
INFORMED PRACTICE:
Syntheses of Higher Education Research for Campus Leaders

Higher Education's
New Economics:
The Risks and Rewards of
Emerging Operational Reforms



American Council on Education
Center for Policy Analysis

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James C. Hearn

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American Council on Education

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Table of Contents

Foreword	iii
Acknowledgments	v
Executive Summary	vii
Introduction	1
Five Significant Reforms.	3
Innovative Pricing: How Institutions Charge Students	4
Budget Decentralization: How Resources Are Allocated	8
Human Resource Initiatives: Who Does the Work.	11
Compensation Reform: How Faculty Are Paid for Their Work	15
Structural Reform: How a Campus Is Organized	19
Implications	22
Conclusions.	23
Appendix A: Questions for Campus Discussion and Strategic Analysis.	25
Appendix B: Key Resources: An Annotated Bibliography	27
References	29
About the Author	37

Foreword

In May 2001, the American Council on Education (ACE) convened a meeting to assess the current state of analysis of higher education policy issues. The purpose was to identify ways in which the needs of institutions, the interests of foundations, and the talents of scholars could 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 research on higher education more accessible and useful to institution leaders. Several participants suggested that ACE produce short publications that summarize the findings of important areas of higher education research. The ACE Center for Policy Analysis embraced that suggestion and created this series, *Informed Practice: Syntheses of Higher Education Research for Campus Leaders*. Reports in the series include:

- *Access & Persistence: Findings from 10 Years of Longitudinal Research on Students* summarizes major findings from a decade of federally funded longitudinal studies of college students.
- *Diversifying Campus Revenue Streams: Opportunities and Risks*, by James Hearn, who also authored this report, describes the emerging literature on the myriad ways that campuses are raising revenue and the issues and problems that leaders must confront as they consider such ventures.
- *The School-to-College Transition: Challenges and Prospects* reviews the large body of research on access to college, focusing in particular on how campus and system leaders can help schools better prepare low-income and minority youth for success in higher education.
- *Adult Learners in the United States: A National Profile* summarizes what we know and—perhaps more importantly—don't know about this large and growing segment of the student population.
- *Apples and Oranges in the Flat World: A Layperson's Guide to International Comparisons of Postsecondary Education* is a primer on the increasingly important indicators of how U.S. higher education compares to postsecondary systems in other developed nations.

Our topic this year is the new economics of American higher education. James Hearn synthesizes the evidence on institutional experiments with new structures, policies, and approaches in pricing, budgeting, human resources, compensation, and organizational structure. Hearn argues that, taken together, these experiments could amount to a fundamental shift in the economics of higher education. And because most occur on individual campuses, there have been few systematic reviews

of either what is happening or the evidence of long-term results. This comprehensive review should provide a helpful guide to campus decision makers as they consider adopting new approaches in these arenas. Like all installments in this series, the report concludes with an annotated bibliography of the most useful sources for additional reading and with a list of questions to guide campus discussion and strategic analysis.

We hope you will share this report with your staff and that it will spark useful conversations with your varied constituents. Additional copies of this report, and all the reports in the *Informed Practice* series, are offered for purchase on the ACE web site. We welcome your suggestions for areas of research that future essays should address and for ways we can make these documents more useful to you.

A handwritten signature in black ink, appearing to read 'J.E.K.', with a stylized flourish at the end.

Jacqueline E. King
Assistant Vice President
Center for Policy Analysis

Acknowledgments

Several colleagues provided comments that improved this report, including Peter Eckel and Jacqueline King of the American Council on Education; Michael McLendon, associate professor of public policy and higher education at Vanderbilt University; and Marvin Peterson, professor emeritus of higher education, University of Michigan. The author also gratefully acknowledges the research assistance of Yang Yang and Austin Lacy.

Executive Summary

Changing economic, political, social, and technological conditions are placing growing pressures on the traditional core operations of colleges and universities. Stakeholders are pushing for increased accountability regarding instructional quality and the economic relevance of research, and government funding of institutions and students is under mounting constraints. At the same time, costs for basic expenses such as salaries, benefits, infrastructure, and maintenance are rising, and many campuses are pressed to cope with dramatically new student enrollment patterns.

In response, numerous campus leaders are considering and adopting new operational approaches. Reforms across several domains have been aimed toward improving institutional flexibility, adaptability, and efficiency in the face of difficult conditions. Belying the traditional view of campuses as changing only slowly and at the margins, some leaders are pursuing fundamental rather than incremental changes in their institutions' core structures, policies, and practices. While these operational changes appear to be growing in both incidence and scope, substantive knowledge about them tends to remain largely localized to home campuses and systems, and the trends themselves are seen at the national level as somewhat disconnected. Systematic reviews and analysis have been rare.

Drawing on published sources and on documents not widely disseminated, this essay presents rationales for and potential risks and rewards of five reform arenas:

- *Innovations in the pricing of educational services*, including tuition discounting, differentiated tuition, and unbundled fees.
- *Budget decentralization to the levels of individual academic units*, including responsibility-centered budgeting.
- *New human resource arrangements*, including non-tenure-line faculty hiring and retirement innovations.
- *Revised compensation policies and practices*, including faculty salary bonuses and the establishment of core/supplement compensation systems.
- *Structural reforms in campus organization to adapt more effectively to emerging conditions*, including establishment of university foundations and multidisciplinary research centers, as well as integration of continuing education into the academic core.

Taken together, the report argues, these reforms may constitute an emerging new economic approach to campus operations.

Higher education's contemporary stakeholders typically express defensible goals: greater efficiency and clear, meaningful indicators of performance. In this context, the pursuit of the

reforms reviewed here is understandable: Abandoning the quest for new and better ways of doing campus business would be a recipe for trouble, not only internally, as wasteful efforts detract from more promising ones, but also externally, as sponsors increasingly wonder about questionable returns on their investments and support.

The accompanying dilemma for leaders is how best to make necessary, even bold, operational changes to adapt to new realities while also preserving the heart of academe's enduring culture, values, and commitment to effective knowledge transmission and open-ended knowledge development. The reforms reviewed in this report

are all being tried around the country, in different ways and in different settings, and in each case they are oriented to improving performance and serving accountability goals. Each of the reforms raises foundational issues that must be borne in mind, and each may cause consternation among traditionalists. At the same time, encouraging a reform-oriented, entrepreneurial, strategically directed mindset among faculty and administrators is a crucial charge to institutional leaders. Failure to do so, and unblinking deference to established business models, is likely a prescription for failure at worst, and stagnation at best.

Introduction

Changing economic, political, social, and technological conditions are placing growing pressures on the traditional core operations of colleges and universities. Stakeholders are pushing for increased accountability regarding instructional quality and the economic relevance of research, and government funding of institutions and students is under mounting constraints.¹ At the same time, costs for basic expenses such as salaries, benefits, infrastructure, and maintenance are rising, and many campuses are pressed to cope with dramatically new student enrollment patterns.²

In response, campus leaders are considering and adopting new operational approaches. Belying the traditional view of campuses as changing only slowly and at the margins, these leaders are pursuing fundamental rather than incremental changes in their institutions' core structures, policies, and practices. Among the targets of these efforts have been budgeting, pricing, organizational structures, and faculty employment relations. Across these domains, reforms have most prominently been aimed toward improving institutional flexibility,

adaptability, and efficiency in the face of difficult conditions.³

While these operational changes appear to be growing in both incidence and scope, substantive knowledge about them tends to remain largely localized to home campuses and systems, and the trends themselves are seen at the national level as somewhat disconnected.

Systematic reviews and analysis have been rare.⁴

This knowledge gap is troubling because campus leaders need to understand the positive and negative effects of innovations that may not be especially visible or viscerally exciting, but ultimately may prove powerful because of their implications for the core operations of academic institutions.

Given that necessity, this essay reviews several recent operational reforms. Drawing on published sources and on documents not widely disseminated, this essay presents rationales for and potential risks and rewards of each reform and, where appropriate, highlights connections among the

Belying the traditional view of campuses as changing only slowly and at the margins, these leaders are pursuing fundamental rather than incremental changes in their institutions' core structures, policies, and practices.

¹ See Lingenfelter (2006).

