

Higher Education Management Series

Number **3**

Budgeting in Higher Education

**Ann Gibson, PhD, CPA
Hasso Endowed Chair of Business Ethics
and Professor of Accounting
School of Business, Andrews University
Berrien Springs, Michigan**

The *Higher Education Management Series* is produced and edited by the Education Department of the General Conference of Seventh-day Adventists, Silver Spring, MD 20904

Copyright © General Conference Department of Education, 2009

Advisory Team

Lisa Beardsley, Associate Director, Education Department, General Conference

John Fowler, Associate Director, Education Department, General Conference

Dennis C. Keith, Sr., Associate Treasurer (retired), General Conference

Preface

This booklet is the third in a series produced by the Education Department of the General Conference of Seventh-day Adventists. The series intends to provide an orientation to major issues in higher education and is written primarily for administrators working in the tertiary education sector.

One of the functions of the Education Department of the General Conference is to arrange for and assist in the accreditation of all education institutions operated by the Seventh-day Adventist Church. The Accrediting Association of Seventh-day Adventist Schools, Colleges, and Universities (AAA) fulfills this responsibility and identifies in its handbook its expectations for institutional operation. The booklets in this series are designed to help administrators improve institutional quality in line with AAA expectations and international best practice.

Each booklet is written by one major author, with a team of readers providing advice and feedback. Booklets are available only by contacting the Department of Education, General Conference, or through the website: <http://education.gc.adventist.org> (see publications)



C. Garland Dulan, PhD
Director of Education
General Conference of Seventh-day Adventists

Table of Contents

Introduction	3
Part I Budgeting: The Context	4
a. Definition and Principles	4
b. The Issues and the Environment:	5
i. The Ideal Versus Reality	5
ii. The Relationship Between the Budget and Organizational Strategic Plans	5
iii. The Politics of Budgeting	6
c. The Personnel Involved in the Budgeting Process	8
d. Criticisms of the Budgeting Process	10
Part II Budgeting: The Process	13
a. Developing the Budget	13
i. Centralized or Participatory Budgeting	13
ii. Building the Operating Budget	15
iii. Revenue	15
iv. Expenditures	16
v. Reducing the Budget	20
vi. The Cash Budget	21
vii. The Capital Budget	24
b. Implementing the Budget	25
i. Communicating the Budget	25
ii. The Oral Presentation	25
iii. The Written Presentation	26
c. Controlling the Budget	26
i. The Variance Report	26
ii. Additional Analytical Techniques	28
Conclusion	31
Appendices	
A. Budget Models	33
B. Eight Golden Rules for Effective Budgets	37
C. Beyond Budgeting—the Hope and Fraser Model	38
D. Ratio and Financial Analysis Glossary	42
E. References and Further Resources	44

Introduction

Early in the 20th century, American business leaders realized that the old-style business with a single product line in a single industry was insufficient to meet growing consumer demand. Their response was to develop the vertically integrated manufacturing organization—of which DuPont Company and General Motors were among the first. The field of management was officially launched by the creation of this type of organization. The management process was described by the first managers as one of *planning, organizing, leading, and controlling*.

The managers of these early diversified companies soon realized that the management processes of *planning* and *controlling* were much more difficult once the operating activities were scattered throughout different divisions. Their answer was: THE BUDGET! Early budgets were designed as tools for managing costs and cash flow across divisions. Ultimately companies developed operating budgets, which forecast revenues and expenses for the next operating period, and capital budgets, which outline the spending plan for plant and equipment and other assets that will have multi-year lifetimes.

Today, all organizations, whether for-profit or not-for-profit, use the budget techniques developed by DuPont and General Motors to assist with organizational planning and control. All organizations, including colleges and universities, wrestle with projecting revenues and expenses as an organizational exercise in planning the future path of the business. They all experience what the early 20th century DuPont accountants realized—that the more complex the organization, the more difficult it is to perform the essential management functions of planning and controlling.

Budgeting in Higher Education examines the budget process as faced by colleges and universities in what is an increasingly complex educational environment. The monograph is divided into two parts. The first part discusses the context of budgeting, including its definition, the environment, the personnel involved, and criticisms of the process. Also included in this section is a discussion of the relationship between the budget and strategic planning, and the pitfalls an organization will encounter as the budget *process* interacts with the *people* who must ultimately make the budget work.

The second part discusses the budget process itself, including the development, implementation, and control of the budget. This section is not written for the controller or the chief accountant; it is written for the non-accountant who wishes to understand the “big picture” view of the process.

The conclusion summarizes the key points of both the budget context and the process. The appendices provide a summary of a number of possible budget models, guidelines for effective budgets, a brief discussion of a recent book which urges organizations to move beyond budgeting—or at least beyond its major pitfalls, and additional information on ratio and financial analysis.

PART I: BUDGETING: THE CONTEXT

DEFINITION AND PRINCIPLES:

A budget is a statement of an organization's plans, priorities, goals, and objectives, expressed in financial terms, for a specific period of time. The most common period of time that an operating budget covers is one year. Capital budgets are generally for a longer period of time. Budgets are a tool and a means to an end—they are not an end in themselves. The primary purpose of the budget is to assist in planning and control for the organization, department, or program, although a budget, properly done, also enhances communication and motivation within the organization. The control function of the budget kicks in after the activity has occurred. Its purpose is to determine if what was anticipated is what actually happened. Evaluation of managerial performance is often a part of the control process.

To begin preparation of a budget for an organization, a department, or a program, one must first know the purpose of the entity and know what it is trying to accomplish with its activities. Thus the first question to ask when beginning to budget is: "What do we want to accomplish?"

Once the mission is known, goals must be established. In putting this step into action, one asks: "How will we accomplish this plan?" Goals are established by a comparison of the mission and prevailing circumstances, in order to determine what direction one needs to move toward if the mission is to be accomplished.

One should not overlook the importance of clearly defining the mission and goals of the organization as part of the budgeting process. The financial manager must know what the institution wants to accomplish and must seek the necessary resources to advance the mission of the institution as part of the budgeting process. The financial manager's role is to assist the organization in funding its priorities and purposes, not to "hoard" funds for his/her own agenda. The care and keeping of the institution and the furtherance of its goals are the primary purposes of budgeting, even in times of limited funds.

Once the goals have been established, alternative ways to reach them must be evaluated and a particular path must be selected as the strategy to follow. The strategy specifies the activity, what is needed, when it is needed, and what resources will be required to accomplish the goals. The question to keep in mind at this stage is: "How much will the activity cost?" The answer to that question becomes the budget. The goal and its strategy become the justification for the budget.

If properly done, the budget process co-ordinates the actions of the different managers and departments/programs of the organization, while securing commitment to achieving the desired results. Finally, the voted budget provides revenue targets for departments/programs of an organization and gives authority to departmental managers to incur expenditures within their

areas of responsibility.

THE ISSUES AND THE ENVIRONMENT:

The Ideal versus Reality:

The Sylvester Jones Leadership Center describes the ideal budget-making process as accomplishing the following:

1. Defines/Refines goals that realistically reflect the resources available in the organization.
2. Compels members of the organization to use funds efficiently.
3. Provides accurate information for evaluating programs and activities.
4. Aids in decision making.
5. Provides a historical reference to be used for future planning.

Unfortunately, budget-making reality often turns into an attempt by someone in an executive office to match anticipated revenue with expenditure requests. Generally the expenditure requests from the various cost centers are higher than the anticipated revenue, so subsequent negotiations are needed to bring down the level of expenditure requests so they are in line with anticipated revenue. The final budget then becomes a statement of how the revenue is allocated to the budget cost centers, which may or may not match the original requests. At the end of the process, where ideally there should have been a strong relationship between organizational goals and the actual use of organizational resources, there is, instead, little relationship between organizational goals and the budget.

The Relationship Between Budgeting and Organizational Strategic Plans:

As noted above, the budget process ideally brings the organization's managers together in support of the organization's mission and goals. This can only be done if there is extensive communication (both by talking and listening) between upper management and all cost center managers before, during, and after the budget process. Top management must communicate the organization's strategic objectives to all levels of the organization. The financial manager must assist the organization in funding these strategic objectives. This communicated vision will inform the cost center managers of where top management expects the organization to be in the next three to five years and what they hope the organization will achieve. In return, cost center managers must communicate their particular needs, assumptions, expectations, and goals back to top management. Through this ongoing communication process, the strategic plan of the organization will be transformed into the tactical annual operation plan—i.e., the budget.

The final product generated by this on-going communication throughout the budget process is the compilation of all the individual budgets from the organization's individual cost centers or departments into a master budget. In a manufacturing environment, the individual budgets might include a materials budget, a labor budget, and factory overhead budget (the three budgets which support the manufacturing operations), and other departmental budgets, such as a sales/marketing budget and administrative budget. In a not-for-profit organization, the cost centers mirror the organization's activities. For example, in a college/university, each academic department or school within the college/university will prepare a budget. There will also be a budget for the library, food service, dormitories, plant service area, computing center, and administrative offices. Irrespective of the names of the cost centers, the master budget brings all the pieces together so that it ultimately incorporates the operating budget (which deals with income and expense items) and the financial budget (which deals with the capital budget and the cash budget) into one comprehensive picture of the organization's plan for the year. But this annual plan must be tied to the strategic plan because the annual budget is merely the short-term action plan which will carry the organization toward reaching its long-term goals.

