENT RESUME

ED 212 836 CE 031 319

AUTHOR	Greer, David R.; And Others
TITLE	Prepare Vocational Education Budgets. Competency-Based Vocational Education Administrator Module Series. Leadership and Training Series No. 58B-13.
INSTITUTION	Ohio State Univ., Columbus. National Center for Research in Vocational Education.
SPONS AGENCY	Consortium for the Development of Professional Materials for Vocational Education.
PUB DATE	81
NOTE	98p.; For related documents see CE 031 320-322, ED 164 746-754, ED 204 484-485, and ED 204 487-488. Some figures may be marginally legible.
AVAILABLE FROM	National Center Publications, The National Center for Research in Vocational Education, The Ohio State University, 1960 Kenny Rd., Columbus, OH 43210 (LT 58B-13, $6.25).
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	*Administrator Education; Administrator Responsibility; Administrator Role; Behavioral Objectives; *Budgets; Case Studies; Competence; *Competency Based Education; *Educational Administration; Educational Finance; Experiential Learning; Higher Education; Job Skills; Learning Activities; Learning Modules; Management Development; *Vocational Education

ABSTRACT

Designed to provide pre- and inservice vocational education administrators with the skills necessary to prepare vocational education budgets, this competency-based learning module consists of an introduction and four sequential learning experiences. Each learning experience contains an overview with objectives and required and optional learning activities. The topic covered in the first learning experience is reviewing given budget estimates for accuracy and completeness. Critiquing performance of an administrator in a given case study in deciding among budget proposals is dealt with in the second learning experience, as is selecting the better of two proposals provided. The third learning experience entails analyzing given budget data and recommending needed budget revisions based on that analysis. The final learning experience involves preparing vocational education budgets in an actual administrative situation. An administrator performance assessment form is provided. (Related competency-based vocational education administrator modules covering other skills are available separately--see note.) (YLB)

Leadership and Training Series No. 58B-13

PREPARE VOCATIONAL EDUCATION BUDGETS

COMPETENCY-BASED VOCATIONAL EDUCATION ADMINISTRATOR MODULE SERIES

Consortium for the Development of Professional
Materials for Vocational Education

Robert E. Norton, Consortium Program Director
David R. Greer, Graduate Research Associate
Lois G. Harrington, Program Associate
Aubrey E. Long, Graduate Research Associate

The National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

1981

The work presented herein was performed by the National Center for Research in Vocational Education on behalf of the Consortium for the Development of Professional Materials for Vocational Education. Sponsors and members of the Consortium for 1978-1979 included the following states and/or cooperating agencies: the Florida Department of Education, Division of Vocational Education, and Florida International University, Division of Vocational Education; the Illinois State Board of Education, Department of Adult, Vocational and Technical Education, and Southern Illinois University at Carbondale; the New York State Education Department, Office of Occupational and Continuing Education; the North Carolina Department of Public Instruction, Division of Vocational Education; the Ohio State Department of Education, Division of Vocational Education; the Pennsylvania Department of Education, Bureau of Vocational Education, and Temple University, Department of Vocational Education; and the Texas Education Agency, Division of Occupational Education. The opinions expressed herein do not, however, necessarily reflect the position or policy of any of the sponsors, and no official endorsement by them should be inferred.

THE NATIONAL CENTER MISSION STATEMENT

The National Center for Research in Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation, and progression. The National Center fulfills its mission by:

- Generating knowledge through research
- Developing educational programs and products
- Evaluating individual program needs and outcomes
- Providing information for national planning and policy
- Installing educational programs and products
- Operating information systems and services
- Conducting leadership development and training programs

For further information contact:

The Program Information Office
The National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

Telephone: (614) 486-3655 or (800) 848-4815
Cable: CTVOCEDOSU/Columbus, Ohio

FOREWORD

The need for competent administrators of vocational education has long been recognized. The rapid expansion of vocational education programs and increased student enrollments have resulted in a need for increasing numbers of vocational administrators at both the secondary and postsecondary levels. Preservice and inservice administrators need to be well prepared for the complex and unique skills required to successfully direct vocational programs.

The effective training of local administrators has been hampered by the limited knowledge of the competencies needed by local administrators and by the limited availability of competency-based materials specifically designed for the preparation of vocational administrators. In response to this pressing need, the Occupational and Adult Education Branch of the U.S. Office of Education, under provisions of part C--Research of the Vocational Education Amendments of 1968, funded the National Center for a scope of work entitled "Development of Competency-Based Instructional Materials for Local Administrators of Vocational Education" during the period 1975-77. That project had two major objectives:

1. To conduct research to identify and nationally verify the competencies considered important to local administrators of vocational education.
2. To develop and field test a series of prototypic competency-based instructional packages and a user's guide. One hundred sixty-six (166) high priority competencies were identified and six prototypic modules and a user's guide were developed, field tested, and revised.

While six modules had been developed, many more were needed to have competency-based materials that would address all the important competencies that had been identified and verified. In September 1978 several states joined with the National Center for Research in Vocational Education to form the Consortium for the Development of Professional Materials for Vocational Education. Those states were Illinois, Ohio, North Carolina, New York, and Pennsylvania. The first five states were joined by Florida and Texas later in the first year. The first objective of the Consortium was to develop and field test additional competency-based administrator modules of which this is one.

Several persons contributed to the successful development and field testing of this module on preparing vocational education budgets. David R. Greer, Graduate Research Associate, assumed the major responsibility for reviewing the literature and for preparing the actual manuscript. Special recognition also goes to Dale Baughman, JVS District Superintendent, Montgomery County JVSD, Clayton, Ohio, who helped conceptualize the module and prepared draft materials for the manuscript; and to Walter Hack, Professor, Academic Faculty of Educational Administration, The Ohio State University, Columbus, Ohio, who helped conceptualize the module, review draft materials, and coordinate its development with the three other modules dealing with financial matters.

Acknowledgement is given to the three official reviewers who provided critiques of the module and suggestions for its improvement: Charles E. Hawley, Superintendent, Medina JVS, Medina, Ohio; R. Winifred Johnson, Supervisor, Occupational Education, Bureau of Occupational Education Services, New York State Education Department, Albany, New York; and Gene M. Love, Professor and Head, Department of Agricultural Education, The Pennsylvania State University, University Park, Pennsylvania.

Credit goes to Lois G. Harrington, Program Associate, who helped to refine the module for publication after field testing; and to Robert E. Norton, Consortium Program Director, for providing program leadership and content reviews. Thanks go to Ferman B. Moody, Associate Director for Personnel Development, for his administrative assistance.

Appreciation is also extended to Calvin Cotrell, James Haire, George Kosbab, Helen Lipscomb, Aaron J. Miller, Dominic Mohamed, Robert Mullen, James Parker, Dale Post, Wayne Ramp, and Kenneth Swatt for their service as state representatives, state department contacts, and field-test coordinators; and to the other teacher educators and local administrators of vocational education who used the modules and provided valuable feedback and suggestions for their improvement. Last, but certainly not least, thanks and credit are due Deborah Linehan, Consortium Program Secretary, for her patience and expert skill in processing the many words necessary to make this module a high-quality document.

Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education

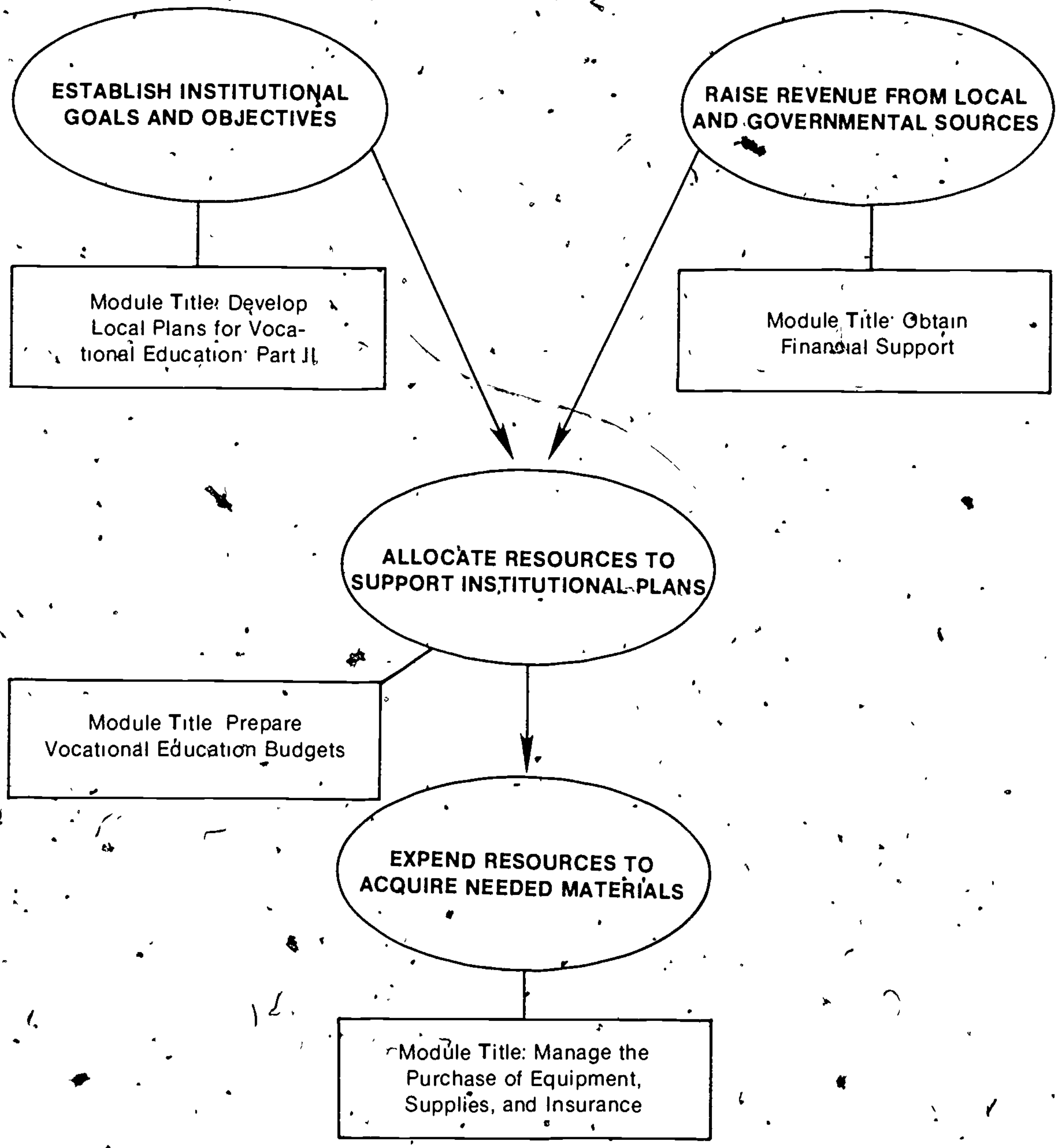
INTRODUCTION

What does a budget mean to you? Is it synonymous with an annual attack of anxiety, an encounter with rising prices and dwindling resources, quarrels with staff wanting more than their fair share of a too-small pie, and repeated computational trials that never seem to come out right? Is a budget the final part of a proposal that you always put off until the last minute? These and other negative feelings about the common task of budgeting are not unusual. However, it is possible for you to cultivate a positive approach to this subject, and one way to attain this feeling is to understand the concept of a budget more deeply, and to acquire some practice applying a few basic principles in a simple setting.

This module should help in all these respects. By reading the materials presented here, and by completing the various activities, you will recognize that a budget is actually just a good plan, one that is set in financial terms. It reflects the outcome of a "creative tension" or dialogue between (1) desired products or outcomes, and (2) the resources needed to fuel the activities that bring about these outcomes. The budget is a device that performs several functions for you as you plan and administer a vocational education program. These functions include projecting revenue needs, reflecting priorities, describing programs, controlling expenditures, and facilitating (or giving structure to) your evaluation efforts. This module contains information and activities designed to help you understand this close relationship between planning and budgeting.

You can benefit from this module regardless of your administrative role or level within your institution. Although most of the examples will relate to institution-level activities, they will usually apply to department-, area-, or program-level activities as well. Regardless of your role--which might be that of a decision-maker (such as a dean, superintendent, or director), a person requesting money (instructor, program coordinator, department chairperson), or a supporting staff member (business manager, systems analyst, institutional researcher)--this module should help you become a more willing, eager, and competent participator in the budgeting process.

Three other modules in this series fit particularly well ~~with~~ this module (see graphic that follows), but they need not be studied at the same time, or as prerequisites. The module Develop Local Plans for Vocational Education: Part II deals in considerable detail with how to generate alternative plans and select the best ones. Obtain Financial Support is related to the ways in which the needed resources are secured, whether by taxes, subsidy, tuition, grants, or contracts. Finally, Manage the Purchase of Equipment, Supplies, and Insurance helps the administrator learn how to spend money wisely, especially how to purchase materials or services economically and use them conservingly.



CONCEPTUAL RELATIONSHIPS OF THIS AND THREE OTHER ADMINISTRATOR MODULES

Module Structure and Use

This module contains an introduction and four sequential learning experiences. Overviews, which precede each learning experience, contain the objectives for each experience and a brief description of what the learning experience involves.

Objectives

Terminal Objective: While working in an actual administrative situation, prepare vocational education budgets. Your performance will be assessed by your resource person using the "Administrator Performance Assessment Form," pp. 93-96. (Learning Experience IV)

Enabling Objectives:

1. After completing the required reading, review given budget estimates for accuracy and completeness. (Learning Experience I)
2. After completing the required reading, critique the performance of an administrator in a given case study in deciding among budget proposals, and select the better from two provided to you. (Learning Experience II)
3. After completing the required reading, analyze given budget data, and recommend needed budget revisions based on that analysis. (Learning Experience III)

Resources

A list of the outside resources that supplement those contained within the module follows. Check with your resource person (1) to determine the availability and the location of these resources, (2) to locate additional references specific to your situation, and (3) to get assistance in setting up activities with peers or observations of skilled administrators.

Learning Experience I

Optional

- REFERENCE: Cheek, Logan M. Zero-Base Budgeting Comes of Age. New York, NY: AMACOM, 1977.
- REFERENCE: Chuang, Ying Co. "Zero Based Budgeting for Vocational Education." American Vocational Journal. 3 (April 1977): 24-26.
- REFERENCE: Harvey, L. James. Zero-Base Budgeting. Washington, DC: McManis Associates, 1978.

- REFERENCE: Ohio Board of Regents. Program Budgeting: Two Year Colleges. Columbus, OH: Ohio Board of Regents, 1973.
- REFERENCE: Weischadle, David. "Why You'll Be Hearing More About Zero-Base Budgeting, and What You Should Know About It." American School Board Journal. 164 (September 1977): 33-34.

Learning Experience II

No outside resources

Learning Experience III

No outside resources

Learning Experience IV

Required

- AN ACTUAL ADMINISTRATIVE SITUATION in which, as part of your duties, you can prepare vocational education budgets.
- A RESOURCE PERSON to assess your competency in preparing vocational education budgets.

Selected Terms

Administrator--refers to a member of the secondary or postsecondary administrative team. This generic term, except where otherwise specified, refers to the community college president, vice-president, dean, or director; or to the secondary school principal, director, or superintendent.

Board--refers to the secondary or postsecondary educational governing body. Except where otherwise specified, the term "board" is used to refer to a board of education and/or a board of trustees.

Institution--refers to a secondary or postsecondary educational agency. Except where otherwise specified, this generic term is used to refer synonymously to secondary schools, secondary vocational schools, area vocational schools, community colleges, postsecondary vocational and technical schools, and trade schools.

Resource Person--refers to the professional educator who is directly responsible for guiding and helping you plan and carry out your professional development program.

Teacher/Instructor--these terms are used interchangeably to refer to the person who is teaching or instructing students in a secondary or postsecondary educational institution.

User's Guide

For information that is common to all modules, such as procedures for module use, organization of modules, and definitions of terms, you should refer to the following supporting document:

Guide to Using Competency-Based Vocational Education Administrator Materials. Columbus, OH: The Center for Vocational Education, The Ohio State University, 1977.

This module addresses task statement numbers 155-160 from Robert E. Norton et al., The Identification and National Verification of Competencies Important to Secondary and Post-Secondary Administrators of Vocational Education (Columbus, OH: The Center for Vocational Education, The Ohio State University, 1977). The 166 task statements in this document, which were verified as important, form the research base for the National Center's competency-based administrator module development.

Learning Experience I

OVERVIEW

Enabling Objective

After completing the required reading, review given budget estimates for accuracy and completeness.

Activity

You will be reading the information sheet, "What Is a Budget and What Is Your Role in Its Preparation?" pp. 9-35.

Optional Activity

You may wish to read one or more of the following supplementary references: Cheek, _Zero-Base Budgeting Comes of Age_; Chuang, "Zero Based Budgeting for Vocational Education," _American Vocational Journal_; Harvey, _Zero-Base Budgeting_; _Ohio Board of Regents, Program Budgeting: Two Year Colleges_; and/or Weischadle, "Why You'll Be Hearing More About Zero-Base Budgeting, and What You Should Know About It," _American School Board Journal_.

Activity

You will be reading the "Case Situation," pp. 37-43, studying the two sample budget estimates, identifying deficiencies in the estimates, and providing additional or corrected information as necessary.

Feedback

You will be evaluating your competency in reviewing budget estimates for accuracy and completeness by comparing your corrected estimates with the "Model Corrections," pp. 45-46.

Activity

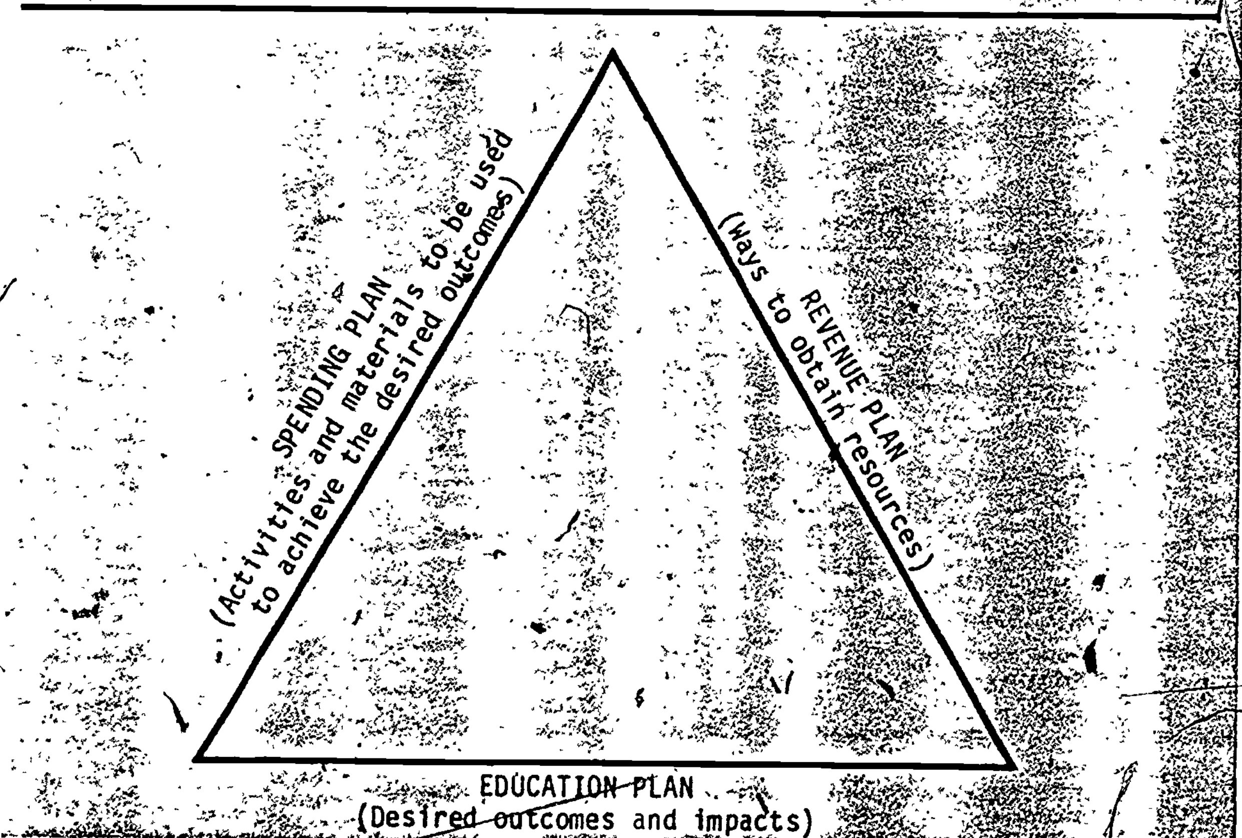
For information about how the budget fits into your institution's overall structure, how to estimate the income and expense figures it contains, and the role of various persons in preparing four types of budgets, read the following information sheet.

WHAT IS A BUDGET AND WHAT IS YOUR ROLE IN ITS PREPARATION?

