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Diversifying Campus Revenue Streams: Opportunities and Risks

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Diversifying Campus Revenue Streams:

Opportunities and Risks

by James C. Hearn

American Council on Education
Center for Policy Analysis

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Foreword

In May 2001, the American Council on Education, with generous support from the William and Flora Hewlett Foundation, convened a meeting to assess the current state of analysis of higher education policy issues. The purpose of the meeting was to identify ways in which the needs of institutions, the interests of foundations, and the talents of scholars can be better aligned. Participants included higher education scholars, foundation executives, college and university presidents, and education policy analysts.

In particular, we were eager to learn how ACE could help make the research on higher education more accessible and useful to institution leaders. Several participants suggested that ACE produce a series of short publications, each summarizing the findings of an important area of higher education research. We have embraced that suggestion and created a new series titled *Informed Practice: Syntheses of Higher Education Research for Campus Leaders*. The first report in that series was released in 2002. *Access & Persistence: Findings from 10 Years of Longitudinal Research on Students* summarized the major findings on access, persistence, and outcomes from a decade of federally funded longitudinal studies of college students.

Given the financial challenges facing colleges and universities today, we felt it was appropriate to focus the second installment of this series on the financing of higher education. James C. Hearn, a respected scholar of higher education finance, has summarized the growing literature that catalogues and evaluates the new means that campuses are using to generate revenue. More important, Hearn describes the research findings on the kinds of analyses campuses should undertake before embarking on any new initiative to generate revenue.

We hope you will share this report with your staff and that it will spark useful conversations on your campus. Additional copies are available for purchase, or may be downloaded free of charge, from the ACE web site. We welcome your suggestions for areas of research that future essays should address and for ways in which we can make these documents more useful.

Jacqueline E. King
Director, Center for Policy Analysis

Executive Summary

The primary leadership challenge for college presidents today is to maintain high quality and competitive standing in the face of menacing resource constraints. To meet this challenge, many institutions have begun to adopt more business-like perspectives, particularly by aggressively pursuing alternative revenue streams. This report considers why colleges and universities are diversifying their revenue streams, then examines how they are doing so. Specifically, revenue-seeking efforts are investigated in eight domains:

- *Instruction*, including online programming and niche-oriented non-degree programming.
- *Research and analysis*, including technology-transfer initiatives, business incubators, and e-commerce initiatives.
- *Pricing*, including differentiated pricing and user fees.
- *Financial decision making and management*, including venture capital investment, as well as participation in arbitrage and options markets.
- *Human resources*, including compensation incentives for entrepreneurship and retirement/rehiring incentives for faculty.
- *Franchising, licensing, sponsorship, and partnering arrangements with third parties*, including logo-bearing clothing, tours and camps, and event sponsorships.
- *Auxiliary enterprises, facilities, and real estate*, including on-campus debit cards, facility rentals, and alumni services.
- *Development*, including appeals to donors abroad and other efforts.

This report also synthesizes the research on decision-making processes regarding new revenues. That analysis stresses that the ultimate goal of any revenue-diversification effort should be the generation of new *net returns*, not simply the generation of new revenue. Potential returns can be nonfinancial as well as financial, and can come in the short or long term. Producing new institutional revenues that are fully offset or even dwarfed by new, associated costs is acceptable only if there are notable nonfinancial returns and if the new net costs are viewed as acceptable from an individual, institutional, or public perspective. If the pursuit of new revenues themselves becomes a major institutional focus, it should be with the understanding that new revenue-oriented initiatives will be undertaken only after rigorous consideration of the associated costs, including the opportunity costs of forgoing other initiatives.

Thus, effective decision making on any prospective initiative should be institution-specific and should consider factors not easily monetized. Because each college or university faces a distinctive context shaping its choices, there is no one best approach to decision making about revenue initiatives. Nevertheless, the literature suggests a number of general considerations and guidelines relating to mission and culture, strategic analysis, and implementation, as well as to finances and cost-effectiveness. These are reviewed in turn in this report.

Of course, some revenue-seeking choices will affect the institution only at its periphery. Usually, no substantive strategic or philosophical debate need accompany a choice to rent aquatic facilities for a high school swimming tournament, for example. Other revenue-seeking choices, however, raise the possibility of more profound change. The report concludes by addressing a critical question: What place does institutional mission hold in choices concerning institutional revenue streams? Offering degrees online, for example, involves the "brand" of the institution in a very fundamental way. In those circumstances, institutional leaders should ask: "Is this effort truly core to who we are and who we want to be? Is this a legacy I wish to leave as a leader?" At its worst, the pursuit of new revenues can be mindless and dispiriting. It is essential that institutional leaders help fashion a path that coheres and motivates all on campus. When ideas for new revenue streams may be promising in a business sense but threatening in a cultural and organizational sense, and perhaps do not serve the public good, the best choice may be to walk away. When promising ideas are also inspired and inspiring, however, wisdom may lie in accepting the challenge of change and moving forward.

Introduction

The primary leadership challenge for college presidents today is to maintain high quality and competitive standing in the face of menacing resource constraints.[1] In both the public and the private sector, labor and health care costs have been rising while economic downturn and political change have squeezed revenues from state funding, research and development efforts, endowments, and charitable giving. On most campuses, opportunities for cost cutting are limited. Meanwhile, for-profit providers as well as faraway not-for-profit competitors have begun to pose more daunting challenges to traditionally organized institutions.[2]

At the same time, however, potentially promising new entrepreneurial opportunities have arisen out of training needs in the economy, new developments in information technology, and globalization trends in education. Not surprisingly, many institutions have begun to adopt more business-like perspectives, particularly by aggressively pursuing alternative revenue streams.[3] In the United States, there are dramatic examples of aggressive entrepreneurial activity in major private institutions such as Stanford and MIT, in flagship state universities such as UCLA and the universities of Michigan and Virginia, and in numerous smaller institutions.[4]

In recent years, government funding has steadily decreased as a share of institutional revenue. In the same period, tuition and fees have risen rapidly to replace this lost funding, but not without controversy. Institutions are increasingly turning to revenue sources other than tuition and fees. National data from 2000 (Knapp et al., 2002) suggest that striking proportions of institutional revenues are being provided by sources other than governments and tuition. For example, private four-year institutions drew approximately half of their revenues for the year from investment returns, hospitals, auxiliary enterprises, sales and services of educational activities, and independent operations. Even in public institutions, the proportion of revenues from such sources is striking. In public four-year institutions, for example, endowment income, hospitals, auxiliary enterprises, educational activities, and independent operations accounted for more than a quarter of all revenues in the year of the survey. Figures 1, 2, and 3 graph institutional revenue distributions for fiscal year 2000.

[1] See Immerwahr (2002) for evidence that the topic is very much on the mind of a broad sample of college and university leaders.

[2] Ruch (2001) provides an especially informative and provocative analysis of the new for-profit institutions in postsecondary education.

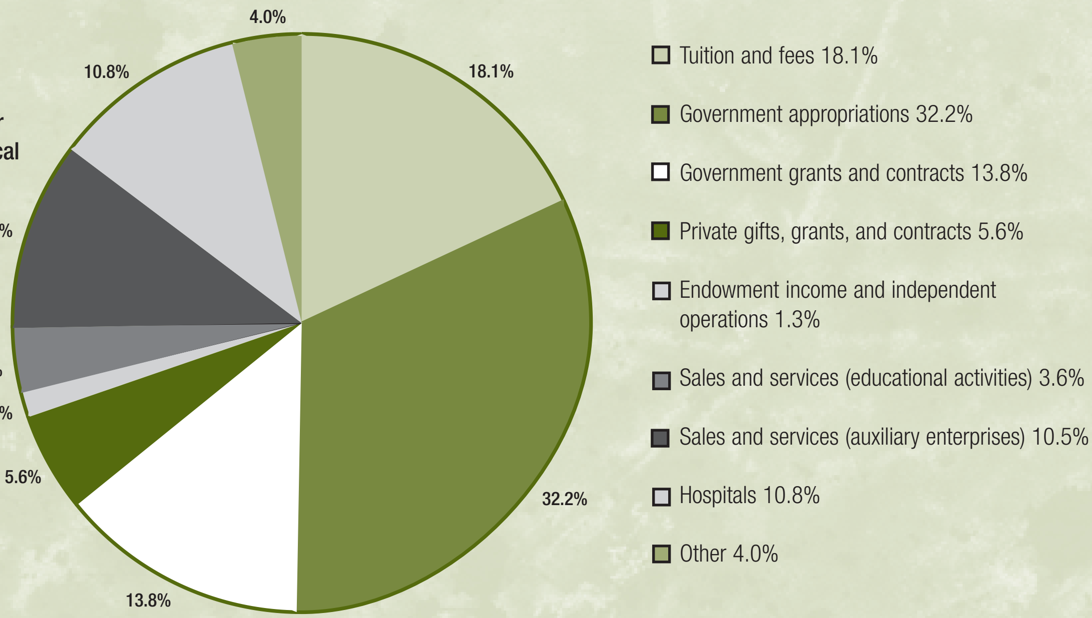
[3] Sociologist Burton Clark (2002, p. 328) has observed this phenomenon worldwide, noting, "The trend away from single-source dependency has spread internationally."

[4] The argument is not new: Homer D. Babbidge and Robert Rosenzweig noted in the early 1960s (1962, p. 158) that "a workable twentieth century definition of institutional autonomy [is] the absence of dependence upon a single or narrow base of support."

This report synthesizes recent writings on revenue diversification in colleges and universities. Although the literature is rather sparse and uneven, there is substantive material that can inform campus decision making. This report first addresses the question of why institutional revenue streams are changing, then presents a taxonomy of new revenue sources, and reviews factors central to effective decision making on revenues. The conclusion focuses on the strategic and philosophical issues embedded in choices about new institutional revenues.