As one might expect, budget preparation involves a great deal of number crunching. But more than number crunching, budget preparation involves people. Ideally, everyone involved in the budget process is moving toward the same goal—i.e., to achieve the organization's strategic objectives. But because each individual brings their own needs and assumptions to the budgeting process, there are bound to be genuine disagreements over the projected numbers, the importance of particular expenditures, the division of resources among the cost centers, and even the strategic goals. It is this human element that can make the budget process fun. The same human element can also lead to frustration and game-playing, especially when anticipated revenues fall short of proposed expenditures.

The Politics of Budgeting:

Cost center managers often perceive that their departments and projects are at risk during the negotiation process that inevitably occurs when proposed expenditures exceed the anticipated revenue. To protect themselves and their cost centers from these anticipated losses, managers engage in a number of budget games. These games go by various names, including "padding the budget," "creating a cushion," "slush fund," "hedge," "kitty," or "war chest."

For example, if one is uncertain of the level of risk in a new product, service, or a new department, a manager may be tempted to add a percentage to the budget to ensure the successful completion of the plan. Generally the manipulation consists of an overstatement of expense or understatement of projected income so that a differential is created which will be to the manager's or the department's benefit. Christopher Bart has a wonderful discussion on budget games in his article: "Budgeting Gamesmanship."

Research cited in Bart's article specifically relates to a manufacturing environment, but the findings illustrate situations which encourage budget games. From an institutional viewpoint, budget games are not desirable. If the department playing the "game" is successful, institutional resources will be placed in the pockets of those who play games rather than where the institution

chooses or desires to place its resources (which should be in accordance with the strategic plan). Programs/Departments which need institutional resources will be short-changed, and successful game-players' programs/departments may receive the funds instead. Additionally, if managers are personally benefitted either by bonuses or promotion for "staying on budget," budget games may mis-allocate the bonuses or promotions away from those who truly stayed on target and reward those who focused primarily on games.

Bart's research identified the following situations which encourage budget games:

1. When there are large funds allocated to "soft numbers," such as advertising, consumer promotions, trade-related expenses, and market research. These numbers are estimates at best, and very difficult to disprove. All organizations have programs which are difficult to accurately determine planned costs. Any such program is a likely candidate for a budget game.
2. When there are big promotional budgets for new products, projects, or any area where there is no prior experience to rely upon in judging the numbers.
3. When there is an opportunity to present the product or project as a "growth" project (and therefore in need of additional funding), as opposed to a "harvest" project or product for which a large body of historical costs has been established.
4. When there are time constraints for budget preparation and thus no time to carefully check the numbers.
5. When the managers are unknowledgeable and thus unlikely to catch the game-playing.

Bart defined some of the reasons for budget game-playing. They include:

1. When the junior manager believes that the submitted budget will invariably be changed by senior management (e.g., by arbitrary cutting) and thus uses "hedges" to protect against the anticipated cuts.
2. When market uncertainty exists, and with it comes the fear that without a hedge, it is unlikely that profit targets will be met.
3. When the drive to achieve the profit target is very strong and linked with some personal reward for meeting the targets, such as a bonus or a favorable personnel evaluation.

Budget game-playing ultimately hurts everyone in the organization, as explained above. It is much better for a department or project manager to negotiate for the money one really needs and determine not to play the budget game. At the maximum, the department or project manager may place an amount on a "contingency line" in the budget to cover unexpected developments. Such a contingency plan is particularly wise when the budget is for a product or project which is

new and does not have a historical basis for estimating costs. It is important to keep in mind that the purpose of the budget isn't to stay within the budget, but to estimate as accurately as possible what the costs are going to be.

Top management, however, also has a major role constraining budget games. Steps that may be taken to constrain the games include:

1. Get the best from people by developing budgets that include participation and consultation with those who must work with the budget. This method generally works better than a budget that is imposed by senior management.
2. Explain what the budget is all about and exactly what each manager is expected to achieve and how he/she is to perform. This process should include outlining what the manager's total profit target should be, thus focusing on total profit from the department/division (rather than on constraining expenses). This focus will relieve the pressure to play games with the expense lines.
3. Avoid setting budget targets too high or too low. People can become demoralized when actual results are compared with unattainable budgets.
4. Carefully review budget proposals in view of historical spending patterns and examine figures which are significantly out of line. Avoid the time crunch situation where insufficient time is available to review submitted material.

THE PERSONNEL INVOLVED IN THE BUDGETING PROCESS:

In an educational institution, the primary personnel involved in the budgeting process include the cost center managers, the vice president for academic administration, the vice president for financial administration, and the controller. These people may be brought together in a large budget committee, or the budget committee may be composed of the two vice presidents and the controller, with representatives from the cost center groups. The latter method is used if the institution is of sufficient size that having all the cost center managers meet with the vice presidents would make the committee too large to function effectively.

The role of the budget committee is to review the submitted figures and assess their viability in preparation for finalizing the master budget. The two vice presidents are present to represent the major parts of the educational institution. At times the president of the institution may choose to join the budget committee, particularly if questions are raised about how budget requests relate to the overall strategic goals of the organization. But ultimately the budget committee will present the budget to the president, who will present it to the board. Thus the president's role is advisory on the committee.

It is essential that the members of the budget committee carefully consider budget requests in light of the big picture—i.e., the strategic plan of the institution as a whole. In this role, three

important questions should be considered (Source: Harvard Business Series, page 228):

1. Do the tactical plans being considered support the larger and longer-term strategic goals of the university?
2. Does the university have, or have access to, the required resources to fund the activities throughout the immediate budget period?
3. Will the university create enough value to attract adequate future resources by following the presented tactical plan to achieve its longer-term goals?

This “big picture view” is essential as the budget committee members advise the cost center managers and coordinate the final agreements. The role of the controller in the committee is to assist in the budget preparation, not to determine the actual content of the cost center budgets. Throughout the budget process, college/university officials need to be kept informed about the programs within the college/university and their needs. All administrative personnel and cost center managers need to hear the details about the university’s fiscal situation. If certain department requests are not funded, there must be an explanation given so that parties involved understand why the decision was made (Birdsall).

When a cost center manager is presenting his/her budget to the budget committee, it is essential that the manager be perceived as fiscally responsible in order to build trust and confidence in his/her ability to manage the proposed budget properly. Specifically, the cost center manager should (Birdsall):

1. Come to the budget committee completely prepared, with figures that are consistent with prior year’s requests. If some portion of the prior year’s requests were unspent, explanations should be given, particularly if operating increases are being requested.
2. Avoid budgetary surprises. Inform the vice president in charge of your area of any new projects for which funds are being requested.
3. Use honest and accurate data to support requests and make your requests in a rational and analytical manner.
4. Demonstrate the ability to make budget hard choices within the department prior to bringing the budget to top administration.

Some institutions may have cost center managers who are not interested in, or qualified, to deal with financial matters. For example, in some academic institutions, a department chair may be selected because of his or her academic expertise—not because of any expressed financial interest or acumen. In such cases, asking the cost center manager to present his/her budget to the budget committee may be problematic, if not impossible. Under these circumstances, it may be necessary for the controller to work closely with the department chair to assure that the budget is prepared in a timely manner and that the financial needs of the department are met. The controller would then bring the department’s budget to the budget committee for inclusion in the master budget.

CRITICISMS OF THE BUDGETING PROCESS:

In Part II we will discuss the budgeting process. Conceptually, creating a budget is a very easy assignment. First estimate future income. Second, estimate future expenditures. Finally, calculate expected net income for the next operating period.

But as described above, the budget *process* is fraught with difficulty because it is done by people whose behavior is often driven by the desire to “meet the budget” and receive the subsequent positive performance evaluations and/or bonuses or avoid scolding for budget overruns. As a result, cost center managers may play games when creating budgets, may set easy targets which favor their meeting the goals even if the targets do not meet the organization’s strategic plan, and may pad their budget requests in anticipation of across-the-board cuts from top administration.

Because of the potential pitfalls of the budget process, and the fact that the process is universally disliked because it takes too long and adds little value to the organization, there are many critics of the budgeting process. Some of these critics call for a new set of management processes which would essentially do away with budgeting (e.g., Hope and Fraser; for more on their ideas, see Appendix C). Other critics urge that managers recognize the issues and take steps to resolve the problems in less drastic ways. Certainly, without recognizing the points raised by the budget critics, a manager may easily fall into serious budgeting traps which will ultimately derail the process and may even derail the organization.

It must be recognized that for all their value, budgets do not measure everything that makes an organization efficient or great. Budgets deal with items which can be quantified in numbers, and thus are excellent for tracking where the money goes. They are not, however, a good measure or evaluator of managerial decision-making, nor does the budget indicate whether or not the organization’s resources have been used in a manner that will best meet the organization’s mission and goals. Budgets are particularly ineffective when they are used to gauge managerial performance. If a cost center manager focuses on “meeting the budget numbers” at the end of the year, he/she will be tempted to take any actions that are required to meet the budgeted revenue or expense amounts, irrespective of whether these actions are actually wise or good.

Examples of some dysfunctional decisions include:

- (1) spending whatever is in the budget (a “use it or lose it mentality”), irrespective of whether the expenditure is needed or wanted;
- (2) creating “stories” to explain away unfavorable variances rather than dealing with the problems;
- (3) blaming other departments for cost overruns, rather than focusing on customer concerns and customer service;
- (4) doing less than expected at year-end with respect to revenue generation because of

fear that if you beat the budgeted revenue numbers, you will be expected to do more next year—and you cannot guarantee a second year of revenue success;

(5) increasing internal charging in order to transfer one's own departmental cost overruns to another department so that the department "looks good" for the year-end budget check.

