Journal for the Advancement of Educational Research (2006), vol.1 (2)

Linking Strategic Planning and Budgeting in Higher Education: Problems in Differential Time Horizons

Michael W. Popejoy, Ph.D.

Central Michigan University

ProfEd

and

Dianne A. Wright, Ph.D.

Florida Atlantic University

Introduction/Background

It is critical to effective organizational planning that close linkages are developed to coordinate the budget development process with the strategic planning process in higher education. Currently, in most settings, annual budgets and multiyear strategic plans have not been effectively intertwined. The key difficulty is the long-term focus of strategic planning and the short-term focus of operating budgets (Meisinger, 1994). To correct this problem of differential time horizons, new models of budgeting are needed to link operating budgets more directly to the organization's long-term strategic plan. More specifically, a new strategic budget planning process model is required. Theory building and pedagogy in multiyear operating budget processes is also needed.

Statement of the Problem

The researchers examine the lack of a link between budgets and strategic planning in higher education institutions. It is hypothesized that the root of the problem revolves around a time horizon differential between operating budgets, and the strategic planning function. The operating budget for any well-managed organization serves mainly as a short-term planning and control tool. It also serves to evaluate management performance. The definition of short-term within the finance and accounting disciplines is a time horizon of one year or less (Seitz and Ellison, 1999).

As such, operating budgets are typically generated for a single fiscal or calendar year with quarterly and monthly reporting cycles. And, managers with direct budget center responsibility are usually, if not always, accountable for budgetary success or failure. On the other hand, the strategic planning function has a time horizon of three to five years; and sometimes as many as ten years or more into the future. This time horizon differential often creates confusion in coordinating the two processes. What is needed is a strategic budget process that closes the gap between the accountant's view and the view of the strategic planner.

The thesis of this research is that the traditional budget paradigm needs to be expanded. And, although the focus of this research is on four distinct higher education institutions, the researchers contend that this dysfunctional time horizon is a problem endemic to most U.S. public and private sector higher education institutions as well as other types of organizations.

The research questions were as follows:

- Why budgets do not link well to strategic planning initiatives within higher education?
- How are budgeting and strategic planning defined in the selected settings?
- To what extent are the strategic plans in the selected settings broadly shared with all stakeholders? (e.g., in one of the case study institutions, not even the deans have control over their spending, and do not participate in either strategic planning or operating budget planning).
- What can effective organizations working in the 21st century do to refocus their planning and control processes to be more compatible with this so called differential time horizon?

Significance

Many organizations fail to link budgeting and strategic planning (NACUBO, 1994), many others are not aware that such a linkage is necessary. This perpetual gap between the budgeting and long-term (strategic) planning processes not only results in wasted resources, but also prevents effective and efficient resource concentration for disbursement when it is called for in the strategic plan.

What is needed is a strategic budget process that closes the gap between the accountant's view (i.e., budgeter) and the view of that of the strategic planner. Further, theory building research is needed to provide the necessary empirical support for future organizational efforts aimed at inventing and implementing a strategic budget process model that exceeds the perspective of accountancy. This research contributes to an emerging discourse on this topic.

Literature Review

The literature of budgeting and the literature of strategic planning are largely separate, and few crosswalks are available to guide organizational managers. This is particularly evident in articles on strategic planning in higher education (Kotler and Murphy, 1991), and in articles on budgeting in higher education (Chaffee, 1991). As an example, two articles appearing in Organization and Governance in Higher Education, 4th ed. edited by Marvin W. Peterson (1991), one on strategic planning and the other on rational budgeting - - there is virtually no mention of one or the other's functions or processes in either of these two articles. The latter is particularly troublesome as both authors are considered experts in the field and leaders on the topic. Overall, <u>linking</u> budgeting and planning has not been well studied, nor extensively reported in the field of higher education administration.

Further examination of the more recent literature reveals that this problem continues to exist—particularly since accountants still drive the budget process largely based on the accounting calendar. This apparent dichotomy creates the continued perception that budgeting and strategic planning are separate and unrelated administrative processes without any rational requirement for their integration and coordination.

Budgeting is commonly known as an internal management planning and control tool that is generally designed to self-terminate at the end of the fiscal or calendar year. It is defined as a plan expressed in dollars for the accomplishment of programs related to objectives and goals within a well defined time period. It includes an estimate of resources required together with an estimate of resources available, is usually compared with one or more past periods, and shows future requirements (Lynch, 1990).It is also essential and vital to the planning and control of resources at the organizational level.