Figure 1

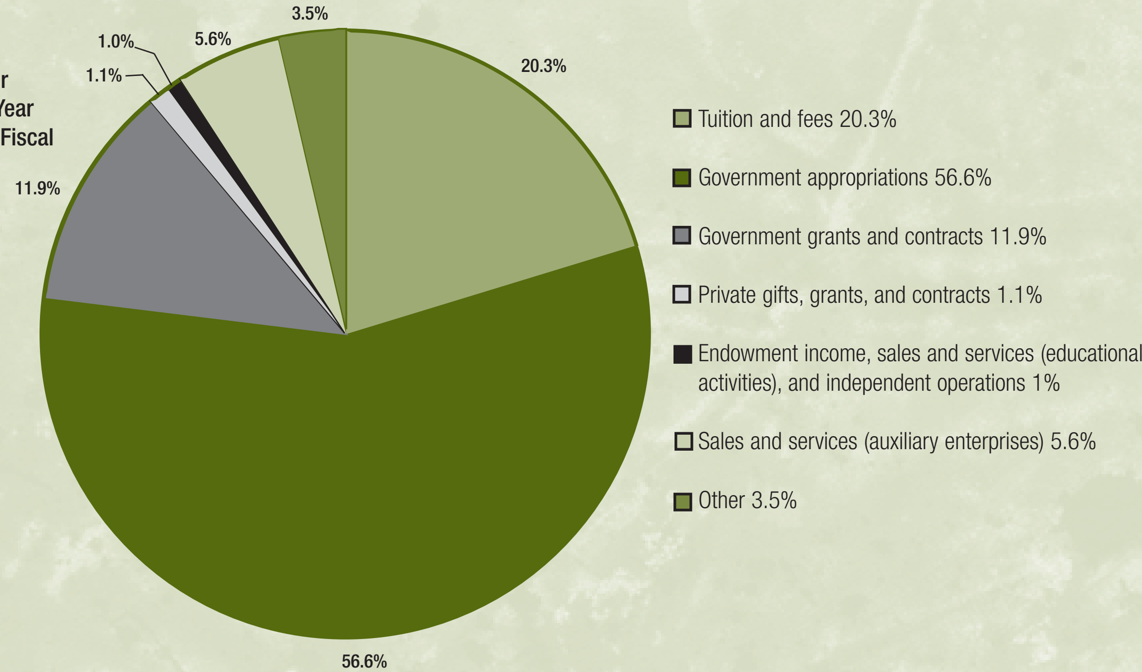
Sources of Revenues for Public Four-Year Institutions, Fiscal Year 2000



Source: Knapp et al., 2002.

Figure 2

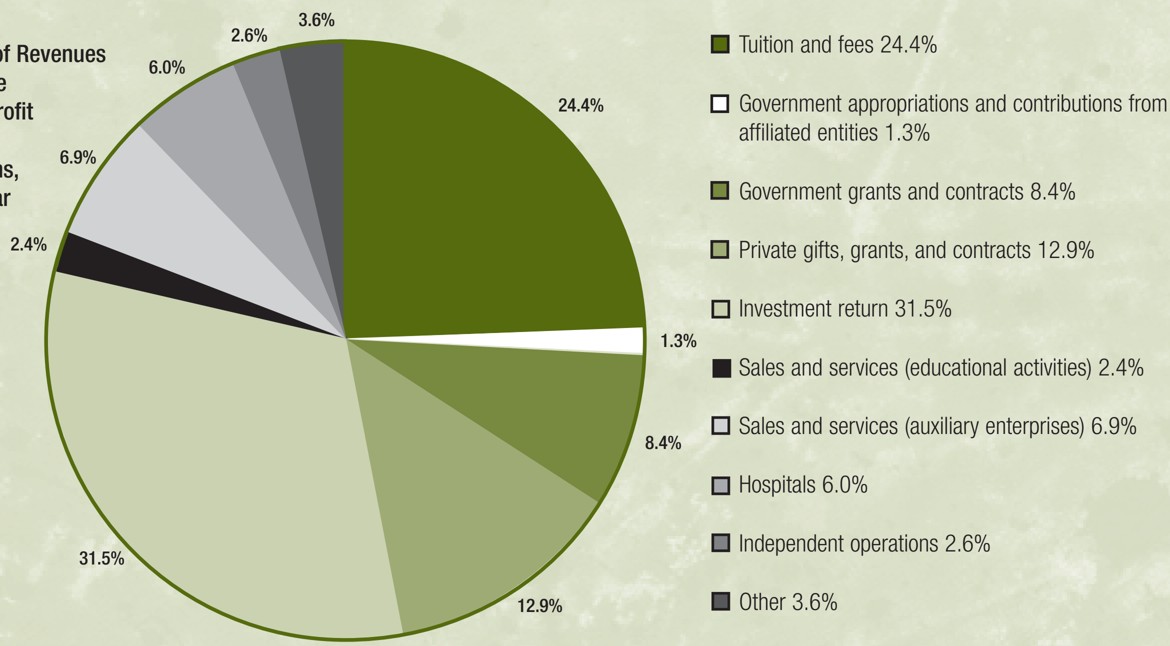
Sources of Revenues for Public Two-Year Institutions, Fiscal Year 2000



Source: Knapp et al., 2002.

Figure 3

Sources of Revenues for Private Not-for-Profit Four-Year Institutions, Fiscal Year 2000



Source: Knapp et al., 2002.

Note: Because public and private institutions use different accounting conventions, category labels here differ from those in previous figures.

Why Are Institutional Revenue Streams Changing?

For many institutions in earlier eras, revenue from tuition and from research and service efforts was predictable and sufficient to maintain at least the status quo on campus. That was rarely satisfactory, however. In his classic book *The Costs of Higher Education* (1980), the late economist and former college president Howard R. Bowen suggested that leaders continually seek real funding growth because they operate under a "revenue theory of cost," in which increased revenues are always being sought in order to pursue excellence, prestige, and influence. Because there is no limit to what could be spent in pursuit of those goals, institutions will always raise and spend all the money they can. After all, new money can always contribute to the pursuit of improvement and increased public stature. For Bowen, the never-ending pursuit of revenues to be directed toward academic improvement was a given, and for him the optimal source was government rather than tuition and fees or other sources. Bowen understood that the drive for new revenues was inexorable, but he did not foresee a time when constrained government funding would imperil the preservation of the academic status quo. Institutions, especially public institutions, now must face such a circumstance.[5]

At the same time, institutions face "demand overload," i.e., expectations for instructional and analytic services to improve and expand, when only maintaining effort and, perhaps, preserving quality seem financially in reach (Clark, 1998, p. 131). Governments, in particular, have pressed institutions to expand postsecondary education capacity in their states and stimulate regional and national economic development through training and research. Lowered funding from traditional sources, increased expectations, and the shifting competitive landscape, where new providers and technologies threaten longstanding assumptions about institutions' assured market position, are forcing institutions to seek additional revenue sources.

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However, not all recent external developments should be cast as threats. Regarding the daunting challenges posed by for-profit providers, for example, Davies (2001) has noted that the lifelong

[5] See Hovey (1999) for an examination of the low priority given higher education in state budgetary decision making. The problem is compounded by the fact that many state governments are facing revenue diversification crises of their own (Boyd, 2002; Arnone, Hebel, and Schmidt, 2003).

learning movement and the globalization of higher education may destabilize cultures and niches at established colleges and universities, but they also present opportunities for those same institutions.

Some governments have provided incentive-based funding for efforts that serve public goals. For example, Illinois has funded an ambitious program (VentureTECH) that, among other initiatives, provides substantial financial incentives for institutions to help develop the state's high-technology infrastructure and labor markets (see Ryan et al., 2001). In addition, industries and other stakeholders have turned to colleges and universities as the logical providers of expertise in labor development, information systems, economic forecasting, and industry-specific techniques and ideas.

Both public and private institutions, reacting to the dramatic swings in the economy in recent years and worrying that present fiscal constraints may be long-lasting, have begun to see that diversifying their economic base is sound policy for all economic and political conditions (Breneman, 2002; Clark, 2002). In the best case, college and university leaders can choose revenue-generating activities that are educationally valuable and integral to their institutions' missions of serving society. Short of that goal lie pursuits that allow the institution to survive and even improve under austere conditions.

New Revenue Streams

Institutions are diversifying their revenue streams in many ways. These include:

- Instructional initiatives.
- Research and analysis initiatives.
- Pricing initiatives.
- Reforms in financial decision making and management.
- Human resource initiatives.
- Franchising, licensing, sponsorship, and partnering arrangements with third parties.
- Initiatives in auxiliary enterprises, facilities, and real estate.
- Development office initiatives.

Each of these domains is described and reviewed in this report. Of course, the domains are not mutually exclusive, and it is sometimes difficult to separate cost savings from revenue generation. Despite these ambiguities, this typology provides a useful framework for considering revenue-generating activities.