Finally, a focus on budget numbers may lead a manager to refuse to take risks, even risks that should be taken in order to improve customer service, a product, or take the organization to a new level. If a manager is focused on the budget number, he/she may be afraid that moving into a new area to build the business might fail, which would result in an unfavorable performance evaluation or a public scolding. The result is that only negative behavior is controlled—i.e., overspending. Positive behavior, like creating new business or a new product through risk-taking goes unrewarded, and thus, undone.

Thomas Stewart, in the article "Why Budgets Are Bad for Business," summarizes his argument with the following comment: "The worst failure of budgets is what they don't measure. Budgets show what you spend on customer service, but not what value customers put on it. They count noses, but not brains. ... In many companies budgets actually discourage spending to protect market share or improve products." Stewart goes on to recommend the following actions to avoid falling into the budget performance trap:

1. Rather than only control expenditures (and ignore how much a cost center may earn), use cost center profit as the key measure. If the cost center has only expenses (such as the Registrar's Office or Human Resources in an educational institution), create relevant measures of achievement such as reduction in the number of complaints during registration or decreasing employee turnover, as success measures. This will shift the focus away from spending money toward providing service.
2. For capital investments, make long-range budgets and do not expect an immediate pay-back. This method is superior to doing a "quick fix" that will save operating funds for the current year. Cost reduction is important in the future as well as in the present, and often real savings for the organization will come through investment in new processes or equipment, even if the current year sees an expenditure cost overrun.
3. While budget numbers are tied to the financial statement numbers, these accounting numbers may not be the best numbers to use for management decision-making. For example, the library budget may call for a certain amount of budgeted revenue from overdue book fines. But from a managerial perspective, if all books were returned on time, that would be a better use of the library resources. If the staff can notify patrons of overdue books electronically, thus reducing the amount of fines, the library may not meet its expected revenue budget but it will have achieved a major managerial objective of having the library's books used *and* returned to facilitate future borrowing.
4. Charging other departments in the organization for its services is a favorite way for a cost center to "make budget." For example, the custodial department may charge an

academic department for set-up of chairs for a departmental function. Because these charges create revenue for the custodial department but create costs for the academic department, the academic department may decide to purchase its own chairs in order to save the set-up charges. As a result, the organization as a whole will own chairs within each department—and perhaps may have purchased more chairs than it actually needs. Conversely, if the set-up charges by custodial become too large, the academic department may go to an outside supplier when chairs are needed—thus leaving the custodial department with both the chairs and with the costs of maintaining the chairs.

5. If there is a cost overrun in a department, ask why before criticizing the overrun. For example, if an academic department has more students than expected, it may incur cost overruns in its supplies and teaching staff budgets. Before demanding that the department stay on budget (and in the future, fail to attract additional students), find out what happened. Perhaps the costs were incurred this year, but revenues will be increased in future years. A wise manager takes the long-range view when asking for explanations for expenditures that run above the budget plan.

PART II: BUDGETING: THE PROCESS

DEVELOPING THE BUDGET:

To develop a budget, one must gather information about the internal and external influences on the organization, estimate amounts for income and expenditures, and bring all this information together in one overall document, the master budget.

The assessment of external influences (e.g., economic factors, government legislation, business relationships with customers and competitors, etc.) is very important to the financial success of the organization. Equally important is the assessment of internal factors, such as the types of products and services provided, the directors and employees of the organization, and the available resources, including capital, land, buildings, and equipment. Finally, in developing the budget, one must consider the limiting factor—the dominating influence that has a constraining effect on the organization. If you fail to recognize the limiting factor, you may set budget targets that are not achievable. For example, the limiting factor for some colleges/universities may be capacity constraints in dormitories, or location in a war-torn area of the country or world, which makes it impossible for students to attend school at expected times. Another limiting factor for schools may be constraints on the development of new programs due to lack of library support or qualified faculty for certain desirable academic degrees.

Centralized or Participatory Budgeting:

The question can be raised as to whether budgeting should be a centralized process (top-down

budgeting) or a shared process which includes participation from a large number of budget managers (bottom-up budgeting).

In centralized (top-down) budget planning, senior managers estimate budgets from their experience, set budget goals (e.g., revenue, expense, profit), and then impose these goals and allocate the funds accordingly to lower-level managers for execution. Centralized budget planning works if managers carefully allocate costs and possess significant experience at managing the needs of lower-level areas of the organization. Centralized budget planning is faster than participatory planning. Its advantages are that it:

1. Considers the entire needs of the organization and reflects management's larger strategic objectives.
2. Consolidates and standardizes information across the organization.
3. Centralizes controls and procedures.
4. Discourages budget games by individual unit managers.

Centralized budget planning will fail if upper management is out of touch with the realities of the individual cost center manager's needs and thus sets inappropriate or unattainable goals. But more often it fails because individual cost center managers do not accept the goals "handed down" because they do not feel involved in the budget process.

Research supports participative budgeting (Birnberg et al, 1990) as the best way to achieve commitment to the budget by cost center managers. Participatory budgeting ideally encourages teamwork. In the participatory model, staff members get together and attempt to hammer out a budget from the task-level detail. These staff members are often the people who have the best information to make the budget decisions. As a group, they share openly in order to consider and include all tasks and evaluate all possible solutions. With this commitment comes a higher level of motivation to attain the budget goals and keep within the budget. In today's work environment, acceptance is crucial if one wants long-term commitment. Participatory budgeting ideally encourages teamwork, but only if it is truly participative. It cannot be pseudo-participatory, where top management pays lip service to the ideas of lower-level management, but in the end, discounts all input and essentially moves forward under the centralized model.

Peter Brinckerhoff recommends the participatory approach precisely because the people involved are the ones who know the needs of the department. He provides the following steps for "bottom's up" budgeting:

1. Provide training and orientation for those who will be involved in the budgeting process. Walk people through the process; don't leave them in the dark!
2. Delegate both responsibility and authority to the staff.
3. Reward success. It is, however, very important that in the process of establishing the

rewards, one considers the possibility of dysfunctional behaviors, as one will get the behavior that is rewarded.

4. Provide regular feedback and reporting. Provide easy-to-read monthly reports. Large discrepancies should be questioned by the administrator who oversees the area.
5. If one hasn't done participatory budgeting before, start slowly with people who really want to participate. Making a budget is not easy—even though writing down the numbers is!

Participatory budgeting isn't perfect, however, It takes time. If performance evaluations are tied to budget achievement, the participatory method may lead to budget game playing by cost center managers. Finally, the people closest to the project, or the department, may not be able to see how their budget fits into the organization's overall strategic plan. This disadvantage may be overcome by submitting the budget and its final approval to the budget committee (discussed on pages 8-10) for review by those taking the "big picture" view of the organization.

Building the Operating Budget:

The process of building an operating budget should be an orderly one. It is important to use one's best estimate for each component of the budget. While it is impossible to know the future and thus there is always the risk of underestimating or overestimating revenues and expenses, it is still important that one create a budget that is as close to expected reality as possible.

The *Managers Toolkit* from the Harvard Business Essentials series (page 229) recommends the following tips for setting budget assumptions:

1. Use historical data as a starting point. Even when times are changing quickly, information about past performance can establish a base from which to begin.
2. Trust your own experience. Make educated guesses where necessary about what is likely to happen in the future.
3. Listen to your intuition. Even though you can't verify those gut feelings, you can take them into account.
4. Conduct due diligence. Seek out the information you need. This may involve doing research, reading trade journals, collecting industry statistics, and so on. Finally, don't forget that the Internet is a growing information resource.
5. Talk with and listen to knowledgeable people. Discuss your ideas with team members, colleagues, and mentors. Seek out industry participants, suppliers, concerned community leaders, and experts in the field. Engage in discussions with competitors.
6. Learn when to be a risk taker and when to be conservative. In a volatile market,

conservative assumptions may be the safest.

7. Test your assumptions. If possible, try out your assumptions in small experiments before you accept them.

Revenue:

The first step in budgeting is to estimate revenue. This number is established based on measurable expectations, although typically the beginning point on revenue will be what happened the previous year, adjusted for expected changes due to the identified external and internal influences. For example, in a school, the estimated revenue is based on the number of students expected multiplied by the tuition rate. If more students are expected in the future than are present at the school now, anticipated revenue will go up. Alternatively, if there is reason to believe that fewer students will attend in the subsequent year, downward adjustments in expected revenue should be made when the budget is prepared. Enrollment projections based on applications and acceptances may be made by the admissions team in a college or university to assist the financial manager in making realistic projections. In an organization which sells a product, such as a publishing house, the expected revenue would be based on the anticipated sales of books times the average price of each book. If there are sales people involved, their estimates of expected sales are an important factor in establishing the amount of revenue.

If the revenue is coming from a donor or a grant, the budget process swings immediately toward the expense side, as revenue will match the expenses if the donor believes the listed expenses are justified.

The estimation of revenue is a point at which internal tension can occur and internal tension may lead to budget game playing. For example, if cost center managers are evaluated and rewarded on their achievement of budgeted revenue targets, they may be tempted to develop conservative revenue targets that will be easy to reach, making it more likely that they will receive a positive evaluation and its subsequent rewards.

Expenditures:

It is essential to understand cost behavior and cost drivers in order to measure the cause and effect of various decisions. Costs can be viewed from two perspectives. Costs may be fixed or variable. They may also be direct or indirect.