² The proportion of college-going students delaying entry after secondary school, attending part time, and attending "nontraditional" institutions is far higher than in earlier years (Adelman, 1999; Adelman et al., 2003), and institutions have been forced to adapt.

³ See Collis (2002) and Yudof (2002).

⁴ Some popular recent innovations have received systematic analytic attention. Regarding online learning, see Hitt and Hartman (2002) and regarding the initiation of technology-transfer efforts on campus, see Feller (1997), Rai and Eisenberg (2003), and Wadman (2005).

efforts. Taken together, these reforms may constitute an emerging new economic approach to campus operations. This report concludes by considering

the reforms' significant implications, both positive and negative, for further change in the fundamental characteristics of U.S. colleges and universities.

Five Significant Reforms

Higher education leaders are reacting to the changing landscape by pursuing a number of noteworthy reforms. Some of these modifications are familiar and well recognized. Revenue diversification is a familiar strategy and one that continues to burgeon.⁵ Large-scale, highly integrated management-information systems and educational-delivery systems, often termed “enterprise systems,” are increasingly being implemented within and across institutions. Partnerships with the private sector are increasing as well, not only through outsourcing of campus services but also through the expansion of private student-loan programs, campus-industry collaborations, and other programmatic and infrastructure arrangements.⁶ And, in the policy arena, performance reporting, funding, and contracting are popular.⁷ But a separate set of economic reforms seems especially prominent and important now. While independently they are familiar, when viewed together and through the lens of the new economics of higher education, they take on new significance. These reforms are the focus of this report:

- Innovations in the pricing of educational services.

- Budget decentralization, to the levels of individual academic units.
- New human resource arrangements.
- Revised compensation policies and practices.
- Structural reforms in campus organization, to enable more effective adaptation to emerging conditions.

In each of these arenas, recent institutional actions raise dramatic contrasts with past approaches on campus. And they focus squarely on the heart of the institution: how we pay for higher education; how the money is distributed within an institution; who does the work of higher education and how they are paid for that work; and how the campus is organized to deliver on its mission. What follows is an examination of the individual features, risks, and rewards of each of the five reforms. Taken as a group, however, the reforms reflect a heightened orientation on campus toward viewing students and families as

Taken as a group ... the reforms reflect a heightened orientation on campus toward viewing students and families as discriminating consumers of services, toward viewing administrators and faculty as accountable decision makers, and toward adapting policies, practices, and organizational configurations to address emerging markets.

⁵ Hearn (2003).

⁶ Hahn (2007).

⁷ The growth of performance funding and budgeting seems to have slowed somewhat in the United States (Burke, 2005), but governments in other nations are increasingly embracing these approaches (Salmi and Hauptman, 2006).

Five Significant Reforms		
Reform	Dominant Rationale	Examples
Innovative Pricing Policies	Tying pricing more closely to costs, markets	Tuition discounting, differentiated tuition, unbundled fees
Budget Decentralization	Linking decision makers, performance measures, and rewards	Responsibility-centered budgeting
Human Resource Initiatives	Increasing flexibility in the workforce	Contingent faculty hiring, retirement innovations
Compensation Reform	Emphasizing incentives for performance	Faculty salary bonuses, establishment of core/supplement compensation systems
Structural Reform	Adaptive organizational design	Establishment of university foundations and multidisciplinary research centers, integration of continuing education into academic core

As costs and public concerns have risen dramatically in both the public and private sectors...and as policy makers have begun to place growing emphasis on market-oriented solutions, a proliferating variety of pricing innovations has emerged.

discriminating consumers of services, toward viewing administrators and faculty as accountable decision makers, and toward adapting policies, practices, and organizational configurations to address emerging markets. The figure on the next page provides an overview of the reforms, their rationales or explanations, and some examples. In the pages that follow, the features, risks, and rewards of each reform are considered in more detail.

**Innovative Pricing:
How Institutions Charge Students**

In recent years, institutions have developed pricing schemes that discount, unbundle, and differentiate tuition

and fees in new ways. Public institutions have long been heavily subsidized by governments and charge students far less than actual costs for educating them and, while private institutions have been far less subsidized, their stated tuition rates have rarely reflected full costs (endowments and other support have been used to cover remaining costs). In both cases, tuition and fees for undergraduates in particular have been uniform within institutions. As costs and public concerns have risen dramatically in both the public and private sectors, however, and as policy makers have begun to place growing emphasis on market-oriented solutions, a proliferating variety of pricing innovations has emerged.

Discounting. The most visible and most discussed innovation has been offering students discounts on tuition and fee charges. Discounting reflects

the intentional variation of students' net costs (i.e., remaining charges after the award of student aid), based on institutional enrollment priorities. Discounting has long been practiced in U.S. higher education, especially in private colleges and universities. By systematically targeting institutional aid to students sought for their academic talents, distinctive social-cultural characteristics, or high (or low) levels of financial need, institutions can direct economic incentives toward building the undergraduate classes they desire. While comparable students at a college using this approach can encounter widely varying net prices, mimicking the variation aboard a typical airline flight after deregulation, that complexity is considered an acceptable cost of the gains achieved under this model.

For years, policy makers in the United States debated the virtues of the traditional low-tuition/low-student aid approach in public higher education, with critics on both the left and right arguing that an alternative—charging high tuition but providing substantial student aid for students lacking the financial resources to attend—made more sense on both equity and efficiency grounds. Of particular importance was the argument that blanket subsidization, which provided low tuition to wealthier as well as impoverished students, was wasteful state spending, because the wealthier students would most likely attend anyway

without the subsidy. By raising tuition in public institutions and forcing students with more resources to pay closer to full price for their educations, the recovered blanket subsidies could be used for student aid to finance the educations of lower-income students.⁸

The use of tuition discounting in public-sector institutions has indeed expanded rapidly in recent years.⁹ In that sector, however, strains on state and federal budgets have meant higher tuitions without corresponding gains in student-aid levels. Instead, the most avid practitioners of the high-tuition/high-aid approach in recent years in the United States have been the *private* institutions, in which continuing, dramatic gains in tuition levels have been mitigated for many students by the practice of offering substantial packages of institutional need or merit-based aid.¹⁰ The end result of this tuition-discounting process has been two-fold: wide variations in the prices seemingly similar students are paying on campus, and the erosion of meaning of an institution's "sticker price."¹¹

From the institutional side, the development of sophisticated enrollment-management systems allows them to craft discounts (aid awards) to attract classes with desired characteristics (e.g., appropriate mixes of very talented students, students of color, men and women in equal numbers, athletic stars, wealthy students, and so forth). From the student and family side, the

⁸ This debate parallels that in many nations around the world in recent years, as they move away from high subsidization rates for tertiary education (Johnstone, 2005).

⁹ Baum and Lapovsky (2006).

¹⁰ Hubbell and Lapovsky (2005).

¹¹ Interestingly, some of the nation's most elite colleges and universities have begun to retreat somewhat from traditional discounting, moving instead toward blanket aid policies for low-, middle-, and sometimes even upper-income students (Farrell, 2008). For example, Harvard has announced plans to ensure that families earning up to \$180,000 will pay no more than 10 percent of their income toward tuition (ibid.). Although the trend is striking, it seems unlikely that most other institutions could afford to adopt such blanket policies and depart from traditional discounting practices.

signaling value of a printed tuition level becomes “softer” by being less tied to actual expected outlays. Indeed, aid officials, analysts, and the media often note the “Chivas Regal” effect: A higher price signals a college of higher quality to some consumers, so raising tuition levels to equal those of competitors may aid rather than hinder institutions in the competition for students, especially if substantial discounts may be offered.¹²

A largely unexamined assumption in the explosion of tuition discounting has been its cost-effectiveness for individual institutions. Recently, a number of veteran campus leaders and researchers have begun to question that assumption. Jerry Davis, former vice president for research for Lumina Foundation for Education, notes, “The evidence we have is significant enough to show that for higher education in general, especially private colleges, tuition discounting isn’t working.”¹³ Indeed, there is evidence suggesting that discounting may decrease the amount of aid for lower-income students, have no substantive effects on raising student quality, and fail to raise net institutional revenues.¹⁴

Differentiated pricing. While discounting tends to make printed tuition rates overstatements, another pricing innovation frequently makes those rates understatements: the differentiating and unbundling of tuition and fees. These charges constitute major proportions of students’ college-going expenses and, especially at the undergraduate

level, they traditionally have been standardized to a great extent across large numbers of students: All undergraduates are charged a set tuition rate and a set fee for room, board, and other services, with these charges varying only by some familiar standards.¹⁵ Now, however, institutions are reforming prices to tie them more closely to students’ specific activities. Much of this effort is devoted to increasing student and family discretion in the local campus marketplace, but it also reflects institutional desire to tie costs and revenues to the “transaction level” in their management-information systems, thus aiding internal decision making.