Strategic planning also serves management for planning and control, but goes further in scope to address the core of an organization's mission, values and long-term future direction over an extended period of three to five, and sometimes as many as ten years. Strategic planning is based on the premise that leaders and managers of public, private, and nonprofit organizations must be effective strategists if their organizations are to fulfill their missions, meet their mandates, and satisfy their constituents in the turbulent years ahead (Melcher and Kerzner, 1988).

Strategic planning is a set of concepts, procedures, and tools designed to assist leaders and managers with these tasks. Strategic planning may be defined as a "disciplined effort to produce fundamental decisions and actions that shape and guide what an organization is, what it does, and why it does it" (Bryson, 1995).

The most significant characteristic of strategic planning is its future orientation--what will be done, and when, within the framework of the organization's culture, and its analyzed predicted future. Much of this analysis is also done within Melcher & Kerzner’s (1988, p.xi) paradigm of external threats and opportunities and internal strengths and weaknesses (SWOT). The strategic plan informs management which must then be "action oriented" since the strategic plan must be implemented for it to be effective (Bryson, 1995; Mintzberg, 1994; Bryson & Crosby, 1992).

It is noted that each point in the T. Lynch (1990) definition of budgeting ties in directly with the latter description of strategic planning process. Yet even Lynch, who can reasonably be considered an authority in (public) budgeting, is silent regarding any long-term focus in the budget process. Rather, he simply comments that budgets are focused upon a specific time period called the budget year (Lynch, 1990, p. 6).

Campus budgeting is also complicated by the variations in funding based on annual allocations from government sources such as grants for research and instruction (Kane, 1997). The latter results in a situation where there are no data available regarding benchmarks of performance over the longer time horizon. In fact collecting data on the performance of budget models is not a popular task since if the model works too well, it may negatively impact favored decisions under a more political rationality.

Further complicating matters is that *different* members of the campus community often participate in the strategic planning process as compared with those who participate in budgeting. Although overlap between the two processes in terms of people is ideal, so that budgeters will better understand program priorities and their origin, this is the exception and not the rule (Meisinger, 1994).

Strategic planning also requires divergent thinking where different options are explored and priorities are established. Budgeting requires convergent thinking such that priorities are matched to available resources. Strategic planning horizons are usually longer that budgeting horizons. Budgeting generally focuses on the fiscal year or biennium, while the academic plan often extends its perspective to a minimum, oftentimes, of five years (Meisinger, 1994).

William L. Simon (1997) in his book, *Beyond the Numbers: How Leading Companies Measure and Drive Success*; reports that many corporate (private sector) CFOs are beginning to see financial planning as an integral part of the firm's strategic planning process, and not as a separate process as in the past. This has become particularly apparent as U.S. firms begin to adopt a more long-term focus or vision in their corporate cultures.

Also referred to as an “Economic Value Added” (EVA) model; Simon reports on the new breed of CFOs adopting Economic Value Added (EVA) models. EVA is a change of focus toward a longer time horizon in the allocation of financial resources within the framework of strategic organizational objectives. According to Simon (1997), one significant problem in implementing this model nationally, however, is the requirement to retrain accountants to rethink their historical cost accounting and book values perspectives, and to embrace new thoughts on market values and economic measures of performance.

The budget has crucial, if not overriding, significance for the implementation of strategies and plans. It often represents the most important and consequential policy statement that an organization makes. At the same time, the difficulty in using budgets for long-term planning purposes results partly from the organizational, cultural, and political context in which budgeting takes place. They typically tend to be short-term, incremental, reactive, and oriented toward accountability, rather than long-term, comprehensive, innovative, proactive, and oriented toward accomplishment of broad purposes, goals, or priorities (Mintzberg, 1994).

Another fundamental reason for the gap between budgeting and strategic planning is that planning for control and planning for action are so fundamentally different. Further, performance control tends to be routine in nature, logically carried out on a regular basis, quantitative in approach, and largely the concern of the accounting staff, and easily mapped onto the existing structure, and geared to motivation and control. This control is also "after-the-fact" which means that budgets are not concerned with predetermining specific actions but with controlling overall performance such as productivity measures.

Conversely, action planning is concerned with "before-the-fact" specification of behavior. Essentially, strategies are supposed to evoke programs that are to prescribe the execution of tangible actions. In contrast to budgets, strategies tend to be, if not nonquantitative, then at least less so, and more the purview of line managers supported by a planning team. This demonstrates a conflict in integrating quantitative and qualitative planning.