Fixed or variable costs can be understood in terms of the cost linkage to the organization's volume of activity—which is generally measured by its revenue. Costs that stay the same when activity volume increases (or decreases) are fixed costs. Costs that increase (decrease) in proportion to activity volume increases (or decreases) are variable costs. Many costs are neither fixed nor variable, but a combination of the two. In not-for-profit organizations like schools, most costs are fixed, at least until capacity is reached, when another jump in fixed cost is added. For example, dormitory costs for heat and light and depreciation do not immediately go up or

down, depending on the number of students in the building. Eventually, however, if the institution grows, another dormitory must be added. At that point the fixed costs related to the dormitories take a major bump upward.

Direct costs are incurred for the benefit of just one product or service. Indirect costs are incurred for the benefit of many products or services. Indirect costs are often called overhead, and are shared across departments or projects. Top administrative costs are indirect costs and are shared across all departments in an organization, whereas a faculty salary for teaching only accounting courses would be a direct cost to the accounting department.

All costs are tied to activities. The more complex the activity becomes, the greater the expense. The importance of tying the cost to the activity was recognized in the manufacturing field in the late 1980s and resulted in the development of activity-based-costing systems. The basic philosophy behind activity based costing is that since activities consume resources, the first step is to identify the activities involved in the process and assign the costs to these activities. The key question is: What is driving the costs of the organization? Once the cost driver is established, one then selects the appropriate measure for each activity and determines the cost driver rate.

While most not-for-profit organizations have not adopted activity-based-costing, the concept of activities-driving-costs is an important one for all organizations to consider. Many times expenses rise in an organization and no one can understand why. Unless one recognizes the way costs behave and what activities are driving the costs, it is impossible to control the expenses of the organization.

For example, consider a college. An identification of some basic activities which create costs (expenses) might include:

- Academic administration
- Teaching contracts
- Cafeteria
- Academic records
- Billing and collection services

Using academic records as an example, one might expect that with an increase in students, the costs in academic records are likely to rise. In this case, the increase in the cost driver (number of students) creates more costs in the academic records department because of the need for more staff and/or more hours of staff time to keep the records for an increasing number of students. Other activity and cost driver relationship examples are listed below.

<u>Activity</u>	<u>Cost Driver</u>
Academic administration	Number of departments or number of faculty, depending on the organization of the college
Teaching contracts	Number of classes
Cafeteria	Number of meals served

Academic records	Number of students
Billing and collection	Number of students

To establish the cost driver rate, divide the total cost by the expected cost driver measure to develop a cost per unit. For example, assume that the total cost of academic records is \$25,000 and the total number of students is 2,500. The cost driver rate would be \$10 per student (\$25,000 divided by 2,500). This rate would then be used to budget academic records costs as the number of students increased or decreased. If the college expected an increase in total students to 3,000 in the next fiscal year, the budget for medical records should increase to \$30,000 (3,000 x \$10 per student). The activity in academic records is driven by the number of students. As they increase, the academic records budget must also increase in recognition that the related activity (number of students) will increase the cost of the department. Provision for this increase must be made in the budget.

While this is only an example, it illustrates the point that activity-based-costing assists managers in remembering that activity drives costs. Often, however, the first question asked is: How does one define the activities of an organization? Here are some suggestions of where to look:

Ask your staff. They may be able to provide estimates of the time required to complete a task or project, as well as assist in estimating the quantities of needed supplies and equipment. It is important that these estimates be as specific as possible. Keep in mind that costs are tied to time requirements. If there is a requirement for a rush job so that the project may be completed faster than planned, costs will generally rise. Overtime and rush charges (especially when an outside vendor tacks on extra charges to complete a job on short notice or outside regular working hours) will quickly increase the costs and cause a budget overrun.

Ask outside vendors, suppliers or service providers. These individuals are particularly invaluable if you are planning a project (as opposed to running an on-going department). If you plan to order supplies and equipment for a specific project's requirements, ask the providers for an estimate. If you must have hard numbers from the outside providers or consultants, get a written estimate of the expected costs.

Ask other managers or experts. People who have managed similar projects or departments can provide excellent advice and cost estimates.

For most organizations, the largest expenses are those related to personnel—the costs of the people working in the organization, department, or on the project. Personnel costs not only include the actual salary or wages paid, but also employee benefits, which are generally charged as a percentage of payroll. The amounts needed for employee costs are relatively easy to compute: the number of employees multiplied by the salary or hourly wage, plus a percentage for benefits.

Other common expenses for schools might include: supplies; equipment, travel, legal fees, training costs, marketing and advertising, library, computing center, records office expenses, etc. Generally the additional indirect costs are charged to the department. Often these are charged on a percentage basis from the organization's head office.

College and university expenses are primarily composed of educational and general costs (more commonly known as E&G expenditures). The following costs make up E&G expenditures: instructional, research, public service, academic support, student support, and institutional support. Costs outside of the E&G category are called auxiliary costs, and include, among others, dormitory and cafeteria costs. The difference between E&G costs and auxiliary costs is that auxiliary costs include both revenue and expense items, while E&G costs must depend on tuition revenue as the income-generator to cover the E&G expenses. These categories for college/university expenses are set by the accounting profession as guidelines for all colleges/universities to classify information for their financial statements.

Questions sometimes arise as to the percent of the tuition dollar that should be spent on the various E&G categories. Andrews University has used data generated by the Minter database for benchmarked schools in the Carnegie Masters I classification as comparative information when evaluating its own expenditures in the various E&G categories. Minter data for the fiscal year 2000-2001 for benchmarked institutions in the Carnegie Masters I database follows:

Instructional costs	53.01%
Research costs	.26%
Public Service costs	.96%
Academic Support costs	10.23%
Student Support costs	16.67%
Institutional Support costs	18.86%

From the Minter database, it can be generalized that slightly over half of the tuition dollar is spent for direct costs of instruction, including faculty salaries and benefits and other educational activities that directly relate to the instruction of students. The second largest category of expenditures is for academic support costs, which includes administrative office costs, administrator salaries and benefits, and the library. The third largest category of expenditures in the Minter database is for student support costs, which includes costs of the health center, counseling and testing services and—for many public institutions—the cost of major sports programs. Because the Minter data is gathered from public educational institutions who have major sports facilities and teams, the total proportion of the tuition dollar spent for student support is much higher than one would expect in a Seventh-day Adventist institution. Thus in a Seventh-day Adventist institution, it is likely that academic support costs (which include library support, academic advising, and remedial academic assistance such as math and/or writing help labs) would be much closer to the 16.67% noted above for student support, and student support costs would be much closer to the 10.23% noted above for academic support in public United States institutions. This is indeed the case at Andrews University. Another difference noted at Andrews University that would also be reflected in similar doctoral-granting institutions is a higher percentage of the tuition dollar spent for research costs. Minter data for Carnegie doctoral-granting institutions shows research costs at 3.12% of the tuition dollar with a corresponding decrease in expenditures for public service costs and student support.

If a budgeted item is part of an ongoing cost center and has had a historical amount budgeted for that expense, it is common to use a flat percentage increase over what was spent for the prior

year to determine the amount to include in the new budget. This procedure is known as “incremental budgeting” and is the process of starting with the amount spent in the preceding year and adding a fixed percentage, such as 5% or 10%, to the prior year's amount. This method is often criticized because it does not encourage planning and it maintains the status quo, which may or may not support current institutional goals. Incremental budgeting can also lead to a “use-it-or-lose-it” mentality, in which managers feel that they must use all the budgeted expenditures by the end of the period so that the following period’s budget will not be reduced. Obviously, incremental budgeting is not an option if the department or project is a new entity, as such entities do not have a historical budget on which to build.

However, incremental budgeting is **very** practical in situations with little budgetary flexibility and fairly fixed costs—the situation found in many not-for-profit organizations and especially in schools. It does permit the cost center manager to bring history, experience, and future expectations to the table when developing the budget. (For a discussion of other budgeting models, see appendix A.)

If incremental budgeting is going to be used, the projecting of expenditures is generally divided into two tasks:

1. Estimate the new year’s budget as though little or no change were to occur and add the appropriate incremental percentage to the prior year’s number. This becomes the base budget for the new year.
2. Develop “program budgets” separately for new initiatives or program expansions which will require additional resources.

For example, a college/university using the incremental budgeting method described above would set initial budget revenue and expenditure goals by enrollment projections, expected changes in facilities, availability of required equipment and supplies, and projection of needed human resources. Most ongoing departmental expenses would be built off of the prior year’s budget information, plus an incremental increase (based on enrollment projections and salary and benefit increases). If there are inflationary pressures that will cause certain expenses to rise at a rate higher than average, the higher rate should be used to add the incremental increase to these areas. For example, a major change in periodical subscription prices due to inflationary pressures needs to be factored into the library budget. Conversely, a decrease in computer and other technology acquisition prices may result in keeping those anticipated budgeted expenditures flat.

New projects would be identified (such as a new retention program for at-risk students or a new major in the curriculum) and an expense worksheet would be developed for the new program. There may be several new projects/programs proposed. If so, they should be prioritized by the cost center manager. After the base budget has been derived as described above, the cost of the new projects would be added to the appropriate accounts as funding permits.

Reducing the Budget:

It would be highly unusual if all expenditure requests were funded. Given this fact, the impact of not receiving requested funds on a department or project's ability to accomplish the goals of the organization must be communicated to the decision-makers.

Possible cost center director responses to the request to reduce the proposed budget in a school could include: establishing new mechanisms to reduce controllable expenses; reducing faculty expense by eliminating planned sections of classes; reducing the number of courses offered; increasing student-faculty ratio; increasing class size; increasing teaching loads; having full-time faculty take unpaid leaves of absence; having full-time faculty accept a shorter contract year; reducing support of students by elimination of lab personnel or reducing student labor hours (Birdsall).