The most prominent aspect of this trend is differentiation of tuition levels, i.e., when institutions vary core academic charges based on the student’s actual educational experiences. Among the many ways tuition may be varied are by number of credits taken (lowering per-credit tuition charges when full-time students add a credit to their semester course loads, e.g., moving from 13 to 14 credits), by the student’s major field, by the field of the particular course being taken (e.g., chemistry versus sociology), by the student’s grade level, by the size of the class, by the degree level or rank of the instructor, by the location of the class, and by the time of the class (certain terms, days, or times of day being more expensive).¹⁶

It is important to bear in mind that any tuition and fee pricing system represents a set of incentives and disin-

¹² E.g., see Larson (1997).

¹³ Cited in Goral (2003), p. 24.

¹⁴ *Ibid.*

¹⁵ Namely, single rooms cost more than doubles, some meal plans are more expensive than others, public institutions charge more to out-of-state than in-state students, and all institutions charge more for graduate and professional education than for undergraduate education, as well as more for full-time than part-time enrollment.

¹⁶ See Hebel (2003), Redden (2007), and Glater (2007).

centives to students. Thus, the new developments in pricing are not moves toward “incentivizing” enrollment behaviors—any pricing system provides incentives and disincentives, and students have always been motivated by their campuses’ tuition and fee systems, no matter how standardized. Instead, moves toward greater price differentiation are creating *new* incentives, perhaps moving students toward different course-taking patterns more in line with institutional and policy maker goals and objectives. For example, colleges can encourage students to take larger class loads via tuition banding, i.e., lower per-credit charges for taking higher total credits. Or, colleges can limit enrollment in a field by pricing it more highly. Because the costs of instruction vary across fields, expanding price differentiation involves considering the extent and nature of cross-subsidization across programs on campuses, not always an easy topic.¹⁷ Notably, charging the same price for higher-cost and lower-cost areas (e.g., engineering and social work) can implicitly subsidize the higher-cost areas, in that revenues from lower-cost areas may be used to support the higher costs of other areas. Students would have fewer incentives to enroll in higher-cost areas if their prices were raised to reflect their higher costs. Thus, when tuition charges for higher-cost areas are raised, those areas are

disfavored in the competition for students to some degree. Still, active price differentiation can bring appealing financial returns as well as risks.¹⁸

In the domain of unbundling, institutions have increasingly begun to break out individual charges for different aspects of the curriculum and co-curriculum. For example, undergraduate activities fees now are often assessed separately for technology, athletics, information services, student organizations, and so forth, while in the past these would be included in lump-sum fees for a term for resident students. Only some of the new fees are discretionary; many are simply automatic add-ons for registered students. Taking this approach aids managerial decision making by tying revenues to costs more directly. Arguably, the approach also provides consumers a sense of where their money is going. This strategy also may hide *de facto* price increases in a climate of growing policy maker and public resistance to such increases: Conceivably, while the advertised tuition level at a school might rise by only 4 percent in a year, the total of tuition plus required fees might rise by substantially more.¹⁹

¹⁷ Bok (2003); Lombardi (2007).

¹⁸ It is important to bear in mind that high-cost programs are often in fields offering the greatest individual returns to students. That is the case with undergraduate engineering programs, for example. Yet there are counter examples: Bachelor’s degree programs in business can be offered at lower costs but can provide high returns, while programs in nursing follow the opposite pattern. Offering lower institutional subsidies for fields that provide high individual returns raises provocative questions at the undergraduate level, but the issue has long been resolved at the graduate and professional level, as evidenced by the high charges for law, medicine, and business degrees.

¹⁹ Interestingly, the unbundling movement on the academic side is paralleled by the imposing of new fees in non-academic areas of university activity. For example, some extension service units, founded under the magnanimous “serve the people” terms of the Morrill Land Grant Acts of the 19th century, have begun to charge for their services to local farmers, businesses, and communities (Healy, 1997).

Budget Decentralization: How Resources Are Allocated

Changing financial and political conditions have prompted many colleges and universities to revise their internal decision-making processes. Among the most prominent changes have been granting increased fiscal and academic autonomy to academic departments, centers, and other units, in concert with increased accountability to central administrations for revenues and expenditures.

Incentives-based systems (IBS) for budgeting and decision making provide units with greater autonomy and incentives for pursuing the institution's strategic goals, in exchange for heightened performance accountability. These systems run counter to traditional, more centralized administration, aiming instead to encourage the adoption of the "every tub its own bottom" approach pioneered in Harvard University's professional schools decades ago. Although the terminology varies across campuses (another popular title is *responsibility center management*), the general aim of all such approaches is to integrate budgeting and management decision making more fully at the level of individual cost centers within institutions.²⁰

Early versions of IBSs were initiated in the 1970s and 1980s, mainly in private research institutions, including Cornell University, the University of Southern California, and the University of Pennsylvania. However, in the 1990s, Indiana University joined the

movement, to be followed by the University of California, Los Angeles and the universities of Michigan, Minnesota, and Virginia, among others.²¹ State-supported colleges and universities may be increasingly adopting versions of this approach in response to mounting fiscal stress and accountability pressures.²²

The IBS approach marks a distinct shift away from centralized, incremental budgeting methods and toward a program-performance emphasis in which local units' academic decisions have direct financial consequences for the unit.²³ From proponents' perspectives, the effectiveness of decisions is thereby improved because better information is available at the unit level and because there is a direct, consequential link between decisions and unit outcomes.²⁴ Whalen (1991, pp. 10–17) characterized the primary emphases of the IBS approach as (1) proximity: the closer the decision maker is to the implementation point, the better the decision will be; (2) proportionality: the larger an organization, the more it can benefit from decentralization of authority and accountability; and (3) knowledge: decisions will be better in an environment that has accurate and timely information. Some institutions using this approach allow funds to flow back to individual departments, but most systems send money back to the colleges housing the generating departments. This approach enables deans to move funds within their colleges from one academic or non-academic unit's

²⁰ Lang (2002); Priest et al. (2002); Priest & St. John (2006); Hearn et al. (2006).

²¹ See Lasher & Greene (1993); Rodas (2001); West et al. (1997).

²² West et al. (1997); Priest et al. (2002).

²³ Meisinger (1994).

²⁴ See Whalen (2002), Massy (1989–90), Adams (1997), Lang (2001), and Priest et al. (2002).

budget to another, depending on the unit's needs and goals.²⁵

Because some institutional activities generate no direct revenues, no institution has adopted a "pure" incentives-based system. Support units, units without instructional missions, and central-administration units require special treatment under an incentives-based system. Usually, a broad "tax" is imposed at the central level before revenues are allowed to accumulate at the unit level. Sometimes, however, central administrations institute itemized charges to units for specific budget domains such as space, maintenance, and technology services.²⁶

Striking an appropriate balance regarding centralization is critical to efficiency and effectiveness. Too much centralization may lead to missed local opportunities. Too much decentralization, however, may bring inefficient duplication of internal activities and externally offered services, as well as inattention to critical institutional goals.²⁷ "Best" comes to be defined in unit rather than institutional terms.