It is also noted that performance control consists of two hierarchies, budgets and objectives, while action planning consists of two additional hierarchies, strategies and programs (Mitzberg, 1994, pp.67-81). The research evidence, according to Mintzberg (1994) and Bryson (1995), indicates that while it is hard to join together either of the two pairs of hierarchies, it is extremely difficult (and perhaps impossible) to join all four hierarchies together in a completely coherent, reasonable, and workable way. Only capital budgeting seems to be a partial exception to this generalization (Seitz and Ellison, 1999).

But, for the most part, the literature of both research and pedagogy on strategic budgeting is rather scarce, but increasing, and the literature support for major process improvements in operational budgeting is scant except as updated by accounting policy which perpetuates the annual time horizon with quarterly and monthly reporting.

So, what can be done? Halachmi and Boydson (1991) interviewed public managers who made attempts at budget process improvements. They have suggested that managers should try to have strategic planning activities precede the budget cycle. Meisinger (1994) goes on to suggest that the linkage between strategic planning and budgeting should come from the use of the product of the planning process –the academic plan-to serve as the framework for budget decisions. He also notes that the academic plan is also useful for several budget cycles, and suggests that in order to exert influence over the budget process for a number of years; one should participate in both processes.

But, Newman, Couturier, & Curry (2004) note that particularly in terms of strategic planning, higher education has its own special characteristics that make realistic strategic planning hard to do. These writers conclude by noting that, “there is a need for each institution [of higher education] to create and implement a strategic plan, and then constantly monitor performance against the plan." Added to this must be the role that the budget plays in terms of contributing to or inhibiting plan implementation, and moving forward to eliminate such barriers.

Data Collection/Methodology

The researcher's identified four distinct higher education organizations served as examples to illustrate the problem. These institutions were Palm Beach Community College (PBCC), Palm Beach Atlantic University (PBAU), Florida International University (FIU), and Florida Atlantic University (FAU), all located in the state of Florida. The research data were collected and triangulated through the use of a review of the related literature, anecdotal data, and participant-observation.

Findings

Palm Beach Community College (PBCC) served as one of four case examples to illustrate the study problem. This large public community college often spent aggressively at the end of each budget year to eliminate any surpluses because they would not carry-over at the end of the fiscal year to subsequent year; or worse yet, would result in budget lines for subsequent years being reduced. Budget allocations could not carry-over, nor could they be banked or combined to meet strategic planning goals. At the end of the budget year, the books were closed, budget surpluses lost, and deficits punished. Any long term planning goals that would require resources in subsequent years would have to be budgeted on a year by year basis.

In an interview with Michael Allen (former CFO and Vice President of Palm Beach Atlantic University, a small liberal arts university in West Palm Beach, Florida); he revealed his frustrations on budgeting and strategic planning. He had not been able to effectively link the required annual operating budgets (nor the capital budget) with the institution’s Vision 2000 (strategic plan) of the university. Further complicating the planning effort, both short term and long term, was the differing perspectives of five different schools within the university, and the independence of various departments and institutes within the different schools.

He stated that the development and management of the operating budget was viewed as an annual, self-terminating process; and, that the development and management of Vision 2000 was completed by a planning team within the university without any detailed budget planning for the financial resources needed as the strategic plan unfolds into the future. Virtually all of the long-term objectives identified in the strategic plan document were reported totally without any consideration for future costs or sources of revenue with which to execute the strategic plan's objectives. Further, the overall five year strategic plan for the university was essentially not quantified in dollar terms. Yet, on close examination, it was clear that virtually all of the long-term objectives developed in the strategic plan would require multiyear financial resource cash flow streams. These resources included operating expenses, new intellectual capital investment and new capital assets.

Allen went on to provide a specific example related to technology. He had discovered serendipitously that faculty wanted to switch to laptop computers from the desk top PC that were currently being issued to faculty members. This could be planned for in the next round of campus-wide technology upgrades which was part of the university’s strategic plan, but budgeted annually. And, with some notice as to a change in direction for any investment, capital resources could be allocated or reassigned over a multiyear basis to accommodate the changing demand within the organization. As the college's chief budget officer, this information does not percolate up to him as he prepared the annual operating and capital budgets for the next budget cycle (Michael Allen, personal communication, 1998).