Instructional Initiatives

For most U.S. institutions, revenues from core academic programs either remained stable or grew through the 1990s. Now, however, there are threats to the financial resilience of core programming and thus threats to institutional confidence and comfort. New providers, new markets, and new technologies are changing the grounds on which institutions make academic decisions. Many institutions have

Examples of Nontraditional Revenue-Generating Initiatives

Instructional Initiatives
- Test-preparation programs
- Retiree-oriented courses
- Programming funded by state for workforce training

Research and Analysis Initiatives
- Technology-transfer offices
- Start-up firms
- Business partnerships
- Business incubators
- Research parks
- E-commerce sales of institutional expertise
- Fee-based information services

Pricing Initiatives
- Differentiated pricing
- Unbundling of user fees for services

Other Financing Initiatives
- Unitized investment pools
- Venture-capital investment
- Participation in arbitrage and options markets
- Revolving funds
- Internal cross-subsidization

Human Resource Initiatives
- Limits on external consulting by faculty
- Compensation incentives for revenue generation
- Retirement/rehire incentives for senior faculty

Franchising, Licensing, Sponsorship, and Partnering Arrangements with Third Parties
- Tours and camps
- Concert series
- Sponsorships of on-campus events
- Outsourcing contracts with revenue guarantees
- Distributed learning partnerships
- Logo-bearing merchandise licensing

Initiatives in Auxiliary Enterprises, Facilities, and Real Estate
- Upgrading athletic facilities
- On-campus debit cards
- Off-campus extensions of debit cards
- Financial services
- Facility rentals
- Alumni services

Development Office Initiatives
- Appeals to donors abroad

been responding to external threats aggressively, targeting such new markets as corporate learners, professional enhancement learners, degree-completion adult learners, pre-college (K–12) learners, remediation and test-preparation learners, and recreational learners (Oblinger et al., 2001). These efforts have focused not only on students seeking degree programs but also on students seeking nondegree pre- and post-baccalaureate certification (see Levine, 2000a; Schneider, 1999).

Some colleges have benefited financially from creative state-level mechanisms to stimulate workforce training and development. For example, several states (including Iowa, Missouri, and Georgia) offer programs that divert portions of state withholding taxes or unemployment taxes into colleges offering certain valued instructional programs (see Sekera et al., 1999). Another source of new enrollments has been "occasional students" who attend for brief periods, often part time. Such students often attend to upgrade employment skills but sometimes attend for purely avocational reasons, e.g., course taking by retirees (Kerr, 2002).

Many institutions have moved toward offering special versions of high-demand courses at high tuition levels. Such efforts can include offerings through corporate partnerships or by for-profit subsidiaries,[6] summer courses, short courses, online courses, credentialing programs in areas demanded by the labor force (e.g., information technology, education, and nursing), and offerings abroad (e.g., see Primary Research Group, 1997; Hinchcliff, 2000). Such efforts are usually designed to attract non–degree-seeking students who may be employed or externally funded and thus more able to pay higher tuitions than students in the midst of a lengthy degree program.[7]

Some of these initiatives have familiar pedagogical forms, but new technologies are also important in the pursuit of new instructional revenues. For some instructional initiatives using new technologies, special public funding is available (Wellman and Phipps, 2001), but often institutions must choose a path without substantial external support. In this uncertain marketplace, Levine (2000a) argues that three kinds of providers are emerging: "brick" (i.e., traditional campus-based institutions), "click" (i.e., institutions existing solely in cyberspace), and "brick and click" (i.e., campus-based institutions also offering online learning opportunities). Of these, Levine argues, the "sweet spot" for mainstream higher education's financial survival is brick and click: having both an electronic and a physical presence.

Collis (2002) predicts that sweet spot will be illusive. His analysis suggests that online corporate training will be a larger and more profitable market than online academic education and that, for nonelite institutions without superior "brands," online education may in fact be a losing proposition. The difficulties experienced by several major, highly touted distributed learning initiatives suggest that a crucial consideration is how institutions incorporate new technologies into their instructional offerings (Oblinger et al., 2001; Hitt and Hartman, 2002). Collis (2002) notes that institutions confronting the risks and

[6] For-profit spin-offs for instructional purposes have been especially prolific in the community college sector, where the corporate-training market is well established. The Primary Research Group (1997) forecasts that revenues from such efforts will continue to be strong for the indefinite future.

[7] For example, for some time, Duke University has been offering a partly online "Global Executive" MBA program at a substantial tuition and fee level (as of this writing, the charge for the entire program totals $100,500), and the program is apparently financially successful. See http://www.fuqua.duke.edu/admin/gemba.

rewards of new technology-based instructional initiatives can choose from four general strategies. In order of innovation, these are:

- *Incremental*, in which technology complements traditional classroom experiences.
- *Distance education*, in which distance offerings are added to student courseloads in traditional degree curricula.
- *Alliances*, in which a third party resells an institution's courses aggressively and in new markets.
- *Market entry*, in which institutions enter new technology markets alone with new products, without the benefit of partners.

Alliances can be an especially effective way to balance risks. In distributed education, early outlays for content development, technical infrastructure, and marketing can be substantial, and partnerships can provide needed capital for generating revenues quickly (Katz et al., 2002). Collis (2002) suggests that a number of leading institutions (including Harvard, Stanford, Duke, MIT, Penn, Johns Hopkins, UCLA, UNC–Chapel Hill, and UT–Austin) are following this path, because it leverages a university's brand name and existing course content with the least risk, with minimal expenditure of time and money, and with minimal objection from faculty, all while preserving the exclusivity of the institution's own degree. Many alliance-based efforts connect outside organizations to campus-based business schools, Collis observes, and most are aimed at the corporate and lifelong learning markets. Such efforts, therefore, do not immediately affect core undergraduate offerings.

A central question in this arena is whether to invest in technology using operating budgets, or capital, or some combination of the two. Among the possible ways to finance technology expansion are:

- Debt financing (bonds, certificates of participation, revenue anticipation notes).
- Vendor arrangements (discounts, donated services or equipment, leasing arrangements, service contracts, performance contracting).
- Leasing arrangements.
- Revolving funds (seed money repaid through either revenue or budgetary savings).
- User fees (special technology fees, tuition increases).
- E-commerce (revenue-generating activities).
- Creation of for-profit subsidiaries.
- Other organizational and budgetary techniques such as consortia, partnerships, and funding through internal recharge systems.

When weighing these options, Wellman and Phipps (2001) note, officials should consider the cost of capital (including planning and management costs), statutory or constitutional restrictions on the revenue (such as bond caps), the political costs of obtaining capital (such as through higher tuition or fees), and the culture and mission of the institution. Too often, these analysts suggest, technology is viewed as a capital item, when in fact it requires ongoing operational investments. Because technology assets depreciate rapidly, they note, bond financing is usually inappropriate.

Research and Analysis Initiatives

Many universities are repackaging and reorganizing their research and analysis capabilities, often in pursuit of revenues (Kozeracki, 1998). Prominent initiatives involve business incubators, technology-transfer offices, research and technology centers and parks, small business development centers, and research collaborations with private industry and the government. Some of these efforts, such as UC–Berkeley's failed alliance with a major Swiss biotechnology company (Blumenstyk, January 10, 2003), have been disappointing. Others, however, have been lucrative. A center for research and development in the nano-sciences has reaped revenues of $850 million thus far for SUNY–Albany (Hebel, 2003).

Patents and licenses based in university research have increased markedly since the 1980s because of the federal government's determination to remove hurdles to revenue realization in this arena (Geiger, 2002; Press and Washburn, 2000). Many campuses have benefited greatly in recent years from profitable discoveries in such areas as computer technology, medicine, and biotechnology (Balderston, 1995; Wellman and Phipps, 2001). Noting such trends, Etkowitz et al. (1998) have called the rise of technology transfer a "second academic revolution" in this country. With projects ranging from designing robotics for safer, more cost-effective underwater and space exploration to developing new processes for growing stem cells to replace diseased kidneys, universities are deep into a new era of commercialization and technology transfer.

Given the current economic climate, the rationales for technology-transfer efforts on campus may be increasingly oriented to financial returns (Feller, 1997). However, it may be risky to hold technology transfer offices to stiff financial expectations. Stanford, UC–Berkeley, and a few other elite institutions experienced early and spectacular financial returns on their technology-transfer efforts, but that pattern is far from the norm. Feller (1997), Press and Washburn (2000), and Geiger (2002) all find it doubtful that many technology-transfer initiatives break even, much less return net revenue to their home institutions. Such efforts can cost hundreds of thousands of dollars a year.[8] Some institutions that have been investing in technology-transfer infrastructure are now retrenching, redirecting, and reconsidering their efforts. Nevertheless, technology-transfer efforts can clearly pay off for research-oriented institutions that have appropriately qualified and positioned faculty (Clark, 1998; Geiger, 2002).

Some institutions are creating new organizations to generate revenues from research. Among the new organizations are units to nurture start-up firms via consulting and financial support as well as overtly for-profit subsidiaries to sell technology services (Leslie and Slaughter, 1997; Johnstone, 2002; Levine, 2000a). The business-incubator approach has frequently been a part of these initiatives, and it often takes advantage of available low-cost real estate to provide affordable rentals to aspiring commercial enterprises (Geiger, 2002; "Education-affiliated incubators," 2001).

[8] Traditionally, technology transfer provides returns only when patents and licenses are activated and successful (Geiger, 2002), a characteristic that can make investments in technology transfer difficult for financially pressed institutions. Thus, some institutions accept equity holdings in return for their technology transfers to industry (Feller, 1997). Because such holdings may be sold, they can represent institutions' only hope for shorter-term returns on frontier technology.

Short of developing separate new organizations, some colleges and universities have entered the treacherous waters of e-commerce, i.e., using the web and Internet for selling institutional research and analysis services. As Wellman and Phipps (2001) note, e-commerce can be a risky enterprise for corporations as well as institutions, and it raises significant questions of institutional mission, governance, and cost-effectiveness.

Another type of initiative in this area is the development of fee-for-service offerings, most prominently fee-based information services, for off-campus parties. Results have been mixed. At Purdue, positive returns from such an effort allowed the purchase of needed new library resources (Nicklin, 1992a), but other library-based information services have lost money (McDaniel and Epp, 1995). Sometimes, when there is no financial return, leaders stress the potential public-relations benefits of the activity rather than its remunerative power (Nicklin, 1992a). Beyond the difficulties of achieving adequate financial returns, fee-based services can also raise legal and philosophical issues for institutions. Notably, public institutions have been challenged in court on the grounds that such services compete unfairly with private-sector businesses (Nicklin, 1992a).

