12

HIGHER EDUCATION MANAGEMENT: CHALLENGES AND STRATEGIES

George Keller
Baltimore, Maryland, USA

In the year 1416, Henry, the son of King John I of Portugal, established a base at Sangres in the southwestern part of that Atlantic coast country to foster exploration of Africa's western coast. In addition to constructing a naval arsenal Prince Henry started an innovative school to study and teach navigation and geography. The school enabled Portuguese sailors to explore West Africa, and, soon after, reach India, Goa, and Brazil. Within decades little, poor Portugal became a great and wealthy colonial empire.

Like Prince Henry, many national leaders today have been improving schools and building new universities to increase the quality of their workforce, or human capital, in order to improve economic growth, military security, public health, cultural vitality, and political sagacity (Bowen, 1977; Schultz, 1981). Intellect building is increasingly seen as essential to nation building. Higher education has become, and is likely to remain, a central activity of developed and many developing countries. It is now the preferred approach among national leaders to prepare a country's more able young people for tomorrow's Darwinian social environment. From Mexico, Brazil, and Poland to Malaysia, South Korea, and China the number of universities and specialized institutes has multiplied and enrollments have swelled (Altbach, 2002).

Naturally, questions have arisen about how these universities should be managed, and by whom. How should they be governed? Which students should be admitted? Who should be the teachers, and toward what ends should the students be taught? And how can they be financed, or who should pay for all this expanding advanced education?

The possible answers to these and other salient questions are complicated by the fact that the expansion of higher learning is proceeding at the same time that major social upheavals are erupting in most areas of the world. The questions that are largely internal to universities are assaulted by fundamental external changes in the societies in which the universities carry out their activities. This double load of pressures has contributed to the increasing demise of traditional patterns in the way universities are run (Keller, 2004a). The unhurried decision making, the inward-looking and preoccupied concerns, and the frail and unobtrusive administration by university executives have been forced to yield to stronger central management, swifter and deeper changes, and the creation

James J.F. Forest and Philip G. Altbach (eds.), International Handbook of Higher Education, 229–242.

of new, more thoughtful strategies so that colleges and universities can respond more adequately to threats and opportunities.

The Forces of Change

Most universities are shaped appreciably by external factors and large shifts in their environment, though many professors believe they, not the external forces, are the principal architects of their academic lives. These external developments have become quite powerful and appear to be multiplying. A growing challenge for university faculty and administrators is the extent to which colleges and universities should yield or adapt to these new conditions.

An example is seen in the form of demographic changes. There have been massive waves of immigration from the poorer and war-torn nations to the richer nations. The United States, for instance, has absorbed an estimated 33 to 36 million immigrants since 1965, when the immigration law was altered. One in nine persons in America today was born in another country. Some scholars have begun to worry that the entire range of religious allegiances, languages, family patterns, and attitudes toward education in the country is being transformed (Huntington, 2004). The United States is not alone. In Australia, foreign-born people are 23% of the population; in Switzerland, 19%; in Canada, 17%; in France and Germany, 10%. University leaders have had to ask themselves a host of questions about their institution's residential arrangements, the breadth of the curriculum, their assistance for the non-native students, and the recruitment of faculty from other cultures and national origins.

Another radical development has been the rapid advance of digital technology, connecting the world through the Internet. Computers have become ubiquitous in much of the developed world, and are increasingly available in developing nations. The information and data obtainable from software programs now competes with that in venerable university libraries. How should universities incorporate the new technology? To what extent should they modify pedagogy and research, or increase collaboration with other academics, or deliver more courses online to new, enlarged audiences? Should nations follow India's lead in the field of software engineering? Or Great Britain's lead in distance education?

There have also been several shifts in the political atmosphere that affect higher education. These shifts differ greatly from country to country, but a few trends are discernible. One is the changing role of government in the patronage, financing, and control of their country's universities. As V. Lynn Meek observes, "Higher education is characterized by a common trend whereby governments increasingly refrain from detailed steering of their respective higher education systems in favor of more global policies that determine the boundary conditions under which institutions may operate" (Amaral, Meek, & Larsen, 2003, p. 1). Governments now prefer to concentrate on such matters as results, efficiency of operations, and service to national needs rather than giving more specific directions. This trend allows higher education institutions more freedom to design their own practices, but it compels them to become more strategic, better managed, financially entrepreneurial, and educationally productive and innovative.