Michael Allen's departmental spending problem at Palm Beach Atlantic University could be curtailed or eliminated by the fact that the very same people who write the strategic plan in the first place should be exercising actual discretion over the use of allocated and encumbered funds. This decentralizes decisions and places them in the hands of the operational line managers--where the action is--where the results are. Unfortunately, the strategic plan is not broadly shared with all stakeholders. Indeed, at Palm Beach Atlantic University, not even the deans were found to have control over their spending, and did not participate in either strategic planning or operating budget planning.

Another specific example cited was a problem related to academic departments purchasing technology independent of the university's strategic plan. The Rinker School of Business at Palm Beach Atlantic University had been purchasing overhead projectors from current operating budgets (specifically grant funds) at a time when the university’s strategic plan called for upgrading classrooms progressively over three years to modern state-of-the-art electronic rooms using computer platforms. The operational lifespan of a overhead projectors is about ten years and yet they will be fully obsolete in less than three years as the strategic plan is fully implemented. The result is wasted organizational resources buying obsolete technology that today are parked in closets, and rarely used.

This conflict occurred because the annual budget impacts only the current fiscal year, and does not reflect the physical resources needed, or being acquired, several years into the future. Also, then, the university's strategic plan is partially flawed because it has no fiscal planning dimensions to which operating and annual capital budgets can be linked. Consequently, academic managers are not guided in their short-term decisions by a long-term perspective, as they should be.

The *"FIU Panther Model: A Rational Framework for Budget Allocation in Academic Affairs"* (based on the *UCF Pegasus Model*) served as the third case example to illustrate the lack of a linkage between budgeting and strategic planning in higher education settings. The *"FIU Panther Model"* is a basic productivity model using a variety of indicators to measure productivity that the university management believe will "increase productivity and (should) result in lower costs and greater quality."

At first glance, the budget model does not seem to completely fail the "test of time" as it relates to the organization's long term objectives, i.e.; a strong point is its concept of funding into a "central bank" or pool that can be tapped over a series of budget years. If the pool is used as a budgetary carry-over then this comes closer to a model that can be linked with strategic budgeting since it could eliminate excess year-end spending to "spend-out" the budget allocation, and can instead spread the operating budgets over a longer time horizon than one calendar year.

An examination of this fairly new (1997) budget model used by FIU revealed a budget that also remained removed from strategic planning time horizons. The FIU Model did allow departments to keep a significant portion of the funds left over at the end of the fiscal year without having their budget base subsequently cut in future years.

Analysis and Recommendations

There exists a "widely held opinion that budgeting is inherently a political process" that could challenge its characterization as a rational process (Lynch, 1990; Chaffee, 1991, p. 263; Finney, 1994). Yet, rationality could be built into the budget process if it is effectively linked to the organization's strategic plan. This would tie-in the internal and external constituencies critical to linking the organization's core mission with the resources needed to accomplish that mission over the strategic long-term time horizon.

Of course, the main criticism of attempting to develop a long-term strategic budget process model is that resources, particularly future revenue streams from federal and state government sources, and tuition revenues based on student enrollment projections, are often difficult to predict over a multiyear time horizon. Part of this limitation can be overcome by using scenario analysis as part of the planning process (Ross, Westerfield, and Jordan, 2001).

However, a counterpoint must be made that any new strategic budget model must have the significant characteristic of variance flexibility to enable it to work within the less well defined revenue and expense forecasts that can be expected over the longer time horizon. This type of budget model will also require a different managerial performance evaluation philosophy and budget variance control process since the longer time horizon does make predictability more difficult. And, of necessity, budgets are rationally designed to be reasonably predictable, even if they are not always so.

Budgeting also suffers from a pedagogic deficit in the education and training of organizational (public and private sector) budget officers. In Rabin and Lynch (1983), Jerry McCaffery cites Edward Lehan (1978) that most budgeters are trained on the job and are thus dependent on the quality of supervision found within their respective budget units; "a most unsatisfactory state of affairs from a pedagogic point of view" (Lehan, p. 193). Although this data may be dated, it nevertheless still predominates today.

McCaffery goes on to identify other problems in the growth and development of budgeting as a body of knowledge worthy of research and teaching in higher education programs. Budgeting is seen as a "rare specialization" with few courses, few qualified faculty, and few textbooks on the subject (p. 195). Public budgeting is available as a doctoral level concentration in public administration programs, but not generally available, e.g., in higher education administration or business administration programs as a concentration or major in budgeting.