Not surprisingly, the decentralized and incentives-based budgeting approach has stimulated controversy. Proponents like the market sensitivity of this strategy and even argue that IBS, although decentralized in orientation, may provide superior support for central-administration efforts to shape institutional objectives, establish pri-

orities and policies, pursue long-term planning and strategy, and coordinate activities among organizational units.²⁸

Critics counter that under IBS, a local unit may create and offer academic programs and courses that generate revenue but compromise the unit's mission or purpose.²⁹ Similarly, IBS can lower incentives for collaborations across units.³⁰ Most dramatically, the quest for students and resources under IBS can pit academic units against one another and encourage duplication and inefficient service delivery.³¹ And, all

else being equal, certain units, especially programs in the arts and humanities, can be disadvantaged by IBS's focus on generating revenues via enrollments.³² In so focusing, the approach can propel institutions toward production-oriented logic, favoring such outcomes as reducing the number of professors, increasing professors' teaching loads, and eliminating majors and programs with low enrollment numbers.³³ Of course, none of these outcomes is necessarily undesirable in and of itself, but critics argue that core educational values and missions should be considered alongside market developments in decisions regarding academic expansion and contraction.

...Critics argue that core educational values and missions should be considered alongside market developments in decisions regarding academic expansion and contraction.

²⁵ Stocum & Rooney (1997).

²⁶ E.g., see Olsen (1999).

²⁷ Cantor & Courant (2003).

²⁸ Massy (1989–90); Whalen (2002); Gros Louis & Thompson (2002).

²⁹ Lasher & Greene (1993); Whalen (2002); Kirp & Roberts (2002); Gros Louis & Thompson (2002).

³⁰ Cantor & Courant (1997).

³¹ Massy (1989–90); Meisinger (1994); Adams (1997).

³² Hearn & Gorbunov (2005).

³³ Adams (1997); Wilms, Teruya, & Walpole (1997).

Most fundamentally, opponents of IBS have noted that there is little evidence as to the benefits of this approach for learning and educational performance on campuses. Empirical research thus far has not demonstrated the effects of incentives-based budgeting systems on educational quality.³⁴ Cantor and Courant (1997) perceptively ask whether “public goods” may be under-produced under such systems. Leslie, Oaxaca, and Rhoades (2002) and Adams (1997) suggest that the strategy may in fact work to centralize, rather than decentralize, power on campus. These striking questions merit serious attention from researchers and policy makers. As Ehrenberg (2004, p. 276) has noted, if institutions are to adopt a decentralized approach, the “designs of academic governance structures need to pay serious attention to reducing problems that decentralization will cause.”

A recent case study of the implementation of incentives-based budgeting and governance at the University of Minnesota suggests a mixed picture regarding these systems. Findings indicated that (1) an IBS, no matter how aggressive, may not radically change budgetary outcomes or units’ knowledge of their own and their institution’s financial circumstances, but can nonetheless be significant (at Minnesota, about 20 percent of the budget seems to have been redirected as a result of this reform), (2) successfully implementing IBS requires full commitment from top leadership, open communication, and adequate information flows, (3) to succeed, IBS adoption must be skillfully integrated into local organi-

zational culture and politics, and (4) effective measurement of results is critical to system success.³⁵

Decentralized budgeting for units has an interesting parallel at the faculty level: offering incentives-based institutional funding for faculty. Some institutions have begun to offer competitive grant funding to faculty who make research, teaching, or service proposals judged to significantly support the school’s strategic priorities. As many leaders and analysts have noted, the strategic plans of colleges and universities often are posed in abstract, non-operational language, with vague commitments to evaluate individual units on the basis of their conformance to institution-wide goals. Powers’ analysis of targeted, competitive campus-wide funding programs for faculty, however, concludes that “a well-designed incentive grants program has genuine appeal as a mechanism for stimulating grassroots efforts in areas of highest institutional priority.”³⁶

As Priest et al. (2002) have noted, decentralized and incentives-based decision approaches are very much a work in progress. One may legitimately question whether academe’s own version of corporate “profit centers” will endure or simply join the graveyard of failed imports from the for-profit sector. At its worst, the approach favors corporate over academic values and can be ruinous to the academic fabric holding institutions together. At its best, however, early evidence suggests some promise in re-energizing activity and attention toward efficient, effective operations.

³⁴In fact, this uncertainty characterizes the broader literature on the relationship between educational costs and learning (Levin, 1991).

³⁵See Hearn et al. (2006).

³⁶Powers (2000), p. 297.

Human Resource Initiatives: Who Does the Work

In recent years, campuses have begun to experiment with a variety of new human resource approaches, sometimes altering faculty employment arrangements in fundamental ways.³⁷ As Gumpert notes (1997, p. 127), “The new style of academic management regards the notion of a self-regulating and autonomous faculty, if it ever existed, as no longer affordable,” and emphasizes instead considering faculty as employees who are expected to contribute in measurable ways to institutional revenues and local economic development. This breakdown in the special status of faculty, Gumpert argues, has been accompanied by lessened commitment to full-time, tenure-track faculty positions and other traditional employment features. Regardless of the underlying reason, there is little question that changes in the academic workforce have taken place everywhere, from small private colleges to massive state universities, and in fields from the liberal arts to the professions.³⁸

Non-tenure-line faculty. There are several aspects to this phenomenon, but clearly the most important development in this arena is the increased hiring of faculty for non-tenure-eligible positions, both full- and part-time. For many years, academic analysts and leaders have noted the relative inflexibility of the faculty workforce, but ideas such as establishing separate research-oriented and teaching-oriented *tenure-line* positions within research

universities have been resisted because of concerns over depriving students of exposure to knowledge development and creating status differences among faculty.³⁹ These concerns notwithstanding, institutions have resolved the flexibility dilemma by reducing commitments to full-time, tenure-line hiring.

The pursuit of organizational agility, flexibility, and cost savings has driven growing numbers of institutions to pursue alternative approaches to faculty labor.⁴⁰ Because faculty are usually the most significant cost category for institutions, and because student demand and external labor-market conditions change over time, tenure and long-term, full-time employment contracts can reduce institutional discretion and adaptability. As costs and external financial constraints rise, institutions have turned to new, more flexible employment arrangements as an obvious, albeit controversial, solution. Reducing tenure-track positions and long-term and full-time contracts brings greater management control to institutions constrained by traditional employment practices.

The trend in these directions has been dramatic. In the 1970s, the proportion of faculty hired on non-tenure-line, part-time, and fixed-term contracts started to grow across diverse types of U.S. institutions. Since that time, the proportion of tenured and tenure-track faculty members in the United States has shrunk from about 57 percent to about 35 percent, while the propor-

Regardless of the underlying reason, there is little question that changes in the academic workforce have taken place everywhere.

³⁷ Schuster & Finkelstein (2006).

³⁸ For example, see Bunton & Mallon (2007).

³⁹ Mortimer et al. (1985); Gilliland (1997); Sexton (2006).

⁴⁰ See Gappa, Austin, & Trice (2005) and Schuster & Finkelstein (2006). This pursuit of flexibility is not distinctive to higher education: see Kalleberg (2001).

tion of full- and part-timers working off the tenure track has grown from about 43 percent to 65 percent.⁴¹ Similarly, the percentage of U.S. faculty in part-time positions has grown in all sectors.⁴² While tenure is far from abolished or on the verge of extinction in the United States, contrary to the earlier fears of some, there is clear evidence that the wave of retirements of full-time tenured faculty hired in the 1960s and 1970s has not been followed by comparable numbers of hires in traditional faculty lines.⁴³ Indeed, Schuster and Finkelstein (2006) report that the majority of new full-time faculty hires are now being made for tenure-ineligible positions.

Colleges' and universities' increasing reliance on part-time and non-tenure-track faculty may be bringing significant changes in educational processes and outcomes in U.S. higher education. These changes relate directly to such currently "hot" policy issues as student persistence and graduation.⁴⁴ Notably, some studies have reported evidence that, with other factors held constant, increasing reliance on part-time and non-tenure-track faculty reduces graduation rates at four-year colleges as well as student persistence into the second academic year.⁴⁵

The increasing use of nontraditional faculty can also markedly change insti-

tutions as workplaces, arguably reducing not only the numbers but also the influence and motivation of tenure-track faculty,⁴⁶ increasing the power of administrators,⁴⁷ and undermining academic freedom.⁴⁸ Such two-tiered faculty systems also may marginalize nontraditional faculty by poorly integrating and socializing them into the organization.⁴⁹ Some observers have even argued that the trend threatens the traditionally high status of the academic profession and, indeed, the basis for academic community.⁵⁰

Yet, it is important not to ignore the potential benefits of the phenomenon. Institutions can not only more flexibly attune their workforce to emerging needs in education and research, but also potentially save money that might in turn be directed toward preserving tenure-line, full-time positions over the longer term. John Sexton, president of New York University, has argued (2006) that differentiated faculty staffing can create balance and, ultimately, common cause among disparate faculty activities, avoiding the derogation of teaching that he views as occurring too often in research universities. Also, with the nontraditional option in place, institutions can hire for full-time tenure-line positions more selectively: Many units in high-demand fields (e.g.,

⁴¹ American Association of University Professors [AAUP] (2006).