Another political trend is the growing demand for egalitarian admission for women, minorities, and the able but poor. The number of females and students from minority and immigrant groups has increased at many universities, even in some Muslim countries. And numerous nations have programs resembling America's "affirmative action" program to give preference to African Americans and others. India has maintained a system of preferences for more than a half century for lower caste people, local tribal groups, and "other backward classes." Nigeria, where an overwhelming majority of university students are from southern Nigeria, has established ethnic quotas so that the heavily Muslim Hausa-Fulani young people of the north will have a larger representation. Since the Civil Rights Act of 1965, the United States has given special attention to including more African-Americans, Hispanics, and women in its student enrollment as well as its faculty and administration appointments (Sowell, 2004); and the federal government has provided opportunity grants and loans to those of modest family means for college study. As higher education becomes more central to each nation's future prospects, pressures are likely to continue so that colleges and universities become more inclusive and representative.

The Overriding Concern

Perhaps the most troublesome and anguish-producing challenge for anyone connected with higher education management is how to pay the bills. The costs of higher education have been increasing faster than rises in the cost of living in most countries. For governments that have built new colleges or universities and enlarged their existing institutions, there is the need for greater appropriations for higher education. More complex scientific equipment, larger libraries for the exponential growth of knowledge, the growing expenses for digital technology, rising costs of employee health benefits, greater financial aid for needy students, larger salaries for the faculty, and increased staff for management and student services have all contributed to the escalating costs of each university.

To add to the financial difficulties, some countries such as Finland refuse to charge tuition; and other nations believe that attendance at a university is a public good not a private benefit, and thus ought to be kept as inexpensive for students and their parents as possible. For instance, Oxford and Cambridge have astonishingly low fees even though many students come from leading families. In America, the state of California charges its public university students very little, even at its prestigious research universities with their noted and highly paid professors and expensive facilities.

At the root of the financial problem is the desire of more and more nation-states to have the most highly educated and trained population possible to compete in world markets and the new knowledge-based economy. They feel they must do so because in our increasingly post-industrial world knowledge is key. As social analyst Daniel Bell has observed, "An industrial society . . . is based on a labor theory of value, and the development of industry proceeds by labor-saving devices, substituting capital for labor. A post-industrial society rests on a knowledge theory of value. Knowledge is the source of invention and innovation" (1999, p. xvii). Bell (1999) also contends that "The post-industrial society is essentially a game between persons."

This recognition has had profound consequences for higher education. It has moved colleges, research institutes, and universities into a central position in society (Kerr, 1964; Keller, 2003). Governments worry more about the quality of these institutions, while students—flocking to enroll in classes—see them as pathways to position, wealth, and privilege. What used to be education for an elite minority has increasingly become higher education for the masses. The finest professors and scholarly researchers have gained new prominence, with some of the best professors—especially in the United States—now receiving six-figure salaries or being allowed to start up businesses based on their discoveries (Slaughter & Rhoades, 2004). Two economists point out that "A superstar phenomenon—albeit a relatively mild one—has emerged in academia. Top researchers' salaries have escalated more rapidly than those of lesser-ranked rivals, even as the teaching loads of the top faculty have shrunk" (Frank & Cook, 1996, p. 13).

The new prominence of intellectuals and researchers has slowly altered their allegiance to (and role in) governance at universities. Professors often pay more attention to their scholarly disciplines, sponsoring agencies, or outside interest groups than to their home campus and its management. Some have become scholar-entrepreneurs (Powell & Owen-Smith, 2002). And as the demand for their talents in the emerging knowledge economy has risen, so have their salaries and benefits, contributing to the increasing costs of higher education and the financial stresses of institutions.

Rumbles from Inside

While this is certainly not the first time major social changes have impacted higher education, the multitude of demographic, technological, political, economic, and religious developments at the present time seems to demand a more penetrating analysis of the challenges that academic managers, faculty, and governments need to confront. Nearly every facet of higher education appears to be under scrutiny and even assault. This becomes evident if one probes a dozen of the basic questions surrounding higher education.

1. *Who is to be taught?* Should universities be reserved for the brightest and the best? Or should they reach out to and include mediocre students, young people from poor family households, and underrepresented minorities in their nation? What about talented artists, exceptional athletes, the devoutly religious, fine craftspeople and technicians, and gifted young entrepreneurs who may not be interested in book learning, the history of civilization, the methods of scholarly disciplines, contemporary science, or research techniques? How much diversity is helpful and how much inhibits the creation of a collaborative learning community? Should foreign students be accepted? If so, how many? Should universities be open to adults who want to continue learning, or to older retirees? Clearly, the issue—for whom a country should design its higher education system—is undergoing interrogation, and in some countries, angry debates and decisions in the courts.
2. *What should the colleges and universities teach?* Should the universities teach what the faculty thinks is best or what the marketplace of students wants to

learn? Should states, provinces, and national governments—or others, like religious groups—have a powerful say in what young people need to know? How global should teaching be? Can time be found to learn not only about a student's own heritage and modern conditions but also about the cultures of other nations around the world? Should religious studies and military studies be included in course offerings or graduation requirements? To what extent should science, engineering, and business be available to all students? Which extracurricular activities are complementary to rigorous study or necessary for recreation? Which foreign languages should be offered? Do recent immigrants require special introductory courses?