Given that the budget process is an attempt to look into the future, proposed reductions should be accompanied by the development of alternative scenarios. The questions this "what if" process could answer include: How will a change in one area affect the expected outcome? For example, eliminating planned sections of classes as a way to reduce expenditures may result in fewer students coming to the college/university because they cannot take the class at the expected time in order to complete their degree. Increasing teaching loads may have negative impact on college/university accreditation results, as accrediting bodies expect faculty to not only teach, but also be involved in research and service.

The Cash Budget:

Cash is king in the not-for-profit realm, as it is for all other types of organizations. Those who have cash can do almost anything. Those who do not, stagger under a load of worry as to whether or not the bills and/or salaries can be paid. Adequate cash allows the organization to pay its bills. More than adequate cash gives the organization a source of additional revenue (through investment income), an operating cushion, and liberation from some of the daily grind of worrying about continued financial existence.

Not-for-profit organizations with adequate cash can do two critical things: Survive crises and take advantage of opportunities. The best way to "plan" for cash is to prepare a cash flow budget, which is actually a cash flow projection. The cash flow projection displays the cash expected to come in, the cash expected to go out, and the difference between the two numbers. It also demands an explanation from management of how any negative differences will be financed.

A simple cash flow projection for three months is provided below. The example assumes that the organization begins the year with a \$10,000 cash balance in the bank account. The three-month illustration demonstrates that in months when the cash outflow exceeds the cash inflow, some plan for borrowing sufficient funds to meet payroll and creditor demands must be made. In the example, the organization has access to a line of credit at the bank, which they can draw on as needed. However, provision for repayment of that line of credit must be made in the following months. Even if the organization does not feel compelled to repay the line of credit

quickly, the bank will want to know how the funds will be repaid, and how quickly the organization will turn itself around so it will not again be drawing on the line of credit.

A cash projection report allows one to predict a cash disaster in advance—in time to do something about it. While a financial manager may carry this kind of projection around in his/her head, non-financial managers need to see it on paper. A projection signals the importance of cash to everyone and allows for action on a planned basis.

The steps to follow to build a cash projection are:

- 1. Add receipts.** Determine the expected receipts of cash that will be achieved for the month. For a school, this number is related to the speed associated with the collection of student accounts receivable. The shorter the collection period, the faster the cash will come into the school's bank accounts.
- 2. Deduct disbursements.** Calculate how much cash will be required to cover disbursements for the month. Note that in the illustration on the next page, the organization plans to increase its fund-raising and have success by March. Contracted services in February and consultants fees in March will be the expenses associated with this fund-raising drive.

The illustrated organization has a fiscal year-end of December 31. (Many colleges/universities have a June 30 year-end.) Audit fees for the illustrated organization are due in January and February of \$1,000 per month. Legal fees of \$1,000 per month continue throughout the year.

Equipment lease payments are anticipated to increase in March due to the lease of a new photocopier and a new fax machine. The first six months of property insurance premiums are due in March.

- 3. Calculate the cash surplus or deficiency.** To calculate the cash surplus or deficiency for the month, subtract the disbursements from the sum of the receipts expected during that period.
- 4. Add the beginning cash balance.** The beginning cash balance is the ending balance from the previous month. By adding it to the cash surplus (deficiency) for the month, one calculates the new ending balance.
- 5. Determine financing needed.** The ending balance will be either positive or negative. A positive balance indicates that you have more than enough cash to cover operations during that period. A negative balance requires the development of a plan for financing the shortfall from other sources, such as a bank loan. Repayment of the bank loan must be reflected among the cash outflows of subsequent periods.

	January	February	March
Cash In:			
Tuition Revenue	\$300,000	\$300,000	\$300,000
Fund-raising Donations	30,000	30,000	50,000
Miscellaneous	15,000	15,000	15,000
Total In	345,000	345,000	365,000
Cash Out:			
Salaries	\$227,160	\$227,160	\$227,160
Payroll Taxes	22,000	22,000	22,000
Employee Benefits	22,240	22,240	22,240
Consultants	0	0	2,500
Legal/Audit	2,000	2,000	1,000
Contracted Services	3,000	5,000	3,000
Program Supplies	47,000	47,000	47,000
Vehicle Expense	1,500	1,500	1,500
Equipment Leases	1,600	1,600	4,000
Rent	24,000	24,000	24,000
Utilities	4,000	4,000	4,000
Property Insurance	0	0	6,000
Total Out	354,500	356,500	364,400
Net Monthly Surplus (Deficiency)	(9,500)	(11,500)	600
Beginning Cash Balance	10,000	500	4,000
Ending Cash Balance	500	(11,000)	4,600
Borrow/(Repay) on line of credit	0	15,000	(1,500)

The Capital Budget:

Capital projects undertaken by an organization require investment in capital assets. Such

investments may take the form of purchasing, building, leasing, or renovating buildings or equipment; or other long-range major items of property. Because such activities involve large sums of money and bring about a large increase in fixed costs, they affect the organization's finances for the current year and many future years. Planning poorly for capital expenditures may harm the organization's ability to achieve financial stability because monies are tied up in non-liquid investments or in servicing debt, when at the same time, these monies are needed by the organization to maintain positive operating cash flow.

On the other hand, every organization must invest in capital assets if it is going to survive. Given that no organization has unlimited funds available for investment, one must choose wisely, both in deciding when to make a capital investment and which capital investment to choose. Once an organization makes a capital investment decision, alternative investment opportunities are normally lost. For all of these reasons, organizations must be very careful in their analysis of capital projects. They must therefore prepare a capital budget.

As noted above, operating budgets are prepared for a 12-month period. The cash budget is prepared for a shorter period of time—generally three or six months. The capital budget takes a long-range perspective and is often prepared for a three- to five-year period. Capital asset annual needs are listed in the budget, with the expectation that annual expenditures will total at or above annual depreciation expense. Because this budget takes a long-term perspective, planned expenditures of major amounts can be identified early on and appropriate funding requests made well in advance of the actual purchase. Like operating budgets, capital budgets must be approved by the board of directors of the organization.

In a for-profit company, making capital-budget decisions involves analyzing cash inflows and outflows, because the company assumes that the initial investment will be “paid back” in terms of increased sales and/or increased profits over an expected period of time. A not-for-profit organization often does not have a direct link between the purchase of a capital item and increased revenue. For example, a college/university may decide to purchase new computers for the computer lab, but there is no expectation that the new computers will necessarily generate more tuition revenue. However, the new computers must be purchased in order to maintain the expected level of learning of the current students and to attract future students. Thus the investment must still be made—even if one cannot determine a direct link to immediate increased revenue. Thus the not-for-profit organization has unique challenges in funding capital expenditures.

The usual method of funding large items, such as buildings, is for the college/university to seek donors from alumni or friends, or to ask for an appropriation from the parent organization (such as the local union or division) or both. In addition, permission to borrow money for the project may be granted by the Board.

Equipment purchases, however, usually require the use of operating funds. The concept of “funding depreciation” is often used to describe the process of assuring that sufficient funds are generated through operating to purchase equipment. Because depreciation expense is an operating expense that does not require a cash outlay, it is often used as a measure of whether an organization is using its cash to replace capital assets (such as equipment) in sufficient amounts

to maintain its asset base. The goal is to assure that the organization does not get itself into a situation where massive sums of money are required to solve what has become a “deferred maintenance” problem. The deferred maintenance problem occurs most often as an organization begins to experience financial difficulty. Because capital items are costly and because such investments may (incorrectly) appear to be able to be postponed, there is often a temptation to delay capital expenditures when cash is in short supply. Yielding to such temptation always results in an overwhelming need to restore the organization’s capital base at some point in the future. Generally by the time the problem is recognized, the deferred maintenance issue has become almost financially unmanageable.

Irrespective of whether the capital budget is dealing with large items, such as buildings, or smaller items, such as equipment expenditures, the organization’s financial administration must tie the capital budget to the organization’s strategic plan. Capital budgeting must reflect the direction in which the institution plans to grow and must be integrated into the campus master plan and academic programming plans of the institution. For example, if the college is seeking university status as part of its strategic plan, the capital budget must reflect increased expenditures in the library because, as a university, the library holdings must support university research by both students and faculty members. Likewise, if the college/university is seeking to double its size over the next 10 years, the capital budget must provide for increased dormitory and classroom space. The cost of failing to adequately manage and fund the organization’s capital budget and reflect in that budget the organization’s strategic goals may actually end up being the loss of the school’s future growth and reputation.

IMPLEMENTING THE BUDGET:

Communicating the Budget:

The budget presentation to the Board or the Budget Committee is the administration’s summary of what it already knows about the organization’s plans and its fiscal situation. However, it is essential that the presentation be done in a style that assures the Board or the Budget Committee of the competency and responsibility of the presenter.

There are four “S’s” for budget presentation: Keep it simple, salient, scrupulous, and with no surprises.

The Oral Presentation:

The oral presentation should be honest, clear, and concise, but with enough detail to convey what will be accomplished with the requested funds. The speaker should address the board with conviction, avoid the jargon of one’s discipline (e.g., accounting), avoid trivial comments and being too casual. Act like you believe you will be given the requested funds. In periods of reductions in funding, the impact of the reduced funding levels should be communicated clearly, but in a non-threatening manner.