⁴² Gappa & Leslie (1993); Ehrenberg & Zhang (2005).

⁴³ AAUP (2006).

⁴⁴ Ehrenberg & Zhang (2005).

⁴⁵ See Ehrenberg and Zhang (2005) and Bettinger and Long (2005). The work provides evidence in support of the argument of Curtis and Jacobe (2006) and others that reliance on part-timers may undermine the quality of undergraduate student learning.

⁴⁶ Bess (1998); Haeger (1998).

⁴⁷ Rhoades (1996).

⁴⁸ Curtis & Jacobe (2006).

⁴⁹ Gappa & Leslie (1993).

⁵⁰ E.g., see Finkelstein, Seal, and Schuster (1998). Interestingly, the phenomenon of staffing differentiation varies markedly by field, with mathematics, business, and certain humanities fields (notably, English and foreign languages) threatening to become "collections of transients" (Finkelstein, 2003).

business) have found traditionally structured positions going unfilled because of an absence of strong candidates, but the development of alternative positions allows those units to continue to offer their programs while awaiting the best tenure-line candidate. Finally, the provision of part-time and periodically full-time positions (that is, positions that move between full-time and part-time status) can enhance connections to local labor markets as well as the attractiveness of teaching work to well-qualified potential instructors unable or unwilling to take on full-time positions. What are commonly called “contingent” positions may in fact be quite stable and secure, and attractive to talented, capable candidates.⁵¹ For example, instructors in ongoing part-time community college positions frequently occupy full-time positions in local businesses.

Retirement reform. Another proliferating employment innovation is creative retirement structuring.⁵² As mandatory retirement at age 65 ended in U.S. higher education in the 1990s, some observers predicted that many institutions seeking to preserve their control over faculty resources would reconsider, reform, or abolish tenure. The prediction has not held: Although faculty appear to be retiring somewhat later than in the past, the differences have apparently not been great enough to prompt widespread abandonment of the tenure system.⁵³ By expanding their offerings of attractive early-retirement packages for faculty, institutions have lessened senior faculty members’ worries

over retirement and limited the incidence of “long goodbyes.” At the same time, by obtaining greater flexibility for new hires, they have improved their strategic responsiveness to emerging developments in knowledge domains, technology, and labor-market conditions for graduates and faculty.

In addition to extending early retirement to some faculty, many institutions have found it appealing to experiment with retirement offers that free up funds for faculty positions or other uses while maintaining the retiring faculty members’ engagement in teaching, research, and campus life. Two approaches are growing in acceptance: phased retirements and retire/rehire agreements.

Phased retirement plans provide for a step-down in a faculty member’s duties and pay over a predetermined period, rather than an abrupt removal from day-to-day service. The most recent survey data suggest that these plans may be offered in as many as one-fourth of all institutions in some formal fashion, and perhaps on an ad hoc basis in even more.⁵⁴ It appears that the plans are offered most often in doctoral institutions and in institutions with high proportions of tenured faculty.⁵⁵ These plans have been designed and adopted to provide institutions with more cost-effective human resources planning, improved recruitment and retention of valued faculty, and enhanced fac-

...Many institutions have found it appealing to experiment with retirement offers that free up funds for faculty positions or other uses while maintaining the retiring faculty members’ engagement in teaching, research, and campus life.

⁵¹ Ehrenberg (2006a).

⁵² Conley (2007).

⁵³ Pencavel (2005).

⁵⁴ Conley (2007).

⁵⁵ Allen (2005).

ulty productivity.⁵⁶ There is little doubt that these arrangements can benefit faculty psychologically and in health terms, and can help uphold morale among faculty in affected units, but research by Leslie and Janson (2005) suggests that such plans can have questionable organizational returns. Specifically, Leslie and Janson suggest that phased retirement programs often are not designed cost-effectively, and can divert resources away from targeted strategic academic initiatives.

Along similar lines, some campus leaders have been offering retire/rehire agreements to selected faculty. Under such arrangements, faculty retire formally, only to be rehired off the tenure line and under contract for further work, often involving part-time or time-bound responsibilities. In government systems, such agreements have been viewed unfavorably as “double dipping,” and periodic media reports of abuses have made the practice even more controversial.⁵⁷ Recently, however, analysts, policy makers, and leaders have begun to recognize some clear advantages, even going so far as to term the agreements as win/win arrangements for employers and employees.⁵⁸ In higher education, the “win” may well be the creation of new tenure-line or non-tenure-line slots without entirely losing the services of the retiring professor.⁵⁹

Institutions seeking to encourage the retirement of certain faculty mem-

bers need to consider how retirement decisions are usually made. Recent surveys suggest that faculty facing this choice appear to be driven by three major factors: their level of satisfaction with work and working conditions, their health-care options after retirement, and the financial implications of retiring.⁶⁰ Of these, health care is the issue of most concern, and continues to rise in importance.⁶¹ With the high costs of health insurance and treatment inevitably awaiting them post-retirement, tenured faculty are often reluctant to give up their positions—for the prospective retiree, the coverage of health-care expenses is often the key sticking point in any invited retirement arrangement. Those institutions able to address it convincingly stand to benefit more quickly and effectively from the contributions of newly retired faculty and their successors.⁶²

From a management perspective, it is critical that information be available regarding the financial implications of any retirement approach in any specific individual and organizational context. Institutions with data systems that provide ready access to models and evaluative information from the past and from peer institutions will be far better prepared to make these very difficult decisions.⁶³

⁵⁶ *Ibid.*

⁵⁷ Sostek (2003).

⁵⁸ Mastracci & Thompson (2005).

⁵⁹ For an example of a retire/rehire contractual agreement in higher education, see www.coe.uga.edu/adfaculty/procedures/COE_Procedure-3_Retire_Rehire.pdf.

⁶⁰ Berberet et al. (2005).

⁶¹ *Ibid.*; Scheiber (2005).

⁶² Moon (2007).

⁶³ Baer et al. (2005).

Compensation Reform: How Faculty Are Paid for Their Work

In a related development, recent years have brought the emergence of new faculty remuneration policies. Institutions have moved toward greater restrictions on faculty consulting activities and intellectual-property development, have begun devising compensation systems that provide financial incentives for entrepreneurial activities in research and teaching, and have taken to formally separating the “core” (standard of living) component of faculty salaries from supplemental, “at risk” components.⁶⁴

Compensation policies in the United States have thus come a long way since Charles Eliot, in his inaugural address as Harvard’s new president in 1869,⁶⁵ mused that the low pay of faculty was a national virtue:

The poverty of scholars is of inestimable worth in this money-getting nation. It maintains the true standards of virtue and honor. The poor scholars and preachers of duty defend the modern community against its own material prosperity. Luxury and learning are ill bed-fellows.

In the years after Eliot’s comments, as U.S. faculty professionalized and higher education expanded, salaries grew and became more secure. Since the 1980s, the norm in most institutions has been to provide percentage increments to average faculty salaries that,

over time, roughly parallel national rates of inflation.⁶⁶

There are important exceptions and caveats to that trend, however. Because fields such as engineering, business, computer science, law, and medicine strive to attract highly trained workers with prosperous career opportunities outside postsecondary institutions, salaries in those disciplines have over the decades increasingly neared those offered in the “outside world.” At the same time, pay in the humanities and some other professional fields has significantly lagged behind the overall averages.⁶⁷ The acceptance in the late 20th century of rapidly growing field differences among salaries was U.S. institutions’ first major step away from well-established, communally focused salary norms.⁶⁸ Now, it appears that institutions are beginning to pull even further away from lockstep remuneration approaches.