Indeed, the evidence is mixed overall for new revenue-generation efforts relating to research and analysis. Technology-transfer offices pay off when core expertise and energy are present, but may be less cost-effective otherwise. Early campus-connected research parks in the Boston area, in the research-triangle area in North Carolina, and in the Palo Alto area in California were great successes, but attempts to recreate those accomplishments elsewhere have been less fortunate. Academic research as a whole unquestionably provides public and institutional returns, but there is uncertainty about which organizational arrangements are most likely to generate a net profit (Mansfield, 1995).

Tuition and fees have changed in two important ways in recent years: They have risen markedly and have become increasingly differentiated. Tuition increases have been documented extensively, but differentiation has not.

Pricing Initiatives

Institutions price their analytic services and auxiliary enterprises, but the most important element of pricing in higher education is the pricing of instruction. Tuition and fees have changed in two important ways in recent years: They have risen markedly and have become increasingly differentiated. Tuition increases have been documented extensively, but differentiation has not.

Institutions can differentiate tuition by the offering unit (the business school as opposed to the department of philosophy), by the instructional or facilities costs associated with a particular course offering, by the timing of the offering (evening, weekends, day, summer, etc.), by the course level (graduate/professional or undergraduate), by the location of the course (online, off campus, etc.), by the student's major field and degree level (or absence of a stated major or degree objective), by the number of credits being taken by the student ("tuition banding," often used to encourage full-time as opposed to part-time enrollment), and by student residency status (in-state, out-of-state but in the United States, or overseas).[9] Tuition has long been differentiated on some of these dimensions, e.g., by state residency and by enrollment in lucrative professional fields such as medicine and law. Now, however, institutions are beginning to experiment with finer distinctions in the pricing of their educational services.

The emerging online education and distance education markets are prime grounds for such experimentation because these areas are less firmly institutionalized, and institutions consequently have greater staffing, curricular, and pricing flexibility. Collis (2002, p. 189) has noted that pricing structures in the online arena are reasonably favorable for institutions: "In principle, [corporate] entrants could destroy the price structure that traditional institutions have become accustomed to. The great news for universities is that this is not happening!" The main reason corporate pricing for online education is not undercutting traditional institutions, he suggests, is that corporations entering these markets require timely revenues to cover their high development costs. What is more, new competitors want to benefit from the favorable (i.e., high) pricing structure that exists in higher education, not destroy it. Thus, Collis argues (p. 190), "extensive price competition is unlikely to occur immediately."

There is no guarantee that new differentiations in tuition will generate additional revenues, and in particular additional net revenues, for any given institution. At heart, prices are incentives for students, and it is difficult to structure incentives to increase revenues without offsetting rises in costs. The critical analytic concept for making such structuring choices is net price to students. This net price is arrived at via formal tuition variations but also via offsetting student aid awards, an indirect form of tuition differentiation. Econometric analysis of the responses of students and families to different prospective pricing and aid configurations can help in projecting the effects of tuition-differentiation initiatives.

Many institutions, especially in the private sector, are combining robust full-tuition charges with aggressively discounted prices for some applicants to generate student bodies with academically and financially preferred characteristics (McPherson and Schapiro, 1998; Johnstone, 2002; Hubbell and Lapovsky, 2002). Tuition discounting may weaken longstanding institutional commitments to "need-blind" admissions, but it can enhance overall net revenues.

In earlier years, the extent of individualized tuition differentiation was limited by its costliness, but developments in information systems have reduced institutions' reliance on human bookkeepers for accounts receivable, and this may help create a pricing system resembling that of airlines, in which each student pays a somewhat different "fare." Whether this emerging vision of higher education pricing is troubling or promising, however, is a matter for individual institutions to consider.

[9] See Yanikoski and Wilson (1984), Hearn (1988), and Wetzel (1995).

Beyond the pricing of tuition itself is the question of the fee structure students face. In recent years, the pricing of undergraduate educational experiences has increasingly been "unbundled." For example, many institutions have initiated overt or de facto user fees associated with technology infrastructure and services (Wellman and Phipps, 2001). Many new "user fees" were formerly covered by basic tuition and fees but now lie more or less at the discretion of students and their families. The user-fee approach has allowed colleges and universities to increase revenues while restraining highly visible rises in their stated tuitions.[10] What is more, the user-fee approach makes pricing and costing more transparent to consumers.[11] In fact, tying pricing to discrete "objects" can make institutional as well as individual decision making more informed and effective. Of course, the turn to unbundling and user fees may or may not raise total or net revenues for an individual institution.

Reforms in Financial Decision Making and Management

Several financial reforms can contribute to improved revenue flows in institutions. Some relate to working capital. Higher education institutions have a financial advantage over other organizations in that their primary source of revenue typically arrives in large sums twice a year (i.e., tuition and fees charges are paid at the beginning of each semester) rather than in smaller increments month by month. Judicious investment of these funds, along with intelligent cash-flow management, can provide appreciable revenues. Helpful to achieving solid returns on these and other liquid assets is the use of unitized investment pools, i.e., pools of funds drawn from multiple sources and managed under a consistent investment approach.

Postsecondary institutions remain rather conservative relative to other major investors, and this approach has worked reasonably well (Yoder, 1996; Morrell, 1997; Tharp, 1997; Spitz, 1999; Standard and Poor's, 2002; NACUBO, 2003). Still,

In recent years, the pricing of undergraduate educational experiences has increasingly been "unbundled."

some institutional financial managers have productively adopted more adventurous approaches, including program trading, venture-capital investment in for-profit start-up enterprises, and participation in foreign, arbitrage, and options markets. Investing intelligently in these alternative assets requires specialized expertise in analysis, valuation, and accounting. Of course, legal charters, regulatory contexts, and leaders' risk tolerance may prohibit such efforts in some settings.[12]

[10] Of course, some user-fee charges are in essence unavoidable for typical students. If an expense is virtually required for almost every student, it is an integral part of cost of education on a campus. As such, parents and students should know about that prospective expense as they make their educational choices.

[11] For example, in many institutions, support for student athletics is still "bundled," in that it comes through general tuition and fees and state subsidies in ways that are not visible to students and their families. By unbundling such support for athletics, and instead charging students and the public more for attendance at athletic events, the economics of college athletics may become clearer to all concerned. I am indebted to Grady Bogue for this example.

[12] For example, federal and state authorities have curtailed some institutions' entry into aggressive interest-rate arbitrage using tax-exempt bonds (Geiger, 2002).

More traditional approaches to investments in higher education often rely on debt financing. The two most frequently employed approaches to long-term debt are general-obligation bonds and revenue bonds. When the acquisition of new revenue requires significant front-end investments and public or private seed funding is unavailable, revenue bonds are more appropriate than general-obligation bonds. The risk, however, is that revenue streams derived from such initiatives can be less assured than for the traditional objects of such financing, such as dormitories (Wellman and Phipps, 2001). A similar concern applies to shorter-term approaches to financing, such as issuing certificates of participation or revenue-anticipation instruments. Without reasonable assurances about future revenues, pursuing such funding may be unrealistic.

Another way to invest in the pursuit of new revenues is with revolving funds. These funds can support teaching and research initiatives as well as improvements in physical plant that can generate revenues (e.g., residence halls). Revolving funds are typically supported by seed funding from institutional, state, or foundation sources and typically operate like investment funds, expecting the recipients to repay through the returns on initial investments (Wellman and Phipps, 2001).

Institutional leaders may also encourage entrepreneurial faculty behavior by creating competitively awarded internal funding pools, which can be supported by across-department cross subsidies and existing resources.[13] In a similar way, decentralized budgeting systems may encourage entrepreneurship. Making each organizational unit on a campus a quasi-independent entity can distribute resources (effectively, revenues) to units generating financially robust products and services (Massy, 1996; Leslie and Slaughter, 1997; Priest et al., 2002).

Human Resource Initiatives

Some institutions are employing human resources in new ways to provide revenues. For example, tightening institutional rules and regulations concerning individual consulting by faculty (e.g., requiring complete reporting and specifying monthly time limits on compensated consulting) can clearly express work expectations and, ideally, capture consulting revenue for the institution rather than the faculty. Such an initiative can be justified philosophically because faculty often use their academic expertise and institutional affiliation in their consulting, and most often pursue those activities during traditional working hours. However, such moves may alienate faculty. Business school faculty, in particular, are in high demand outside the academy, and business schools generally cannot match the salaries their faculty can earn elsewhere. In addition, tight controls over consulting opportunities can further harm chances of recruiting talented faculty.

Institutions can also take a more indirect, but similarly controversial, human-resources approach: refining compensation and promotion processes to provide more explicit incentives for faculty's revenue-generating activities. However, leaders at research institutions may have limited discretion and only indirect influence in that domain because most of those institutions respect peer-review and disciplinary norms (which tend not to favor revenue-generating activity).

[13] Clark (2002) provides an intriguing example from the University of Warwick.

Similarly, leaders in unionized institutions may have limited capability to alter reward systems agreed upon under collective bargaining. Still, some institutions have begun experimenting with such novel ideas as salary bonuses for faculty members successful in generating new revenues (Hearn, 1999). Thus, there is potential for incremental change over the longer term in salary and promotion systems.[14]

Some revenue-oriented ideas in the human-resources domain are quite creative. For example, Nelson (1996) argues that institutions should provide incentives for senior faculty to retire, and then rehire them at 10 to 30 percent of their pre-retirement pay. Doing so shifts the financial support of these faculty from the institution to their individual retirement programs while also supplementing their retirement benefits. Assuming stable support for faculty positions, the institution earns, in effect, a revenue windfall with which to hire new faculty members.