Birdsall offers three additional strategies on budget presentations for college personnel:

1. Convey the impression that the dean or support unit administrator understands that the department or unit is only one part of the university, and that there are important needs to be met throughout both the academic and non-academic sides of the campus. Statements should not be made about the need to direct funds from one area of the university to another.
2. Convey the importance of the department or support unit to the mission of the university. Specific links should be made between the institution's strategic plan and the contributions of the department or unit.
3. Department and support units that have high levels of external funding can show how well those funds were leveraged and how efficiently they were managed. Units with fewer opportunities for external funding may point to national statistics that support their position and then emphasize their traditional reliance on money appropriated by the university's administration.

The Written Presentation:

The written presentation of the budget to the board or the budget committee should be highly focused and concise. If possible, it should be a one-page document. One method to achieve this level of conciseness is to place funding priorities into categories—for example, those that support general education requirements; and another for graduate assistants. Use a different category for one-time requests and another section for new funding that changes the base appropriation for the department or unit. A third category can be used for items that arise because of workload increases (e.g., computing centers).

CONTROLLING THE BUDGET:

As the costs are incurred, they will be compared against the budget. The budget is the traditional device used by senior management to measure managerial and business performance.

The Variance Report

Differences between the budget and the actual expenditures are called variances. Variances can be favorable (i.e., underspending) or unfavorable (i.e., overspending). Generally unfavorable variances for expenditures are shown in parentheses. All variances require a full explanation in order to identify potential problems. The variance report should not only show how and why the variance occurred, but also must identify whether or not the variance can be absorbed in the future. Of particular interest to management is what category of variances are encountered (e.g., revenue variances or expense variances), and what are the causes, the effects, and the remedies.

An example of a simplified variance report follows:

	Actual	Budget	Variance Favorable (or Unfavorable) compared to Budget
Revenue:			
Tuition Revenue	\$ 100,000	\$ 90,000	\$ 10,000
Expenditures:			
Personnel Costs	\$ (75,000)	\$ (70,000)	\$ (5,000)
Supplies	\$ (12,000)	\$ (10,000)	\$ (2,000)
Equipment Depreciation	\$ (5,000)	\$ (5,000)	\$ ----
Net Income	\$ 8,000	\$ 5,000	\$ 3,000

In the above example, the school budgeted \$90,000 for tuition revenue, but more students came to campus, giving the school a favorable tuition variance of \$10,000. However, having more students on campus required more faculty (probably contract faculty to teach the additional sections of classes) and more supplies. The equipment depreciation did not change because of additional students because depreciation is a fixed cost and does not change with increases in the enrollment of the school in the short-run. From the variance report financial management can determine that while revenue was up by \$10,000, net income is only up by \$3,000 because of the additional expenses incurred with higher enrollment.

Financial managers can create a variance report as illustrated above, or any other type of report that fits their decision-making needs. Other examples of possible reports include exception reports, payroll reports, and program reports. Exception reports show those budget areas that significantly deviate from budget expectations. Payroll reports are necessary to show that there have been no deviations from authorized staffing levels. Payroll reports can also pinpoint exceptions to budget expectations caused by salary adjustments and excessive overtime. Finally, program reports can be used for program budgeting or program-oriented planning to track expenditures by major function in the institution.

The following are some examples of budgeting problems and corrective actions that can be taken:

Example 1. Assume that labor expenses are exceeding the budget because some parties have done advance work on future phases of the project. This variance is a timing problem, and will take care of itself in the future.

Example 2. Assume that supply expenditures are exceeding budget because of higher prices of the supplies than anticipated due to inflation. In this case, the budget will need to be revised to recognize the inflationary effect on anticipated supply expenses.

Example 3. Assume that supply expenditures are exceeding budget because the purchaser bought more than needed, or because he/she purchased higher quality than the project demanded. In this case, controls need to be put in place to control purchases. Examples of such controls might be pre-approval of requisitions or check requests.

When investigating variances, it is important not to blame staff members for a variance that is effectively unavoidable. Often a variance could not have been foreseen at the time the budget was prepared, even though it is easily explained with hindsight. Staff members will be demoralized if the “easy explanation” given after the fact includes blame to them as if they should have been able to see into the future.

If the cost is a controllable one, then the budget manager should make every effort to bring the expenditures into line with the budget.

Additional Analytical Techniques:

Additional analytical techniques that may be used for controlling the budget include:

1. Review of monthly financial statement numbers in the format presented.
2. Calculation of financial ratios.

The review of monthly financial statement numbers in the format presented is used when the manager seeks to quickly identify items where recent changes have occurred. The manager should particularly note balance sheet changes in the current asset accounts (e.g., accounts receivable, inventories, investments, and cash). Changes in current liabilities (e.g., accounts payable) and long-term debt and mortgages are also worthy of note because they signal additional borrowing by the organization. On the income statement, the manager should note any large changes in revenue or expense accounts for the fiscal period.

The financial manager should be able to mentally account for the changes identified, and if he/she cannot, further investigation should take place. For example, an increase in total student accounts receivable would be expected at the beginning of the school term because tuition charges have just been placed on the student accounts. A decrease in total student accounts receivable would be anticipated at the end of the term because of the expectation that student accounts are being collected. If the expected decrease in student accounts receivable does not occur, the financial manager may wish to speak with his/her accounts receivable collection clerk to find out what is happening to student accounts receivable, and why collections are not materializing as expected.

The calculation of financial ratios is done to help the financial manager put large numbers into an understandable perspective and to assist when comparing two organizations or two periods of time when the numbers may be quite different in size. Financial ratios are commonly divided into three categories to assist the financial manager in obtaining the desired analytical information. These three categories are: liquidity ratios, profitability ratios, and solvency ratios.

Liquidity Ratios. These ratios measure the short-term ability of the enterprise to pay its maturing obligations to outside creditors and to meet unexpected needs for cash. The calculation of these ratios on a regular basis will help the financial manager determine whether the organization can pay its bills on a timely basis.

There are two primary liquidity ratios: *Acid Test (or Quick Assets) Ratio* and the *Current Ratio*.

The *Acid Test (or Quick Assets) Ratio* is a measure of the organization's immediate short-term liquidity. It is computed as follows:

$$\frac{\text{Cash} + \text{Marketable Securities} + \text{Receivables}}{\text{Current Liabilities}}$$

Conventional wisdom says this ratio should be 1:1, which means there is one dollar of "quick assets" (assets quickly turned into cash) available to meet the current obligations to outside creditors.

The *Current Ratio* is a measure used to evaluate an organization's liquidity and short-term debt-paying ability over a slightly longer period (i.e., over a year). It is computed as follows:

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Conventional wisdom says that this ratio should be 2:1, which means there are at least two dollars of current assets available to pay for every one dollar of current liabilities which will come due in the next 12 months. It is important to remember that current assets include the asset "inventory." It will take some time to turn inventory into cash because the inventory must be sold, and if it is sold on account, it will take some time to also collect the receivable. If an organization does not have much inventory (which is common for many colleges and universities), the current ratio and the acid test ratio may be almost identical.

Profitability Ratios. The profitability ratios measure the operating success of the organization for a given period of time. One of the most common profitability ratios is the profit margin calculation.

The *Profit Margin* measures the percentage of each dollar of revenue (tuition, etc.) that results in net income (or change in net assets). The ratio is computed as follows:

$$\frac{\text{Net Income (or Change in Net Assets)}}{\text{Tuition Revenue or Total Revenue}}$$

The higher the profit margin, the better—to a point. Profit is very important because it generates cash for stability, innovation, and growth. However, a not-for-profit organization's board may choose to set a limit to the amount of profit it wishes the organization to generate (e.g., 10%) and require that after that limit is reached, then additional services need to be provided.

Solvency Ratios. Solvency ratios measure the ability of the enterprise to survive over a long period of time. Since the most common reason for the demise of an organization is its inability to meet the demands of its creditors, the solvency ratios focus on the amount of debt an organization holds. We will consider one solvency ratio: *Debt to Total Assets*.

The *Debt to Total Assets* ratio measures the percentage of total assets provided by the creditors (as opposed to the owners/donors). The number is expressed as a percentage. A high percentage indicates high debt load; a low percentage indicates low debt load. The higher the percentage of debt, the less flexibility the organization has to meet its mission and more of its revenue must go to service the debt through the payment of interest and re-payment of principal. The ratio is computed as follows:

$$\frac{\text{Total Liabilities}}{\text{Total Assets}}$$

The ratios presented will assist the financial manager and user in understanding whether or not the organization can pay its bills; whether or not it is profitable so that the mission of the organization can be continued and enhanced; and whether or not the organization will continue into the future or whether it is in danger of going bankrupt.

The ratio and financial analysis glossary (see Appendix D) provides a number of other ratios which can be computed if the manager is interested in using additional ratio analysis techniques. Additional discussion of the importance of ratio and financial analysis for the manager and best practices for financial statement analysis are provided in the Higher Education Management Series monograph entitled: *Financial Statement Analysis*.

CONCLUSION

A budget is a statement of an organization's plans, priorities, goals, and objectives, expressed in financial terms, for a specific period of time. Ideally, the budget ties to and supports the organization's strategic plan, which in turn is connected to the mission and goals of the organization. But *people* prepare the budget. How these people work together affects the budget process and ultimately, the effectiveness of the budget itself. If an individual believes that his/her department or project is at risk through the budget process, he/she may react by engaging in budget games. To guard against such dysfunctional behavior, management must be in constant communication with all cost centers managers and there must be a high level of trust among these people, irrespective of where they are within the organization. It is not sufficient to have high levels of communication and trust only among top management. These attributes must be exhibited at all organizational levels.