A budget is a plan set in financial terms. One mental image that might help you remember the three basic elements of a budget is a triangle. The three sides of this triangle (see sample 1) represent the three elements of educational budgeting: the education plan (desired outcomes), the spending plan (proposed activities and materials to be used to achieve the outcomes), and the revenue plan (ways to obtain resources by which you can finance the activities and materials). This model will appear often throughout the module.

SAMPLE 1

THE BUDGET TRIANGLE



You are probably already familiar with the budgeting process through working with your own household budget. At first glance, such a budget is merely a listing of what portion of the monthly income is to be expended for each of several financial commitments: house and car payments, food, insurance, and taxes (so-called fixed expenses); clothing, furniture, education, vacation, entertainment, gifts, and so on (discretionary expenses); and--if you're fortunate--some funds set aside in savings.

You didn't arrive at these allocations in an arbitrary fashion, did you? Most likely, you and your family had decided on certain things that you wanted to accomplish in the future (just like an education plan) and deliberately arranged your spending patterns (the spending plan) to fit these desired accomplishments. A decision to travel to Europe, for example, is no plan at all until you take steps to provide the (extensive) funding that the trip requires (the revenue plan, completing the triangle). Conversely, it wouldn't make much sense to allocate "5 percent for the stock market" if you didn't have a broker, didn't understand the market, and weren't sure if you should be dabbling in this type of investment. A budget is meaningless without a plan to shape it, and a plan is an empty promise unless it is supported by a budget showing how you will use your resources to accomplish the plan's objectives.

In this information sheet, we will discuss some of the basics of educational budgeting, including the following:

- How budgeting fits into the total organization and affects its structure, goals, personnel, and planning activities
- Who does what with a budget and where your role fits in
- What specific techniques exist for estimating and calculating income (revenue) and expenses, in several categories
- What four main types of budgets you will be working with

The Budget and Its Institutional Neighbors

The budgeting process and the completed budget are integral elements of the organizational structure and operation and cannot be understood completely without being related to this context. The broadest setting within which the budget must be placed is that of the state educational system. The state legislature--through the education department or higher education coordinating agency, or through the state auditor, or both--often will prescribe the form that must be followed in preparing a budget proposal or report. To the extent that variation is allowed, local board or administrative policy (or tradition) will have further developed [illegible] specific framework for the various budget documents (e.g., proposals, summaries, reports, appropriations, and listings). The result is that you don't have to dream up the budget formats from scratch--just look at last year's, or consult a state department reference guide, or adapt sample 2.

SAMPLE 2

TYPICAL BUDGET FORMAT FOR A SECONDARY VOCATIONAL SCHOOL

Income

1. Local tax funds (valuation x millage rate =) $----
2. State "foundation" reimbursement
   a. Salaries
   b. Retirement and sick leave
   c. Extended service
   d. Travel
3. Tuition
   a. Day students
   b. Adult education
4. Farming operations
5. Interest or deposits
6. Miscellaneous student fees
7. Other income

TOTAL ESTIMATED FUNDS AVAILABLE $----

Expenditures

1. Personnel services--salaries and wages
   a. Administration--superintendent, treasurer, board
   b. Instruction--principal, supervisors, teachers
   c. Coordinated/auxiliary services--nurses, librarians, media technicians
   d. Plant operations--coordinator, janitors
   e. Maintenance--repairmen, groundskeepers
   f. Special services--tutors, lecturers, attorneys
   g. Other
2. Supplies
   a. Textbooks
   b. Library--periodicals, books, newspapers
   c. Audiovisual software
   d. Supplemental materials
   e. Other
3. Equipment and replacements
   a. Office furniture
   b. Motor vehicles
   c. Instructional
   d. Recreational
   e. Maintenance and custodial
4. Contract and service
5. Fixed charges
   a. Insurance--hospitalization, life, casualty, liability
   b. Retirement--teachers, employees
   c. Workers' Compensation
   d. Auditing
   e. Elections
   f. Unemployment
   g. Student activities
   h. Other
6. Debt service
   a. Payment on principal
   b. Payment on interest

TOTAL GENERAL FUND EXPENDITURES $----

However, the technical layout of the budget documents is not the most significant aspect of budgeting. What is important--to you, to your institution, and to your community of citizens, students, and faculty--is the entire planning process. The education plan--the institution's overall mission, goals, and objectives--is the focal point, but it relies on resources to make it work. Educational planning and budgeting are part of a single process--interrelated and interactive. The budget grows out of, and provides the support for, your educational plans.

While you are developing ambitious educational plans, you need to be aware of whether you have the resources at hand to make these plans come true. If you are trying to decide between two, three, or many competing plans, you need to know how much each one costs, or more importantly, how much each plan yields in the way of results for a given level of investment. While you are deciding to whom you'll give scarce resources, you will want to remind yourself of the overall aims of your institution, and the particular role that each receiving department is to play in attaining those objectives.

In addition, you can hardly expect the public to provide your institution with funds if you haven't developed--and announced--what goals you hope to attain using these funds. You would not expect the board or chief administrator to grant funds to this program or that department without some idea of how those funds will be used. It is for this reason that each subordinate part of the institution (1) has its own, albeit smaller, education plan, and (2) also develops a spending plan it will follow to obtain those objectives.

Because of this interrelationship between planning and budgeting, it is important that they be developed concurrently--that goals and objectives be developed at the same time that resource allocations are made. This does more than result in a realistic budget and workable plans. First, it involves an efficient use of staff time and effort. Since the people who are involved in planning and operating the institution, in controlling expenditures and developing resources, and in helping to accomplish the institution's goals should be the same ones who determine its budget, staff do not have to serve on two different committees or attend two sets of meetings.

Second, planning in relationship with budgeting provides a ready means for evaluating how efficiently the recipient departments or programs have used their resources, and how effectively they have fulfilled their stated purposes. Also, the board or administrator distributing the resources can immediately explain to the providers why these allocations have been made, and exactly what ends will be served by them.

This duality, or close coordination between planning and funding, is usually reflected in official governmental policy. Most state education agencies require that proposals to offer new curricula or degree programs be supported by tentative budgets and statements of the availability of resources. Likewise, requests for special public monies, such as a federal aid proposal, require that the proposal writer state explicitly what the grantee plans to do with the money, what outcomes will be realized, and what evaluation techniques will be used to indicate that these goals were reached. In addition to special ad hoc proposals, the routine, sustained activities of an institution must also be described in outcome terms--often in the form of a long-range plan--in order for the institution to remain eligible for regular annual appropriations or subsidies from the public treasury.

A final thought about combined planning and budgeting. The emergence of this concept as a routine way for government to conduct its business has spotlighted two particular techniques: Planning-Programming-Budgeting Systems (PPBS) and Zero-Based Budgeting (ZBB). PPBS, first widely publicized during the mid-1960s, integrates many of the concepts already presented here. Simply put, an organization first determines its goals (the "education plan") through planning; next identifies the activities (programs) that can effectively reach these goals (a spending plan); and then budgets for those alternatives that seem to use funds (acquired by following a revenue plan) most efficiently to support those activities. The whole process seems to flow logically from needs assessment (what should we do?)--through planning and budgeting--and ultimately to evaluation (how well have we done it?).

ZBB became widely known in the mid-1970s. This approach assures that all proposals are considered on a fairly equal basis, granting no particular advantage to current activities or "business as usual." Alternative ways of accomplishing desired objectives are considered; not doing something, even though "it's always been done this way," is always one of the alternatives. Likewise, conducting a current activity at only 70 percent (or 95 percent, or whatever) of its usual level is another alternative. By requiring each separate program or activity ("decision component" is the ZBB terminology) to be associated with its cost and consequences, it is argued that ZBB eliminates the built-in bias for the status quo, thus giving new programs a better chance to receive funds. Some organizations using this system have developed sophisticated means of quantifying intended results and have used complex methods for determining the ranking of alternatives in determining which one(s) will be funded. This complexity, with its attendant high levels of paperwork and time requirements, need not characterize the ZBB approach, however. You can use these same ideas without following all the detailed procedures.

The term program budgeting also has sometimes been applied to integrated budgeting/planning/management systems. Its concepts are very similar to those of PPBS or ZBB. More to the point, it involves different ways to use accounting data in determining costs. Specifically, program budgeting and accounting methods classify costs and revenue in terms of program objectives and outcomes (credit hours granted, students graduated, patients attended to, automobiles repaired, or diners fed) rather than in terms of traditional activity line items that actually represent inputs (e.g., personnel services, maintenance, transportation, building and grounds).

For example, a dental hygiene program, whose outcomes include licensable graduates, pays all of the costs for dental instructors, special supplies, and special equipment. However it is allocated a portion of the costs of inputs such as facilities upkeep, general administration, or library services. The program also is charged for that portion of prerequisite or supporting courses (e.g., psychology and English) taught by other departments of which its students are "customers." In the same fashion, it is credited with some portion of the tuition or state subsidy revenue, along with clinical fees for cleaning teeth. Associating costs and income with programs in this way certainly facilitates making the input vs. output decisions (or, what do we get for what we give?) that should be part of budgetary deliberations.

In this module, we will be following many of the principles of all three--PPBS, ZBB, and program budgeting--even if we don't adhere to their specific procedural details.

Who Does What with the Budget

Regardless of your position or duties within the institution, you will likely be involved with the budgeting process in some way. And while we're on the subject, let's understand one important fact very clearly: The business officer (assistant superintendent or vice-president for business, or whatever the title) is not the person with sole responsibility for the budget. In fact, he or she doesn't necessarily have even a major role as far as the planning decisions go. Whether you are a top academic administrator working with the overall budget, or a vocational program director dealing with a specific part of the budget, you can and should contribute much of the important information and values needed in order for a sound budget to be developed.

Let's look at the roles of the various persons in the organization concerning the budgeting process.

Instructor. Who knows the educational needs of the student better than the classroom instructor? This person also is aware of the time and effort (work load) required to aid effective learning and is well informed about the equipment, supplies, and facilities that are used in the support of teaching and learning activities. Thus, most budget proposals and requests come from instructors, or should at least be reviewed by them. However, they cannot have sole authority; rather, their preferences, subject-area interests, or "tunnel vision" must be balanced through a mutual, rational, decision-making process.

Staff specialist. This general term is used here to include the many professional persons that provide specialized services, usually in the support or nonacademic areas of the institution. These include community services; institutional operations such as computers, maintenance, records, library, and audiovisual; and student service functions such as guidance, admissions, or placement. Persons in these areas are similar to instructors in their specialized knowledge of the activities and tools of their respective trades. Their role in originating and checking budget proposals relating to their particular areas corresponds to that of instructors.

First-level supervisors. Perhaps "administrators" is a better term, but what we mean is someone such as a department chairperson, occupational specialty coordinator, vocational service area director, or head of a student personnel office. In other words, this person is the "boss" of the staff people mentioned earlier, or the leader of several teachers in an academic area. These persons guide the development of proposals by their faculty or staff, ensure that overall department/office requirements are met, and help strike a balance among competing requests for (probably) limited funds. In essence, these persons prepare a vocational education budget for a department or program, using all the skills covered by this module (e.g., estimating, decision making, expenditure control, and cost computation).

Dean or director. (Or vice-president or assistant superintendent . . . of the vocational program, or academic affairs, or administration, or student services, or whatever, depending on the setting) That is, these people occupy the next level(s) of responsibility above the supervisors described earlier but are right below the chief administrator. Their role is like that of the supervisors, only one step higher and broader. They, too, prepare budgets, implement and enforce them, and revise them as needed to fit into the overall plans and goals of the institution, as accomplished within their area of responsibility.

President, director, or superintendent. This is the person who reports to the board of education or trustees--the chief administrator. He or she must assume overall leadership responsibility for the budgeting process and is ultimately accountable to the board for the use of resources in reaching the institution's goals. At this level, all the subordinate budget proposals are collected, placed in priority order, and funded at the levels deemed appropriate. The final budget emerges as a recommendation to the board. That doesn't mean it's a one-person job, however. Rather, it is a process that involves many other persons.

Board. As you can conclude from the preceding paragraph, this body makes the final budgeting decision by adopting--either "as is" or after revising it--the budget recommended by the chief administrator. This isn't necessarily a seven-person, half-hour session; more appropriately, the board should have a budget/finance committee that would have been involved with the administration all along.

Business officer. Now we finally get to this staff position. We won't deny the important role played in this office, but it's not as all-encompassing as you may have thought. First of all, this person manages an office, so he or she has to prepare and submit a budget just like all the other supervisors and administrators. The special contributions coming from this person are (1) information about the institution's history of costs and revenues--data that everybody else needs to make intelligent estimates on their own budget proposals, and (2) a uniform structure--an accounting scheme--that allows for comparisons (a) among programs, (b) with the past, and (c) with legal, auditable requirements. And finally, the ultimate in budget control is exercised here; this is the person who can tell you how much is left in your budget, and who might even have to refuse to sign a purchase order or check if you exceed your allocated amount! Even so, the business officer only enforces the spending plan; it was many others who helped develop it, and who tied it to a particular education plan.

Institutional research/planning officer. Many other titles could apply here; some institutions don't even have such an official. Primarily, a person in this capacity develops and provides information about nonmonetary, but often quantifiable or measurable, aspects of the institution's activities. Planning, course evaluation, community surveys, benefit analysis, enrollment projections, program innovations, productivity studies, manpower trends, and similar activities or data are the products of this office. This information can help you or your budget committee in preparing and evaluating budgets. Remember, though, this office, like the business office, merely provides you with information and staff support. You, not they, have the prerogative for deciding among alternative education plans at your level.

Estimating Revenues

Maybe you feel unprepared for forecasting the income for your department, project, or institution during the next year. And who could ever make a five-year prediction, right? Relax! You'd be surprised at how much help is available when you take on this task, and it's a good thing. After all, without a reasonable estimate of your resources, it certainly would be difficult to decide what levels of activities could be supported. That's why we'll start with revenue calculations (the adding part) and wait a little while for the material on estimating expenditures (the subtracting-until-you-end-up-with-zero-again part).

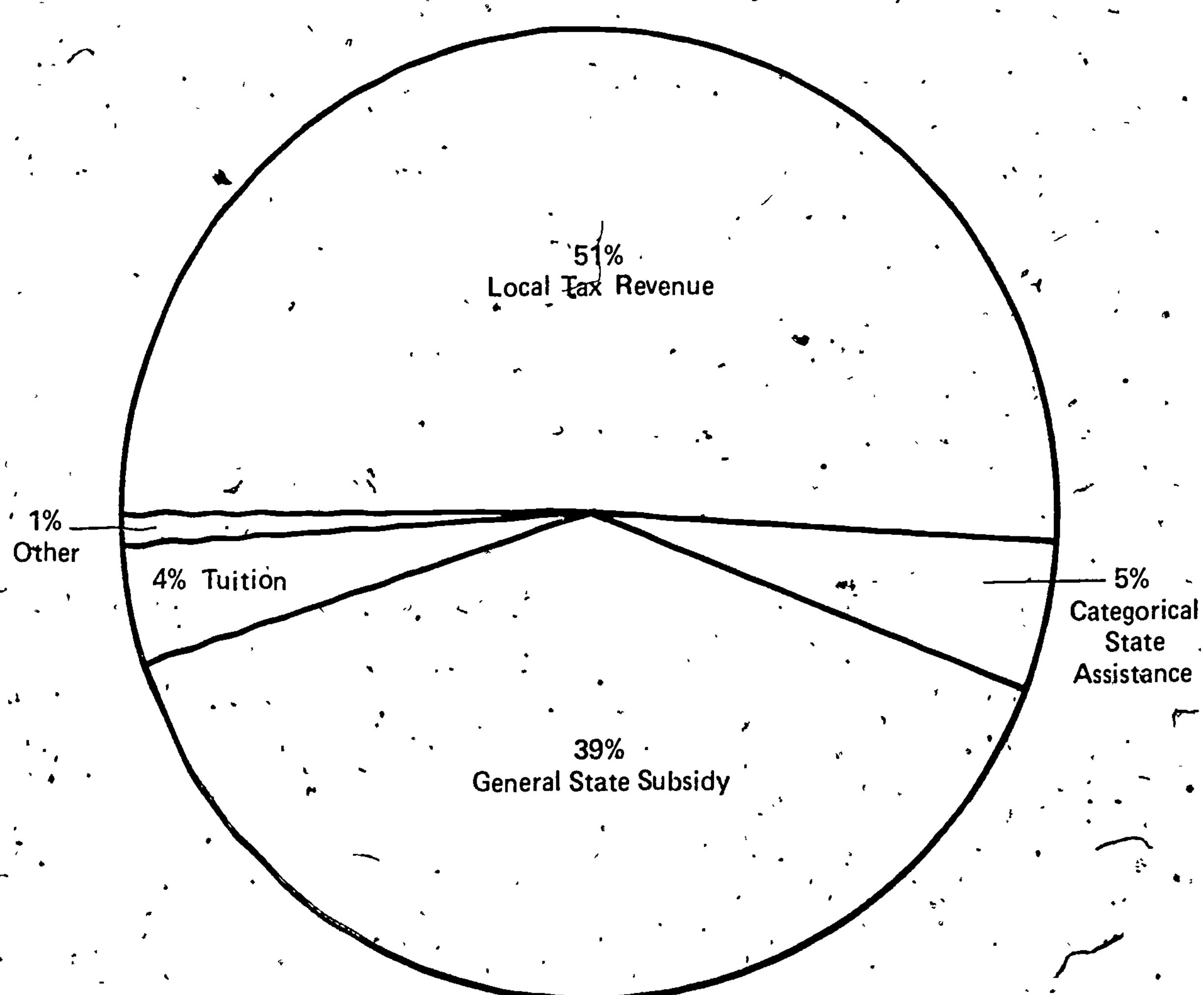
What are some of these aids to your estimating process? They include state formulas, worksheets, subsidy schedules, tax tables, and historical records. Let's look at them systematically, dealing first with institution-wide finances.

Funding for secondary schools. In the case of public schools, the primary sources of funding are local taxes (usually based on property value) and state aid or subsidy. (See sample 3 for the revenue sources of a typical school system.) The tax revenue depends, in turn, on two factors: the rate and the base. If your district is supported by property taxes, you can consult your city auditor, county auditor, or county schools office to learn what the millage rate is. While you're there, ascertain the assessed value of the taxable property in your district. For example, the homes, businesses, industries, utility installations, and so on, in your community might have been assigned a value of $400 million. If your tax rate is five "mills" (five-tenths of 1 percent, or $5 per $1,000 of property value), then your tax revenue is .005 x 400,000,000, or $2 million.

Of course, this estimate is accurate only for the immediate future. The millage rate can be changed by the board, by a county commission, or by the voters (laws vary from state to state); and the taxed valuation can be altered by reappraisal and general economic conditions. The local and state chambers of commerce and governmental economic development offices can give you estimates on the latter factors.

SAMPLE 3

TYPICAL REVENUE SOURCES FOR A SECONDARY VOCATIONAL SCHOOL



If yours is a secondary area/joint vocational school, your funding might come via the feeder schools or be allocated by a county budget commission. In addition to the calculations just described, then, you will need to learn the allocation rationale or the political considerations that influence these distribution decisions.

The other big piece of the income pie for public schools is state funding. Schemes vary among the states, but usually the allocation depends at least on the population, or census, of students in the system, multiplied by some factor that can vary as a function of either local tax effort or the special needs of certain categories of students.

Funding for postsecondary institutions. At the postsecondary level, some institutions, such as community colleges, receive local support (see sample 4). Also, the state provides a subsidy based, again, on some formula or set of factors, multiplied by the number of students or "full-time equivalent student" (FTE). FTE is usually calculated by adding up (aggregating) the total number of credit hours the students are signed up for (e.g., 30,000 semester credit hours) and dividing by some standard factor (if it is 15 hours per FTE, then 30,000 hours ÷ 15 = 2,000 FTE). Or, students may be categorized according to type of program, since some curricula involve higher expenditure amounts per FTE.

The other primary source of funding for postsecondary institutions is tuition. The rate is usually set by the board, perhaps within state-imposed limits. Multiply this rate by the expected number of students to determine tuition income.

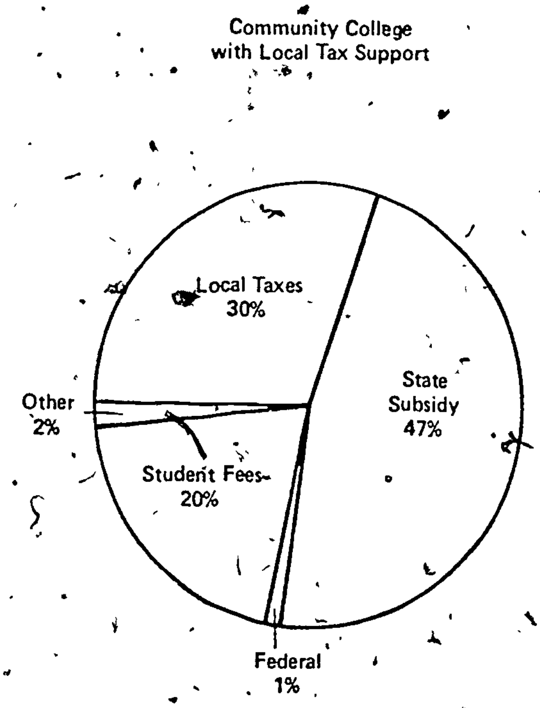
Enrollment projections. The previous discussion introduces a problem area known as enrollment projections. The process is not as easy as it was 15 years ago. Then a postsecondary administrator could just locate the demographic data on population levels by age, or number of students graduating from high schools in a service area, and multiply by a known, and stable, attendance rate.