Franchising, Licensing, Sponsorship, and Partnering Arrangements with Third Parties

Whether event-driven or long-term, collaborations with externally based partners can be fruitful across a wide range of institutional efforts.[15] For example, tours and camps undertaken with closely associated groups such as alumni organizations and athletic booster clubs may generate additional revenues. Revenues can also be generated in partnership with less closely associated groups, e.g., scholarly conferences, concert series or museum showings, and athletic competitions. Partnering with vendors for such activities can potentially bring expert staffing as well as useful discounts and incentives, factors that can directly and indirectly raise net revenues (Wellman and Phipps, 2001).

Many developments in partnering, franchising, licensing, and sponsorships are elements of the "privatization movement" in higher education, i.e., the movement toward creating more market-driven college and university decision systems and services (Gose, 2002). Virtually every campus uses outside parties to deliver services traditionally provided by institutional employees, making "outsourcing" the most prominent example of privatizing in higher education (Wertz, 1997). In a survey of campus leaders (Wertz, 1997), proponents of outsourcing cited improved costs of operation, financial incentives, renovation of facilities, increased efficiency, human-resource concerns (i.e., ability to staff in-house), limitations in expertise and technology on campus, an emphasis on establishing a competitive edge, and doubts about offering the service on a campus. Detractors raised concerns over a loss of institutional control, loyalty of workers to a company rather than the campus, loss of direct worker accountability for quality of services, financial dependence, questionable revenue and cost projections, and questionable quality of service.

> Institutional leaders may also encourage entrepreneurial faculty behavior by creating competitively awarded internal funding pools, which can be supported by across-department cross subsidies and existing resources.

[14] After all, research publications were far less valued in university salary and promotion systems before the 1970s than they are now, so change is possible in this domain over time.

[15] For those seeking a defense of the value of such arrangements, NASULGC (1997) presents an important analysis of how investments in various cooperative external enterprises on public university campuses have paid off impressively for their home states.

Outsourcing arrangements with third parties are usually quite visible to students and faculty. These arrangements can trade one form of revenue gathering (the term-by-term garnering of funds from individual students, for example) in favor of another form (periodic payments from third parties). Along these lines, institutions are increasingly privatizing their bookstores as legally separate entities or contracting their work to for-profit corporations such as Follett, with the aim of enhancing revenues and returns for all parties. Dining facilities are also often managed under contract by private firms, and newer outsourcing arenas include residence halls, legal services, facilities operations, technology services, security, child care, teaching hospitals, architectural and construction services, capital-campaign management, and remedial classes (Wood, 2000; Rinella, 2002). A number of observers have raised cautions about such activities (Ikenberry, 1997; Geiger, 2002), and outsourcing can fail for reasons such as poor communication and coordination (Bartem and Manning, 2001; Rinella, 2002). Still, its growth seems assured. As Jefferies (1996) and Wertz (2000) have noted, outsourcing efforts meet the pressures of the current era by focusing on reduced costs, increased service efficiencies, and higher revenues.

A primary focus of third-party collaborations is the instructional arena. Partnerships in distributed learning can take many forms, including online applications, campus-based portals, online course delivery, supplemental content provision, online library services, online textbooks, and advising and tutoring (see Katz, 2002). We may be entering a period of decreasing distinctions and increasing combinations among the various institutional and non-institutional providers of education and related services (Levine, 2000a), but the early evidence on such efforts is mixed.[16]

Sometimes, new revenues may be generated simply by paying attention to ways in which third parties are using university resources (including the "brand" itself) without legal permissions. Grassmuck (1990), for example, details how colleges and universities were slow to realize the revenues potentially generated by enforcing institutions' legal rights over their distinctive logos and emblems. Now, most institutions closely monitor sales of institutionally themed merchandise in the pursuit of potential revenues from sales or, if necessary, from damages awarded under legal settlements.

Ideally, there is a close relationship between revenues and the use of university assets (including the brand) by others. For example, soft drink companies, athletic gear manufacturers, and others pay colleges and universities on an ongoing basis for exclusive rights to vend on campus or sell themed items. Such arrangements have raised IRS concerns over reporting and taxability (see Healy, 2000), but can generate substantial additional revenues. But the right to have their logos or names displayed prominently in a university's basketball coliseum or on the jerseys of players in college football's myriad bowl games is a substantial inducement to corporations to provide significant financial support.[17]

[16] Such collaborative ventures can fail even when their participants are widely respected and well funded. Recently, Columbia University announced the termination of its online learning initiative with the British Library, the London School of Economics and Political Science, the Cambridge University Press, the Rand Corporation, the University of Chicago, and others (Carlson, 2003).
[17] See Wertz (1997).

Initiatives in Auxiliary Enterprises, Facilities, and Real Estate

Revenues from familiar auxiliary units such as hospitals, athletics departments, bookstores, dining facilities, and hotels do not always exceed costs (Geiger, 2002; Kirp and Roberts, 2002). On most campuses, intercollegiate athletics is far from a clear-cut net revenue generator (see Zimbalist, 1999). Efforts to rent athletic facilities, sell the name of such facilities to donors or corporations, and sell recreational offerings (e.g., soccer camps) often founder because of environmental, legal, and oversight issues (e.g., see Nicklin, 1996; "IRS Ruling," 2003). In the medical arena, cost increases, insurance limitations, and growing corporate competition have limited the success of university hospitals, and a number of institutions have moved toward merging their hospitals with other providers.

Still, auxiliary enterprises can pay off. For example, upgrading athletic facilities can increase revenues via naming rights for arenas, and via sale of suites and other amenities (Koger, 2001; Allen, 2002) and thus reduce subsidies for athletic programs from general institutional funds. In a similar vein, revenue can be generated by upgrading dining facilities (Watkins, 1997; Swanquist, 1999) and marketing specialized expertise (e.g., Fresno State operates a turf service).

Institutions are also marketing new services to students, faculty, and staff. A familiar example is debit cards for purchasing on-campus products and services (see Nicklin, 1993). Such programs increase revenues by encouraging spending on campus rather than off campus, and also provide institutions with interest income from funds deposited into debit-card accounts.[18] Taking their debit-card initiatives a step further, some institutions are garnering additional revenues by extending use of the cards to off-campus product and service providers willing to pay a fee for special access to the spending power of the institution's students, faculty, and staff.[19]

Alumni can provide new revenues to institutions as well. Many formerly free alumni magazines are now sent only to those who have purchased memberships in alumni societies or provided gifts in the past. Many alumni magazines now feature colorful covers, impressive photography, and engaging, sometimes controversial articles, all in the interest of generating paying subscribers and gifts. Advertising revenue is also sought; many formerly staid magazines have now opened their pages to advertisers.[20] Further tapping alumni as sources of revenue, institutions now offer such services as basic checking and savings accounts, first mortgages, home equity lines, home insurance, student loan consolidation programs, school-branded credit cards, certificates of deposit, money market accounts, and health insurance (Leder, 2002).

Alumni can provide new revenues to institutions as well. Many formerly free alumni magazines are now sent only to those who have purchased memberships in alumni societies or provided gifts in the past.

[18] That is, when a student puts $50 into a card, he or she is eligible to spend only that amount, but institutions are garnering interest on these funds and on subsequently deposited funds throughout the active life of the card.
[19] A development noted for me by Betty Price (personal communication).
[20] A development noted for me by Grady Bogue (personal communication).

Classrooms, residence halls, recreational areas, and undeveloped land are assets that could provide additional revenue for institutions (Junker, 1990; Kienle, 1997; Biddison and Hier, 1998). Such assets can be used for new educational or recreational offerings; new retirement communities with an educational purpose; or new cooperative revenue-generating efforts with third parties. Such assets can also be sold, leased, or rented to third parties, or used as collateral to secure financing for new entrepreneurial initiatives (e.g., see Horwitz and Rolett, 1991; Nicklin, 1996; Bachner, 1999).[21]

Development Office Initiatives

With state and federal support in relative decline, many institutions are aggressively expanding efforts to bring in donations from individuals and organizations (Worth, 1993; Hirsch, 1999). Johnstone (2002, p. 32) notes wryly that "no source of revenue is quite as benign and reliable as revenue from unrestricted endowment, once the institution has it." It is the getting of such funding that poses the challenge. For the first time in many years, giving to colleges has recently fallen (Blumenstyk, March 21, 2003). Although a small number of institutions have wealthy alumni capable and willing to contribute sizable unrestricted funds, most institutions have to work hard to build a self-sustaining development effort. Some have turned to foreign donors, but costs can be prohibitive for such efforts (see Nicklin, 1995). In fact, the pursuit of donations of any kind must constantly be evaluated for cost-effectiveness, because analysis may show that many gifts cost the institution more than they return.

In the end, successful development office operations are essential to the financial well being and educational quality of most institutions. Creating the conditions for these operations to succeed in raising revenues is an undeniable part of good institutional leadership. But it is also undeniable that such efforts must be kept in context. Hirsch (1999) notes that an emphasis on private giving can unbalance or threaten academic programs, because it tends to favor certain fields over others (e.g., the sciences over the fine arts), and because it can tilt institutions away from productive and well-established educational missions.

[21] The history of Stanford University (see http://www.stanford.edu/home/stanford/history/lands.html) is often cited as the model for the use of real estate, but there are numerous other success stories.