There are also too few students who see budgeting *alone* as a standalone viable career (McCaffery, 1978, p. 195). The latter is the result of the fact that there are too few courses dedicated to budgeting across the general curricula for degrees in education, finance, or accounting, leaving only governmental budgeting as a concentration in public administration doctoral programs.

Several of the organizational managers interviewed reported that they mentally reset their time horizons or focus (perspective) as they move from their ongoing operating budget responsibilities to their more infrequent strategic planning functions. This seemingly natural tendency to refocus their thinking is actually counterproductive to effectively linking annual budgets and the longer-term planning of strategic focus.

Many other managers reported not being functionally capable of applying a long-term focus to their budget responsibilities. The reason for this apparent dysfunction is the reality that managers are controlled, and often have their performances evaluated, by budget policies and procedures that are driven by an organizational budget calendar based on annual budget estimates with monthly and quarterly reporting. This is the accounting process driven method that has long been established as the budget process; while strategic planners have established a planning time horizon that far exceeds the accountant’s time horizon which is often more related to the closing of the organization’s books on a set periodic basis.

More directly stated managers can lose their jobs for failing to meet their short-term budget objectives. Or, they can meet these budget numbers, and survive in their positions despite failing to achieve their organization's long-term strategic objectives. This reality occurs because of how managerial performance is most frequently measured--a short-term, bottom-line performance orientation without significant regard to long-term consequences which really do not fit well into the shorter focused annual budget process. This complicates any hope of satisfactory integration between budgets and strategic planning.

Essentially, strategic budgets must move to a multiyear focus, and specifically follow the lead of the strategic planning process. Further, essentially the same people must actively engage in both the budgeting and strategic planning processes. Organizations must eliminate the solo budget officer role whenever that budget officer is an accountant doing the annual budget often far removed from the action of the line managers whose performance is being measured by the numbers created by the accountant. In too many organizations, the accountant is often the "tail that wags the dog."

Departmental managers within any organization should work to establish broad strategic goals, and then set overall expenditure limits along with broad allocations for specific functions. Operating departments, managed by qualified administrators, should be given substantially increased discretion over the use of their allocated funds in order to achieve their specific portion of the organization's strategic goals. And, that specific portion of the strategic plan should be "wholly owned" by the operating department, its managers and employees--very much in an entrepreneurial fashion.

Departments should also be allowed to keep a significant portion of the funds left at the end of the fiscal year without having their budget base subsequently cut in future years. This is in keeping with how the FIU Model appeared to operate. Cost savings, and wise management can be rewarded, and the "use it or lose it" phenomenon of foolish buying sprees at the end of the fiscal year is avoided. In fact, the surplus budget dollars should be "banked" in order to meet the future multiyear needs of the organization's strategic plan. And, all purchases should correspond closely with the organization's future expected needs as indicated in the strategic plan. These two processes should be a tight fit so as to minimize wasteful spending.

Another feature of the proposed budget paradigm is for "benchmarking of time" as a measure rather than just people related productivity measures, i.e.; the strategic budget and the strategic plan must be placed on the same timeline with common reporting periods and features. Control over broad-scale goal setting and monitoring the budget figures for results are critical to effective management of modern organizations. But, they will require common parameters or they will remain separate and incompatible processes.

Further, budgeting is more likely to serve overall organizational purposes if environmental assessments, strategic issue identification, and strategy formulation precede rather than follow it. Prior strategic planning efforts can provide many of the premises needed to influence budgeting in strategically preset directions.

One very significant, and problematic, aspect of the proposed budget paradigm, however, will be a necessary and profound, even radical shift in the organizational culture. Organizations have, for too long, relied on a traditional budget model that has been incrementally altered over the years, but has never been put through a true paradigm shift. In fact, this change in the culture itself needs to be thought about in a strategic fashion through careful planning.

What factors are required for the adoption of the proposed *Strategic Budget Process Model* as well as what organizational changes to make a reality? An influential factor might be the establishment of some strong empirical support, perhaps through the implementation of a demonstration project. Essential to such a demonstration project would be the creation of a seat at the table for the chief budget officer when strategic planning is being conducted. Such a demonstration project could provide the beginning of some theory building research upon which to build the specifics of such a paradigm. What would also be needed, however, would be the support of the accounting profession who predominately control the organizational budget processes.