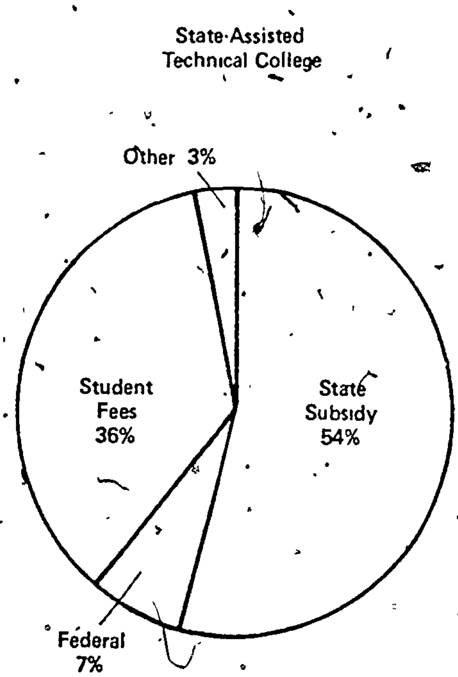
Unfortunately for you, the predictor, things are a bit less predictable now. For one thing, going on to some kind of college is no longer a foregone conclusion for high school graduates. They now face many alternatives (some of them very attractive) such as industrial jobs, military service, specialized training, and apprenticeship programs. Also, there is now a wider variety of postsecondary education opportunities available, such as occupational, general, pretransfer baccalaureate, preprofessional, and the like. On the other hand, greater numbers of "nontraditional" students enter, or return to, education at older ages, after marriage, while still employed full-time, or on only an intermittent basis. All these phenomena make the "prediction formula" very complicated.

How can you master it? You can study trends, including the current experience of your own institution (see sample 5), that of nearby or similar institutions, patterns of demography such as local in- and out-migration, or birth and marriage rates. Indices of local or state economic activity will

SAMPLE 4

TYPICAL REVENUE SOURCES FOR POSTSECONDARY INSTITUTIONS





SAMPLE 5

COMPARING ADMISSIONS/REGISTRATION PROGRESS DATA

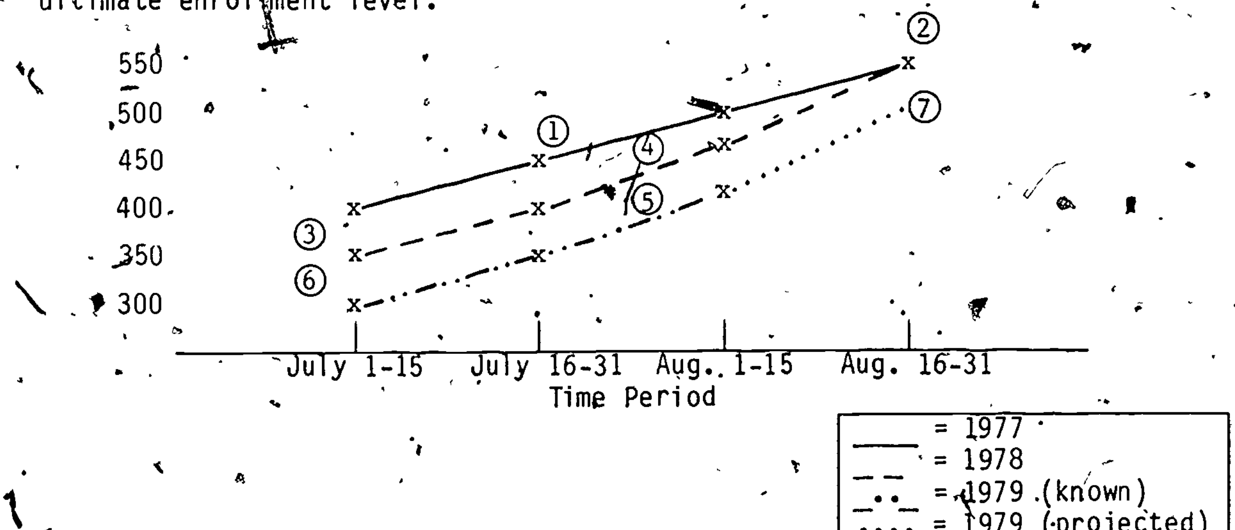
Many postsecondary institutions compare the progress of admissions or registrations from year to year as an aid to making enrollment predictions.

First of all, it is necessary for the admissions office or registrar to count completed applications or registration forms at fixed, frequent intervals. Then, tabular reports showing these data on a cumulative basis should be prepared. As of August 20, 1979, such a table might look like this:

Total Applications Received by Two-Week Period for 1977, 1978, 1979

	1977	1978	1979
July 1-15	400	350	300
July 16-31	450	400	350
Aug. 1-15	500	475	425
Aug. 16-31	550	550	-

To aid your interpretation of these data, you should plot them as line graphs on the same sheet of paper. By comparing the shape of the graphs, and their relative positions, you can make an "educated guess" regarding the ultimate enrollment level.



This graph shows ① that the 1977 admissions climbed evenly (50 every two-week period) to reach an ultimate level of ② 550. The 1978 admissions had ③ lagged behind comparable 1977 periods by 50, but ④ surged upward during August to reach the same final total of 550.

Now it appears that the 1979 figures are also surging in August, ⑤ parallel to 1978; but, since they are ⑥ consistently below 1978 data by 50, then the projected end figure will be ⑦ only 500.

give clues about the employment picture. In addition, don't ignore the fact that your institution can affect its attendance rate somewhat by enhancing its reputational quality, clearly defining and publicizing its role, targeting its recruitment efforts to specific groups of prospective students, offering vocational programs that serve particular local needs, and implementing public information and community involvement programs.

These same principles apply to the administration of high-school-level vocational programs, whether in comprehensive high schools or area vocational schools. As the administrator, you still have the problem of determining what portion of students will choose to enroll in vocational education programs. Furthermore, you can also influence student decisions and predict them--to some degree.[1]

Perhaps the best way to take all these factors into account simultaneously is (1) to use the past year's enrollment as a baseline, and then (2) to adjust it up or down by increments using each factor in turn (see sample 6). The percentage figures used there are hypothetical; you should derive your own by consulting local officals, statewide statistics, and expert opinions of staff and advisory committee members.

These projected enrollments will be very useful in other planning situations, too, especially in estimating space and facility requirements, developing master schedules of classes, predicting future faculty needs, or calculating likely utilization of new equipment.

Other funding. Regardless of the type or level of your institution, you should also consider other sources of revenue besides local taxes, general state aid, and tuition. For example, most federal- and some state-aid funds (for example, transportation or special education) are available to you in some degree, but these usually are based on (1) the applicability of certain criteria, and (2) your submission of an application. Still other aid programs involve grants that are decided through competition, and you must state your case through an application or proposal clearly setting forth why you deserve the grant and how you propose to use it. Then, too, other funding from outside sources (foundations, associations, businesses, or industries, as well as local, state, and federal governments) often consists of contractual arrangements. Your proposal indicating how you will use the money to provide the desired product or service is a crucial element in securing such contracts. As you might suspect, or already know, most of these proposals require a budget section.

Gifts from private sources--including alumni, individuals, philanthropic organizations, and local firms--are also available to secondary and

---

1. For more information concerning how an institution can increase its enrollment, you may wish to refer to Promote the Vocational Education Program and Manage Student Recruitment and Admissions, part of the Competency-Based Vocational Education Administrator Module Series. (Columbus, OH: The National Center for Research in Vocational Education, The Ohio State University, 1981).

SAMPLE 6

ENROLLMENT PROJECTION USING SUCCESSIVE APPLICATION OF INCREMENTAL ADJUSTMENT FACTORS

(numbers rounded to nearest 5)

Current year enrollment (baseline)	1,000
Net community/district population growth--add 10%	+ 100
	1,100
Decline in student age group--subtract 5%	- 55
	1,045
Effect of more active recruiting and information program--add 8%	+ 85
	1,130
Effect of higher student tuition, lab, or tool costs--subtract 4%	- 45
	1,085
Need of new industry for trained workers in skills taught by your institution--add 60	+ 60
	1,145
Net loss of students from discontinued program in accounting--subtract 20	- 20
Final adjusted projection for next year	1,125

NOTE: Be careful to apply general, percentage factors <u>first</u> (those applying to the overall population, economy, or institutional changes); <u>then</u> consider specific effects (either percentages or raw numbers).

postsecondary schools involved in vocational education. You don't have to be at Harvard or Cal Tech to seek these endowments, real estate transfers, equipment donations, library contributions, or even alumni dues.

The problems with grants, contracts, and gifts are at least threefold: their amount is difficult to predict accurately, their funds are restricted to only certain types of expenditures or activities, and they must be regarded as nonrecurring. In other words, using funds of this type to balance a budget--or relying on them to meet routine, annual operating costs--can amount to deficit spending. In fact, programs or personnel positions funded by such resources are often referred to in slang as "soft-money" projects or jobs. Beware of your reliance on them, unless you have (1) a long, stable record of funding from certain established sources, (2) highly placed friends in the state and national capitals, and (3) your own oil wells on the grounds.

Miscellaneous sources of revenue--perhaps smaller in amount, but more predictable--might include lease income from institutional properties (cropland or houses), interest on cash reserves, fee collections for various public service activities (clinics, food service, craft shops), noncredit course and workshop registration charges, or rental of rooms and gyms/auditoriums for community events. In most of these cases, recent records will provide the best basis for estimating income levels in the near future.

Departmental revenue. So far, you've been learning just about types of revenue available to the entire institution. If your level of interest or responsibility lies at a lower level (e.g., department, program, or specialized staff office), you might wonder how to calculate the size of your "slice" of this pie. There is only one direct, measurable factor you can use--if the institution recognizes it--and that is enrollment. This is especially true in postsecondary organizations where so much of the funding is based on student-FTE-count multiplied by subsidies of different levels, depending on the typical cost of educating a student in a given curriculum.

For example, in Ohio, the state subsidy for "Technical Level III" is \$3,500 per FTE. Therefore, the director of a dental hygiene program in a community college can calculate that 25 students, each taking 12 hours of dental hygiene subjects (aggregate of 300 hours, or 20 FTE), will "earn" 20 x \$3,500 or \$70,000 in revenue. Note that this director cannot count the five hours of English composition taken by each student. That's the English department chairperson's "money," worth only \$2,100 per FTE (General Studies I rate), or a total of \$17,500 (5 x 25 = 125; 125 ÷ 15 = 8.33 FTE; 8.33 x 2,100 = \$17,500). This English chairperson can also count up the money "earned" by the engineering students, and the accounting students, and so on, attending these same classes in composition. In like fashion, tuition income (usually assessed at a uniform rate, regardless of the student's program) can be assigned on a pro-rata basis to the departments offering the instruction.

Please note, however, that not all institutions recognize the earning of income by departments or programs. (Accountants use the useful term cost centers, but that term can include income as well as outgo.) What has just been described is a rudimentary type of program accounting, and you should be able to see that this analysis of income can help you determine what portions of the overall institutional revenue could be ascribed to the programs for which you are accountable.

In many cases, the revenue from grants, gifts, or contracts is, by its very nature, ascribable to only the department or program that prepared the proposal or conducts the specified activity. Usually, this "soft money" must go into a "restricted fund" and be spent strictly according to its respective budget. You may also be administering similar restricted funds (not part of the general fund pool) for food service, bookstore, scholarship, adult education, and other operations.

It is understandably more difficult to decide how to distribute general, noncategorical revenue arising from taxes or unrestricted gifts. On the other hand, certain grant or contract earnings may have been secured solely because of a project or activity directed by you, and you can reasonably expect that most of these funds (minus a fair deduction for administrative and support services provided by the institution) could be estimated exclusively within "your" revenue category. The same is true of private gifts that have a restricted purpose (e.g., a local industry's gift of $10,000, half of which is to go for the rental of a minicomputer, and the other half as financial aid to students in data processing courses).

In short, if you want any more money, you'll have to show why your area, and not another, deserves it. Let us move on to the subject of expenses.

Estimating Expenditures

This is no time for you to become unduly anxious about your possible lack of experience or expertise in this technical area. Some of the same types of assistance as were discussed in the revenue estimation section are available here also. For example, you can always look at examples of (1) how expenditure estimates were derived at your institution or another institution last year, or perhaps (2) how they need to be arranged to meet state requirements. (There probably is a handbook on state-mandated classification of accounts to help you.) Furthermore, this module should help you at least to organize your thinking, if not lay out your estimate sheet.

You may classify expenses into at least three categories: personnel services, equipment, and operating expenses. Sometimes a fourth category--contingency funds--is added. Another way is to think of some expenses as directly associated with a program, while others are related only indirectly; that is, they are associated with a higher level office or supporting area, and your area is just part of the expense. Also, costs can be fixed, or they can vary depending on the amount of activity or number of persons involved. Each of these categories will be explained in the next few pages.

Regardless of the category, you can apply some of the same techniques of estimation. One of the easiest, but least reliable, is to take last year's figures, tack on 8 percent (or 12 percent, or 18 percent) for inflation, throw in a "fudge factor" for safety's sake (it's good tactics to overestimate expenses and underestimate revenue), and add up the result. However, there may not have been a similar expenditure last year, and price increases aren't always constant.

Another technique is to consult persons who have experience with the product or service whose cost you are estimating. Be careful, though, if your consultant happens also to be a vendor. Be doubly sure that your request for a ball-park price estimate is not construed as a solicitation for a bid or indication of intent to buy.

A source of cost estimation that never misunderstands your intent is a catalog. It can show you the entire range of models, options, and combinations of equipment or supplies, often with illustrations. You still need to be careful that the prices quoted therein are reasonably accurate. They are subject to being raised, of course, but they might also be extensively discountable.

One way, in fact, for your institution to enjoy lower prices for equipment and supplies is to organize or join a purchasing consortium. This is a group of institutions (for example, all state-assisted technical colleges in a state, or all area vocational schools in a region) who pool their purchasing needs. Because of the high volume of business they represent, they often can attract bids from more vendors, induce competition, and thus negotiate contracts offering significant discounts and favorable terms.

Cost categories. Let's look now at each of the specific cost categories. First of all, personnel services might comprise as much as 60 to 70 percent of your entire budget. Not only wages and salaries, but also the costs of fringe benefits and the employer's share of payroll taxes and retirement-fund contributions, are included in this category. Some of these items might be estimated at a flat rate (unemployment insurance or health plan), while others vary proportionally with the salary (taxes, retirement). Still other costs occur at an indeterminate rate (the extent to which an employee takes advantage of tuition assistance, for example). A rule of thumb is to add about 20 percent to an employee's salary for these costs. That is, an instructor receiving a salary of $10,000 actually "costs" the institution $12,000.

The costs of all employees--faculty, administrators, librarians, support staff such as clerical and custodial workers, and consultants--are included in the personnel services category. The amount paid each will be based on the pay scale or collective bargaining agreement, and it will change as each person accumulates seniority, earns new credits or degrees, or is promoted. Furthermore, the profile of the work force might change as senior faculty or employees retire and young, new staff are hired at lower salaries.

Besides the cost of each employee, you also need to estimate the number of employees needed. Your measure here is "work load." An obvious example is based on number of classes taught. If an instructor is expected to teach four sections of electronics repair, and the student enrollment requires six such sections, then you need 1.5 FTE (the full-time equivalent concept again).

instructors. The "half" instructor could be a part-time employee, or a full-time instructor with a split assignment (e.g., assigned to teach both electronics repair and basic science courses). Sample 7 shows some work-load factors used by the Washington Community College system for work-load/staffing estimation.

The second category, equipment, includes items--such as apparatus, furniture, machines, vehicles--that are not consumed during use and have an extended life span. These items are easily found in catalogs, but they vary considerably in price, features, quality, and other attributes. If they are purchased, you need to consider not only their initial cost but also any associated necessary expenses. By this, we mean repair, fuel, insurance, and operating supplies such as paper, drill bits, or lubricants (most of which will fall under the "operating" category).

Also, a purchase involves a loss due to depreciation and it may require amortization (long-term payment or accounting), which involves the payment of interest. An alternative, then, would be rental or lease of the equipment, whereby the owner pays for maintenance and capital costs. This is commonly done with computing and copying equipment, and it is worth considering for vehicles. Also available are maintenance contracts or "buyer protection plans," which can be included in the purchase price and budgeted for in the equipment category.

We have already noted some elements of the third category: operating expenses. In general, this category includes consumable supplies, maintenance, minor articles (wastebaskets, pencil sharpeners), energy sources, telephone service, and postage. Sample 8 shows some of these specific items in an organized way. This list may be exhausting in its length, but it's not exhaustive; we haven't thought of everything, so be sure to add to this list yourself, depending on your particular situation!

A fourth category is contingency funds. This is an unallocated reserve--the difference between the revenue estimate and the specific expenditure estimates cited above. It also functions as a cushion--a source of funds to be transferred later in the year to any of the other three areas that suffer unexpected depletions, or to be used to take advantage of unforeseen opportunities requiring additional funds.

Don't give yourself too big a cushion, however. By withholding too large a reserve, you, in effect, restrict the funds available to planned activities, and you could end the year with underexpenditures, reflecting too little support for your intended goals and objectives. A reasonable maximum for contingencies is 2 to 5 percent of the entire budget. Some states do not allow any contingency allocation at all.

Cost behaviors. As you've been reading and thinking about these expenditures, it may have occurred to you that costs "behave" differently. Some costs stay at the same level (the purchase of a mimeograph machine, for example), regardless of how much you use the item. Accountants call this a fixed cost. Other costs, such as postage, vary in exact proportion to the

SAMPLE 7

WORK-LOAD FACTORS

(numbers rounded to nearest whole number)

Several states and institutions use coefficients (multiplying factors) to determine the number of faculty, administrative, and support personnel needed, based on number of students, books, building square feet, grounds acreage, number of employees, and so on.

Listed below are several such figures, adapted from those used by the Washington State Board for Community Colleges. An illustrative computation has been completed based on a hypothetical institution having 3,000 students, 90 faculty; 100,000 books in its library (plus 1,000 new ones each year); 200,000 square feet of buildings; 4 acres of flowers, arboretum, and shubbery; and 64 acres of general lawns or athletic fields.

	Sample Computation
Academic Support. Library and Learning Resources Center	
Base staff: 2	2
Acquisitions: .001 x no. of new books (1,000)	1
Circulation assistance: .0003 x no. of students (3,000)	1
Audiovisual technicians: .02 x no. of faculty (90)	2
TOTAL (1/3 professional, 2/3 support)	6 (2, 4)
Student Services: Admissions, Counseling, Placement, Records, etc.	
Base staff: 10	10
Increments: .007 x no. of students (3,000)	21
TOTAL (50% clerical, 42% professional, 8% administration)	31 (16, 13, 2)
Plant Operations	
Janitorial: .00005 x sq. ft. (200,000)	10
Groundskeepers: .25 x acres of flowers/groves (4)	1
.03 x acres of fields, open lawns (64)	2
Security: .00002 x sq. ft. (200,000)	4
.0005 x no. of students (3,000)	2
Maintenance: Use historical/experience rates since maintenance depends on age, automation, etc.	6
Subtotal	25
Allowance for supervision, absences (vacation, sick leave): .14 x subtotal	4
TOTAL	29
Institutional Support:	
Cashier/bursar: 1	1
Purchasing. .015 x no. of faculty (90)	1
Base payroll staff: 1	1
Increments: .002 x no. of total staff (150)	0
Subtotal	3
Budgeting, accounting, reporting: 2 x subtotal	6
Base administrative staff: 4	4
Increment: .003 x no. of students (3,000)	9
TOTAL	22

SOURCE: Budget Models (Olympia, WA: Washington State Board for Community College Education, 1978), pp. IV-1 to VII-8. ED 165 814

SAMPLE 8

SOME TYPICAL LINE ITEMS IN THE "OPERATING" COST CATEGORY

Instruction-related:

- Textbooks
- Library (periodicals, books, newspapers)
- Audiovisual software (films and tapes, not projectors or recorders)
- Supplemental printed materials
- Computer rental
- Student transportation

Personnel-related:

- Travel
- Professional conference fees

Administration-related:

- Telephone
- Postage
- Copier rental, per copy charges
- Paper, forms
- Advertising
- Election costs
- Auditor's fees
- Office supplies

Plant/Facility-related:

- Water
- Electricity
- Heating fuel
- Vehicle fuel and lubricants
- Freight
- Trash hauling
- Repairs
- Tool rentals
- Snow removal
- Landscaping

Miscellaneous:

- Consumable athletic materials

amount of activity--ergo, a variable cost. You can see, moreover, that some things "behave" a little like both. For example, your telephone costs a minimum amount just for monthly service; it then incurs additional expense to the extent that you make toll calls or exceed a base level of local calls. Behold, this is termed a mixed cost. And finally, some items such as the mimeograph machine have a fixed cost in the equipment category but are variable in operating terms; the costs of paper, ink, pads, and repairs will rise the more the machine is used. (Sorry, no special name for this phenomenon.)