3. *How should students be taught?* Should there be large lectures or smaller classes and seminars? What role should technology play in today's pedagogy? How extensively should modern technology—film, tapes, the Internet, CD-ROMs, television, videoconferencing, and the like—be used? Should travel, apprenticeships, or work experiences help students learn? How much reading, writing, and speaking should be required?
4. *How long should students study at the level of higher education?* Should undergraduate study be for two, three, or four years? Should asynchronous online courses be available at any time? How long should training in the professions take? How many years of study should be required for a doctoral degree? Should brilliant students be able to progress faster? (In 1999 the nations of Western Europe agreed to the Bologna Declaration, imposing a two-tier Anglo-American structure of higher education—a three or four year bachelor's degree and a one or two-year master's degree—on the entire European community.)
5. *Who should teach?* Should professors be engaged largely full-time or mostly part-time, as in Latin America and China? Should they be mainly scholars and researchers with doctoral degrees or mainly skillful practitioners or former experienced workers or executives? What about those who teach poorly? Should faculties be balanced in gender, politics, or ethnicity? How much should university teachers be aided by auxiliary programs such as Britain's National Institute for Teaching and Learning or Canada's new Collège Boréal, a seven-campus high-tech institution serving 160,000 French speaking students which has weekly three-hour workshops for faculty so they can develop advanced skills in the use of technology and in multimedia presentations (Bates, 2000)? Should universities bring in famous persons as speakers or invite learned or expert practitioners to teach for short periods as scholars-in-residence? Should graduate students teach the basic courses, freeing professors for research, consulting, or advanced instruction?
6. *Where should the teaching take place?* Is it best to locate universities in the major cities or in more pastoral, less diversion-rich settings? Should contemporary universities establish branches in other areas of their region, or in other countries as an increasing number of American institutions have done? Or does a single large, secular, monastery-like campus better produce a learning community? How much learning should take place in homes, offices, or workplaces, either online or in off-campus deliveries?

7. *What facilities should be provided?* Should universities have abundant or sparse accommodations? What about residence halls, faculty housing, playing fields and clubhouses for sports, the latest scientific equipment, small shops for books, CDs and computer paraphernalia, in-house cafes or coffee houses, and a post office? Should faculty have a faculty club or students a student center to gather, or a fitness center?
8. *How much research?* Should most professors be expected to conduct research or engage in high-level scholarly activity, and publish? How much teaching should the best research faculty do? Is it best to carry out research on campus, during special leaves, or at separate research institutes? What are the main objectives of a nation's research (Boyer, 1990)? Should universities collaborate with industry in doing research? If so, to what extent?
9. *Who should pay for higher learning?* Should university costs be borne largely by the national government, or by the nation's provinces, states, or leading cities? Or should the costs be paid largely by the students and their parents (Johnson, 1986; McPherson & Schapiro, 1991; St. John, 2003)? Should corporations and the university's graduates be solicited to contribute? Is it wise to encourage students and faculty to work part-time to help cover expenses? How can institutions become more productive and efficient to reduce the rate of cost increases? Should universities seek to raise money through quasi-commercial enterprises, patents, faculty enterprises, sports events, and the like (Bok, 2003)? For the growing number of private universities in many countries, should governments help support them or their students?
10. *How should universities be governed?* Who should set policy for a country's universities? The central government? The regional or local political and business leaders? Each university? Who within each university should be involved in helping to shape the policies, programs, and practices of the institution? Should outside advisers, trustees, or overseers be appointed to help determine the major policies? What authority should the chancellor, president, or rector have (Ehrenberg, 2004; Hirsch & Weber; 2001; Keller, 2004a)? How can colleges and universities best adapt to the new conditions they face (Clark, 1998; Keller, 1983)?
11. *To whom should universities be accountable?* The national or state government? All those who help support the university? Some licensing or accrediting body? A board of trustees or overseers? The wider world of scholarship, past and present? How detailed and self-critical should the accounts be? What elements should be assessed to provide the accounts? What contributes to quality for an institution?
12. *How much independence should universities have?* Should public universities be free to establish their own programs and hire their professors? Or should the state limit the offerings and help screen the appointment and retention of teachers, as is happening, for instance, in the Arab states (Mazawi, 2004)? How free should professors be to teach what they believe is most important? Should universities be free to engage in politics? In religious discussions? In cultural and economic reform movements? Should the courts be able to proscribe the actions of universities?