Incentive pay. One aspect of this trend has been the appearance on campus of salary bonuses for faculty. By rewarding faculty who are especially successful in research activities beyond their regular compensation, institutions are seeking to attach incentives to valued activities and retain those faculty likely to be subject to “raids” by competing institutions. At the same time, critics wonder whether bonuses threaten longstanding academic values, missions, and duties.⁶⁹

Some salary reforms are even more aggressive. In the 1990s, in response to growing financial pressures posed

⁶⁴ Hearn (1999).

⁶⁵ Cited in Rudolph (1990, p. 196).

⁶⁶ AAUP (2007).

⁶⁷ Hearn and Gorbunov (2005); AAUP (2007).

⁶⁸ Growing acceptance of this differentiation on the expenditure side parallels a growing acceptance on the revenue side of tuition levels differentiated by fields of study.

⁶⁹ Wilson (2003); Mallon and Korn (2004).

by managed-care organizations and health reform legislation, a number of university medical schools began to break up faculty members' salaries into a guaranteed "core" or "base" component and a second "flexible" or "at risk" component.⁷⁰ Under such schemes, a professor's pay is unbundled into a foundational element and a supplemental element based on the level of clinical or funded research revenues he or she generates, either alone or with colleagues. While the first portion of salary is "hard money" and thus

ensured from year to year, usually with an inflation adjustment, the second varies annually depending on financial success.

Now, the core/supplement salary approach is being considered beyond medicine, and its wide-

spread adoption would represent a radical change in campus employment relations. Tierney (1997, p. 20) has explained how the idea is conceptually and legally linked to tenure:

The assumption has long been that tenure is equivalent to an individual's base salary. Summer salaries and bonuses were negotiable, of course, but an individual fit within some form of a salary scale, and he or she was guaranteed that base. Recent arguments have called for tenure to be the equivalent of a portion of an individual's salary, but not 100% of it. That percentage may be as low as 20% of what the individual has come to think of as base pay or as much as 90%. . . . No one will receive full compensation. . . . The expectation is that

the individual, the department, the school, and the institution all need to work creatively to generate the additional income necessary to cover the salary—but it is not guaranteed.

This would appear to conflict with the guidelines of the American Association of University Professors (AAUP), the major voluntary professional guild for U.S. faculty and an organization whose formal sanctions of institutions are widely publicized. Under the AAUP guidelines, salaries at an institution may be reduced "across the board" only in conditions of financial exigency. Nor have institutions historically been allowed under the guidelines to reduce the salaries of *individual* tenured faculty members without the due process guaranteed by tenure. In reality, this has meant that, even when the salary reduction proposed for an individual is for a clearly justifiable cause, lengthy hearings and appeals have been required.⁷¹ To the extent this new salary approach is approved for tenured and tenure-line faculty by institutional leaders and governance bodies and upheld legally, it could erode a traditional form of financial security for faculty, allowing institutions to reduce individual salaries far more easily than in the past.

In practice, however, institutions adopting the core/supplement approach need not immediately reduce faculty salaries in nominal terms. Rather, they can provide only for cost-of-living raises or less each year, thus reducing faculty purchasing power (i.e., real salaries after adjustment for inflation) over time. Then, institutions can follow a practice of allocating remaining funds on an incentives-driven basis. Faculty

⁷⁰ See Mangan (1996).

⁷¹ From a review by Professor Parker Young (personal communication, December 18, 1996).

The core/supplement approach provides institutions greater flexibility to move resources from one area to another, while encouraging individual faculty initiatives toward generating external revenues.

successful in supporting all or part of their regular salary through grants and contracts for research or training might be paid additional compensation based on that support.⁷²

The core/supplement approach provides institutions greater flexibility to move resources from one area to another, while encouraging individual faculty initiatives toward generating external revenues. In variations of the approach that direct supplementary or bonus pools to units rather than individuals, faculty become responsible for generating income on the unit's collective behalf, so the approach may produce more cohesiveness in academic units (Tierney, 1997).

On the other hand, the approach raises potential threats to faculty's financial security. Faculty failing to secure sufficient funding from teaching or research activities are forced to adapt to fewer resources or leave. The AAUP, expressing fears that a trend toward the core/supplement approach might harm the financial well-being of many faculty, has maintained its stance that tenure must ensure a salary adequate to maintaining economic independence.⁷³

The approach can save institutions money, by lowering salaries for faculty in higher-paying fields. In the United States prior to the 1990s, medical faculty salaries rose to high levels because of strong demand for their services as clinical health-care providers. Because

faculty salaries cannot easily be lowered, institutions that follow traditional compensation approaches have been unable to respond efficiently to the subsequent severe cooling in that demand. In contrast, institutions that attune compensation to the current marketplace by adopting the core/supplement approach have successfully lowered salaries. Administrators of medical schools have argued that the marketplace demand for clinically adept physicians was the basis for the higher salaries of their faculty in the first place and, "If the argument is good on the upside, it should be equally good on the downside."⁷⁴ That is, as the market for physicians' services softens, so should faculty salaries.⁷⁵

Extending this strategy to other academic areas would mean tying salaries in those units to emerging conditions in their respective labor markets. Where salaries have ossified at levels unjustified by external market conditions, cost-saving adjustments become possible. On the other hand, where the core/supplement approach energizes faculty to seek and secure external funding, the potential for greater total institutional outlays rises. Clearly, managers need to set a new system's formulas for salary reductions and supplementations carefully, to target faculty behaviors fairly and appropriately while neither breaking budget limits nor leaving potentially well-spent money on the table.

⁷² For an example of how such a system works in practice, see the incentives policy of the College of Veterinary Medicine of the University of Tennessee (available at www.vet.utk.edu/research/info/incentive.shtml).

⁷³ Cited in AAUP (1996).

⁷⁴ Comment by David R. Perry, senior associate dean of the medical school at the University of North Carolina at Chapel Hill (cited in Mangan, 1996, p. A18).

⁷⁵ For research-oriented medical-school faculty, the responsiveness and stability of salaries under this new system often depends on the availability of institutional "bridging" funds to smooth transitions for investigators whose grants have ended but who are preparing new research-funding proposals. Without such funds, the salaries of even the most entrepreneurially productive faculty could vary appreciably from year to year.

Limits on external compensation.

While the reforms above push institutions further toward internal market-based differentiations in compensation, some institutions have pursued a contrary effort: increasing limitations on faculty's external consulting activities and income. For years, faculty with skills highly valued outside the institution often supplemented their institutional compensation with consulting money, pursued outside the institutional employment relationship. For some faculty in business, engineering, law, and certain sciences, the income generated by these activities was substantial. For institutions, however, the time that faculty devoted to the activities, and the activities' frequent overlap with established external service roles of the institutions, prompted restraints. Beginning in the 1980s, increasing numbers of U.S. institutions established policies limiting faculty's capabilities to spend more than a certain number of days per month consulting while on academic contracts (Boyer & Lewis, 1985). Policies also came to be more explicit on questions of who owns the intellectual property associated with research work, although this remains an area of contention.⁷⁶

Evaluating compensation systems.

Because institutional compensation policies extend beyond regular nine-month faculty salaries into summer support, bonuses, research-grant releases from teaching responsibilities, supplementation for service activities, and consulting and intellectual property requirements, it is important to consider them holistically. Any compensation system, traditional or innovative, may be judged on certain value criteria:

- *Efficiency*: Can the system operate without excessive investments of time or other resources?
- *Procedural equity*: Are the procedures used for salary determination fair? For example, do affected parties have a role in the process?
- *Outcome equity*: Are the results of salary determination fair across fields, for those suffering from market-driven salary compression across ranks, and for minorities and women?
- *Transparency*: Is the salary system well understood on campus and, as necessary, beyond the campus?
- *Adaptability*: Does the system allow adequate flexibility in response to potential policy crises and special cases?
- *Organizational fit*: Does the system synchronize with the strategic initiatives, management approach, and organizational culture of the campus?
- *Political fit*: Does the system make sense from an internal political perspective, balancing the interests of various parties on campus and reflecting current political realities there?
- *Performance analysis*: Is the system assessed and evaluated on a regular basis?

Conceivably, innovative compensation systems can meet these criteria as easily as more traditional systems. The burden of proof for reform, however, demands overt, deliberate consideration of these factors before adoption.