Indirect costs. Now, you need to understand one final wrinkle, an important distinction. Up until now, we've been considering the various items of expenditure that you have to estimate. If you're a department chairperson or coordinator of a vocational service area, you need to think about only the costs directly associated with your program: instructors, supplies, equipment, books, postage, photocopying, and so on. However, you should recognize that you also benefit from services that are provided on an institutionwide or divisionwide basis. An obvious illustration is the dean or vocational director's office. Costs (the salaries of the dean/director and secretary, paper work, travel) are incurred there, yet no revenue is generated there; the director doesn't necessarily teach any classes that earn tuition or subsidy income. The library is another example, as is the audiovisual aids operation or the records office.

The examples cited above are called instructional support. There are some other logical groupings, too. The Ohio Board of Regents uses the following categories[2] in its costs analysis system:

- Academic support--Library services, audiovisual materials, programmed learning materials, clinical activities, instructional computer operations, field experience and observation programs
- Student services--Admissions, registration, class scheduling, student record keeping, placement, discipline, student relations
- Institutional support--Overall planning and administration, public information, communications services, administrative computer operations, reproduction services, personnel and business management, board of trustees
- Plant operations--Heating, ventilation, cleaning, maintenance, utilities, repairs, parking, upkeep of grounds, security

As a department chairperson, you probably would not have to estimate the cost of these services, but it is fair for your area to pay its share of the expense these services incur, and you should understand the process. On the other hand, if you are a higher level administrator, it might indeed be your responsibility to decide how these costs are to be ascribed.

---

2. Program Expenditure Models for Higher Education Budgeting (Columbus, OH: Ohio Board of Regents, 1975), pp. 12-13. ED 131 792

A problem encountered here is one of arriving at a logical, acceptable, and usable method or formula for distributing these costs. These formulas might use any of several bases such as the following:

- Costs can be distributed based on the level of use by each "customer." That is, the expenses of the computer center could be shared by the records office, business office, computer instructional area, and a vocational (e.g., electronics or farm management) instructional area, based on the percentage of time each used the facility (based, preferably, on a long-term average, not a month-by-month metering).
- A good basis for allocating plant operation costs is on the square footage, or floor area, assigned to each department or vocational service area.
- Costs related to the personnel office and student services might be shared based on the number of employees and students, respectively, while general administrative services costs might be assigned to subunits based simply on the dollar value of their individual budgets.
- Finally, you could use a system by which one department (e.g., a bookstore or print shop) actually "charges its customers" (other departments) for services rendered, using an internal requisition form.

Regardless of the cost allocation scheme used, it's important that it be written down, understood, and agreed to by all parties involved. (Sample 9 shows some computations using a few of these methods.)

Enough for costs--part of the spending plan. Let's return now to the education plan.

Measuring Outputs

A cynic has been defined as one who knows the cost of everything, but recognizes the value of nothing. If you were to adopt a cynical approach, you would reject any spending proposal, and your institution would soon come to a grinding halt. However, pursuit of the opposite extreme (a spendthrift's dream), in which you approved all expenditures, would eventually bankrupt your institution and, even sooner, destroy its life and growth.

The happy middle ground between these undesirable boundaries is a policy by which costs are measured, not on their magnitude alone, but in terms of the results, effects, outcomes, or outputs produced. Earlier you read about the institution's mission, and the goals and objectives of particular programs--your educational plan. In this section, you will be learning some of the possible ways to measure the attainment of these goals--your outputs--so that alternative spending plans can be expressed in comparable terms.

Generally, institutional outcomes can be seen as benefiting either individuals, organizations, or society in general. Unfortunately, few of these benefits can be expressed in terms that are strictly monetary. Most of them

SAMPLE 9

COST-SHARING FORMULAS AND PRINCIPLES

A. Some useful schemes for allocating indirect costs:

Service Provided	Cost-Sharing Basis
Audiovisual	Actual usage (number or length of times equipment is loaned)
Computing	Actual usage
Student services	Per total credit hours granted
Custodial	Per square feet assigned to instructional department or administrative office
Reproduction and copying	Actual usage (number of copies made)

B. Selected standards for determining the costing formula:

- Cost data should be reconcilable to official financial accounting data.
- Definitions used in cost determinations should be applied uniformly.
- Cost information and related costing units should cover the same period.
- Cost information should be consistently determined.
- Cost should be attributed according to identifiable relationships of what causes the cost to occur, or who receives the benefits of the costed activity.
- Indirect cost should be allocated based on quantitative measures that can be applied in a practical manner.
- Cost information should be accompanied by a disclosure statement.

SOURCE: Adapted from NACUBO [National Association of College and University Business Officers] Procedures for Determining Historical Full Costs, Technical Report #5, Second Edition (Boulder, CO: National Center for Higher Education Management Systems, 1977), p. 2.49, appendix pp. 15-16. ED 145 771 are more generally economic--or intellectual, social, or civic--and thus elude your efforts to quantify and compare them. You can probably think of examples of each kind of output. It will take some head scratching, but you probably can also come up with at least some "proxy" measures of the quantity of these outcomes. To aid in your analysis of these notions, look also at the following possible measures of educational output:[3]

- Student knowledge and skills development--Faculty or student perceptions of breadth and depth of knowledge, student scores on pre/post-test examinations, student course grades, student success in passing certification/licensure examinations
- Social and cultural growth--Student knowledge and understanding of the arts, development of effective social relationships, openness to new ideas, participation in social and cultural events or organizations
- Personal growth and satisfaction--Student satisfaction with human relations skills, critical-thinking ability, vocational preparation, overall educational experience
- Career training--Student success in obtaining first job/preferred first job, first job earnings, annual income of former students, relatedness of employment to field of study, job mobility, job satisfaction, stability of career goals, employer evaluations of job performance, promotions
- Community service--Student participation in social affairs, membership in community organizations, political activities
- Educational development--Highest degree or certificate earned by student, time for program completion, length of study prior to transfer, stepout/dropout rate, incidence of change of major fields

Another problem in developing some standardized basis for comparing costs in terms of outputs is the time period to use. The lifelong gain in earning power of a student is obviously too long an interval upon which to base a decision among competing proposals for an annual budget. Likewise, the long-run effects on the productivity of the local labor force are not synchronized with the time span of your decisions. Using the number of graduates may also involve too long a period of time, but with only one to two years involved in most vocational programs, we're getting close to an ideal interval.

Another alternative for the measure of the output of an educational process or activity is to use the credit (secondary) or quarter/semester credit hour (postsecondary). Alternatively, you may wish to utilize the contact

3. Adapted from Richard L. Alfred, "Conclusions About Coping with Reduced Resources," New Directions for Community Colleges, 22 (Summer 1978): 90-91.

(class or laboratory) hour, since many vocational courses require two to three hours of class time (but proportionally less out-of-class assignments, preparation, or report-writing time) per hour or unit of credit granted. The contact hour also more accurately represents the use of instructor time. In either case, the number of credit/contact hours per student can be multiplied by the number of students per class or section to measure the total "production" of an instructor, course, department, or program. Clearly, a course meeting 10 hours per week and involving 20 students provides more output than a five-hour class with only 16 students. In quantitative terms, the first example would be about 2.5 times more productive (10 x 20 = 200; 5 x 16 = 80; 200 ÷ 80 = 2.5), and you now have some rough basis for comparing alternatives.

Admittedly, these calculations do not yield qualitative assessments. Likewise, there are examples in which some parts of the institution generate service, not instruction, to other parts of the institution (consider the guidance, records, or tutoring activities), or to the community as a whole (e.g., facilities for meetings, consultants and leadership to civic groups, and cultural and artistic events). Some of these have an easily identifiable monetary dimension (e.g., the cost of renting an equivalent room elsewhere), but most do not. (How would you measure the value of volunteer help given to the United Way campaign?)

Types of Budgets

You learned about the common features of all budgets: they reflect institutional goals and objectives (the educational plan); they include estimates of available resources (the revenue plan); and they detail the ways that resources will be used (the spending plan) in order to obtain certain outputs (back to the educational plan again). Now let's look at the several different forms that budgets might take. Basically, they can be classified according to the scope of time involved, and we'll look at them in the sequence of long-range to short.

Long-range budgets. A long-range budget is primarily an in-house planning tool having no strict legal significance. It conforms closely with other long-range planning documents, covering perhaps a five- or ten-year span. Prognostications about community economic conditions are an important element in this plan, since they affect tax revenues, ability to bear tuition burdens, or even the number of potential students living in the district. This budget may be updated every two or three years.

The long-range budget will also show how resources will be used to accomplish internal responses to the economic, social, or other environmental factors. For example, new vocational or student service programs will necessitate new, or altered, expenditure patterns. Inflation may require that personnel salaries take up an even larger part of the outlay, or rising utility costs may add to the "operating" part of the budget. The results of these projected revenue and spending comparisons will forecast whether an institution can expect a surplus or deficit, and how large it will be. This, in turn, can provide advance warning of the need to seek new funds (by tax levies, lobbying for more state aid, raising tuition, or applying for grants and contracts), or to reduce staff or program offerings. Thus, key decisions are made based on a gradual, rationally developed plan rather than highly emotional, poorly thought-out, "crisis management" reactions.

Capital budgets. A capital budget flows logically from the long-range one, especially when projected growth in student numbers or program breadth means that new buildings will be needed. Even in a "steady-state" situation, renovation of facilities or replacement of equipment might still be needed, and the farther ahead you can anticipate this, the better. It might be possible, for example, to establish a plan whereby enough reserves (surplus of revenue over spending) can accumulate over a few years to purchase buildings or equipment without borrowing, thus saving interest costs. On the other hand, foresight can give you the time to shop around for alternatives, resulting in the selection of a lower cost choice. This also allows you to select the strategic time to campaign for a bond issue to fund the project, or prepare and lobby for a sound proposal for legislative appropriation.

The actual process of estimating costs of capital investment in buildings or major equipment probably will require that you engage the services of a professional consultant or architect. The money will be well spent, since this person can provide a careful, objective analysis of the adequacy of current facilities, as well as draw on a broad repertoire of solutions to the particular needs of your institution. He or she might be able to propose projects that will suit a variety of needs and have additional benefits as well.

Annual operating (or current funds) budgets. The "bread and butter" member of the budgeting family is the annual operating, or current funds, budget. This is the document receiving the most attention from public and institutional members alike, and the one that most affects the character and daily operations of your institution. All of the types of estimating discussed earlier--revenue, expenditures, and output--are involved in the preparation of this budget, and these figures must be developed in considerable detail. Furthermore, these amounts must be subdivided into specific spending limitations for the various departments or programs of the institution. This process of allocation results in the assignment of corresponding responsibility for the wise spending of the budgeted amounts by these organizational units.

The annual budget has a well-defined legal nature; it must be approved by the institution's board (sometimes in the form of an "appropriation resolution") and might require further approval by a county budget commission, a state-level board/department of education, or a higher education controlling/governing board or commission. The amounts allocated for broad categories (such as personnel services, equipment, and operating) cannot be exceeded without formal board action, and in some cases, appropriations among certain programs likewise will require formal endorsement for any midyear alterations.

Because this budget has the most direct effect on the extent to which the many programs and functions of the institution can be accomplished, the annual budget is therefore subjected to the most careful scrutiny, and it generates the most intense debate. Fundamental disagreements about the nature and purposes of an institution usually emerge at budget time. It will be important for you to have the skills needed to make this a time of rational and constructive analysis, not one of divisive and acrimonious infighting. Regardless of your role in the institution, then, you will need to learn and practice the fundamentals of participation and decision making.

Program or project budgets. The final type of budget that will be encountered in a vocational education setting is one related to a program or project of limited scope (less than institutionwide) or time span (not corresponding to the usual fiscal, school, or calendar year). These budgets include student activity/club budgets; adult education workshop budgets; and rotary accounts for food service, bookstores, or athletic events. They also are prepared in support of proposals for grant or contract funding of restricted programs such as scholarships, equipment purchases, Comprehensive Employment and Training Act (CETA) activities, tutoring or academic enrichment services, innovational teaching methods, and the like. All of these budgets call for the estimation of revenue, spending, and output in the same, or even greater, detail as does the annual budget.

There are some ways in which the preparation of program/ project budgets is quite difficult. In many cases, the funding source might (1) impose tight restrictions on transfers among the various budget categories, and (2) call for even stricter accounting of the actual expenditures. An added complication is that new programs do not have a "heritage." You do not have the experience of similar programs to fall back on when making your estimates and, therefore, have to "start from scratch" in generating your budget figures. And finally, the potential funding source might classify expenditures into categories that are different from the scheme used by your institution. The format of the program budget, and the source's definitions of these expense items, will usually be spelled out in the Request for Proposal (RFP), program regulations, grant competition rules, or other guidelines covering the allocation of these funds. Be sure to read these specifications carefully in order to ascertain in what ways they may differ from your usual concepts of these terms.

Note that many times these budgets affect each other. For example, the addition of a new building will usually imply that operating costs (for maintenance, utilities, custodial expenses) will be higher in subsequent years. On the other hand, high fuel (operating) costs might suggest that a capital improvement be made in the form of more insulation or a heating system modification. Similarly, projected long-range deficits might lead to the writing of proposals for grant or contract funds (with their attendant budgets), and these specially funded programs would, in turn, affect the levels of revenue and spending of subsequent annual operating budgets.

Optional Activity

In order to increase your knowledge of the detailed operation and applicability of specific budgeting systems, you may wish to read one or more of the following supplementary references: Cheek, Zero-Base Budgeting Comes of Age; Chuang, "Zero Based Budgeting for Vocational Education," American Vocational Journal; Harvey, Zero-Base Budgeting; Ohio Board of Regents, Program Budgeting: Two Year Colleges; and/or Weischadle, "Why You'll Be Hearing More About Zero-Base Budgeting, and What You Should Know About It," American School Board Journal.

As you study these references, ask yourself the following types of questions:

- What are the advantages of budgeting and cost accounting systems such as zero-based budgeting and program budgeting?
- What are their theoretical limitations?

If you are now working in an educational institution, ask yourself these further questions:

- Can these systems be put into practice in my institution?
- If so, what changes or adaptations (to either the system or the institution's current procedures) would need to be made?
- Would the benefits of these changes outweigh the inconvenience of altering our traditional methods?

Activity

The following "Case Situation" gives a brief description of a postsecondary vocational education institution. It also includes two estimates that are part of two budgets--an annual operating budget and a long-range budget being considered by the administrators. Start with part I. Review the situation described. Then read the first budget estimate carefully, and identify any deficiencies in this estimate. Correct these deficiencies by providing either additional information or figures that are more nearly correct than those shown. Next, repeat the process for part II--the long-range budget estimate and related description. (You can make some of these changes on the estimate sheets themselves; you may wish to write related observations on a separate sheet of paper.)

Although the situation applies only to a postsecondary institution, the general principles it illustrates will apply, in most cases, to secondary institutions as well.

CASE SITUATION

Part I: Operating Budget

Hoover Technical Institute (HTI) is a state-assisted, two-year technical college serving a city with a population of 50,000, plus a surrounding four-county area of another 100,000 persons. The college also receives funding from property taxes on the assessed value of $500 million within this region, at the rate of 2 mills. (This rate will be subject to renewal by public officials in two years, and there currently is a well-supported campaign underway to cut all property taxes statewide in half.) Tuition at HTI is $300 per trimester, with about one-third of the students attending year round. State subsidies range from $1,000 to $3,000 per FTE, depending on the cost structure of the vocational program. Four grant applications, totaling $100,000, have been approved for the coming year.

There are 2,000 students attending HTI, many of them part-time, with a full-time-equivalency of 1,000. The faculty consists of 70 full-time instructors, supplemented by about 50 part-time lecturers who teach one course each per year on the average. Vocational programs are offered in the areas of agriculture and agribusiness, business, engineering technology, and health (RN, LPN, and therapy assisting). There are 10 members on the administrative and professional staff, and 30 support personnel.

Prominent in the economy of the community are a farm equipment manufacturing facility, large agribusiness concerns that provide supplies and services or market farm products, and regional service offices for most types of business (e.g., banking, insurance, wholesale, transportation). The city is the major shopping and health-care center for a 75-mile-radius area. The projected establishment of a "gasohol" distillery is the major event expected to occur in the future of the area. Otherwise, the economy and population are basically stable, except for a noticeable "youth flight" of 18- to 25-year-olds. High school graduating classes are about 3 percent smaller each year.

As she looks toward the institute's future, President Allison Chambers has noted the reduced number of young persons in the community, as well as the apparent leveling off of economic growth. The only program within the institution that seems likely to expand is agriculture technology, especially in the area of cropland management. This will require that HTI somehow (1) acquire access to, or ownership of, 100-200 acres of land (prices are rising quickly); (2) construct a small classroom building and an equipment storage shed; and (3) obtain some farm machinery within the next two years. Many of the part-time students are veterans whose GI Bill benefits will soon expire. An enrollment decline is likely, and the size of the faculty might also have to be reduced, but all salaries and wages are 15 percent below the state average and need to be raised. All full-time faculty and employees receive fringe-benefit packages amounting to an additional 20 percent of their cash salary (25 percent for administrative and professional staff).

Dr. Chambers' staff has prepared the following budget for next year. Before she presents it to the nine-member Board of Trustees for approval, she will discuss it with the entire faculty and administrative staff. But first, she needs to review it to determine whether all items have been covered and all estimates are as accurate as possible.

HOOVER TECHNICAL INSTITUTE

(Tentative) Budget for
Academic Year 19-- to 19--

REVENUE			(In thousands)
Local Property Taxes (500 million @ 2 mills)			1000
State Subsidies	300 FTE @ 1,000	300	
	100 FTE @ 1,500	150	
	200 FTE @ 2,000	400	
	100 FTE @ 2,500	250	
	300 FTE @ 3,000	900	
Total			2000
Tuition and Fees			
Autumn term	1030 FTE @ 300	309	
Winter term	970 FTE @ 300	291	
Summer term	333 FTE @ 300	100	
Total			700
TOTAL REVENUE			3700 (3.7 million)
EXPENDITURES			
Personnel Services			
Faculty (full-time)	70 @ 12,500 (avg.)	875	
Faculty (part-time)	50 @ 1,000	50	
Admin.-Professional	10 @ 16,000	160	
+ Benefits Package	@ 25%	40	
Support Staff	30 @ 10,000	300	
+ Benefits Package	@ 20%	60	
Total			1485
Operating Expenses			
Educational materials		20	
Shop, lab, and clinic supplies		70	
Library and audiovisual		30	
Travel and professional conferences		50	
Computer software		30	
Telephone service and toll calls		20	

EXPENDITURES (continued)

Operating Expenses (continued)

Postage and mailing permits	30	
Copier rental, per copy charges	15	
Utilities (gas, electricity, water)	120	
Fuel and lubricants	50	
Purchase of farm machinery	45	
Repairs	45	
Insurance	15	
Snow removal, landscaping	35	
Freight, hauling	10	
Total		585

Equipment Purchases

Instructional (lab, shop, and clinic)	325	
Office, administrative	25	
Vehicles	30	
Legal and auditing services	10	
Recreation equipment	20	
Library security system	10	
Custodial, maintenance tools	15	
Audiovisual, photographic	10	
Office supplies, paper	50	
Computer accessories	20	
Total		515

CAPITAL IMPROVEMENTS (Pay-as-you-go set-asides)	600
CONTINGENCY	200
TOTAL EXPENDITURES	3385

Part II: Long-Range Budget

After the operating budget for the following year was prepared, President Chambers started revising the long-range budget for two, five, and ten years hence. In developing the various estimates for revenue and expenditures [presented here only in summary form], she considered the following factors [as implied by the description given in part I]:

1. Reduction in faculty size can best be accomplished by reducing first the number of part-time lecturers.
2. Once corrected by this year's raises, all salaries will need to rise by only 5 to 6 percent, given the expected leveling off of inflation.
3. Equipment purchases and capital set-asides can be reduced after the current program of farm expansion is completed (one to two years).
4. Some of the major items of operating expense (utilities, fuel, shop supplies) will continue to rise in cost.
5. Assessed property value will also rise by 5 to 7 percent each year.
6. The enrollment will fall no lower than 900 FTE.
7. In spite of ultimately higher state subsidies (made partially to offset expected property-tax limitations), tuition will have to be raised.
8. The prognosis for private grants and contracts is good, thus supplementing declining amounts of federal funds.