But, even a well designed strategic budget process model may not win acceptance and willing support if it departs largely from the existing processes well entrenched into the organization's culture. Further, one can not conclude without acknowledging that it would be imperative that checks and balances be established to ensure that the ensuring paradigm is implemented and monitored with honesty and faithfulness; i.e., that carry-overs be held for their intended purpose and not siphoned off at the first hint of an annual budget deficit. In this regard, much would depend on each institution’s ethics, not withstanding the nature of any impending financial crisis.

Summary and Conclusions

It is well documented that the budget process is inherently political in both the public and private sectors. Indeed, in the rush to implement a new program or salvage a favored one, budget realities are often not welcome unless they are somehow favorable to the decision already made by the planners. But, given the paucity of pedagogical experience, and theoretical research, linking budgeting to strategic planning, it is unlikely that major changes in budgeting will occur soon.

As such, one view is that essential and often expensive organizational resources will continue to be wasted, and most organizations are blind to the problem, or they see the problem such as Michael Allen (interview, 1998), but do not see the solution, or possibly from an organizational “politics” perspective, the budgets are just too revealing, and can adversely affect decisions that were already made in a more non-rational manner.

However, budgetary issues must be examined in light of a comprehensive analytical framework or strategy, and attempts made to influence budgetary allocations based on a larger strategic vision. Otherwise, both processes will continue to lead to wasted resources (i.e., until the budget is linked to the strategic vision).

It would seem logical to conclude that any effort to design and implement a strategic budget model with extended time horizons compatible with strategic planning models would require significant advances in the philosophy and pedagogy of public budgeting as a field of knowledge, and specific integration with the field of strategic planning would be required as well.

Reasonably extensive theory building work will be needed to ramp up the field, and extend it into the mainstream of organizational and managerial theory, not just incremental development as a small subset field of finance and accounting which it is now. Anytime planning is discussed, budgeting needs to be in that conversation; and, too often when staff is planning quantum leaps in organizational change, few want to discuss the budget—almost as though the budget is the great killer of big ideas and plans.

The proposed "strategic budget model" can provide for better planning and control of operating resources over a multiyear period. Only then can financial resources hold promise in meeting the total resource requirements demanded by the unfolding strategic plan of the organization.

The focus here has primarily been for application in higher education settings. However, the ideas presented are also applicable to other venues such as health care and public administration, as well. At a minimum, it is hoped that the ideas expressed herein will spark debate, help to clarify the issues, and perhaps build support for a demonstration project. A problem in organizational planning and resource allocation has been identified and a solution recommended, i.e., the idea of a Strategic Budget Process Model. The "idea" of a Strategic Budget Process Model has merit as a concept for organizational process improvement. However, in the opinion of the writers, without empirical support, it remains simply an academic discussion.

References

Allen, John L. Jr. (1997). Strange days for colleges facing rising costs. National College Reporter, 33(41), 22-25.

Allen, Michael (1998). Personal Interview. Vice President and Chief Financial Officer, Palm Beach Atlantic University, West Palm Beach, Florida.

Banziger, G., Wagner, A.M., & Watts, Thomas (1997). On the road to ratios. NACUBO Business Officer, 31(5), 49-52.

Bok, Derek (1993). The cost of talent: how executives and professionals are paid and how it affects America. New York: The Free Press, Macmillan, Inc.

Blumenstyk, Goldie (1998). Western Governors U. takes shape as a new model for higher education. The Chronicle of Higher Education, 44(22), A21-A24.

Blustain, Harvey (1998). Navigating the process labyrinth. NACUBO Business Officer, 31(8), 39-48.

Brenner, M. (1997). The chosen one. NACUBO Business Officer, 30(12), 40-41.

Brown, Ken W. (1998). How colleges can profit through depreciation. Management Accounting, 79(7), 18-22.

Bryson, John M. (1995). Strategic planning for public and nonprofit organizations (Rev. ed.). San Francisco: Jossey-Bass Publishers.

Bryson, John M. and Crosby, Barbara C. (1992). Leadership for the common good: tackling public problems in a shared-power world. San Francisco: Jossey-Bass Publishers.

Chaffee, E.E. (1991). The role of rationality in university budgeting. In Marvin W. Peterson (Ed.), Organization and governance in higher education (4th ed., pp. 253-267). Needham Heights, MA: Ginn Press.

Champy, James (1995). Reengineering management: the mandate for new leadership. New York: Harper Business: Harper Collins Publishers.