Making Decisions About New Revenue Streams

The ultimate goal of any revenue-diversification effort, should not be simply to generate new revenues but to generate new net returns. Potential returns can be nonfinancial as well as financial and can come in the short or long term. Producing new institutional revenues that are fully offset or even dwarfed by new, associated costs is acceptable only if there are notable nonfinancial returns and if the new net costs are viewed as acceptable from an individual, institutional, or public perspective. If the pursuit of new revenues becomes a major institutional focus, it should be with the understanding that new revenue-oriented initiatives will be undertaken only after rigorous consideration of the associated costs, including the opportunity costs of forgoing other initiatives.

Effective decision making regarding any prospective initiative should be institution-specific and should consider factors not easily monetized. Because different contexts shape the choices of each college or university, there is no one best approach to decision making about revenue initiatives. Nevertheless, the literature suggests a number of general considerations and guidelines relating to mission and culture, strategic analysis, and implementation, as well as finances and cost-effectiveness (**see page 29** for a set of questions to begin campus discussions and prompt institutional research in this area).

Mission and Culture

Any new revenue-seeking initiative should be congruent with the existing or desired institutional mission and culture. Significant disjunctions must be addressed, either by abandoning the initiative or by acting to refine the mission and change the dominant culture (e.g., see Chaffee and Tierney, 1988). For example, struggling institutions with historic liberal arts missions may face dramatic strains if their major opportunities for revenue recovery emerge out of markets for continuing professional education of working adults. In making revenue choices, leaders need to consider whether the prospective activity to be pursued is really required by economic or political conditions, or simply holds the prospect of producing bonus revenues for the institution. A clear-cut answer to such a question is unlikely, of course, but if the logic for pursuing the

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activity seems closer to the "bonus" rationale, leaders need to ask whether its pursuit may eventually disrupt the institution's organizational culture and deflect it from its current core mission. If so, is such disruption and deflection acceptable? In the current evolving social and economic context, the answer to that question should be open to debate.

Strategic Analysis

In a classic study of corporate strategy, Miles and Cameron (1982) argued that successful responses to threatening conditions involve three tactics:

- Domain defense–the aggressive effort to protect existing markets through political activity, marketing, and public relations.
- Domain offense–the diversification of existing activities into new arenas.
- Domain creation–the development of new business that promises synergies with existing businesses.

These tactics may be useful in higher education. The "industry" is mature, so institutions need to find new ways to extend the reach of their current services, explore new ideas, and diversify their "portfolios."

Taking a strategic perspective requires systematic analysis. Oblinger et al. (2001), Zemsky et al. (2001), and Blustain et al. (1998) informatively review multiple markets for new instructional offerings, forgoing simplistic reasoning about *the* market for such services. Sophisticated market analysis requires sensitivity to the possibility that high levels of potential demand may not translate into additional revenues at the margin. For example, institutions often find that new offerings promising high enrollments simply draw students from other, existing programs on the same campus.

Institutions considering new initiatives need to evaluate them rigorously to ascertain mission appropriateness, cultural fit, substantive quality, short- and long-term financial prospects, the risk tolerance of all involved parties, and organizational sustainability. In the course of this analysis, institutions need to determine whether they hold a comparative advantage, and thus the potential for a distinctive niche, in a competitive marketplace. Similar services available outside the institution at comparable quality and cost may doom otherwise well-conceived efforts. Institutions might also investigate similar initiatives at comparable institutions to understand why they have succeeded or failed. Facing questionable strategic prospects on their own, institutions may wish to explore cooperative arrangements with organizations that have a successful track record in the area of the new initiative (Katz et al., 2002).

Implementation

Beyond strategic analysis lies a set of questions about implementing new revenue-seeking initiatives. First, does this new activity require structuring of operations and incentives? Restructuring is a frequent choice among entrepreneurial institutional leaders (Davies, 2001), but it raises a number of questions. Are spin-offs advisable? Are new buffering organizations necessary?[22] Should new partnerships be designed? How are relationships among existing stakeholders and constituents (e.g., funders, government leaders, faculty, staff, students, families, the press) likely to be affected, and are structural changes necessary to address these transitions?

[22] For example, a separate full-service technology corporation might take responsibility for business aspects of the commercialization of intellectual property, while a university-owned investment company might manage funds generated by nontraditional activities and giving campaigns.

It is important to note that launching new revenue-generating enterprises requires not only entrepreneurial spirit on the part of some members of a campus community but also the cultural and organizational conditions necessary to fuel and support that spirit. Work by Leslie et al. (2002) suggests that the most entrepreneurial cultures and traditions may be found in the life sciences departments, but as Clark (1998) has noted, a department's academic emphasis or location does not always predict its adaptive capabilities. Davies (2001) found in a series of case analyses that a single moral philosophy department in England brought in more in new revenues than its institution's engineering faculty, because of contracts for ethical codes in electronic communications. Several institutions in Vietnam offer photocopying and translation services, an institution in Mongolia operates a driving school, and a university in China runs a high-volume furniture factory.[23] In each case, creative thinkers on campus accepted the constraints posed by financial exigencies, considered their institutions' comparative advantages, identified a market niche, structured distinctive responses fitting local needs, and garnered additional revenues as a result.

Obviously, and not at all surprisingly, success in revenue seeking depends in good part on opportunistic, talented individuals with good ideas. Still, leaders can improve the odds with organizational savvy. Matkin (1997) provides an especially insightful and systematic examination of different structural arrangements for two specific revenue-generating efforts. For continuing education, Matkin discusses the advantages and disadvantages of what he terms decentralized, centralized, hybrid, and buffer-external models of organization. For technology transfer, Matkin examines the relative effectiveness of structural models that he terms integrated, peripheral, subsidiary, interdependent, and independent. Along similar lines, Newman and Couturier (2001) argue that institutions need to adapt to emerging markets by considering even the most radical alternative structures.

Obviously, and not at all surprisingly, success in revenue seeking depends in good part on opportunistic, talented individuals with good ideas. Still, leaders can improve the odds with organizational savvy.

Blustain et al. (1998) identify barriers and frequent mistakes that institutions make in launching new revenue-seeking efforts in the instructional arena:

- Program cannibalization (simply moving students from program to program without attracting new students at the margin).
- Failure to identify wants and needs of customers.
- Failure to establish guidelines for program development.
- Remaining committed to old-style pedagogy and curricular organization.
- Assuming that simply providing the program will be enough, absent efforts to market it.

[23] International colleagues provided these examples in the course of this report's preparation.

Blustain et al. (1998) also identify some barriers that may preclude successful new marketplace initiatives despite leaders' best intentions and efforts:

- Strong faculty and staff resistance on philosophical or other grounds.
- Pressing needs to use existing physical plant.
- Untenable financial demands for new technology commitments.

Also important for launching new instructional programs is a clear understanding of the marketplace being entered. Levine (2000a) conducted interviews with a variety of adult students on what they seek in postsecondary education and found that older students today are resistant to fees assessed across the board on all students. They often seek access to a scaled back, tailored (unbundled) product. Interestingly, Levine's interviews suggested that older students today want their educational experiences to be similar to their experiences with banks, providing features such as high quality, low cost, service orientation, access on every corner (an ATM analogy), and no requirement to pay for services or goods not received.

Senior administrators can be essential to revenue initiatives. In particular, they can establish what Clark (2002) calls the "steering core" for entrepreneurial efforts. Developing and sustaining a culture supportive of change requires leaders who are oriented to problem solving, operate on trust and with openness, are self-critical, are internally responsive and flexible, and provide expert attention (Davies, 2001). Leaders of major entrepreneurial change need to consult actively with all key stakeholders in the institution, including the governing board, institutional leadership and administration, faculty, students, governments, and the public (Hirsch, 1999). Leaders also must structure staff-development priorities and budgets in systematic relation to the required new tasks (Davies, 2001).

Because core strategic adaptations require the energy and commitment of line faculty and staff,[24] central administrators need to set up appropriate financial, professional, and personal incentives. Incentives for departments, colleges, staff, and line administrative units are all important, but the incentives for individual faculty merit special attention. Davies (2001) suggests that institutions that are serious about this agenda must work to establish salary and promotion criteria that reflect the entrepreneurial agenda. They must also provide in-kind support, development funds, and structured time for entrepreneurial activity, away from the "tyranny of the teaching timetable" that can restrict faculty flexibility and commitment. In a similar vein, Johnstone (2002) has observed that there are three limitations on faculty and institutional entrepreneurship:

- Such activities can divert faculty and institutional time and attention from the core mission and activities of the institutions.
- Such activities can conflict with the canons of scholarly integrity (as when a funding source has a vested interest in outcomes of a putatively neutral research project).
- Entrepreneurship brings uneven distribution of possibilities–and thus of rewards–across departments on a campus.

[24] See Hearn and Heydinger (1985); Hearn (1988); Hearn, Clugston, and Heydinger (1993); and Hearn (1996).

As Johnstone and others note, these critical concerns require aggressive efforts to ensure that core activities continue, to establish controls to preserve scholarly standards, and to reward those in advantaged fields while sensitively redressing across-department inequities by cross-subsidization of some kind.

Special attention should be paid to what Clark (2002) terms the "academic heartland," i.e., the humanities and social sciences. Faculty in those areas tend to be less well positioned for substantial revenue generation, and they may be marginalized and disadvantaged by such efforts. Because those faculty are central to the core mission of most institutions, however, it is important to address their potential dissatisfaction. Faculty and administrators often disagree about the details, appropriateness, and value of university/industry relationships (Campbell and Slaughter, 1999), and such disagreements may be greatest in the heartland. Ignoring those faculty members' concerns may imperil an institution's culture and productivity, and thus its prospects for successful adaptation and revenue gains.