HOOVER TECHNICAL INSTITUTE

Long-Range Budget Projections

YEAR 2

REVENUE		(In thousands)
Property Taxes	(600 million @ 2 mills)	1200
State Subsidies	(950 FTE @ 2,100)	2000
Tuition	(avg. 950 @ avg. 700 per year)	665
Grants and Contracts		80
TOTAL REVENUE		3945

EXPENDITURES

Personnel Services*

Full-Time Faculty	60 @ 18,000*	1080	
Part-Time Faculty	50 @ 1,200	60	
Admin.-Professional	10 @ 22,000*	220	
Support	30 @ 14,400*	430	
Total			1790
Operating			850
Equipment			600
Capital Improvement			500
Contingency			205
TOTAL EXPENDITURES			3945

YEAR 5

REVENUE

Property Taxes	(700 million @ 1 mill)**	700
State Subsidies	(900 FTE @ 2,200)	1980
Tuition	(avg. 900 @ avg. 800 per year)	720
Grants and Contracts		100
TOTAL REVENUE		3500

EXPENDITURES

Personnel Services*

Full-Time Faculty	60 @ 21,000*	1260	
Part-Time Faculty	35 @ 1,400	49	
Admin.-Professional	9 @ 26,000*	234	
Support	28 @ 17,000*	476	
Total			2019

*Average salary rates, including cost of fringe benefits packages
**Assumes that a millage limitation will be imposed by referendum

EXPENDITURES (continued)

Operating	900
Equipment	400
Contingency	300
TOTAL EXPENDITURES	3619

YEAR 10

REVENUE

Property Taxes	(1 billion @ 1 mill)**	1000
State Subsidies	(900 FTE @ 2,500)	2250
Tuition	(avg. 900 @ avg. 1,000 per year)	900
Grants and Contracts		100
TOTAL REVENUE		4250

EXPENDITURES

Personnel Services*

Full-Time Faculty	60 @ 28,000*	1680	
Part-Time Faculty	35 @ 1,900	67	
Admin.-Professional	9 @ 35,000*	315	
Support	26 @ 23,000*	598	
Total			2660
Operating			1000
Equipment			400
Contingency			190
TOTAL EXPENDITURES			4250

Feedback

Compare your completed written estimate corrections with the "Model Corrections" given below. Your responses need not exactly duplicate the model responses, since some involve "judgment calls" that could vary. However, you should have identified and corrected errors of the same general type.

MODEL CORRECTIONS

Part I: Operating Budget

Revenue

The category of "Grants and Contracts" was omitted, in the amount of $100,000. (See first paragraph of the situation description.) The new revenue total should be $3.8 million.

Expenditures

- The benefits package for full-time faculty was omitted, equalling $175,000 (20 percent of $875,000), making the new total for personnel services $1,660,000.
- "Purchase of Farm Machinery" should be listed under the equipment category; on the other hand, the entries for "Legal and Auditing Services" and "Office Supplies, Paper" should have been listed in the operating category. New totals: Operating = $600,000; Equipment = $500,000.
- Even with these corrections, the total expenditures do not equal the total revenue. This difference can be made up by increasing contingency to $440,000, bringing the total expenditures also to $3.8 million.

Part II: Long-Range Budget

Year 2

- The property tax revenue might be considered a little high (see factor 1), but perhaps the valuation will have increased to $600 million because of the new gasohol plant.
- It would be difficult to cut the full-time faculty from 70 to 60 in one year without reducing part-time faculty at all (see factor 1). Thus, 65 full-time faculty and 40 part-time lecturers might be more realistic, giving a personnel services subtotal of $1,868,000.
- Raising the operating category from $600,000 to $850,000 in one year is a 42 percent hike! Perhaps $700,000 would be more realistic.

- The contingency category could be raised to $277,000 to strike a balance at $3,945,000. However, since this is about 7 percent of the total, the capital improvements set-aside might be raised to the same $600,000 level as the year before, leaving contingency at only $177,000 (4.5 percent).

Year 5

- The revenue estimates still are plausible, reflecting a 5 percent per year rise in assessed valuation and the expected increases of tuition and subsidy rates. Note, too, that grants and contracts have returned to their original level because of private sources (factors 5, 7, and 8).
- Likewise, the slight reductions of faculty have been accounted for, with salaries being raised about 5 percent per year.
- The only apparent problem is that revenue and expenditures don't balance. Reducing contingency to $181,000 would correct this, so would a reduction to $81,000 (still over 2 percent of the budget), combined with an enhancement of equipment to a total of $500,000.

Year 10

- Both the revenue and salary estimates remain within the given parameters.
- This time, the operating estimate is too low--only 2 percent per year above the Year 5 estimate. A figure of at least $1,150,000 would be more realistic.
- Since the total is already set by the revenue estimate, both the equipment and the contingency estimates need to be reduced (they are usually more discretionary than are the items under operating)--or else the college needs to consider developing new resources.

Level of Performance: Your corrected estimates should have identified most of the same errors and corrected them in approximately the same way as was done in the model responses. If you missed some errors or have questions about any additional points you made, review the material in the information sheet, "What Is a Budget and What Is Your Role in Its Preparation," pp. 9-35, or check with your resource person if necessary.

Learning Experience II

OVERVIEW

Enabling Objective

After completing the required reading, critique the performance of an administrator in a given case study in deciding among budget proposals, and select the better proposal from two provided to you.

Activity

You will be reading the information sheet, "Making Decisions to Arrive at a Balanced Budget," pp. 49-65.

Activity

You will be reading the "Case Study," pp. 67-68, and critiquing the performance of the administrator described.

Feedback

You will be evaluating your competency in critiquing the administrator's performance in deciding among budget proposals by comparing your completed critique with the "Model Critique," pp. 69-70.

continued

Activity

You will be reading the "Case Situation," pp. 71-74, reviewing two budget proposals that are competing for the same funds, selecting only one of them for funding, and explaining in writing your rationale for the selection.

Feedback

You will be evaluating your competency in selecting the better budget proposal by comparing your choice and rationale with the "Model Selection," pp. 75-76.

Activity For information about how to obtain the cooperation of many persons in the budgeting process, and how to group and compare several competing budget proposals, read the following information sheet.

MAKING DECISIONS TO ARRIVE AT A BALANCED BUDGET

Once you are able to clear the first hurdle in budget preparation (estimating the amounts of revenue, spending, and outputs involved for the budget period), you have a new concern: bringing the budget into balance by deciding among various spending proposals, all of which seek to use the same limited resources. Everyone is affected by this problem, regardless of their level or role within the institution, and regardless of how directly they were involved in generating the estimated figures. For example, an instructor--who developed specific dollar amounts to support certain program efforts--would now want to be sure he/she has an opportunity to defend those proposals and demonstrate their worth as compared to the ideas set forth by other instructors in the department. The head of a department, program, or vocational service area likewise will want to justify the estimates he/she has prepared in the face of competition from other areas. In addition, the head of an area has the task of arbitrating within that area to bring his/her own part of the budget into balance.

These scenarios are based on the assumption that, in 99 percent of the cases, the "asking budget" compiled from the spending requests will exceed the available resources. In other words, you and your colleagues probably would like to do more than your institution or district can afford. These limitations on resources can lead to conflict, but this conflict should be viewed as healthy. Since the conflict cannot be avoided (unless resources are infinitely abundant), then your challenge is to manage this conflict in a constructive, rational way. As either the leader or a participant in a decision-making conference, you can apply certain principles that can lead to allocative decisions that are received positively, that satisfy the participants as much as possible, and that have both high quality and high acceptability.

Role of a Budget Committee

One key to the attainment of both the quality and the acceptance of a decision is broad, planned, and publicly observable participation. A way to develop this type of participation is by forming a budget committee or task force, or including budgeting within the responsibilities of an already-existing planning committee. Since the preparation of a budget is at least an annual task (in the case of the operating budget), but also can come up on rather short notice (when "windfall" grant or contract opportunities arise), this body should be a standing (permanent) committee whose composition is fairly stable from year to year. A committee of this nature can exist at any level, so you should read this material from the perspective both of one who might form and lead such a committee for his/her level of responsibility, or of one who might be asked to serve on a committee for the entire institution or a large part thereof.

You can recognize several advantages to having such a committee. It leads to wider awareness of the institution's financial status and needs. It makes even more persons conscious of the need to keep costs down, or to exert efforts to generate new revenue. Those who were formerly concerned with only their own area have an opportunity to open their minds to the broader role of the institution, and to become more familiar with its overall goals and objectives. The addition of new persons to the decision-making process also injects new values and provides for obtaining consensus in the rating of divergent goals that do not lend themselves to being rated objectively or quantitatively.

Of course, there are some disadvantages to participatory decision-making methods (e.g., using a budget committee). Usually, this method takes more time because it involves many meetings. It can erode what little authority the administrator feels he/she has to start with and can induce feelings of threat. Most importantly, committee meetings can reach successful conclusions only if the members are skilled in communications and human relations techniques--rare commodities in many instances. Thus, special training in these skills, or particular efforts to develop cooperative attitudes, may be required before this type of decision making is attempted.

Let us now turn to a more detailed consideration of three factors that are related to the effectiveness of a budget advisory committee: nature of responsibilities, permanence, size and composition, and nature of appointment.

Nature of responsibilities. The scope of the entire committee's duties and responsibilities should be clearly spelled out, both in the written resolution or other official action establishing it, and in the letters of appointment to each member. Presumably, the group would be charged with investigative, evaluative, deliberative, and advisory functions, but not with final decision prerogatives. The committee's final report would consist of a recommendation, or a list of alternatives accompanied by a listing of the advantages and disadvantages of each. The chief administrator would modify or endorse the recommendation and forward it to the board for a final decision.

Permanence. The need to set up a budget committee on a permanent (as opposed to an ad hoc, or temporary) basis was briefly mentioned earlier. Since the budget process recurs on such a regular basis, and since its activities extend throughout the year, the stability provided by a permanent committee seems desirable. Moreover, by having a fixed composition, the committee is less susceptible to having its membership manipulated to suit temporarily expedient ends (e.g., "court packing," or appointing members who you know will support your ideas). Instead, it provides an open, predictable method by which to represent the various interest groups of the institution and community. The incumbents (members) of the committee may change somewhat from year to year, but the committee will always consist of the same categories (faculty, administration, staff, board, student, and community representatives) in the same general proportions.

Size and composition. The size and the composition of a budget committee can be considered together. Both will vary depending on the level of the organization for which a budget is being deliberated. At the institutionwide level, a committee of about eleven members could be useful, comprised of persons representing the following areas:

Institutional Area	No.
Overall administration: (chief administrator, board member)	2
Instructional area: (vocational program director/dean, two faculty at-large)	3
Instructional support: (librarian or AV coordinator)	1
Student services: (counselor, admissions or placement officer)	1
Business or support area: (business officer, building and grounds coordinator)	1
Representatives of advisory committees/councils:	1
Students:	2

For a single vocational service area or occupational program, a similar committee would contain approximately seven members:

Institutional Area	No.
Administrator: (program director, department chairperson, or lead teacher)	1
Instructors:	2
Support staff member: (clerical, laboratory/shop technician)	1
Student services representative: (counselor, placement, admissions)	1
Student:	1
Advisory committee member:	1

Some of these positions will be ex officio; that is, the administrator would serve as a member by virtue of his/her being the president or superintendent, and one of the student members by virtue of being president of the student government organization. The other members, however, would be selected by their respective constituents through (1) at-large general elections, (2) selection by their organizations (e.g., faculty senate or assembly, union local), or (3) appointment by the administrative head of their department.

Nature of appointment. The person or body appointing the committee should be the same as the one that receives the advice and makes the decisions. In the case of the overall institutional budget, this would be the board of education or trustees. In the case of a department or vocational service area, it would be the chairperson or director/coordinator. In any event, the names of all the appointees should be published, and each member should receive a letter or memo confirming the appointment and its terms.

To assure valid and forceful representation of interests, each member should be accountable only to his/her constituents, even though the formal appointment may have been signed by the administrator or chairperson of the committee. Thus, only the faculty (or students, or advisory committee) could remove their respective member, although such a removal might properly be requested (but not demanded) by the chief administrator in the event of absenteeism, negligence, or incompetence. If it were otherwise, members would be subject, inappropriately, to removal at the whim of the board, administrator, or program head merely because they opposed certain proposals or were, in good faith, trying to represent a legitimate minority position.

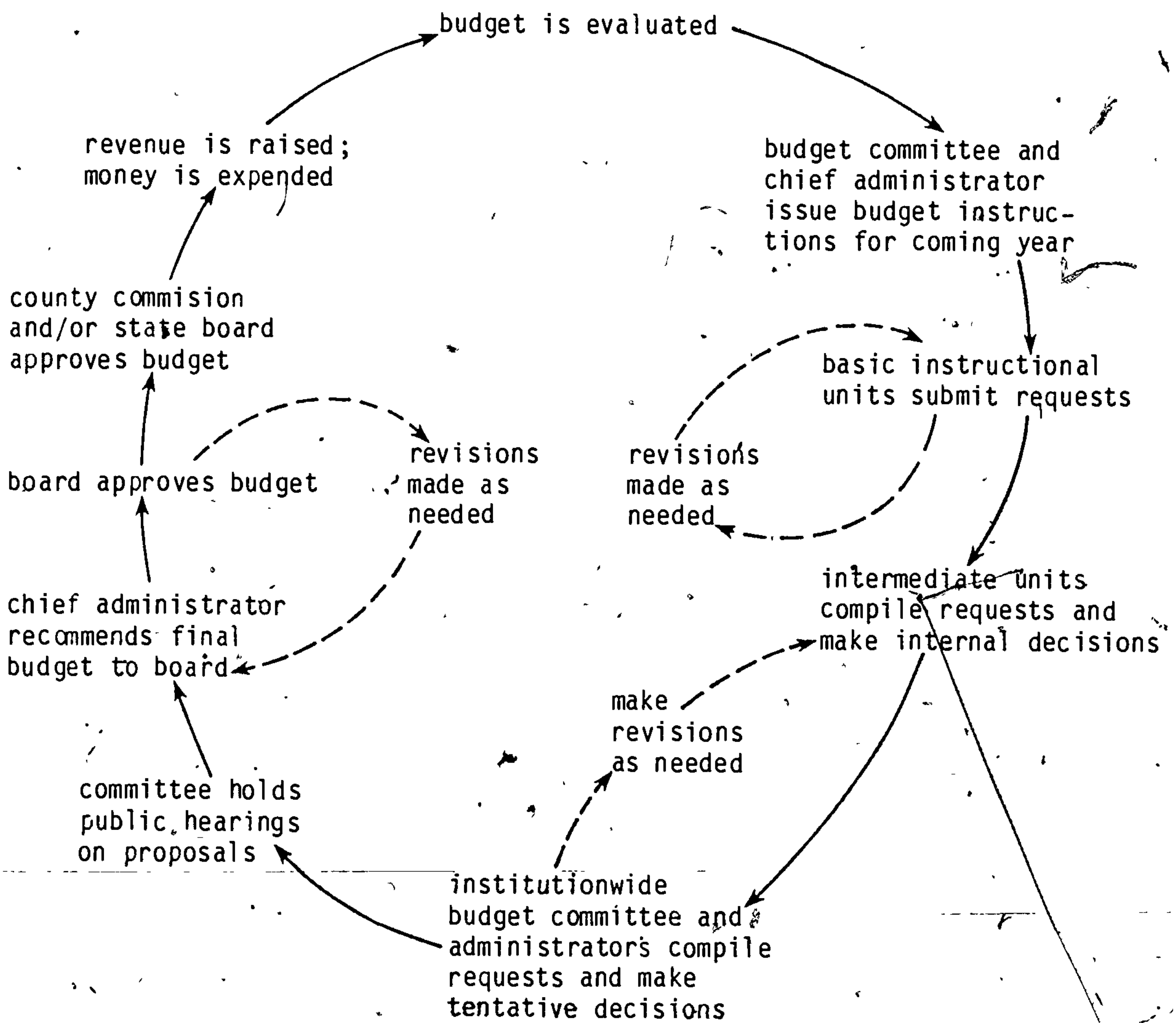
The Budget Cycle

The first tasks of a budget committee are (1) the forecasting of the time required for completion of their main tasks, and (2) the consequent development of a schedule of events and deadlines. In effect, your committee will be recognizing the recurring features of the "budget cycle" (see sample 10) and using this pattern to form an overall plan of work.

A useful method for determining the timing of the committee's main tasks is "backwards planning." For example, let us assume that the committee is working on the budget for the 1981-82 school year, running perhaps from September 1981 through August 1982. If the state department of education (vocational education or higher education) must approve this budget before faculty contracts are confirmed, then this approval should be secured by June of 1981. The local board would thus need to pass the budget resolution no later than April 1981. Accordingly, institutionwide and communitywide deliberations and hearings on the various budget recommendations would need to occur from January through March of 1981. In turn, similar discussions at subordinate levels should take place during November and December of 1980. To guide all this, budget guidelines, formats, and solicitations for input should be published in September and October of 1980. Obviously, the committee must be convened so it can organize all this, perhaps as early as August 1980--a full two years before the ending date of the budget they will recommend! (Check closely--the state department might already have prescribed a timetable for all these events.)

SAMPLE 10

A BUDGET CYCLE



You may very well recognize circumstances in your particular situation that will require your schedule to be different from the one just proposed. Some of the factors your committee should consider in setting up its schedule are fairly common to all settings, however. They include the following:

- State requirements--Is state approval required? When must the budget request be submitted? How long does the approval process take? How long a period must be allowed for local hearings and comment? Is a local vote by the general public required?
- Level of desired input--How open do you want your budget planning process to be? Which strategy will secure more participation: a very short period for comments, widely announced by a publicity blitz; or an extended, low-key "opening of the books" on a drop-in basis? Is opinion likely to crystallize quickly, or will it require some time for discussion?
- Amount of deliberation allowed--Do you plan to provide time for several minicycles of negotiation in divisions/departments before their recommendations are passed to the next higher level? Or will all the "asking budgets" merely be consolidated and passed on to the budget committee, which will trim and adjust as needed on an institutionwide basis?
- Staff available--Will all the work be done by the committee members themselves, or will there be clerical and computer assistance available? Can the committee use the services of the business officer, an institutional researcher, a consultant, or internal specialists to refine, compile, and analyze the hordes of numbers submitted to them? Will they have these services on a full-time, a priority, or only a catch-as-catch-can basis?
- Other duties and deadlines--What other events will be occurring in the institution or community during these budget deliberations? The rush of activity that often accompanies the end of the school year (concerts, plays, parties, recognition banquets) can distract or fatigue the committee members. Thus, timetables should allow for some "slack" during these periods. In addition, individual members might have their own scheduling conflicts that must be accommodated from time to time.

Keeping the Process Open

The material in this learning experience has been based on the fundamental principle that wide participation in the budgeting and planning process will lead to decisions that are both more acceptable and of a higher quality. A budget committee doesn't relieve the chief administrator and board of their ultimate responsibility for using public resources wisely. However, it does add new points of view, represent alternative value structures, and keep the organization from being subject to the opinions of only one or a few persons. Furthermore, although the committee might consist of as many as 10-12 people, it is possible and desirable to seek knowledge and opinion from even wider circles. Therefore, the budget committee should be careful to build into its plan certain features that assure access to, and scrutiny of, its work. Some examples of these features include (1) soliciting budget proposals, (2) ensuring the availability of records and pending proposals, (3) publishing interim reports, (4) holding public hearings, (5) providing open comment periods, and (6) opening meetings to the press and public. Let's look at each in a bit more detail.

Soliciting proposals. A budget usually cannot be decided based only on considerations generated "from the bottom up." However, the basic material from which budget proposals and decisions are effected--the details of intended outcomes (education plans) and of estimated expenditures (spending plans)--becomes more accurate and more meaningful if it is generated by those closest to the activities under consideration. Therefore, the committee should notify every member of the entire institutional community (in writing) that they may--and should--contribute their ideas concerning how resources should be expended, within the person's particular area of responsibility or activity. (Comments of a more general nature will be invited at a later stage in the budgeting process.)

In order to be sincere and effective, this announcement seeking budget input must also include some essential information to aid the potential budget requestor. First of all, it must describe general budget guidelines and assumptions: enrollment projections, wage and salary raise ranges, contingency levels, revenue outlooks, and so on.

Second, the format for budget input must be described. This format should be as simple and nontechnical as possible, but it must be followed uniformly so that administrators and budget committees at all levels can easily compile, summarize, and compare budgets. One such format is shown in sample 11. Note that blanks are provided for the figures themselves, and that ample space is provided for narrative explanation and justification of the budget as well.

Third, these instructions must state (and repeat, and repeat yet again) the deadlines for the submission of various types of budget inputs (original requests, revised requests, comment on the requests of other programs, and comment on the committee's final recommendation). Of course, these deadlines must be planned and communicated far enough in advance to provide "lead time" to allow for thoughtful, well-researched input.