Cohen, Arthur M. and Brawer, Florence B. (1996). The American community college (3rd ed.). San Francisco: Jossey-Bass Publishers.

Dougherty, Kevin J. (1997). Mass higher education: what is its impetus? what is its impact? Teachers College Record, 99(1), 66-72.

Drucker, Peter F. (1985). Innovation and entrepreneurship: practice and principles. New York: Harper&Row, Publishers.

Finney, Robert G. (1994). Basics of budgeting. New York: AMACOM American Management Association.

Godet, Michel (1987). Scenarios and strategic management. London: Butterworths.

Green, K. and Jenkins, R. (1998). IT financial planning 101. NACUBO Business Officer, 31(9), 32-37.

Halachmi, A. and Boydston, R. (1991). Strategic management with annual and multi-year operating budgets. Public Budgeting and Financial Management, 3(2), 293-316.

Hall, Richard H. (1996). Organizations: structures, processes, and outcomes (6th ed.). Englewood Cliffs, NJ: Prentice Hall.

Hesselbein, F., Goldsmith, M., & Beckhard, R. (Eds.). (1997). The organization of the future. San Francisco: Jossey-Bass Publishers.

Kane, Thomas J. (1997). Beyond tax relief: long-term challenges in financing higher education. National Tax Journal, 50(2), 335-349.

Kotler, P. and Murphy, P.E. (1991). Strategic planning for higher education. In Marvin W. Peterson (Ed.), Organization and governance in higher education (4th ed., pp. 239-252). Needham Heights, MA: Ginn Press.

Lenhardt, S.W. (1997). Mid-life crisis. NACUBO Business Officer, 30(10), 38-41.

Lively, Kit (1997). An inside look at how a private research university sets tuition rates and spends money. The Chronicle of Higher Education, 43(38), A12-A15.

Lynch, Thomas D. (1990). Public budgeting in America (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

Mancini, C. G. (1997). On rugged ground. NACUBO Business Officer, 30(12), 26-30.

McCluskey, B., Miller, J.K., & Goeres, E.R, (1997). Made from scratch: WVU department tests team-based budgeting recipe. NACUBO Business Officer, 31(5), 42-46.

Melcher, B.H. and Kerzner, H. (1988). Strategic planning: development and implementation. Blue Ridge Summit, PA: TAB Professional and Reference Books.

Mendell, Jay S. (Ed.). (1985). Nonextrapolative methods in business forecasting: scenarios, vision, and issues management. Westport, CT: Quorum Books.

Mintzberg, Henry (1994). The rise and fall of strategic planning. New York: Free Press.

Nanus, Burt (1992). Visionary leadership. San Francisco: Jossey-Bass Publishers.

Napier, Rodney (1999). Using core values to leverage change. NACUBO Business Officer, 32(10), 20.

Peterson, Marvin W. (Ed.). (1991). Organization and governance in higher education (4th ed.). Needham Heights, MA: Ginn Press.

Popejoy, Michael W. (1994). Matthew Effect and public administration research: an analysis of the relationship of institutional prestige to research funding levels and departmental research productivity at U.S. schools of public administration. Unpublished doctoral dissertation, Florida Atlantic University.

Price Waterhouse Financial and Cost Management Team (1997). CFO: architect of the corporation's future. New York: John Wiley & Sons.

Rabin, J., Hildreth, W.B. & Miller G.J. (Eds.). (1996). Budgeting: formulation and execution. Athens, GA: University of Georgia Press.

Rabin, J. and Lynch, Thomas D. (Ed.). (1983). Handbook on public budgeting and financial management. New York: Marcel Dekker, Inc.

Ross, S., Westerfield, R. & Jordan, B. (2001). Essentials of corporate finance, 3rd ed. Boston: McGraw-Hill Irwin Publishers.

Seitz, N. and Ellison, M. (1999). Capital budgeting and long-term financing decisions (3rd ed.). Orlando: Harcourt Brace College Publishers.

Senge, Peter M. (1990). The fifth discipline: the art and practice of the learning organization. New York: Doubleday.

Simon, William L. (1997). Beyond the numbers: how leading companies measure and drive success. New York: Van Nostrand Reinhold.

Stewart, Thomas A. (1999). Intellectual capital: the new wealth of organizations. New York: Doubleday.

West, J. (1998). Erecting a sturdy financial structure. NACUBO Business Officer, 31(9), 41-45.