⁷⁶ For an example of an especially detailed faculty consulting policy, see that of the University of California System at www.ucop.edu/ott/documents/consult.pdf.

Structural Reform: How a Campus Is Organized

A fifth domain of reform on campus has been structural. Realistically, it seems accurate to observe that the organization of any academic community represents a compromise among several factors, including the institution's mission and operational goals, the external organizational context of the institution, the faculty's expertise and interest areas, the nature of the institution's student "market" and, importantly, the financial context of the institution. Institutions seek a balance among these factors that positions them as well as possible among their stakeholders and constituents.

That can be especially difficult in public institutions, where longstanding configurations have been pressured by what Ehrenberg (2006b) has termed a "perfect storm" of developments: structural deficits in state budgets, rising costs on several fronts, and limited options for both generating new revenues and constraining costs. The provision of freedom to these institutions to initiate market-sensitive programs and set tuitions at levels appropriate not only to their missions but also to their finances represents a significant step forward. Often, the new adaptations feature an entrepreneurial bent. Lyall and Sell (2006) note that market pressures are driving public institutions to pursue greater management flexibility and autonomy, to establish clearer incentives for efficiencies, to attend more closely to consumer preferences, and to decrease dependencies on state systems and policies.

In both public and private institutions, structural reform initiatives have taken a variety of forms. Among these are the merging of distinct aca-

demically units; pursuing partnerships with corporations to support research and economic development; reducing administrative services; cutting organizational layers; changing the nature of the faculty workforce (as discussed earlier); redesigning courses and programs to make better use of new technologies; deferring capital maintenance and the replacement of classroom technology; establishing new foundations for athletics, research infrastructure, and institutional development; and improving management-information systems to foster transparency and make clearer to leaders the relationships among revenue and cost streams, institutional activities, and outcomes.⁷⁷ Notably, many institutions have moved to create novel organizational forms for generating new knowledge and new revenues stemming from that knowledge.

For example, Mallon (2006) notes that, in recent years, university medical schools have increasingly established research centers and institutes to deal with their emerging revenue needs and fast-breaking scientific developments. Procedures for integrating these creations into campus operations have been varied, with some being governed and budgeted systematically through institutionalized, agreed upon, and monitored approaches but many others being governed and budgeted through a "charity" model rooted in the personal relations of faculty and top administrators (ibid.).

Outside the sciences, interdisciplinary research and service centers have been established in growing numbers

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⁷⁷ Lyall and Sell (2006); Pratt (2003).

to help engage institutions more fully in important public issues while also directing funding to arenas with palpable returns in finance or stature for institutions. Such units vary widely in their focus (e.g., urban issues, education, poverty, etc.) but share concern over directing research, attention, and discourse to social problems.⁷⁸ The units are almost always involved in activities, such as “applied research” and service, not strongly favored under the traditional reward systems of academic departments in research universities. For that reason, centers and institutes often find themselves on the margins of the traditional activities and norms of their home campuses.⁷⁹ Ideally, though, such creations more closely tie their home institutions to issues of concern to supporters and stakeholders in legislatures, foundations, and other key external settings.

In a case study of one institution’s break with traditional organizational arrangements, Bruininks (2006) highlights the structural reforms at the University of Minnesota, including the university’s integration of six colleges into three and the reorganization of the university’s extension service (historically rather loosely connected to the core academic activities of the institution), from 92 county-based offices into 18 regional centers far more closely tied to faculty research interests and on-campus academic units. These reforms were reported to have saved over \$3 million in 2006 alone and, Bruininks argues, have led to increased opportunities for collaborative research, enhanced curricular quality and selection, more effective services, and more efficient operations. In particular, advo-

cates of the changes point to their promise for interdisciplinary connections and breakthroughs in such areas as brain functioning across the lifespan, environmental and energy concerns, and research on children, youth, and families. Thus, it may be possible for public institutions to find a “sweet spot” in which significant public issues are addressed more effectively but also more efficiently than in the past.

Of course, organizational reform is not always simply a matter of moving departments around on an organizational chart. A major element in the Minnesota reforms was oriented to changing values, language, emphases, and communication patterns throughout the organization, with special attention to the public charge, role, and responsibilities of the university.

These social and cultural aspects of campus organization are strongly connected to emerging technologies, which can facilitate new ways of envisioning the organization, communicating its core ideas, and delivering its major products and services. Indeed, new technologies can shake the foundations of what we think of as an institution. Many are now familiar with Arthur Levine’s (2000) distinction among “brick” providers of education (i.e., traditional campus-based institutions), “click” providers (i.e., institutions existing solely in cyberspace) and “brick and click” hybrids (i.e., campus-based institutions also offering online learning opportunities). For Levine, the optimal posture is in the hybrid camp, falling outside the familiar notions of where an institution begins and ends.

Along these same lines, Carchidi and Peterson (2000) remind us that new

⁷⁸ Seltzer (1999); Scott (1999).

⁷⁹ Moxley (1996); Leverty & Colburn (2000).

technologies are breaking down old conceptions of how institutions can and should be organized. They describe six kinds of institutions that may be present or emerging in higher education, as new technologies are developed. The *insular institution* is the most familiar archetype, relying on centralized organizational structures and decision making and traditional, residence-based education. The *extended institution* uses distance-learning technologies to reach new learner constituencies. The *stable network organization with place-bound offerings* delivers face-to-face educational products and services but outsources some elements to a consistent set of partners. The *stable network organization with remote offerings* combines stable outsourcing relationships with remote delivery via new technologies. The *virtual organization with place-bound offerings* is frequently employed in corporations relying on external consultants and trainers but requiring co-located physical presence in classrooms, thus educating employees and customers without committing to extensive educational staff resources. Finally, the *virtual institution* relies almost entirely on ad hoc aggregations of external resources for achieving its goals, which are often short-term or at least fluid. For Carchidi and Peterson, “virtual” organizational structures need not be confined to those relying on new technologies for delivering educational experiences and materials; they may also be organizations in which units are integrated horizontally, vertically, and spatially across different physical locations.

Of course, structural reforms of all kinds raise risks, many of them financial in an immediate or longer-term sense. Driven by evolving cost and revenues contexts and following failed efforts at major restructuring, some institutions have been forced to close or shrink their operations, a very visible recent example being Antioch College in Ohio.⁸⁰ Similarly, there are many examples of revenue-seeking institutions creating new research centers and new kinds of clinical activities only to be brought low by institutional and faculty conflicts of interest (e.g., with drug makers) or by questionable activities taking place under the campus aegis or “brand.”⁸¹ More broadly, structural reforms can risk weakening public service commitments; moving the curriculum away from low-market-value fields like teaching, nursing, social work, and physical therapy; and, ultimately, eroding the nation’s capacity to produce human capital in certain areas.

For every negative example, however, there are notable instances of dramatic change driven by leaders who were willing to question those aspects of their campuses long taken for granted. The story of the University of St. Thomas in St. Paul, Minn., suggests that even a small, regional liberal arts college with a strongly religious tradition can—when faced with both competitive challenges and strategic opportunities—successfully reshape itself to pursue an expanded, academically diverse mission in a highly competitive urban market. As reported evocatively by Marvin Peterson and

⁸⁰ Fain (2007).

⁸¹ Wiener (1995), for example, reports on a case in which faculty in a university fertility clinic were accused of personally and professionally profiting from an array of unsanctioned transactions using eggs harvested from the clinic’s patients.

his University of Michigan colleagues,⁸² the St. Thomas story involves a startlingly swift organizational transition in the 1980s and 1990s under determined leadership. Now occupying a niche unanticipated by prior generations of faculty and students, the institution has expanded its research activities and begun offering a variety of advanced graduate and professional degrees.

Implications

The five reforms reviewed in this report offer no panaceas, but do represent arenas of experimentation by institutional leaders willing to question the

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virtues of established business models or forced by constraints to make trade-offs regarding those models. Often, portrayals of institutional presidents, provosts, vice presidents, and deans focus on their roles as “administra-

tors,” a term that seems to emphasize their fiduciary responsibilities to maintain an institution’s goals, resources, governance arrangements, and culture. Those responsibilities of higher education leaders are undeniably important, but the contexts now emerging for institutions demand more. *Creativity* and *risk taking* are terms not usually associated with administration, and pursued thoughtlessly can threaten what is most worth preserving about the enterprise. But it is the campus leaders who are willing to experiment, and take less for granted, that may move their insti-

tutions out of slumps and out of fallow niches.