Last, and most important of all, an effective solicitation for budgetary information, requests, or comment must offer the technical assistance that may be needed by the contributors. In particular, some of the services, expertise, and time of the business officer, treasurer, assistant superintendent for business/administration, institutional research director, and so on, must be made available to anyone within the organization. Clearly, these individuals are the most likely to have current and broad, experience-based information about cost levels and trends, past expenditures, likely revenue amounts, cost-sharing formulas, and the like. If these officials hold a few general sessions and then offer to meet with individuals as they prepare their

SAMPLE 11

A BUDGET PROPOSAL/REQUEST FORM

(arranged by program, also compatible with PPBS OR ZBB System)

1. Decision Unit	2. Person Preparing	3. Priority Rating	4. Cost Center
Word Processing	A. M. Keyes	to be completed by budget committee	business and office
5. Package Number / Level	6. Date Prepared	7. No. of Similar Packages	8. Total Cost — Last Year / This Package
2	October 29, 198_	3	N/A / 6,000

9. Objectives of This Package; Code to Higher Objectives (Use Other Side, If Necessary, for Items 9, 10, 11)

Provide a one-semester elective course in word processor machine operation.
Train up to nine graduates per year, qualified as intermediate level WP operators.

10. Advantages Over Other Packages

Does not tie up capital in purchase of equipment (machines are only rented).
Gives sufficient practice with a variety of machines so graduates will be eligible for employment regardless of the kind of equipment used by firm.
Instruction is extensive enough to develop a level of skill which allows graduates to command $100 per month higher salaries.
Responds both to student interests and expressed needs of local employers.

11. Advantages of Alternative Plans

1. Staying with minimum level (Package 1) provides enough experience to develop familiarity, but with only a low expenditure level.
2. Buying more machines and using full-time instructor (Package 3) offers greater flexibility.

12. Cost Factors Acct. No.	Function	Remarks	Cost Last Year	Estimated Costs Year 1	Year 2	Year 3	Year 1 Over Last Year Increase	Decrease
A-16-1	Professional Staff (No.) 0.25	1/2 time, 1 semester only	0	3,000	3,200	3,500	3,000	
	Support Staff (No.) -							
B-4	Supplies	paper, discs, ribbons	0	500	550	600	500	
D-4	Equipment	3 machines @ 200/month	0	2,400	2,600	2,600	2,400	
	Travel							
A-33	Contractual Services	lecturer - inservice training	0	100	100	125	100	
	Miscellaneous							
	TOTAL		0	6,000	6,450	6,825	6,000	

SOURCE: Adapted from L. James Harvey, Zero-Base Budgeting (Washington, DC: McManis Associates, 1978), Appendix B. ED 164 019 requests, the quality and accuracy of input is likely to be much higher, saving time and effort during all subsequent considerations of the data provided by these contributors.

Making all proposals available for review. Another way to assure widespread opportunity for participation in the budget process is to allow all members of the institution to become aware of the initial requests made by everyone else. This could take the form of the publication of a summary of requests, grouped by program or vocational service area. Proponents of certain ideas could then detect possible overlap between their proposals and those submitted by other persons within the institution, or make their own comparisons concerning the relative validity of the spending proposals.

Publishing interim reports. The budget committee or administrators should also publish reports of their work after they have reached tentative decisions about spending priorities. Again, this would allow proponents to see how their proposals ranked and reveal trends in institutional emphasis and objectives. Based on this information, observers could appeal these tentative decisions or generate new reasons to justify a more favorable reception of their own proposals.

Holding public hearings and providing open comment periods. Both these devices provide ways to receive information and opinion from persons who are not necessarily already involved in the budget proposal or decision process. For hearings on the institution's budget, the committee might wish to invite specific persons or organizations to testify (e.g., administrators of other educational institutions located nearby; representatives of business, industry, and labor groups; or local governmental officials). The committee should also make time available for anyone to speak, regardless of organizational affiliation. Since it might become necessary to limit the time of unscheduled speakers, the committee could also request (or require) written summaries of prepared testimony. Persons appearing before the committee could speak as individuals or as spokespersons for groups, and they could speak for or against specific proposals already under consideration, or even suggest programs or activities not yet formally proposed. The members of the committee should be free to ask questions of, or reply to, the persons appearing before them, entering into as much dialogue as time allows.

The open-comment period complements, and should follow, each public hearing of the budget committee. In the case of a departmental budget, there might not be a hearing--just a discussion at a meeting of all the faculty of the department or vocational service area--and the comment period could be informal. That is, the chairperson or director could issue an open invitation for any interested person to drop by the office to look at the budget proposals and tentative rankings or to talk about various proposals.

On an institutionwide basis, the invitation might be more formal, including notices in the press and broadcast news media and in institutional newsletters. These notices should announce the hearing date and specific places where budget information and proposals could be viewed. Since most comments would come in written form, this notification should also clearly indicate to whom submissions should be directed, how long they should be, in what form they should be prepared, and the last date on which they would be accepted.

Opening meetings to the public. The final means for providing public and institutional access to the budgeting process is through allowing public attendance at the meetings of the budget committee and of the governing board. Your state may already have passed a "Sunshine Law" relating to the public nature of such board meetings. Even where not required, your institution can benefit from observing the spirit of this openness by announcing the date, time, and place of these meetings; providing agendas and information sheets to visitors; arranging the board/committee members on the same side of the tables and providing amplification to help them be heard; and providing plenty of room for seating visitors.

There is one final item to consider when you open up your decision-making processes to scrutiny from colleagues and citizens. Just because opinion and information are sought is no guarantee that they will necessarily be adopted, either in whole or in part. Everyone has a right to be heard but cannot necessarily expect that they will be heeded. Thus, announcements of hearings, open meetings, comment periods, and availability of budget documents must be accompanied by carefully worded disclaimers making it clear that (1) the final authority and decision lie with the board, and (2) the input of all others is important but, still, only advisory. Such a statement can help avoid the development of unreasonably high expectations about these participative roles.

Decision-Making Techniques

Do you remember the assumption stated at the outset of this information sheet? We submitted that, in nearly every case, the total amount of money requested by subordinate offices and departments will exceed the amount of money available for allocation at your level of the organization. Thus, you (or someone) will have to decide who gets how much. So far, we've discussed how a budget committee can help in this process, what the time sequence of budget considerations will be, and how interested and involved persons can observe or participate in the process. Now we must get down to the actual details of how budgeting decisions are made.

As is true of nearly every type of choice situation (not just the preparation of vocational education budgets), the basic steps are to (1) generate alternatives, (2) project the impact and effectiveness of each alternative, (3) assess the advantages and disadvantages of each impact vs. the cost of the alternative and vs. the overall goals, and (4) select the alternatives having the most advantages. To show just how common this procedure is, let's consider the thinking of Mr. and Mrs. Jones as they face a family decision.

Henry and Irene Jones have decided to budget their expenses for the coming calendar year. Last year they never seemed to be able to make ends meet, have any extra money on hand for emergencies, or even take advantage of sale prices for some items they really needed. Here's their financial outlook, including Irene's promotion to chief technician at the refinery and Henry's job as Head Start social service coordinator:

	Monthly	Annual
Total Family Income:	$ 2,000	$24,000
Fixed Expenses:		
House payments and taxes	$ 600	$ 7,200
Life insurance premiums	75	900
Car payments, insurance, tags	300	3,600
Utilities, energy	125	1,500
Subtotal	$ 1,100	$13,200

Subtracting fixed expenses ($13,200) from total income ($24,000) leaves a remainder of $10,800 ($900 per month) for the necessities of food and clothing, plus entertainment, savings, furnishings, education, and other items for which they can exert some choice concerning the quality or quantity purchased.

Let's assume that a percentage has been assigned to each of those areas of "discretionary expense," and that 10 percent was allocated to entertainment, including a vacation in the summer for which the Joneses will have accumulated $600 by the end of June. As they start now to plan for this vacation, they ask each other: Where will we go? What will we do? Will we drive or use public transportation? Will we vacation at all?

Step 1 in the decision-making process is the generation of alternatives, so Henry and Irene came up with these: (A) camp in Glacier National Park for two weeks, driving there and back; (B) spend two weeks on the Gulf Coast, traveling by air; (C) take two one-week trips (July and October) within the state, shopping for antiques and taking pictures (travel by auto); and (D) don't go anywhere or take any time off, staying at home to fix up the house and saving money for next year.

Using step 2, they listed some of the following as the impacts of each alternative:

(A) No hotel costs, rising costs and uncertain availability of gasoline, relaxing surroundings conducive to reading and photography, cost estimated at $400

(B) Moderate charges for resort cottage, high but discountable air fare, same effect on reading and photography as stated above, cost $600

(C) Moderate motel costs, same problems with gas prices and supply as option A, opportunity to pursue both Henry's hobby (antiques) and Irene's (photography), little disruption of work routines, relatively low cost outlay at any one time, cost $500

(D) "Cabin fever" likely to set in by August, would not break monotony of professional and domestic chores, family room would finally be finished and new shrubbery planted, cost nearly nothing

Determining the advantages (step 3) can be accomplished given the effects listed above, and given that the most important goals were (1) rest and relaxation, and (2) pursuit of avocational interests--at as low a cost as possible.

By following this analysis, the Joneses decided (step 4), that option A--the lazy two weeks at Glacier Park--would be their best choice. Accordingly, they budgeted $400 for this activity and then "reappropriated" the uncommitted $200 for books on antiques and a new camera lens.

Perhaps a little more discussion about each step would be useful at this point. First of all, let's look at the generation of alternatives. Notice that the Joneses thought of four alternatives that were quite different from one another. They might just as easily have developed plans that differed only in degree: one week on the Gulf Coast vs. two weeks, for example. Or, they could carry the question of degree to its extreme (as they did with option D) and pose a "binary" question: go vs. no go, do vs. don't, all or nothing, and so on.

In your administrative situation, you could ask the directors or coordinators of programs under your supervision to submit alternative spending plans along any of these lines (question of kind, question of degree, or do/don't). Furthermore, at your level, you and the respective committee might generate alternatives on a larger scale by grouping the proposals of smaller programs in various ways. The budget packages could be (1) based on former practices, (2) adapted from the practices of other departments or institutions, or (3) created by the resourcefulness of your faculty and staff.

In step 2, you recall that the Joneses estimated the impact, cost, and effectiveness of each possible choice. Impact can be described as some quantitative measure of the results of a program or activity, one that perhaps can be derived from reports or the statistical analysis of data. Effectiveness, on the other hand, is a qualitative notion requiring that subjective judgments of value be secured from a wide variety of persons, both experts and laypersons. (This alone is a good reason to have a committee.) Some other factors that can be identified and measured for each alternative are ease of implementation, chance of success, compatibility with other programs, reaction of staff and other educators, and political feasibility or acceptance.

The analysis of these factors into advantages and disadvantages makes up step 3, and it should be obvious how to do this. There is a small problem, of course, in deciding the relative weight to be given to each advantage or disadvantage. (Do five little disadvantages nullify one major advantage of a proposal?) Having a variety of opinions represented on a committee can help resolve this question. However, this same diversity of opinion requires that the institution's priorities be established beforehand and be kept constantly in mind during the budgeting process.

Perhaps these steps seem self-evident, not all that profound. Consider, for a moment, however, the other bases on which, or the methods by which, budget decisions might be made if a reasonable, step-by-step procedure such as the one described were not followed. Some of these less-than-desirable ways of determining budget amounts are as follows:

- The across-the-board sweep--With this plan, if the boss finds there is $1.1 million available this year compared to the $1 million for last year, he/she just gives everybody 10 percent more, no questions asked.
- The rotation plan--This one's almost as simple, but in this case, the administrator gives all $100,000 to trade and industrial education, because distributive education got it last year, and agricultural education got it the year before . . .
- The squeaky-wheel-gets-the-grease plan--Under this system, business and office education will receive all or most of the "new" $100,000, since their director makes a point of always showing up at board meetings and tends to dominate most of the discussion at budget committee and faculty meetings.
- The political expediency model--Following this thinking, the administrator would grant the full amount of extra money to the director of home economics and consumer education, whose spouse was just recently elected to the state board of education and is, thus, in a position to help the local institution receive some special contract funds.
- The lowest cost plan--Assume that six subordinate administrators have filed requests for budget increments as follows: A = $60,000; B, C, and D = $75,000 each; and E and F = $100,000 each. Then A will get the money, and the remaining $40,000 will go into a contingency account.
- The fortunate sum concept--If in the previous example, the amount "up for grabs" was $260,000, instead of $100,000, the administrator might decide to allocate it to A, E, and F, since their requests just happened to add up, fortunately, to the sum of $260,000.

On a more serious note, some particular ways to apply the rational approach to budget decision-making have emerged in the last 10-15 years and are closely tied in with various budgetary decision-making methods such as Planning-Programming-Budgeting Systems (PPBS), Zero-Based Budgeting (ZBB), and program budgeting.

PPBS, ZBB, and program budgeting have one feature in common: they consider "vertical" groupings of expenses (called "decision packages") as the entities to be considered during budget deliberations. For example, one such decision package might involve the proposed addition of a new counselor to the institution's student services staff. The addition of a counselor is not a single expense; it involves a cluster of expenses, including the items listed in the table below:

Salary for counselor, plus benefits	$15,000
Wages for 1/2 secretary, plus benefits	6,000
Travel allowances	500
Additional postage, duplication, phone	200
Miscellaneous office supplies	300
Total	$22,000

One good reason for listing the expenses in this way is that it shows, at a glance, the additional (marginal) costs required. Had this proposal been included instead in the usual "line item" format, the implications would have been buried in the large totals for each of many budget lines (e.g., professional salaries, classified wages, insurance, retirement contributions or payroll tax, conference fees, travel, telephone, postage, and duplication).

Furthermore, this decision package lists not only the expenditure elements, but also (1) the revenue generated (if, for example, a categorical state subsidy of $5,000 were paid for each counselor provided), and most importantly (2) the outputs or benefits to be realized from having this additional counselor on the staff. (For example, it might enable the institution to implement a certain innovative program, extend its contacts with other community agencies or industries, follow up its graduates more closely, provide new services to persons with special needs, or comply with legal mandates.)

Sample 11 shows how a decision package might be laid out. Notice again that it includes plenty of space for narrative descriptions of goals and objectives, benefits, risks, and alternative methods, as well as for the customary figures on revenue and expense.

The use of decision packages enables the administrator, committee, or board that is making judgments about priorities to avoid making all-or-none decisions. Moreover, it's easier for them to decide which units should receive all of, and which will receive less than, their requested amounts. However, the decision makers need not be the ones to decide how those budget units should cope with reduced resources. This happy result is made possible because the vertical-cluster approach, represented most effectively by the ZBB method, requires each budget unit, or program, to submit several packages, which are implemented (if funded) in increments. They then can be arranged in priority order, and the cumulative cost of approving the packages becomes readily apparent (see sample 12).

Let us consider an example illustrating how decisions were made concerning which packages to budget in a business and office education service area.

SAMPLE 12

RANKING TABLE FOR THE OFFICE OF STUDENT SERVICES

Rank	Services	Package Number	Incremental Cost	Cumulative Program Cost
1	Health Services	1 of 2	$100,000	$100,000
2	Counseling	1 of 3	150,000	250,000
3	Career Planning & Placement	1 of 3	125,000	375,000
4	Financial Aid	1 of 3	75,000	450,000
5	Student Development	1 of 4	50,000	500,000
		1st cutoff level		
6	Counseling	2 of 3	15,000	515,000
7	Financial Aid	3 of 3	20,000	535,000
8	Career Planning & Placement	2 of 3	15,000	550,000
		2nd cutoff level		
9	Student Development	3 of 4	5,000	555,000
10	Counseling	3 of 3	15,000	570,000

SOURCE: Willie D. Adamson, Zero Base Budgeting: A New Planning Tool for New Colleges (Arlington, VA: ERIC Document Reproduction Services, 1978), p. 18. ED 149 810

The proposals from the business and office education area for the word processing program included the following decision packages:

	Plan	Marginal Cost	Marginal Benefits
Base (Package 1)	Add 6-week unit to curriculum; use a machine in nearby business office	$ 1,000	3 graduates per year, trained for entry-level job only
1st Increment (Package 2; on top of package 1)	Offer new 1-semester course; rent 3 different units; hire 1/2-time instructor	$ 6,000	6 more graduates per year, qualified for intermediate job placement
2nd Increment (Package 3; on top of Package 2)	Offer full 2-year program; hire 1 full-time instructor; buy 1 unit	$18,000	12 more graduates per year in intermediate/advanced placement; 20 adult education students; recruitment tool

Based on the criteria of impact (benefit), cost, and effectiveness, the packages were ranked within the entire set of proposals from all business and office education programs as follows: Package 1 = 12th; Package 2 = 18th; Package 3 = 25th.

The previous example dealt with a new program. Let us look also at a program (bookkeeping), still within the business and office service area, that has been present for many years but is concerned with skills being demanded less by local employers:

	Plan	Marginal Cost	Marginal Benefits
Package 1	Retain 2 of 3 full-time instructors; repair old adding machines	$30,000	20 graduates per year; 10 adult education students
Package 2 (on top of package 1)	Buy electronic calculators	$ 5,000	no additional graduates, but 20 more adult education students
Package 3 (on top of package 2)	Retain 3rd full-time instructor	$17,000	5 more graduates per year; 10 more adult education students

These three proposals received the following rankings within the entire business and office education service area: 4th, [illegible]th, and 30th.

When the administrator and budget committee for the business and office education area listed all the proposals in rank order, they found that the first 24 proposals required $490,000. Because the target budget for their service area had been $500,000, they cut off their list here. However, they strongly recommended that their area receive consideration for the additional funds needed ($18,000) to support the next item on their list: package 3 for the word processing education program. Because of its even lower ranking (30th), package 3 for bookkeeping was deleted from further consideration, at least for the current year.

Notice that if only the "needs" of current programs had been considered first (viz, the retention of all three bookkeeping instructors and needed repair of machines on hand), the entire 500,000 might have all been "spoken for" before even the first package of the new word processing program was considered. The ZBB approach allowed the committee to see just how much value they could obtain from the first expenditure of only $1,000, and even from the second expenditure of $6,000, in the word processing program, both of which exceeded the benefits to be gained from the $12,000 needed to retain a third instructor in an obsolescing bookkeeping program.

The negative effects of these tough-sounding management decisions can be alleviated by creative administration. For example, the third bookkeeping instructor might not need to be "laid off." Perhaps one was about to retire anyway. Or, maybe this instructor, or one of the other two, might be interested in acquiring cross-training that would qualify him/her to teach the new word processing course.

By applying these concepts of participatory decision-making, you can help make your budgeting process, and the resulting decisions, more acceptable to persons within the institution and community. Moreover, by using some of these specific decision-making techniques, the quality of those final budget decisions should also be high, leading to effective and efficient use of limited resources.

Activity

The following "Case Study" describes how a vocational education administrator organized a budget committee, considered budget requests, and reached a decision on the next year's operating budget. Read the situation described and critique in writing his performance.

CASE STUDY

Shortly after the school year began in September, Jack Deering, superintendent of Riverview Vocational School, realized that it would soon be time to begin work on the budget for the next school year. (In his state, both the fiscal and the academic year run from September to August.) He sent a memo to Lance Ball, the assistant superintendent for business, asking him to take charge of the process of obtaining budget proposals from all the heads of the vocational service areas and administrative offices.

Around December 10th, he asked Mr. Ball how things were coming with the budget. Lance replied that he really hadn't done much. However, he added, maybe that was fortunate, because he had recently attended a business officers' conference where the speakers had emphasized that budgeting ought to be tied more closely to the planning function, and more removed from the business officer's duties. The speakers had also recommended that a budget advisory committee be formed to assist with the budgeting and planning processes.

After looking at some of the materials brought back from this conference, Dr. Deering concluded that he should adopt many of these recommendations. Early in January, he asked the district board to create a Budget Planning Committee. Then he appointed the following persons to serve:

Jack Deering, superintendent
Alice Graham, board vice-chairperson
Lance Ball, assistant superintendent for business
Doug Tenace, director, business and office education
Debbie Cook, drafting instructor
Ralph Murphy, president, DECA
Tom Leach, building/grounds supervisor

These appointments were made based on the nominations of the respective units or organizations represented, except for Mr. Tenace, whom Dr. Deering himself nominated because he knew he could count on him to support his proposal to install a new computer for the following year. Each appointee received a letter from the superintendent stating the length of term, duties, expectations, and tentative schedule of meetings. Enclosed was a copy of the board resolution forming the committee, clearly stating that the committee was to make only recommendations, not decisions, about the budget.

At its first meeting on February 20th, the committee reviewed the previous year's budget and the state and local regulations pertaining to budget preparation. Based on these requirements, they developed the following schedule:

March 5	- Request all offices and vocational service areas to prepare and compile their own budget requests by given deadlines. (This announcement would be made by publishing and distributing the minutes of this meeting to all faculty and staff members.)
March 30	- All budget requests to be turned in to Mr. Ball for compilation, using each department's usual format.
April 10	- Committee begins to consider all requests.
May 5	- Committee publishes tentative budget recommendation; invites comment from all members of faculty, staff, and community.
May 10	- Public hearing is held on budget recommendation.
May 20	- Committee reconsiders budget recommendations based on comments and hearing testimony.
June 5	- Superintendent presents final budget recommendation to board members at regular meeting.
June 25	- Board takes action on budget at special, open meeting.
July 2	- Budget is submitted to state department of education for final approval.
September 1	- Fiscal year covered by newly approved budget begins.