New technologies may very well require a rethinking of faculty roles and structure, as formerly separate and sometimes self-sufficient continuing- and distance-education units may need to become more integrated with core units (Barbulies and Callister, 2000). Such restructuring may change the expectations and reward systems within academic units. In many professional schools, new revenues are being generated by establishing non–tenure-track faculty lines to address emerging instructional and analytic needs in the marketplace (Hearn and Anderson, 2001). Such adaptations can be productive, but they raise notable organizational concerns about existing promotion and tenure systems (see Tierney, 1999; Baldwin and Chronister, 2001).

Leaders must also address ethical and legal considerations. Exactly where should lines be drawn concerning what colleges will and will not do for revenue (Teitel, 1989)? For example, significant ethical and legal concerns surround appropriate use of intellectual property, faculty labor, and institutions' privileged tax status. Realistically, any new revenue-generating activity poses legal issues, as institutions must consider potential liabilities in court.[25] For instance, an unfavorable judicial decision concerning the proper appropriation of intellectual property could derail an institution's hopes of substantial new net revenues. Colleges and universities need to ensure that appropriately structured contracts, controls, and institutional oversight mechanisms are in place to protect institutions and their employees, as well as the public and institutional partners and contractors. As Johnstone (2002) has argued, all contracts and transactions concerning new revenue sources must be clear and enforceable.

Leaders must also address ethical and legal considerations. Exactly where should lines be drawn concerning what colleges will and will not do for revenue?

[25] Regarding tax status, for example, tax-favored enterprises at some institutions have been challenged on their right to compete with community-based bookstores and suppliers of office supplies, computer hardware, and software.

Finances and Cost Effectiveness

Before an initiative is carried out, it is essential to perform systematic forecasting and analysis of prospective revenue flows (Caruthers and Wentworth, 1997; Day, 1997). Once the initiative has begun, institutions should use appropriate benchmarks for cost-effectiveness to continuously inquire whether returns outweigh costs at present or in the likely future (Institute for Higher Education Policy and the National Education Association, 2000). Leaders should make clear from the start that the institution will withdraw from failing enterprises. Sunk costs, pride of creation, and public "face" all pale beside the costs of maintaining a losing operation, especially in arenas not central to the institutional mission.[26] When institutions move aggressively toward new domains for revenue generation, there can be long-term costs to an institution's reputation and market position, which can translate into revenues forgone from prospective students and funders who find the new initiatives and character of the institution distasteful.

For example, selling or licensing strategic assets to outside businesses may offer short-term financial gain but may undercut longer-term prospects by diminishing the value and power of the institution's "brand" (Kaludis and Stine, 2000). Another familiar short-term/long-term trade-off involves technology-based initiatives. Often, in such initiatives, development costs on the front end are daunting, and prospects for net positive returns lie in the longer term, often years after undertaking the initial burden.

There are many stories of financial failure in revenue-seeking initiatives.[27] As college officials suggested to Nicklin (1992b), perhaps leaders contemplating new initiatives should "overestimate expenses and underestimate revenues." Katz and Associates (1998) observed certain characteristics in successful, cost-effective distance-based instructional programs:

- Market demand is carefully studied in advance with the goal of developing curricula that can either maximize earnings or fulfill noneconomic policy objectives.
- Location and scheduling decisions are treated as market factors for curriculum and program planning purposes, because those decisions have revenue implications.
- Instructional cost is required operationally to be a variable cost rather than a fixed cost (for example, instructional expenses are not fixed but rise or fall parallel to teaching efforts).
- Each class is required to produce marginal revenues exceeding or equal to marginal cost.

[26] Cutting losses in new ancillary revenue-seeking initiatives may not be posing a major problem for institutions. In the course of preparing this report, we found no current evidence of the existence of several campus initiatives reported upon glowingly in press releases and articles in the mid- and late 1990s.

[27] Consider the many failures in auxiliary enterprises. For example, see "Coal mining revenues prove insufficient…" (2002). For information about failures in medical-center reorganizations at Stanford and Loyola-Chicago, see van der Werf (2000).

The noneconomic objectives noted by Katz and Associates are important. While rigorous financial analysis with conservative cost and revenue projections in dollar terms is imperative, it is also essential that institutions take into account potential costs and returns of a less easily monetized nature. For example, Feller (1997) notes that technology-transfer offices seek to serve faculty and promote regional economic development as well as generate additional revenue. Similarly, Tornatzky et al. (2002) found that business-university partnerships provide jobs for graduates and geographically marooned spouses of faculty and staff members, stimulate local research partnerships, and encourage lifestyle amenities associated with the technology industry. None of these benefits is easily studied empirically, but each nonetheless merits attention.

Cultural change concerning money matters may also be important. Davies (2001) notes that, to succeed in diversifying revenues, institutions need new ways to deal financially with partners, clients, and stakeholders. In particular, he stresses that institutions need to develop a "surplus-oriented mentality" in the costing and pricing of contracts and services (p. 34). That is, instead of mainly seeking not to lose money on transactions, institutions should seek whenever possible to recover more than their costs on transactions. And, when surplus funds are available, leaders need to consider how these funds should be deployed in the pursuit of new revenues. For example, how aggressively should central units claim surpluses at the college or department levels? Should surplus funds at the unit level be allowed to be carried forward from year to year, or should these be remanded to central leaders? Answers to those last questions depend on leadership views concerning the best way to invest capital in the institution: To what extent should individual units, as opposed to the institution as a whole, be empowered to choose and pursue entrepreneurial initiatives? Specifically, can decentralized budgeting approaches encourage entrepreneurship and new revenue generation at the unit level (see Strauss et al., 1996; Massy, 1996; Leslie and Slaughter, 1997; Winston, 1997)?

Leaders should make clear from the start that the institution will withdraw from failing enterprises. Sunk costs, pride of creation, and public "face" all pale beside the costs of maintaining a losing operation, especially in arenas not central to the institutional mission.

A final set of financial questions relates to internal incentive systems for faculty. How should faculty salaries and institutional research and program funding be structured to create incentives for new revenue generation?[28] Is a core and supplemental salary system, now in effect in some medical schools, a promising approach (see Hearn, 1999)? Can creating internal "start-up" or venture-capital pools aid in fostering unit and faculty efforts in revenue generation? Setting up such mechanisms may encourage faculty and staff to be entrepreneurial and carve distinctive niches for the institution (Newman and Couturier, 2001). Awarded astutely and fairly, funds of this kind may preserve faculty's treasured autonomy while still signaling and addressing institutional needs.

[28] For example, Oblinger et al. (2001) stress the importance of considering in detail and in advance how generated funds should be made available at the unit and individual levels.

Conclusion

As is evident from the synthesis presented here, the literature provides no single or simple answers for colleges and universities entering the aggressive search for new revenues. Numerous ideas have been tried or proposed. Central to any decision in this arena is local context (including mission, students, faculty, and curriculum, as well as the immediate economic, political, technological, and social conditions facing the institution), and in the United States, context varies immensely by institution. Still, there is a literature that can help frame decision making in this arena.

Any decisions about pursuing new revenues ultimately must deal with the question of why new revenues are being sought. Is the guiding metaphor to be one of minor adaptation or fundamental institutional change? Many prospective methods of acquiring new revenues can take place outside the instructional and research operations of the institution, and they might raise marginal revenues while remaining relatively benign factors in the organizational climate and culture. For example, the use of residence halls for summer camps raises few academic questions. But when fundamental change is on the table, climate and culture barriers may be formidable.

One needs to ask, for example, whether all faculty should be expected to accept the value of revenue-generating work and join the effort, and whether pursuing such an expectation is organizationally realistic.[29] The answer may be no. While institutions are being asked by external sponsors, prodded by their boards, and pressed by financial circumstances to pursue new ways of generating revenue, faculty at the heart of the academic enterprise are, for the most part, still being trained, hired,

Any decisions about pursuing new revenues ultimately must deal with the question of why new revenues are being sought. Is the guiding metaphor to be one of minor adaptation or fundamental institutional change?

and rewarded in traditional ways. For fundamental change to occur, the impulse to do business in different ways must be communicated and institutionalized at all levels of the organization.

Those ready to pursue that prospect aggressively need to consider two potential dangers. A first danger is immediate and pressing. Institutions must beware of having public authorities come to believe that higher education can obtain enough new revenue to take care of itself without substantial additional societal investment (Johnstone, 2002). In their pursuit of revenue diversification, institutional leaders

[29] Findings from Leslie et al. (2002) suggest that faculty entrepreneurship rarely arises from centrally mandated, collective, strategic initiatives. For these authors (p. 87), such a result raises an important question: "Should incentives be targeted primarily to individuals rather than departments?"

need to bear in mind the parallel need for them to do all they can to maintain the historic and essential commitment of governments to the enterprise. A second danger is just as important but less directly pressing. Unreflective movement toward diversified revenue streams can threaten core institutional identities and missions (Bok, 2003; Johnstone, 2002; "Public universities and private money," 2001). The push for more reliance on grants and contracts from external organizations, for example, can raise costs on campus, redistribute academic power, shift academic priorities, and reduce the sense of community (Slaughter and Leslie, 1997; Leslie et al., 2002).

Economist and former college president David Breneman (2002) notes that, overall, institutional efforts to diversify revenue have been successful, but he cautions that danger lies in the cumulative effect of the incremental changes–each may seem relatively minor, but collectively they alter the nature of the enterprise. In a similar vein, former university president Frank Newman (2000) has worried that the increasing push for market adaptation threatens the "soul of higher education" and its place as a home for disinterested scholarship and open and unfettered discussion of important issues.[30] Each of these critical observers acknowledges that market-based approaches are inevitable in U.S. higher education, but that inevitability does not warrant forgoing vigilance over imperiled core values.