The budget process can be easily described, but it is difficult to accomplish. The process requires the budget makers to estimate the organization's revenue and expenditures for the coming 12-month period. Unfortunately, few organizations have sufficient revenue to cover

desired expenditures, and reductions in expenditures (or expectations of additional revenue) are generally required to balance the budget. Using the participatory budget process, where all budget-makers work as a team, is ideal for budget-making, including the process of dealing with budget reductions, if required. However, the temptation to make a “top-down” decision at this final point in order to “get the budget done” is strong. “Top-down” decisions, especially after budget players have participated in the budget process, never builds trust nor achieves buy-in to the final budget. Since budgets are only effective when everyone works together, the temptation to short-cut the process as it enters its final stage just prior to communication to the board should be avoided.

When communicating the budget to the board, the presenter must be honest, clear, and concise. The board must be informed of the needs of the organization with sufficient detail so they understand what will be accomplished with the requested funds. If, in order to balance the budget, certain departments or programs have had their funding reduced, the impact of this reduction in funding should be communicated clearly to the board members. Budget communication should follow the four “S’s”: Keep the presentation simple, salient, scrupulous, and with no surprises.

Budget-making is only the first step in the process. After the budget is voted, it is used as a tool during the coming year to control actual costs. Differences between the budget and the actual expenditures, called variances, must be monitored as the year progresses in order to assure achievement of the expected profit or loss for the year. This monitoring process is a monthly event and requires action as soon as the variance is determined to be material. The organization’s controller is generally given the responsibility to monitor the budget and communicate any problems to the appropriate cost center managers.

It is highly unlikely that anyone involved in budget-making would describe the process as “fun.” However, having a financial plan that guides the college/university toward financial profitability is essential. Without financial profit, a college/university cannot enjoy the stability necessary to focus on how to build and grow the institution. Instead, the organization may be required to focus on how to cut back and forego, and may be subject to nasty financial surprises, such as borrowing for payroll or finding itself unable to meet other organizational commitments.

All Seventh-day Adventist colleges and universities see themselves as part of the overall mission of the church to serve mankind while spreading the message of the soon return of Christ to all the world. But to fulfill this mission, the organization must stay in business, and while in business, it must utilize its resources in the wisest manner, again in support of achieving the organization’s mission. Careful budgeting provides for growth in the financial dimension of the organization. Such financial growth is a necessary precondition to growth in mission.

APPENDIX A

Budget Models

1. Executive Budget Model:

In the executive budget model, the budgeting process is centralized in a specific office—commonly a vice president's office. This vice president is the one who submits the budget to the board. The advantages seen for this model include (1) consideration of the entire needs of the organization; (2) consolidating and standardizing information; and (3) centralizing controls and procedures. The disadvantage is that it is not a participatory model, and thus is unlikely to have buy-in from the cost center managers who will have to make the budget work effectively. Given that most middle-level managers today want input into decision-making, the executive budget model very seldom achieves success.

2. Performance Budget Model:

The performance budget model focuses on activities and their outcomes (as opposed to objectives)—specifically the historical performance of the team. Examples of indicators that might be used to measure past performance in an academic setting are the number of credits taught, the number of sections taught, the number of students in the program, the number of graduates, the number of graduates employed, etc.

This method is rational, objective, and rewards performance characteristics the institution wants to encourage. It is primarily used as a top-down method of budgeting in hierarchical organizations.

Problems with this model include: (1) the fact that quality indicators are difficult to identify; (2) agreement on appropriate measurements for evaluation is difficult to accomplish; and (3) the cause/effect relationship is usually complex and often difficult to measure. Thus quality indicators are often used as supplements to financial measures when evaluating the effectiveness of a cost center or department.

3. Planning, Programming, Budgeting Systems (PPBS):

PPBS attempts to merge the strategic planning process with the allocation of funds. It is generally implemented by a top-down approach.

The steps of this method are:

1. Establish objectives and goals.
2. Develop alternative programs that will accomplish goals.
3. Establish resource requirements for each alternative.
4. Estimate benefits to be gained from each program alternative.
5. Develop an operating plan by selecting from among alternatives.
6. Test the long-range fiscal implication of the plan.
7. Compile the annual budget.
8. Evaluate the success with which program benefits are achieved.
9. Revise planning standards.
10. Repeat the cycle to accommodate changes in objectives, goals, available resources, and the institution's environment.

Obviously, this method is VERY time consuming and therefore very difficult (even impossible) to implement unless you have a large staff and lots of time. However, some useful principles can be gleaned which can be used in other contexts:

First, budgeting should be focused on the benefit an activity will provide rather than on what resources are available to expend. Suppose you have just been asked to cut your budget in a particular area. If you have tied the budget to the benefit, you can respond by informing the decision-maker what benefit the organization must forego. If you have not tied the budget to the benefit, you have no response but to cut the budget.

Second, number 6 above highlights the importance of testing the long-range fiscal implications of the plan. In this step, one identifies the future costs of an action. Long-range fiscal planning is important in retaining future flexibility and responsiveness.

4. Formula Budgeting:

Formula budgeting creates a budget formula by estimating future budget requirements through the manipulation of data about future programs and by utilizing the relationship between the program and the cost. This method assumes that the past accurately predicts the future, that the chosen formula is a mathematical expression of the best decisions of the past, and that the basis of the formula is a cost analysis of past performance. Unfortunately, this is not always true. At their own peril, the users of this method may forget that the results of the calculations are only as good as the data and formula. If the data is inconsistent or the formula is an inaccurate summary of past history, then the estimate will not be reliable. Formula budgeting also stifles innovation and change. It assumes and encourages the status quo. Finally, because formula budgeting is so simple, it often is applied to circumstances where it is inappropriate.

This method can, however, be quite useful for some budget accounts where the expenditures are small and numerous, such as instructional supplies, or where the mathematical relationship is very consistent. Two such instances are described below.

Example 1: Salary expenditures are projected by determining the number and type of positions required, then applying to that estimate a salary schedule or average salary per position.

Example 2: Budgets for classroom supplies are created by multiplying the historical cost of the materials per student times the number of sections and average enrollment for the course.

5. Zero-Based Budgeting:

Zero-based budgeting starts with a blank sheet of paper, usually in regard to discretionary expenditures, with the intent to get a handle on rising costs. Beginning at zero is seen as the best exercise to review discretionary overhead (instead of incrementing the new on the old). While conceptually attractive, it requires a **great** deal of managerial time to prepare and implement. The concept grew out of concern for increasing costs in the 1970s in United States businesses. However, because of the bureaucratic and time-consuming nature of the process, few companies tried it more than once.

This process is unfit for programs which are of a continuing nature—as are many programs in educational institutions. For example, a college/university will need to “teach out” students, even if a particular major is dropped. Thus using zero-based budgeting for faculty salaries is not a wise use of the staff’s time.

Sometimes the term "zero-based budgeting" is used loosely—i.e., to mean "starting from scratch" in estimating needed resources, rather than the more formal process of deciding whether you need the activity. In such cases, the call is generally for rethinking the nature of the program, or whether a particular course of study is still relevant to the students. It is important that the manager remember the loose definition of the term when hearing a call for “zero-based budgeting.” Few organizations have the time or resources to redo their entire organizational financial plan on an annual basis.

6. Incremental Budgeting:

This is the most common type of budgeting and the one discussed in Part II. This method assumes that the starting point for each discretionary expenditure item is the amount spent on it in previous years. Frequently, the amount of the budget increases by some fixed percentage—such as 5% or 10% of the prior year's amount.

While this method is often criticized, it does have advantages. It is easy to understand, easy to use to prepare a new budget, ruffles very few feathers, and is accepted by most governing boards. It is especially practical in situations of little budgetary flexibility and fairly fixed costs—which is often the very situation faced in many colleges and universities.

The weakness with this approach is that it maintains the status quo and does not encourage

planning. It also does not require any connection between allocation of resources and institutional goals. Thus when using this approach, comparing the budget with the organization's mission and strategic plan is essential.

APPENDIX B

Eight Golden Rules for Effective Budgets

Budget Continuously. Budgeting and planning are not just one-time events. Consider budgeting as more than an annual activity. Remember that the future is uncertain, so revise budgets regularly to reflect changes in the business environment.

Take Your Time. Budgets are the key part of planning and require careful thinking. Do not underestimate the time needed to gather relevant information, formulate plans, and make a budget a realistic planning proposal.

Involve Everyone. Include all those that should be involved in the budgeting process. Make your budgeting more than just a high-level activity. Involve relevant people with appropriate knowledge and skills and encourage them to commit to the process.

Be Realistic. Focus on what your department actually needs in a particular budget. Be aware that if resources are scarce there will be competing demands for items within the organization, which can often lead to deliberate overestimation.

Look Ahead. Look to the future, not to the past when deciding budgeting amounts. Keep focused on future targets. Do not rely on historic figures to guide next year's budget, which, although approximately right, might be completely wrong.

Be Aware of Politics. Understand that the size of a budget should not be confused with its importance in the organization. Avoid all traditional budgetary game-playing around this normal misunderstanding.

Monitor Events. Priorities and amounts may need to be changed in line with events. Be prepared to amend your budget while still challenging all expenditures and trying to resolve unforeseen problems in other areas.

Allow Flexibility. Budgets do not have to be slavishly followed. Avoid the temptation to spend all that you were authorized to, and do not guard the underspent portion of your budget when others could well use the resource.