The actual events followed this schedule rather closely at the beginning and end of the process. However, the budget requests were turned in late. Furthermore, the compilation of the requests by the business office consumed more time than planned. As a result, the committee could not begin to look at them until April 28th. Also, the committee then took some time at the beginning of their deliberations to ascertain, and in some cases modify, the short-term goals of the institution as affected by impending enrollment declines. As a result, their tentative budget was not developed until May 18. There wasn't enough time to publish these recommendations, and the committee concluded that they wouldn't be read anyway, since everyone was so busy with concerts, plays, proms, and so on. A few persons did present new information at this time, so the superintendent and three committee members worked over the Memorial Day weekend to take these points into account as they prepared the final draft.

Several members of the faculty and community then appeared at the June 5th board meeting to ask that they be given a chance to speak about some of the provisions of the budget being given to the board for consideration. Several of their objections were noted by the board, which set up a meeting of their financial committee with the superintendent to work out some of these problems before they ultimately gave their final approval at a rather long meeting on June 25th.

Feedback

Compare your completed written critique of the "Case Study" with the "Model Critique" given below. Your response need not exactly duplicate the model response; however, you should have covered the same <u>major</u> points.

MODEL CRITIQUE

Once he got around to a serious effort on the budget, Dr. Deering didn't do too badly. Obviously, however, his first problem occurred when he delegated the budget chore entirely to the assistant superintendent for business--and then did not follow up quickly enough. He wisely accepted the advice from Mr. Ball to integrate the planning and budgeting processes (and divorce them from the business office), but he still didn't act as promptly as he needed to--the first committee meeting was delayed far too long to February 20th.

The terms of the committee's appointment were developed fairly well: the duties, responsibilities, length of service, and <u>advisory</u> role (as opposed to a decision-making one) were clearly spelled out in writing, were originated from the board, and were made a regular part of the school's structure. Likewise, the composition of the committee met the criteria of balance and workable size. Perhaps there should have been a citizen/advisory council member and/or a representative of the professional support staff (e.g., librarian or counselor) added to the committee; the resulting size of nine would not have been unwieldy. The appointment of Mr. Terace <u>by the superintendent</u> wasn't exactly fair; better to let the faculty select their own representatives if indeed their point of view is sought on these important budget issues.

The committee members acted correctly in quickly reviewing their tasks, guidelines, and time requirements, and then setting up a cycle of events with deadlines. Likewise, they set a good example by publishing this schedule and the minutes of their meetings. Unfortunately, they failed to prescribe a specific format to be followed in submitting budget requests. Also, the period from March 5th to 30th probably was not long enough to allow for all the internal negotiating needed before each vocational service area and administrative area could produce its own balanced, prioritized budget request. The lack of a form and of sufficient time probably explain why the requests were so late--and the lack of uniformity probably made the job of compiling and comparing the requests just that much harder and longer.

In turn, the shortage of time forced the committee and superintendent to sacrifice their policy of openness. They obviously hadn't anticipated the competing school activities of late May, and they failed to give due consideration to the ideas and opinions of the many people who would be affected by the budget. Some provision, regardless of how limited or "short-fused," should have been made--in lieu of the hearing and open-comment period--to allow these persons to express themselves before the recommendation went to the board on June 5th.

The committee's method of reaching decisons about priorities and cost-benefit judgments for specific budget proposals was not described. They were correct, at least, in basing their deliberations on the institution's goals and objectives. It would, of course, have been better if they had been working on the objective statements between February 20th and mid-April, rather than waiting until the budget proposals finally came to their attention at the April 28th meeting.

Overall, the superintendent had, after a weak start, developed an acceptable plan, one that could work in subsequent years if he (1) started to implement it much earlier in the school year, (2) developed a standard format to be followed by subordinate units, and (3) scrupulously adhered to a policy that provided for fair and timely access to public participation.

Level of Performance: Your completed written critique should have covered the same major points as the "Model Critique." If you missed some points, or have questions about any additional points you made, review the material in the information sheet, "Making Decisions to Arrive at a Balanced Budget," pp. 49-65, or check with your resource person if necessary.

Activity

The following "Case Situation" involves an administrator who must choose between two budget proposals. Read the situation described, review the two competing budget requests, and decide which of the two you would recommend for funding. Write down your choice, and describe your rationale in choosing that request instead of the other one.

CASE SITUATION

Based on the lessons learned from the previous year's experience, Dr. Deering organized the school's budgeting efforts much more effectively the following year. Among other things, he activated the budget/planning advisory committee much earlier; and the schedule they set up allowed a great deal more time for the administrators of subordinate units (vocational service area chairpersons and heads of administrative offices) to develop and decide among budget proposals within their respective areas.

James Wagner, the director of the trade and industrial (T & I) area, is considering one such decision now. He and his five-member T & I budget planning task force--including a member of the T & I Advisory Committee--have already arranged most of the program proposals (set forth by the instructors) in priority order. These proposals have "used up" all but $20,000 of the estimated resources tentatively allocated to T & I. There are several proposals still to be considered, but the most worthy ones seem to be the following:

- Drafting (full-staff option)--This occupational specialty formerly involved two full-time faculty, and graduated about 10-15 students per year. In addition, students in other, related T & I specialties took drafting courses as part of their curricula (machine tools, carpentry, landscaping, farm management). Data obtained from the advisory committee and local industries seem to indicate that the need for draftspersons is declining. The supply matches the demand within the region, and the jobs offer relatively good pay but little opportunity for advancement. Moreover, several of the drafting tables are old and require either extensive repair or replacement.

  A budget request, which would retain one of the instructors, has already been approved. That would be sufficient staff for the course for students from other curricula but would accommodate only five students specializing in drafting per se. The smaller classes would not need to use the defective tables, three of which could be sold for a modest salvage price.

  This proposed decision package would retain the second instructor as well, buy five new tables over a three-year period (three of them next year), and provide for the repair of existing tables.

• Printing and Graphics (computer typesetting option)--This decision package would enhance the current occupational specialty, which already teaches skills in linotype operation, composition, layout, print plate making, and printing press operation.

Advisory committee members and others in the community have reported that most newspapers, commercial printers, and industry publications offices in the region now use second-generation equipment involving computerized "cold type" setting and composition procedures. There appears to be an immediate need for eight to ten qualified operators of such machines, with an estimated sustaining need of five to eight operators per year. Entry salaries are fairly attractive, but the potential for advancement is unknown so far.

To add this option to the graphics curriculum, the school would need to add one full-time instructor and lease three pieces of equipment. Their purchase cost is prohibitive at the moment, but part of the lease payment can be applied toward eventual purchase. Of course, the consumption of paper, ink, and other supplies would increase.

To provide work experience for the students, the school would have all of its printing done by the graphics shop (e.g., school newspaper, adult education brochures, parent/community newsletters, posters, and tickets). Also, the service would be provided to community nonprofit organizations on a cost-of-materials basis. Both activities would generate revenue for the program and save the school the cost of printing.

In making a decision, Mr. Wagner and the committee want to consider the school's goals and objectives. Those that appear relevant include (1) to provide vocational education to students in areas that give them skills leading to immediate employability; (2) to provide a pool of trained, skilled labor that meets the needs of local business and industrial employers; (3) to provide education opportunities for area adults seeking to change vocations or upgrade skills in their current career fields; (4) to utilize taxpayers' dollars in the most efficient and effective means possible; (5) to allow for limited curricular innovation to keep pace with technological change in education and those skill areas taught; and (6) to provide facilities and services useful to local citizens as individuals or groups.

If you were Mr. Wagner, or a member of his committee, which of these two proposals (presented here in a form similar to that shown in sample II) would you select for inclusion in next year's budget? Why?

A BUDGET PROPOSAL/REQUEST FORM
(arranged by program, also compatible with PPBS OR ZBB System)

1. Decision Unit	2. Person Preparing	3. Priority Rating	4. Cost Center
Drafting Full-staff option	Debbie Cook		Trade and Industrial
5. Package Number or Level	**6. Date Prepared**	**7. No. of Similar Packages**	**8. Total Cost** Last Year / This Package
2nd Increment	December 9, 198-		$15,040 / $18,020

9. Objectives of This Package; Code to Higher Objectives (Use Other Side, If Necessary, for Items 9, 10, 11)

Graduate ten more students per year into general drafting jobs
Provide faculty for and support to one adult education class per year

10. Advantages Over Other Packages

Goes beyond mere service courses for other T & I skills (machine tools, ag. housing, carpentry, landscaping
Provides way to respond to industrial inservice training needs

11. Advantages of Alternative Plans

Could use part-time lecturer for industrial inservice classes
Don't glut market with drafting graduates qualified only for entry-level positions

12. Cost Factors Function / Remarks	Estimated Cost	Estimated Costs Year 1	Year 2	Year 3	Year 1 Over Last Year Increase	Decrease
Professional Staff		13,400	14,100	14,900	760	
Instructor, full-time, 10 months + overtime assignment: evening class, 36 hours	12,800 600					
Support Staff		500	525	560	30	
5% of time of T & I secretary	500					
Operating		1,870	1,960	2,080	340	
Maintenance of drafting tables Miscellaneous supplies Blueprint machine solutions Indirect (.05 of salaries)	500 500 200 670					
Equipment		1,500	525	560	1,500	
3 Drafting tables (+1 each of next 2 years)	1,500					
Travel		450	450	500	50	
1 State meeting--T & I 1 Technical seminar	50 400					
Miscellaneous		300	-	-	300	
Forego income from sale of 3 used tables						
TOTAL		18,020	17,560	18,520	2,980	

SOURCE: Form adapted from Harvey, Zero-Base Budgeting, Appendix B.

A BUDGET PROPOSAL/REQUEST FORM
(arranged by program, also compatible with PPBS OR ZBB System)

1. Decision Unit	2. Person Preparing	3. Priority Rating	4. Cost Center	
Printing and Graphics Computer typesetting option	William Meadows		Trade and Industrial	
5. Package Number or Level	6. Date Prepared	7. No. of Similar Packages	8. Total Cost	
			Last Year	This Package
3rd Increment	December 17, 198-		N/A	$19,785

9. Objectives of this Package; Code to Higher Objectives (Use Other Side, If Necessary, for Items 9, 10, 11)

Graduate six students per year with comprehensive ("hot" and "cold") typesetting skills
Provide faculty and equipment to support three adult education classes per year
Support institutional printing needs up to 10 jobs and 200,000 impressions per month
Provide rapid response for community nonprofit job orders at cost

10. Advantages Over Other Packages

Gives students experience and skill training on most modern printing methods and equipment
Allows currently employed printers to add up-to-date skills
By-product of in-house printing capability
Reduces purchases of lead for old linotype machines

11. Advantages of Alternative Plans

Utilize low-cost surplus machines rather than requiring lease/purchase of new computerized equipment

12. Cost Factors Function. Remarks	Estimated Cost	Estimated Costs Year 1	Year 2	Year 3	Year 1 Over Last Year Increase	Decrease
Professional Staff		14,700	15,500	16,400	14,700	
Instructor, full-time, 10 months	13,500					
Lecturer, 1 evening/week evening class, 36 hours	1,200					
Support Staff		2,000	2,100	2,230	2,200	
10% of time of T & I secretary + shop assistant	2,000					
Operating		6,235	6,600	7,000	6,235	
Paper--2,500 reams @ 1.80	4,500					
Printing plates--aluminum	600					
Ink and cleaning solutions	400					
Indirect (.05 of salaries)	735					
Equipment (all including maintenance; 50% applies to purchase)		6,500	7,000	7,200	6,500	
Lease--Type-O-Graph @ 200/mo.	2,000					
Lease--Compute-A-Set @ 300/mo.	3,000					
Lease--Photo Plate Maker @ 150/mo.	1,500					
Travel		350	370	400	350	
1 State meeting--T & I	50					
1 Technical seminar--Chicago	300					
Miscellaneous		(10,000)	(11,000)	(13,000)	(10,000)	
Income: Charge for printing to other departments and offices	4,000					
Savings vs. doing work commercially	2,000					
Charges to community organizations	3,000					
TOTAL		19,785	20,570	20,230	19,785	

SOURCE: Form adapted from Harvey, Zero-Base Budgeting, Appendix B.

Feedback

Compare your written choice and rationale with the "Model Selection" given below. Your choice need not follow exactly the same rationale as given here. In fact, since both proposals were sound, it's entirely possible that you could have chosen the other proposal, for equally defensible reasons. However, you should have considered at least some of the same principal factors and followed some of the same lines of reasoning in making your decision.

MODEL SELECTION

The graphics program probably is preferable to the drafting program. In your analysis, you should have considered the following factors, or similar ones, even though your conclusions might not be the same as those listed here:

- Support of school's goals and objectives--Both programs have elements that deal with training needs of students, skill needs of employers, and adult education opportunities. However, the employability of that many drafting graduates is questionable, and the graphics program has a larger adult education component.

  With respect to innovation and services to the community (goals 5 and 6), only the graphics program meets these criteria.

- Output per dollar of input--Both programs are about equal; drafting will have more graduates, but graphics includes more adult education courses.

- Responsiveness to community needs--The graphics innovation seems to be a suitable response, whereas continuance of the drafting program seems to ignore the information about a contracting, dwindling job market.

- Internal impacts--It's always hard to reduce or discontinue an existing program, because it might lead to disappointed students or the unemployment of personnel. Thus, the inclination is to favor drafting over graphics unless the superfluous second instructor can be reassigned, trained in a new teaching area, or was leaving anyway to retire or seek other employment.

- Long-range commitments--Both programs are about equal in this regard. The total costs of each are rising by a few percent--scarcely more than the anticipated rate of inflation. Since the new typesetting machines are being leased, not purchased, the new program could be discontinued without financial loss or expanded without requiring a large lump-sum expenditure. On the other hand, there may be continuing need to renovate or replace the aging drafting tables.

Level of Performance: Your completed selection and rationale should have included many of the same major points and observations as the model. Since there was not a preponderance of evidence on either side, your selection of the drafting program, instead of the graphics one, would still be acceptable. Your analysis, however, should have included most of the same factors. If you missed some points or have questions about any additional or different conclusions you might have reached, review the material in the information sheet, "Making Decisions to Arrive at a Balanced Budget," pp. 49-65, or check with your resource person if necessary.

Learning Experience III

OVERVIEW

Enabling Objective

After completing the required reading, analyze given budget data, and recommend needed budget revisions based on that analysis.

Activity

You will be reading the information sheet, "Implementing and Evaluating a Budget," pp. 79-84.

Activity

You will be reading the "Case Study," pp. 85-87, analyzing the budget data provided, and recommending needed budget revisions based on your analysis.

Feedback

You will be evaluating your competency in analyzing budget data and recommending budget revisions by comparing your responses with the "Model Responses," pp. 89-90.

Activity

For information about how to implement and evaluate the budget, read the following information sheet.

IMPLEMENTING AND EVALUATING A BUDGET

Once the forms for generating budget requests and estimates have been devised, and after the system for making budget decisions has been instituted, the task of enforcing and following the budget is relatively straightforward. Nevertheless, there are several principles you need to know in order to (1) perform this task more efficiently, and (2) avoid the inherent tendency for an administrator to become unpopular while completing these assignments. In addition, you need to be aware of how frequently you should revise your budget preparation procedures so that they will become even more efficient and acceptable.

Budget Control and Enforcement

There are several ways, besides the traditional line-item method, to analyze, estimate, or compare costs. Fortunately (for both the administrator and auditor), certain concerns--resolution of costs into their fixed and variable components, the calculation of average or marginal costs, and even the recognition of certain expenses as direct or indirect--can now be left behind, for the most part. This is because it is only when preparing budget requests that each of the departments/vocational service areas includes certain percentages of the cost of the chief administrator's office, audiovisual services, or computer operations, and so on, as part of their own indirect expenses. Once decisions about levels of services or types and numbers of programs have been made, the total cost of operating the chief administrator's office, audiovisual center, or computer center is reaggregated under the respective office's account. The head of that office is then held responsible for ensuring that the budgeted amounts are not exceeded.

Perhaps sample 13 will make this clearer. Note that departments A, B, and C budgeted for the use, or "consumption," of $30,000, $20,000, and $10,000, respectively, for indirect administrative services, prorated based on their projected FTE enrollments. (Those cost lines were not further differentiated in their case.) Once the final annual budget has been adopted, however, those amounts are retrieved as a sum of $60,000 for the chief administrator's office. For purposes of budgetary control and for reporting to, or being audited by, the state government, $57,700 of this total is then broken down into the three broad areas--personnel services, operating, and equipment--with many line items in each area (the remaining $2,300 is his/her office's own indirect costs, which revert in turn to the business office). Should the chief administrator be involved in more statewide meetings or professional conferences than he/she expected, the travel payments and requests might exceed the $3,000 allocation, and adjustments would have to be made.

SAMPLE 13

ALLOCATION AND SUBSEQUENT RETRIEVAL OF INDIRECT COSTS

A. Line-Item Version (for budget control purposes)

Program: Chief Administrator's Office

Personnel:	Professional salary	$30,000	
	Clerical wages	10,000	
	Benefits (insurance, retirement)	10,000	
			$50,000
Operating:	Office supplies, paper	650	
	Postage	300	
	Copying	400	
	Telephone	950	
	Travel	1,000	
	Professional association dues	2,000	
	Conference fees		5,300
Equipment:	Word processor rental	2,400	
			2,400
Subtotal			57,700
Business Office Indirect Charges (4% of subtotal)			2,300
Total			$60,000

B. Program Budgeting/ZBB Version (for budget decision, priority ranking purposes)

Note that chief administrator's office was also assessed an indirect cost charge of 4% of the total budget, or $2,300, for services provided by the business office (processing travel vouchers and cleaning the office area).

The resulting total of $60,000 is now allocated to the three academic departments on the basis of their budget size, in this case using a factor ~~of 6%~~.

Thus, the bottom of the budget sheets for each department would look like this:

	Dept. A	Dept. B	Dept. C
Subtotal	$500,000	$333,333	$166,667
Indirect Costs:			
Admin. @ 6%	30,000	20,000	10,000
Total	$530,000	$353,333	$176,667

In general terms, by adopting the budget, the board has empowered each budgetary/administrative unit to go ahead and spend that amount of money within the confines of its intentions. The individual spending (or revenue raising) actions will not require the further attention of the board. This general authority is limited only in special cases in which a particular purchase, contract, or appointment is so significant--either in terms of dollar amount or expected duration--that the specific deliberation and assent of the board must be sought. Thus, the purchase of a $300,000 computer, the execution of a five-year snow removal agreement, or the granting of tenure do require more than the routine sign-off of the purchase order or contract by the person in charge of the department or office to be charged with the expense.

Budget Status Reporting

Since, in most cases, approval of purchase or personnel expenditures will be approved at relatively decentralized, lower levels, it is essential that information about current budget balances be provided to these persons. (Not to do so would be rather like not telling your spouse that you wrote a check against funds in your joint account, or how much the check was written for.) This situation is complicated by the fact that the actual charges for items often vary from the estimated costs that the chairman/director may have already approved. Such discrepancies arise because of shipping costs, partially canceled orders, quantity discounts, or other factors.[4] It is sufficient for now to note that, without current, timely, accurate, complete, and usable information about the income and outgo of funds for which he/she is responsible, the administrator is "flying blind" in attempting to control them.

If they are to be current and timely, the reports should be available on a regular basis--probably monthly since many statements from vendors and most payroll actions occur with that frequency. It is not necessary for these reports to be distributed to anyone else but the department/office involved. However, higher authorities, including the board, may wish to receive less detailed reports on perhaps a quarterly basis. In this way, they could get a broad perspective on how rapidly the institution is expending its resources and detect any unusual trends that are emerging. The budget committees at various levels could be used profitably to analyze these reports, or they might find this information useful as they begin to work (already) on the next year's budget.

---

4. For further detail concerning the flow of purchasing information, you may wish to refer to Manage the Purchase of Equipment, Supplies, and Insurance, part of the Competency-Based Vocational Education Administrator Module Series (Columbus, OH: The National Center for Research in Vocational Education, The Ohio State University, 1980).

To be complete and usable, these reports should be organized into a format compatible with the budget request documents. The formats would not be identical because, as we have already noted, indirect costs are not reported by or for subordinate units. However, they should allow easy comparisons between budget forms. They also should conform to the requirements of state auditors and to the format adopted for reports made to the board. In this way, the business office can readily aggregate monthly reports into quarterly or annual summaries.