The corporate sector may provide some guidance for institutions exploring new revenue sources. However, there are real organizational and economic differences between higher education institutions and businesses (Winston, 1997, 1999; Hearn, 1988). Notably, institutions face numerous distinctive constraints and incentives in their pricing, their costs, their offerings, and their acquisition and use of human resources. What is more, as Clark (2002) notes, decision-making processes are starkly different, with higher education far less hierarchical, less oriented to economic utility, and less preoccupied with efficiency. Yet institutions must do what business does routinely: change as revenue possibilities change. For Clark, the central question is therefore how institutions can become more adaptable while remaining true to their essential traditions of self-management and intellectual achievement.

Of course, some revenue-seeking choices will affect an institution only at its periphery. Usually, for instance, no substantive strategic or philosophical debate need accompany a choice to rent aquatic facilities for a high school swimming tournament. Other revenue-seeking choices, however, raise the possibility of more profound change. The offering of degrees online, for example, involves the "brand" of the institution in a very fundamental way. In those circumstances, institutional leaders should ask: "Is this effort truly core to who we are and who we want to be? Is this a legacy I wish to leave as a leader?" At its worst, the pursuit of new revenues can be mindless and dispiriting. Institutional leaders must help fashion a path that coheres and motivates all on campus. When ideas for new revenue streams are promising in a business sense but threatening in a cultural and organizational sense, and perhaps do not serve the public good, the best choice may be to walk away. When promising ideas are also inspired and inspiring, however, wisdom may lie in accepting the challenge of change and moving forward.

[30] For a stinging indictment in the popular press, see Press and Washburn (2000).

Questions for Discussion and Institutional Research

Strategic Analysis

1) Do we have an up-to-date assessment of our strategic position, including our areas of strength and promise as well as our areas of vulnerability and threat? For example, what are the comparative advantages of this institution as it considers new revenue initiatives? Are people with appropriate expertise and authority being included in making these judgments?

2) Are recent and prospective investments in new revenue-generating enterprises cost effective? Do our analysis protocols ascertain short-term and long-term costs (including development and opportunity costs) as accurately as they ascertain possible short-term and long-term revenues?

3) Can ideas for new revenue generation be garnered from environmental scanning of the activities of other institutions and organizations and of the institution's economic, social, political, and technological contexts? How might an aggressive analysis of the external environment be organized?

4) What expertise do faculty have (e.g., environmental scanning, technical knowledge) that might aid in assessing existing and prospective revenue-generating initiatives?

5) Are existing assets of various kinds on campus capable of producing more revenue?

6) Which liquid or semi-liquid assets are available for investment in new revenue-generating activities?

7) How does the performance of our endowment and short-term money market holdings compare to that of comparable institutions?

8) Are there barriers to entry into some promising areas for revenue generation, and are there ways to act proactively now to overcome those barriers?

Internal Operations Analysis

1) How does the central administration currently support the pursuit of additional revenues by academic units and faculty? Could the process be made easier while still maintaining appropriate central controls? For example, do we have in place one or more competitive funding programs for faculty to pursue innovative ideas that may generate new revenues for the university? If so, is the program working, and how might it be refined? If not, how should such a program be organized?

2) What are the price sensitivities of our current and prospective undergraduate, graduate, professional, certificate, and nondegree students, both part-time and full-time? To what extent might tuitions and tuition schemes (e.g., forms of differentiated tuition) be changed to generate greater net revenues without sacrificing other core institutional goals of student quality and diversity?

3) In what ways are user fees now being employed on campus, across units and levels? Are we instituting and using these fees in appropriate ways, i.e., maximizing revenues while maintaining core academic commitments?

4) What is the cost-effectiveness of current or prospective investment in a patenting, licensing, or technology-transfer office on campus? Are front-end and ongoing costs currently being offset by revenues? What are the prospects for future financial viability?

5) Would instituting or further emphasizing responsibility-centered, incentives-based budgeting (which decentralizes some financial decision making to the unit level) help generate greater net revenue for the institution?

6) Are we accurately assessing potential risks and legal liabilities associated with existing and prospective revenue?

7) Are existing assets valued appropriately for purposes of sale or debt security?

8) What role will external consultants or specially designated staffers play in developing new initiatives?

9) What organizational mechanisms (e.g., teams, task forces, committees, new units) are being used or could be used to integrate the efforts of institutional staff and faculty involved in overseeing, designing, and implementing new revenue-generating activities?

10) Are revenue-generating initiatives being monitored to ensure their continuing, or at least promising, returns on investment?

KEY STUDIES:

An Annotated Bibliography

Bok, D. (2003). *Universities in the Marketplace: The Commercialization of Higher Education.* Princeton, NJ: Princeton University Press.

In this new book, former Harvard president Derek Bok suggests that incautious pursuit of commercial ventures may lead universities to imperil their core academic missions. When institutions go too far down the path to commercialization, he writes, "they will have sacrificed essential values that are all but impossible to restore" (p. 208). Bok expresses particular concern over the path being taken by many major institutions to garner new revenues in athletics, scientific research, and instructional offerings. Among the countermeasures he proposes for preserving core values are the pursuit of noncompetitive agreements among institutions (e.g., in athletic scholarships, sharing of research materials, secrecy arrangements, and restraints on corporate funding) and more assertive and effective oversight by trustees and faculty. Bok's book is an insightful, cautionary essay for leaders confronting the promise and peril of new ventures.

Davies, J. L. (2001). The emergence of entrepreneurial cultures in European universities. *Higher Education Management*, 13(2): pp. 25–43.

This article, based on the author's case-study research on entrepreneurial efforts and cultures within European higher education, provides provocative ideas concerning the nature of entrepreneurship on campus. The parallels with U.S. concerns and institutions are striking, making this a very helpful addition to the rather sparse literature on entrepreneurial activity in colleges and universities.

Ikenberry, S. O. (1997, Winter). The entrepreneurial campus: A time for innovation (and caution). *Educational Record*, pp. 7–8.

Ikenberry's experience as a president and a long-time analyst of higher education organization and policy contribute to this insightful and informative examination of the entrepreneurial movement in higher education. Writings on new revenue sources too often descend to boosterism (or, at the opposite extreme, cynicism). Ikenberry's balance, caution, and wisdom are welcome antidotes.

Immerwahr, J. (2002). *Meeting the Competition: College and University Presidents, Faculty, and State Legislators View the New Competitive Academic Arena*. A report by Public Agenda for the Futures Project: Policy for Higher Education in a Changing World. Providence, RI: Brown University.

This report provides a useful summary of interviews with presidents, faculty, and political leaders on the emerging academic competitiveness in this country. Many of the findings simply confirm the notion that there is widespread doubt about the continuation of business-as-usual in higher education, but some of the findings are surprising, and the quotations from those interviewed are often eloquent and provocative.

Johnstone, D. B. (2002). Challenges of financial austerity: Imperatives and limitations of revenue diversification in higher education. *Welsh Journal of Education*, 11(1), pp. 18–36.

In this essay, researcher and former SUNY Chancellor Bruce Johnstone provides an extraordinarily useful examination of the promise and peril of the pursuit of new revenues. Johnstone's scholarly and experiential knowledge combine to make this essential reading for leaders interested in diversifying their institution's revenue base.

Kerr, C. (2002). Shock wave II: An introduction to the twenty-first century. In S. J. Brint (Ed.), *The Future of the City of Intellect: The Changing American University*, pp. 1–19. Palo Alto, CA: Stanford University Press.

As always, Kerr is perceptive and incisive in his analysis of recent developments in U.S. higher education, including the turn to new revenues and markets. For those who relish the perspectives of this esteemed veteran leader and analyst, this essay is one more example of how central he is to our understanding of the enterprise.

Levine, A. (2000, March 20). The soul of a new university. *The New York Times*, p. A25.

This essay provoked responses from many observers and has become a staple in discussions of the new economy of higher education. The emphasis is on the market for higher education: how it is perceived by students, by corporations looking for new revenues, and by those responsible for its future. A frequently cited line suggests the tone of the essay: "Colleges and universities are not in the campus business, but the education business."

Matkin, G. W. (1997). Organizing university economic development: Lessons from continuing education and technology transfer. *New Directions for Higher Education*, no. 97. San Francisco: Jossey-Bass.

This piece provides what appears to be the available literature's most thorough examination of alternative approaches to organizing for both instructional and research-oriented revenue generation. It cites numerous examples of institutions following the different organizational forms and discusses the implications of those forms for various goals and outcomes. Although the focus is mainly on structures facilitating regional economic development, the essay provides insights extending beyond that topic.

Ruch, R. S. (2001). *Higher Ed, Inc.: The Rise of the For-Profit University*. Baltimore, MD: The Johns Hopkins University.

Ruch's book, while controversial, should be read for its distinctive perspective on the emerging changes in the organization and economics of higher education. While some may bridle at Ruch's analysis and his generally positive view of the for-profit institutions challenging traditionally organized and financed institutions, the book does raise questions worth consideration, and it serves as something of a counterbalance to the work of those most critical of the movement toward marketization.

Winston, G. C. (1997, September/October). Why can't a college be more like a firm? *Change*, 29(5), pp. 33–38.

This provocative essay serves as a reminder from a respected economist of the limitations and possibilities of business-style thinking on campus. The author covers a number of aspects of pricing, privatization, market models, and effectiveness and assessment on campus. In the end, the article provides new insights for readers, whether they are troubled, pleased, or simply confused about the changing finances of higher education. Those wishing a more thorough and somewhat more technical treatment of the topic by the same author may wish to review his "Subsidies, hierarchy, and peers: The awkward economics of higher education," which appeared in 1999 in the *Journal of Economic Perspectives*, 13(1), pp. 13–36.

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