By allowing their pricing to vary in response to cost and market conditions, institutions can shape their enrollments to serve both academic and financial goals. By moving control of decisions to lower levels, institutions can spur creativity, fiscal responsibility, and a sense of ownership among faculty. By finding novel ways to structure faculty careers and academic workforces, institutions can enhance their flexibility to meet strategic threats and opportunities. By paying faculty in ways more directly tied to their performance in service of institutional goals, institutions can assure their sponsors (including state governments) of their attention to productivity, while maintaining the loyalty of those most central to campus success. By exploring new ways of organizing, institutions can align themselves more precisely not only with the marketplaces surrounding them but also with the rapidly changing dimensions and interconnections of knowledge.

There is no single line of reform to fit all institutions or all leadership styles. Any of the reforms considered here might well be disastrous if undertaken in certain settings. And what might work one year may be doomed if tried a few years later, after conditions have changed. Nothing can substitute for a leader’s ability to astutely match setting, timing, and ideas. But armed with an array of possible reforms, capable leaders may be able to move beyond traditional administrative roles, and move their institutions toward sounder futures.

⁸² Research on St. Thomas was conducted by Peterson’s Work Group on Organizational Change and Transformation in Higher Education, under the auspices of the Kellogg Forum for Higher Education Transformation. See www-personal.umich.edu/~marvp/facultynetwork/index.html (accessed March 5, 2008).

Conclusions

Recently, Michael Crow, president of Arizona State University, argued that

Most of the processes and outcomes that define greatness in academic culture are by their very nature contrary to standardization and efficiency. Scholars and researchers cannot be efficient when following a path that has not already been marked. The hierarchical relationship that allows agencies like the local division of motor vehicles to perform repetitive tasks in a standardized and relatively efficient manner is ill-suited to the famously circuitous pursuit of discovery. I can say with absolute certainty that efficiency is not the means by which one determines the origin of the universe.⁸³

Crow is not the first to suggest an important concern about efficiency-oriented reform in colleges and universities. Thirty years ago, distinguished economist Kenneth Boulding (1978) wrote a well-cited essay “in praise of inefficiency” on campus, and the respected organizational scholars Burton Clark and Karl Weick have made similar points about the distinctive nature of effective operations in higher education. From this perspective, innovative operational reforms are likely to succeed only to the extent they are sensitive

to the distinctive qualities of college organization, and only to the extent they allow for serendipity, chance, and time spent wandering down ultimately fruitless paths to new knowledge and understanding.

In line with this perspective is a growing awareness on campus that too often what has seemed to work in business settings has failed in higher education. From “Program, Planning, and Budgeting Systems” to “Zero-based Budgeting,” and from “Management by Objectives” to “Total Quality Management,” higher education leaders seem to have tried imports from other settings only to find them insufficiently sensitive to the peculiarities of campus organization and faculty work.⁸⁴

At the same time, however, higher education’s constituents are seeking precisely the same goals that drove those earlier reforms: greater efficiency and understandable, meaningful indicators of short-term performance. Using the startlingly foreign language of products, net revenues and costs, niches, market analysis, and brands, contemporary stakeholders are asking hard questions of institutional leaders. In this context, abandoning the quest for new and better ways of doing campus business would be a recipe for trouble, not only internally, as wasteful efforts detract from more promising ones, but also externally, as sponsors wonder

⁸³ Crow (2007, pp. 26–27).

⁸⁴ Birnbaum (2000).

about questionable returns on their investments and support.

Thus, the dilemma for leaders is how best to make necessary, even bold, operational changes to adapt to new realities while also preserving the heart of academe's enduring culture, values, and commitment to effective knowledge transmission and open-ended knowledge development. The reforms reviewed in this report are all being tried around the country, in different ways and in different settings, and in each case they are oriented to improv-

ing performance and serving accountability goals. Each of the reforms raises foundational issues that must be borne in mind, and each may cause consternation among traditionalists. At the same time, encouraging a reform-oriented, entrepreneurial, strategic mindset among faculty and administrators is a crucial charge to institutional leaders. Failure to do so, coupled with unblinking deference to established business models, is likely a prescription for failure at worst, and stagnation at best.

Appendix A:

Questions for Campus Discussion and Strategic Analysis

1. How well is our institution adapted to its emerging environmental context?
2. What reforms have we put into place to address the emerging economic realities? What are the effects of individual reforms? What are the cumulative effects of these reforms?
3. Are leaders at all levels of the organization (including the faculty) adequately informed about the revenues and costs associated with their units' activities?
4. Are appropriate incentives and structures (including data structures) in place to enable faculty and their units to make decisions that support institutional priorities, including the priority of financial health?
5. Do our information systems provide leaders what they need to make effective decisions concerning potential campus reforms?
6. Upon implementing reforms, have we planned adequately for objective follow-up evaluation and, if necessary, abandonment or major revision of the reforms?
7. To what extent have changes at our institution over the past few years, viewed as a whole, compromised our historical and public-service missions, both in the short and long terms?
8. Are we well-positioned financially and academically to prosper in the emerging technological environment?
9. Does our institution have leaders and professional staff sufficiently trained to analyze prospective operational reforms objectively, overemphasizing neither the familiar comforts of tradition nor appealing but uncertain future rewards?
10. In making their enrollment and major choices, do current and prospective students perceive our current tuition and fees as appropriate in level, simplicity, and transparency? What would be the implications of further tuition differentiation for our institution?
11. Are we providing tuition discounts (that is, institutional student aid) in appropriate amounts and forms to attract the students we want while preserving our core mission, supporting our strategic goals, and maintaining adequate cost-effectiveness returns?
12. How far are we willing to go to change the nature of our faculty workforce and adapt it to emerging social, economic, and technological developments?

Appendix B:

Key Resources: An Annotated Bibliography

Bunton, S. A. & Mallon, W. T. (2007). The continued evolution of faculty appointment and tenure policies at U.S. medical schools. *Academic Medicine*, 82(3), 281–289.

University medical schools were the first campus units to undertake major experimentation along several of the lines considered in this report, including reforming faculty positions, unbundling faculty compensation packages, and developing interdisciplinary research units. This review reports on the most recent developments in faculty appointments in medical schools. This exporting of medical school reforms to other units on campus is likely to continue, so the article may be of special interest.

Carchidi, D. M. & Peterson, M. W. (2000). Emerging organizational structures. *Planning for Higher Education*, 28, 1–15.

This essay focuses on how new technologies can change the nature of colleges and universities. The article's evocative conceptual framing of the issues, its abundant literature base, and its many examples from practice make this a rich resource for those interested in emerging alternative approaches to organizing academic work.

Hubbell, L. L. & Lapovsky, L. (2005). *Tuition discounting: 15 years in perspective*. Washington, DC: National Association of College and University Business Officers.

Much has been written about the changing context of college admissions and attendance decisions, and about the growth of tuition discounting in particular. Hubbell and Lapovsky, both veteran higher education analysts and leaders, provide a thorough, hard-nosed examination of discounting trends, with the concluding suggestion that the net returns on the practice may be questionable, at least for broadening college access to lower- and middle-income students.

Priest, D. M. & St. John, E. P. (Eds.). (2006). *Privatization and public universities*. Bloomington, IN: Indiana University Press.

This edited volume examines a number of the finance-oriented reforms discussed in this report, including incentives-based budgeting systems, reformed management-information systems, and online delivery of educational services. The volume also provides several provocative essays on the implications of the privatization movement across campuses and systems.

Schuster, J. H. & Finkelstein, M. J. (2006). *The American faculty: The restructuring of academic work and careers*. Baltimore: Johns Hopkins University Press.

Many of the reforms currently under consideration on campuses reflect a growing sense that the faculty role has changed in fundamental ways. The authors of this important book note that they were surprised by the extent of the changes in faculty hiring and careers taking place even in the past decade. While these changes have surely been driven by both internal decisions and developments in institutions' external contexts, it is essential that leaders stay informed in order to adjust their campuses' organizational and financial practices reflectively and appropriately.

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