Budget Revision

Shortly after the midyear point--soon after the second cumulative quarterly report has been issued--the administrators and their respective budget committees should meet formally to determine if revisions (reallocations of funds) must be made. Obviously, they now have new information that was not at their disposal when they made decisions eight to ten months earlier based only on estimates. For example, by this time the actual enrollment, both in total and by various areas, is known, as are the receipts from local taxes or state subsidies. Grants or contracts, which were in the proposal stage back then, have either been awarded to the institution, or else officials have learned that they will not be receiving the funds requested. On the expense side of the ledger, costs will also be known more accurately. Inflation might have exceeded even its predicted rate, or the nonavailability of certain items might, on the other hand, have reduced total expenditures.

Most important of all, the outputs, or impacts, of various programs will now be emerging. Perhaps the circulation rate of the library has not risen as much as had been anticipated it would as a result of the publication of a handbook. On the other hand, noncredit adult education courses might have generated very high enrollments, with people asking for more offerings. The food/hotel management program might be doing a booming business with the institution's restaurant, whereas the dental hygiene clinic might have experienced a shortage of patients.

The budget committee cannot confine its attention only to numbers, however; the written or oral comments of responsible instructors and administrators must be solicited and heard.

Once all pertinent information is available, the committee needs to reexamine the decisions made before the fiscal year began and, then, to transfer funds if necessary and feasible (1) between programs (e.g., from the library to adult education), (2) among types of expense (e.g., from part-time salaries to travel, or from postage to telephone), or (3) out of (usually) a contingency/reserve fund into other funding categories. These decisions don't necessarily follow a logic that "those who need, get." For example, a program that appears unlikely to achieve more than 60 percent of its goals, given current levels of resources, probably would not deserve a near-doubling of its allocation. The same amount of money might better be spent to push a "95 percent project" over the top, or even to support an upward revision of the goals of a program that has already--even at midyear--achieved its goals and shows promise of having even greater impact if given more resources.

At midyear, there is still sufficient time for the committees to consider evidence and deliberate on their recommendations to the board, which must ultimately approve budget modifications. Such will probably not be the case during "eleventh-hour crises" (i.e., after the next-to-last monthly reports have been distributed). The committees might want to give general guidelines to the respective administrator concerning what factors he/she should consider in recommending to the board any last minute, finely tuned budget revisions just before the fiscal year ends. In fact, it behooves everyone to maintain a "wish list" of proposed purchases that might enable them to wisely spend year-end balances. By maintaining such lists, the purchasing department/agent could have already shopped around to develop accurate specifications and close price estimates, and could act at once to requisition a needed, useful item if the funds became available.

Budget Evaluation

The final assignment for an administrator or committee involved in the preparation of budgets is that of evaluating their budgeting process and results. Crucial to their performance of this task is the retention of good records (the original proposals and worksheets, minutes of meetings, reports of hearings, letters of comment) and the publication of two reports: (1) an interim report after the budget has been adopted by the board (just before the fiscal year begins), and (2) a final report after the fiscal year itself has ended and after actual revenue/expenditures/outcomes are known.

The committee should also develop answers to some of the following evaluation questions, as well as ones they devise themselves:

- Did the composition of the budget committee adequately represent those parts of the institution and its environment having the most at stake or the most interest in budget decisions?
- Were the deadlines and mileposts set by the committee feasible? Were they met?
- Was sufficient information about the budgeting process given to those from whom budget requests and proposals were solicited? Were the forms and formats clear?
- Was enough technical assistance from the business or institutional research office available to aid budget preparers?
- Was enough supporting information (about broad goals, trends, requirements) provided to facilitate the formulation of reasonable subgoals and objectives?
- Did the decision-making methods employed help the committee, administrator, and board reach a speedy decision with a minimum of discord?

- How accurate were the estimates of revenue, expenditures, and outputs?
- How satisfied were the major interest groups of the institution (students, faculty, staff, administration, board, and community) with the budget process and the final allocations? What suggestions can they offer for improvement?

The answers to these and other questions should be (1) formulated based on the information found in the early portions of the committee's report, and then (2) presented in the report's final section. Most importantly, the committee must develop recommendations based on their findings and suggest ways to maximize the best, or correct the worst, of the previous year's experiences. The practices they recommend after the interim report (i.e., at the very outset of the year for which they have just completed a budget) will be invaluable to the next year's committee (similar mission and membership, but not necessarily the same persons) as it starts the cycle ~~all~~ over again. Recommendations about procedure will be particularly helpful and timely at this point.

The final report--the one filed after the fiscal year has ended--will of course be able to include an assessment of the accuracy of estimates and will give more specific information about the overall adequacy of the budget decisions made nearly one and a half years earlier. As such, it will not affect the current year's budget committee work as much as it will the <u>next</u> one, but the wheels keep on turning . . .

Activity

The following "Case Study" describes a situation in which an administrator and a budget advisory committee are reviewing budget compliance reports in the midst of a fiscal year. Review the situation and the budget reports, and then describe in writing what actions, if any, should be taken to revise the resource allocations to the three offices involved. Explain, also, your rationale for each recommended action you suggest.

CASE STUDY

It is late in March, and President Allison Chambers of Hoover Technical Institute (HTI) and her budget advisory committee are reviewing the second quarterly financial reports showing actual versus projected budget expenditures by program areas for the period December 1 through February 28. In addition, they have received progress reports from all department chairpersons and directors of administrative offices. At the moment, their attention is directed to three sets of reports, those for the offices of admissions, placement, and career counseling, summarized below:

****

ADMISSIONS	Projected (entire year)	Actual (to date)
Objectives		
New students accepted	1,000	400
Applications received	1,100	430
Inquiries, contacts	2,300	900
High school and club visits	50 (by May)	25
Open houses, visitations	12	6
Fair, garden show displays	8	3
Interns trained	2 (Oct.-May)	1
Expenditures		
Director and secretary	$28,000	$14,000
Interns	6,000	2,000
Travel--local area	300	150
prof. conferences	700	350
Printing	5,000	4,500
Postage, telephone	3,500	2,000
Advertising	5,000	2,500
Miscellaneous and indirect	1,500	600
TOTAL	$50,000	$26,100

Comments: "Only one part-time intern was made available from the student personnel program of a nearby university. That staff shortage, plus extremely severe winter weather, have reduced the number of school and service club visits, and caused a consequent lag in inquiries, applications, and admissions. Likewise, certain time- or staff-related expenditures are below budget, but all printing, and most advertising, funds are being expended on schedule. WE NEED HELP!"

****

PLACEMENT	Projected (entire year)	Actual (to date)
Objectives		
Business and industry contacts	80 (by May)	60
Seminars for seniors	6	4
Publication of "prospectus" on seniors, with vitae	1 (by March)	1
Job orders received	600 (Jan.-May)	300
One-, two- and five-year follow-ups conducted	3 (by March)	2 1/2
Interns trained	1	1
Expenditures		
Director and 1/2 secretary	$23,800	$11,900
Intern	3,000	1,900
Travel--local area	200	150
prof. conferences	500	250
Printing	2,000	1,000
Postage, telephone	1,000	500
Miscellaneous and indirect	500	240
TOTAL	$31,000	$15,940

Comments: "Activities in this office are pretty much up to date, thanks to the outstanding competency of the intern, who learned the operation of the program very quickly and is both a real "self-starter" and a personable representative of the college with local employers. Most visits were made either before or after the blizzards, so they were not affected. The "prospectus," recently mailed to prospective employers, is already generating a heavy flow of inquiries about employing our graduates--and cost only half of the estimated printing charges."

****

CAREER COUNSELING	Projected (entire year)	Actual (to date)
Objectives		
Career days	3 (Nov., Jan., April)	1
Adult education classes on career change	6	2
Public seminars on career change	2	1

	Projected (entire year)	Actual (to date)
Counseling sessions--		
group	12	3
individual	200	80
Interns trained	1 (Oct.-May)	1
Expenditures		
Director and 1/2 secretary	$20,000	$10,000
Intern	3,000	1,500
Travel--prof. conferences	400	220
Printing	600	550
Postage, telephone	500	200
Miscellaneous and indirect	500	230
TOTAL	$25,000	$12,700

Comments: "Since this is a new program venture of the college, and because the director is fairly inexperienced, activities have been slow to get off the ground. Also, the intern was not assigned until November 1st (one month late). The January career day was postponed because of the blizzards and is now rescheduled for March 10th. All publicity brochures are complete and have been distributed. News of the career service seems to be spreading now by word of mouth, and response has been positive, so we expect an increase in counseling appointments and opportunities for group sessions or seminars."

****

In addition to these reports, the committee has been informed by the vice-president for administration and student services, Charles Finn, that all three of the directors concerned are quite familiar with the operation of each other's office and are about equally well known throughout the institute's service area. All three offices are now running smoothly. He recommends that the admissions office not only complete its schedule of high school visits but broaden it to include sources of nontraditional students as well. He further urges that additional funds be directed toward more advertising, another series of brochures, and a mass mailing about HTI's summer schedule of classes. These latter three measures would cost $5,000.

President Chambers, as well as the chairpersons of some vocational departments, are concerned over the slower-than-normal admissions progress and generally support these recommendations from Mr. Finn.

Overall, HTI's budget is being followed fairly closely. The committee has already recommended a transfer of $20,000 from the contingency account (estimated balance before transfer: $80,000) to cover mandated faculty/staff pay raises and pension contributions. Pending its consideration are requests to transfer funds for some capital purchases (major equipment) as follows: priority 1 = $15,000; priority 2 = $25,000; priority 3 = $15,000.

Compare your completed written responses with the "Model Responses" given below. Your analysis, recommendations, and rationale need not correspond exactly to those given, but you should have listed many of the same major points and reached several of the same major conclusions.

MODEL RESPONSES

Analysis

In approximate terms, the status of the three offices under consideration, with respect to budget progress and attainment of objectives, is as follows:

	Objectives	Budget
Admissions	40%-50%	50%+
Placement	60%-80%	50%+
Career Counseling	30%-40%	50%

Since the year is half over as of the end of the second-quarter reporting period, all three offices are about on schedule with their expenditures, but only the placement office is up to date with its plan of work or is meeting its expectations.

The problem with the career counseling office does not seem to be one that could be corrected either with more money or personnel. In fact, its operation now seems to be working as well as hoped. If it does not attain 100 percent of its goals, the institution will not be sorely handicapped.

In admissions, however, a drop in performance could harm the institution's enrollment and, thus, its revenue, prestige, and productivity on behalf of the community. There is enough money left to fund the remaining activities as originally planned, but that might not be enough. Also, the director and the sole intern, by themselves, might not be able both to catch up with the snow-delayed visits and to contact the other groups suggested by Vice-President Finn.

On the plus side, there are $3,000 "extra dollars" available from the salary allocation for the vacant intern position.

Finally, it appears that some "external" funds are available in the form of transfer from the contingency account (competing with capital requests of varying urgency), and the other directors both seem to be qualified to "help out."

Recommendations and Rationale

1. Assign the placement director to assist the admissions officer on a half-time basis, carrying out the extended round of community visits. Based on a full-time monthly salary of $1,250, she could work as much as five months for $3,125--about equal to the personnel services money available in the admissions account. (The intern seems to be well qualified to keep the placement office going in the meantime.)

2. Transfer funds from the contingency account to admissions in the amount of the requested $5,000, after the transfer for priority 1 capital equipment purchases ($15,000) is made. When added to the aforementioned transfer of $20,000 for personnel salaries and pensions, this would leave the contingency account at $40,000 ($80,000 minus $40,000).

3. Defer any more transfers for capital equipment until very late in the fiscal year (the "eleventh-hour review"), lest some more urgent use for the remaining $40,000 develop in the meantime. (During the interim, the purchasing officer could be securing firm price estimates on the equipment specified in priorities 2 and 3 and preparing standby purchase orders, in the event the funds did ultimately become available.)

4. Recommend to Vice-President Finn that performance estimates, especially for the career counseling office, be calculated more accurately for the coming year (for which the budget is probably being considered at about this same time).

5. Compliment the vice-president and the placement director for their efficient and effective use of resources in the placement area; consider that as a highly cost-efficient office, worthy of additional funds next year.

Level of Performance: Your completed analysis and recommendations should have included many of the same major points as the "Model Responses." If you missed some points or have questions about any additional points you might have made, review the material in the information sheet, "Implementing and Evaluating a Budget," pp. 79-84, or check with your resource person if necessary.

Learning Experience IV

FINAL EXPERIENCE

Terminal Objective

While working in an actual administrative situation, prepare vocational education budgets.*

Activity

As part of your administrative responsibility, prepare one each of at least two of the four kinds of budgets (annual operating, capital, long-range, or project) for a vocational education institution or program. This will include--

- considering general institutionwide or programwide objectives
- determining resource requirements of various alternative programs
- allocating resources and responsibilities to the main parts and persons of the organization
- involving key persons in the preparation, decision making, implementation, and evaluation of budgets

NOTE: Due to the nature of this experience, you will need to have access to an actual administrative situation over an extended period of time.

As you complete the various activities, create or preserve documentation of these activities (e.g., budget memos, minutes of budget committee meetings, draft budget proposals), or maintain a tape-recorded or written log, for assessment purposes.

continued

*If you are not currently working in an actual administration situation, this learning experience may be deferred, with the approval of your resource person, until you have access to an actual administrative situation.

Feedback

Arrange to have your resource person review the documentation of your activities and any products developed under your leadership. If possible, arrange to have your resource person observe one instance in which you are working with instructors and/or other administrators to prepare vocational education budgets (e.g., a meeting of a budget committee).

Your total competency will be assessed by your resource person, using the "Administrator Performance Assessment Form," pp. 93-96.

Based upon the criteria specified in the assessment instrument, your resource person will determine whether you are competent in preparing vocational education budgets.

92

Name ______________________

Date ______________________

ADMINSTRATOR PERFORMANCE ASSESSMENT FORM

Prepare Vocational Education Budgets

Directions: Indicate the level of the administrator's accomplishment by placing an X in the appropriate box under the LEVEL OF PERFORMANCE heading. If, because of special circumstances, a performance component was not applicable, or impossible to execute, place an X in the N/A column.

In preparing all types of vocational education budgets, the administrator:	N/A	None	Poor	Fair	Good	Excellent
1. gathered information related to institutional/program purpose and organization including:						
a. prioritized listing of long-range, overall goals	☐	☐	☐	☐		
b. position, name, and dates of those individuals from whom budget requests are sought, or who have budget authority, or who might be appointed to a budget committee	☐	☐	☐	☐		
c. important planning dates	☐	☐	☐	☐		
2. gathered information about revenue and other available resources by:						
a. reviewing or preparing enrollment projections	☐	☐	☐	☐		
b. studying the most recent tables of local taxation or state subsidy formulas	☐	☐	☐	☐		
c. compiling summaries of miscellaneous income from grants, gifts, and contracts	☐	☐	☐	☐		

	LEVEL OF PERFORMANCE					
	N/A	None	Poor	Fair	Good	Excellent
3. appointed, or provided leadership to, a standing budget committee that included key persons involved in or affected by budget actions......	☐	☐	☐	☐		
4. In conjunction with this committee:						
a. established a "budget cycle"...............	☐	☐	☐	☐		
b. widely published the nature of, and dates of crucial events in, that cycle (including invitation to submit budget requests)..	☐	☐	☐	☐		
c. established methods and rationale for evaluating proposals........................	☐	☐	☐	☐		
d. decided on final allocations of resources to each program or major subunit of the institution................................	☐	☐	☐	☐		
5. submitted the budget for approval by the appropriate official or governing board........	☐	☐	☐	☐		
6. clearly assigned responsibility for use and control of these resources to the official already in charge of the affected program or subunit......................................	☐	☐	☐	☐		
7. developed a plan for periodic review of the current year's operating budget to detect major over- or under-spending rates............	☐	☐	☐	☐		
8. developed a plan for periodic evaluation of the budgeting process..........................	☐	☐	☐	☐		
In developing an annual operating budget, the administrator:						
9. arranged budget requests in terms of program alternatives (added, reduced, or continuing) that support the institution's long-range goals and objectives..........................	☐	☐	☐	☐		

94

	N/A	None	Poor	Fair	Good	Excellent
	LEVEL OF PERFORMANCE					
10. estimated the resources directly required by each alternative including:						
a. personnel salaries, based on workload data.	☐	☐	☐	☐		
b. equipment purchases, based on price estimates from vendors or previous experience..	☐	☐	☐	☐		
c. operating costs; based on past records of similar activities current rate schedules..	☐	☐	☐	☐		
11. assigned indirect (overhead) costs to each alternative based on the extent to which it utilizes institutionwide services...............	☐	☐	☐	☐		
12. quantified, where possible, the outcomes (financial and academic) to be realized from each budget alternative........................	☐	☐	☐	☐		
<u>In preparing a capital improvements budget, the administrator:</u>						
13. arranged all requests for capital improvements in priority order, based on institutional goals..................................	☐	☐	☐	☐		
14. estimated accurately the costs of major equipment purchase, construction of building, or remodeling of facilities, using professional consultation:.................................	☐	☐	☐	☐		
15. secured broad-based information and opinion about long-range implications, as well as immediate effects, of capital improvements......	☐	☐	☐	☐		
16. assessed potential for additional or alternative uses of proposed capital acquisitions......	☐	☐	☐	☐		
<u>In preparing long-range budgets, the administrator:</u>						
17. assured a correct alignment of budget plans with institutional goals and objectives........	☐	☐	☐	☐		

95

	LEVEL OF PERFORMANCE					
	N/A	None	Poor	Fair	Good	Excellent
18. recommended revisions to the overall goals and objectives if it became apparent that the resources to support them would be unavailable....................................	☐	☐	☐	☐	[redacted]	
19. called attention to alternative sources of finance needed in the future to supplement current resources..............................	☐	☐	☐	☐	[redacted]	

<u>Level of Performance</u>: All items must receive N/A, GOOD, or EXCELLENT responses. If any item receives a NONE, POOR, or FAIR response, the administrator and resource person should meet to determine what additional activities the administrator needs to complete in order to reach competency in the weak area(s).

ADDITIONAL RECOMMENDED REFERENCES

Albright, A. Rodney. "Institutional Planning and Budgeting--A Team Approach." Community College Review. 7 (Fall 1979): 30-35.

Clark, David G., and Huff, Robert A. Instructional Program Budgeting in Higher Education. Boulder, CO: National Center for Higher Education Management Systems, 1972. ED 074 981

Hardin, Brian, and Lee, Robbie. "Zero-Base Budgeting--A Catalyst for Improved Management." Community College Review. 7 (Fall 1979): 51-55.

Jackson, Frank, and Hale, William S. "Zero-Base Budgeting for Local Education Agencies." Planning and Changing. 6 (1976): 231-237.

Listou, Robert E. Financial Management in Higher Education: An Approach to Improvement. Washington, DC: McManis Associates, 1976. ED 133 022

Miner, Alfred Norris. A Budget Simulation Model for Times of Stress. Sanford, FL: Seminole Community College, 1976. ED 121 379.

Roberts, Charles T., and Lichtenberger, Allan R., comps. Financial Accounting: Classifications and Standard Terminology for Local and State School Systems. State Educational Records and Reports Series: Handbook II, Revised. Washington, DC: National Center for Educational Statistics, 1973. ED 081 103

Tidwell, Sam B. Financial and Managerial Accounting for Elementary and Secondary School Systems. Chicago, IL: The Research Corporation, Association of School Business Officials, 1974.

COMPETENCY-BASED VOCATIONAL EDUCATION ADMINISTRATOR MODULE SERIES

Order No.	Module Title
LT 58B-1	Organize and Work with a Local Vocational Education Advisory Council
LT 58B-2	Supervise Vocational Education Personnel
LT 58B-3	Appraise the Personnel Development Needs of Vocational Teachers
LT 58B-4	Establish a Student Placement Service and Coordinate Follow-up Studies
LT 58B-5	Develop Local Plans for Vocational Education: Part I
LT 58B-6	Develop Local Plans for Vocational Education: Part II
LT 58B-7	Direct Curriculum Development
LT 58B-8	Guide the Development and Improvement of Instruction
LT 58B-9	Promote the Vocational Education Program
LT 58B-10	Direct Program Evaluation
LT 58B-11	Manage Student Recruitment and Admissions
LT 58B-12	Provide a Staff Development Program
LT 58B-13	Prepare Vocational Education Budgets
LT 58B-14	Manage the Purchase of Equipment, Supplies, and Insurance
LT 58B-15	Evaluate Staff Performance
LT 58B-16	Manage Vocational Buildings and Equipment

Additional modules are being developed through the Consortium for the Development of Professional Materials for Vocational Education. The Consortium is supported by the following member states: Florida, Illinois, Ohio, New York, North Carolina, and Pennsylvania.

RELATED MATERIALS

LT 58A	Guide to Using Competency-Based Vocational Education Administrator Materials
RD 141	The Identification and National Verification of Competencies Important to Secondary and Post-Secondary Administrators of Vocational Education
RD 142	The Development of Competency-Based Instructional Materials for the Preparation of Local Administrators of Secondary and Post-Secondary Vocational Education

For information regarding availability and prices of these materials contact—

Program Information Office
The National Center for Research
in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210
(614) 486-3655
(800) 848-4825

OSU

The Ohio State University