Source: Brookson, p. 29

APPENDIX C

Beyond Budgeting—the Hope and Fraser Model

As noted in Part 1, budgets are severely criticized by many because the process is too time-consuming and therefore too expensive for the value it brings to the business, and because the process often results in budget game-playing by those involved. These general criticisms can also be levied at the budget process within Seventh-day Adventist colleges and universities, where attempts to create a participatory budget process often result in hours and hours of meetings which include both administration and middle-management cost center managers, but do not result in corresponding buy-in to the budget or reduction in budget game playing.

Hope and Fraser, in their book entitled *Beyond Budgeting: How Managers Can Break Free From the Annual Performance Trap*, discuss the two criticisms noted above and already addressed in this document, and add a third. Their book discusses the use of the budget as a “fixed performance contract,” through which top administration **commits** the cost center manager to “achieving an agreed-upon outcome and then enables a superior to **control** the results against that outcome” (p. 10). Often managerial rewards, including promotion, are tied to achieving these budget contracts. This use of the budget relates to the “command and control” style of management that does not fit in today’s competitive and fast-changing climate. If an organization uses the budget as a fixed performance contract, the organization can become “budget-focused” rather than “strategy-focused”—often to its competitive detriment.

Hope and Fraser define the “budget contract” as one that includes the following features (p. 10):

1. A fixed target.
2. An incentive or reward, usually fixed to the agreed target.
3. An agreed-upon plan.
4. A statement of resources which are allocated to functions and departments.
5. A commitment to cross-company actions so that actions in one area commit other departments to common goal and plans.
6. A reporting schedule identifying the type and frequency of reporting.

As can be seen from the above list, Hope and Fraser are describing a tightly-controlled budget process where the pressure to “meet the budget” is enormous and where failure to achieve the stated goals result in personal loss, either financially or through loss of recognition or promotion. In such an environment, the pressure to improve performance with respect to the budget runs directly counter to the recognition that with business conditions constantly changing (and sometimes deteriorating), one does not have the required flexibility to act in market-smart ways.

Most colleges/universities do not grant bonuses or promotions based on budget performance, nor do they closely tie the organization’s various departments/cost centers together, as would be true in a manufacturing environment. Thus it may appear that Hope and Fraser’s caution against fixed performance contracts does not fit an educational organization. However, when top administration uses the budget or the budget process to control middle management’s actions, such control inevitably results in the inability of the organization, as a whole, to act strategically.

As Hope and Fraser put it, “management by the numbers” is a “dismal way of managing a business” (p. 15).

Hope and Fraser’s remedy for the dysfunctional budget process is to do away with budgets in order to encourage the organization to relinquish top-down control and focus on multilevel control. They urge management to work to build trust among team members and grant more responsibility to these people rather than attempt to control team members actions through the budget process.

Hope and Fraser take an extreme approach to address the problem of too much control from the top during budget creation and evaluation. The author of this monograph would argue that rather than doing away with budgets, good managers should seek participation and consultation with those who must work with the budget in order to create support and budget buy-in. All organizations **must** have a financial plan in order to be successful. The Seventh-day Adventist Church recognizes this reality by including the preparation of the budget as part of required church financial policy for its organizations. Doing away with budgets is not an appropriate answer to budget problems. Doing budgeting wisely and carefully, with participation and buy-in from cost center managers, is the best answer to a dysfunctional budget situation.

However, in all organizations, even Seventh-day Adventist colleges and universities, too much time may be spent in budgeting, and cost center managers may engage in gaming activities. Often frustrated administrators respond to these realities by increasing financial control over cost centers and in some cases, preparing autocratic budgets which are handed down from the top without input from the budget managers. Hope and Fraser warn us that increasing managerial control increases dysfunctional behavior. At times this dysfunctional behavior takes the form of budget games, such as those discussed in Part 1. At other times the effect of too much control is to squeeze the life and spirit out of the organization and its people. In either case, the organization and its mission are not well-served.

APPENDIX D

Ratio and Financial Analysis Glossary

Acid-test ratio	A measure of a company's immediate short-term liquidity, computed by dividing the sum of cash, marketable securities, and (net) receivables by current liabilities.
Current ratio	A measure used to evaluate a company's liquidity and short-term debt-paying ability, computed by dividing current assets by current liabilities.
Debt to total assets ratio	Measures the percentage of total assets provided by creditors, computed by dividing total debt by total assets.
Horizontal analysis	A technique for evaluating a series of financial statement data over a period of time to determine the increase (decrease) that has taken place, expressed as either an amount or a percentage.
Inventory turnover ratio	A measure of liquidity of inventory, computed by dividing cost of goods sold by average inventory.
Liquidity ratios	Measures the short-term ability of the enterprise to pay its maturing obligations and to meet unexpected needs for cash.
Profitability ratios	Measures the income or operating success of an enterprise for a given period of time.
Profit margin ratio	Measures the percentage of each dollar of sales that results in net income, computed by dividing net income by net sales.
Receivables turnover ratio	A measure of the liquidity of receivables, computed by dividing net credit sales by average net receivables.
Return on assets ratio	An overall measure of profitability, computed by dividing net income by average assets.
Solvency ratios	Measures the ability of the enterprise to survive over a long period of time.
Vertical analysis	A technique for evaluating financial statement data that expresses

each item within a financial statement in terms of a percent of a base amount.

% of Self-Support

Earned Operating Income (Excl. Donations/Appropriations) divided by Total Operating Income. This percentage is an important indicator of self-sufficiency. Operating within the organization's own income, exclusive of appropriations for operating purposes, is the goal. The higher the percentage, the better the position.

% of Required Working Capital

Working Capital divided by Required Working Capital. Required Working Capital for all organizations has been established by policy. The expected percentage to be maintained is 100%. Effort should be exerted to bring the actual working capital up to this point. An unreasonable accumulation of working capital beyond the 100% point should be guarded against as it may be an indication of hoarding to the detriment of the field program.

% of Fixed Asset Investment

Net Invested in Plant divided by Total Fund Balances. This percentage measures the extent to which the total fund balances of the organization are tied up in land and buildings. Fixed asset requirements are relative; certain types of organizations require more than others. The cost of maintenance, repairs and depreciation increases even if the assets are donated. Alert management will adopt as its objective the investment of the minimum in fixed assets consistent with the operational requirements of the particular organization.

% of Debt-Financed Fixed Assets

Invested in Plant Payables divided by Total Fixed Assets. This shows the percentage of fixed assets financed with borrowed funds. Appropriate percentage should be determined based on a number of factors: relative needs for capital for carrying on the operating program of the entity; availability of funds from lenders, and cost of borrowing (interest); estimated future cash flows and ability to repay borrowing when due; and proper authorization for borrowing voted by the senior organization(s) as required by policy.

% of Receivables to
Operating

Accounts Receivable (net) + Notes and Loans Receivable divided by Unallocated and Allocated Operating Fund Balances. This is a key percentage to control receivables as it relates to the operating fund balances. Generally, the lower the percentage, the better the position. How much of the operating fund balances should be tied up in receivables? What are the basic operating needs of the organization in this respect? No norm has been established.

% of Return on Equity

Net Increase (Decrease) from Operations divided by Total Fund Balances indicates the percent of excess of all income over all expenditures as related to total investment of denominational funds. It is usually more meaningful in such organizations as institutions (publishing, healthcare, etc.), and commercially oriented operations, but it is an informative guide in conference-type organizations as well.

APPENDIX E

References and Further Resources

- Bart, C. K. "Budgeting Gamesmanship." *Academy of Management Executive*, 1988, pp. 285-294.
- Birnberg, J., M. Shields, and S. Young. "The Case for Multiple Methods in Empirical Management Accounting Research (with an Illustration from Budget Setting)." *Journal of Management Accounting Research*, 1990, pp. 33-66.
- Birdsall, Douglas G. "The MicroPolitics of Budgeting in Universities: Lessons for Library Administrators." *Journal of Academic Librarianship*, November 1995, Vol. 21, Issue 6, pp. 427-438.
- Brinckerhoff, Peter. "How to Save Money Through Bottoms-Up Budgeting." *Nonprofit World*, Vol. 14 (1), Jan./Feb., 1996, pp. 22-25.
- Brookson, Stephen. *Managing Budgets*. London: Dorling Kindersley Press, 2000.
- Chabotar, K. J. "Managing Participative Budgeting in Higher Education." *Change*, Sept./Oct.1995, Vol. 27 (5), pp. 21-31.
- Godin, Seth and Paul Lim. *If You're Clueless About Accounting and Finance and Want to Know More*. Chicago, Ill: Dearborn Trade Publishing, 1998.
- Harvard Business Essentials Manager's Toolkit. *Your Mentor and Guide to Doing Business Effectively*. Boston, Mass.: Harvard Business School Press, 2004.
- Hope, Jeremy and Robin Fraser. *Beyond Budgeting: How Managers Can Break Free From the Annual Performance Trap*. Boston, Mass.: Harvard Business School Press, 2003.
- McLaughlin, Thomas A. *Streetsmart Financial Basics for Nonprofit Managers*. John Wiley & Sons, 1995.
- Sylvester Jones Resource (Note: according to the website, it's called "Resource" Center), not Sylvester Jones University. Center. University of Alabama. <http://leadership.ua.edu>.
- Stewart, T. A. and Shawn Tully. "Why Budgets Are Bad For Business." *Fortune*, June 4, 1990, pp. 179-190.
- Tracy, John A. *How to Read a Financial Report*. John Wiley & Sons, 1999, 5th edition.