Dealing with the Issues

Clearly, there is a plethora of management challenges for the increasingly important world of higher education in every nation. The combination of internal pressures and powerful external forces of change requires that each college and university create a satisfactory process for decision making and a strategy for survival, growth, and enlarging expenses. And the new importance—and rising costs—of higher learning, training, and research for a country's economy, polity, and culture has tugged numerous national governments into establishing fresh national policies for their universities. Also, as more corporate and commercial enterprises depend on research, special knowledge, and advanced training to be successful in the increasingly competitive global economy, the business sector of most nations has become more concerned with the management and content of their country's colleges, universities, and research institutes.

Thus, today's higher education is often engaged in a three-way tussle, with government, business, and academe battling for changes that each believes is vital. To make things more complicated, two other groups have entered the fray. In some countries, such as the United States and several Latin American nations, the students and their parents are becoming more influential in what the universities teach, how they teach, and how much they charge. In other countries, religious leaders are gathering an increasing arsenal of weapons to shape their nation's educational content in a more devout direction. To some extent, the struggle to dominate the operation of universities is an age-old one (Barker, 1930; Grendler, 2002; Marsden, 1984; Rashdall, 1936). But the intensity of the discussions and maneuvers seems to have grown considerably.

National governments and their leaders have chosen to manage their universities in different ways. South Korea, for instance, sensing expanded competition from China, the United States, and Japan, has decided to press its universities to be more research-oriented. Since 1993, the government has invested more than $20 billion, and has prodded South Korean industry to invest even more, sending 24,000 graduate students to study in the United States in order to develop a new cadre of scientific and engineering faculty in "the six T's": biotechnology, environmental technology, information technology, materials technology, nanotechnology, and space technology. The "Brain Korea 21" project is also improving university research facilities, reforming graduate admissions and study in Korea, inviting more foreign scholars to study in Korea, and has designated three state universities to become research powerhouses, while also helping the private colleges, which constitute three quarters of all Korean higher education institutions. The education ministry has even enticed an American Nobel Prize winner, Robert Laughlin, to become president of its Korea Advanced Institute of Science and Technology (KAIST), the nation's equivalent of the world-renowned Massachusetts Institute of Technology (MIT) in the U.S. In Korea, the government has chosen to become the principal new manager of higher education (Brender, 2004), and has a well-defined strategy with priorities.

In Austria, on the other hand, the universities have long been regarded as state agencies, with faculty having lifetime civil service appointments. And the management of the universities, except for teaching and research, has been in the hands of legislators and government bureaucrats, in a kind of dualism. But in recent years a radically new higher education policy has been enacted. As one scholar put it, "Commencing in

2004, Austrian universities will cease to be state agencies and will acquire a kind of corporate autonomy unparalleled in the last 400 years" (Pechar, 2003, p. 109). Earlier, a second layer of vocational colleges, the *Fachhochschulen*, was introduced. Also, in 2002 the government decided that the universities will no longer be agencies of the state; the state will still fund the institutions, but 20% will be based on performance indicators; all faculty will have private contracts; each university will have a governing board of regents and a rector chosen by the governing board, with up to four vice rectors; and each institution will be free to shape its own profile and programs and organize its departments and faculties as it chooses. So, the Austrian government has cut its universities loose to compete, plan their own strategies, and contend for students, professors, and dollars. Management has shifted from state control and mandates to individual university rectors, governing boards, and faculty managers, who will exercise greatly enhanced powers.

Just as many colleges and universities have begun to set their own directions and decide on their own priorities, national governments from Brazil to Bulgaria have begun to re-examine their policies toward higher education. They are prodded by many of the same factors: the need for a better educated workforce, the desire for improved research and teaching, the growing demand from the young for higher education, the government's diminishing ability to pay for the necessities, and a recognition that in-house managers and their faculty are more likely to build useful houses of intellect than government ministers. For many countries, the changes in state policy have meant a significantly enlarged role for the university's leaders and an increased need for them to create an appropriate strategy to steer their academic vessels through more turbulent waters.

New Ingredients for a Strategy

Today, a growing number of academic institutions need to make hard choices. To do so, universities require what one sociologist of education calls "a steering mechanism" (Clark, 1998), a small group of academic executives and concerned faculty who can agree on a competitive strategy to pilot their institution. As the number of public and private institutions increases, the competition among them for students, faculty, and financial support intensifies. As external conditions change, universities must decide how to adjust to them. Strategic decision making has become imperative.

This trend toward stronger central leadership and proactive decision making is not popular with many faculty, who often deprecatingly label it "managerialism" in critical articles and books. They prefer to adhere to the old Humboldtian ideal of heavy faculty control and freedom, with weak administrative guidance and little regard for finances, institutional priorities, and major renovations. But outside stakeholders insist that organized anarchy and programmatic sprawl are no longer appropriate for higher education, especially given the universities' new centrality in the knowledge-based society and the escalating costs of academic life.

If colleges and universities now need more focus, efficiency, and responsiveness to the rapidly changing environment, the question arises: Who should decide on the strategy? The prevailing opinion is that the efforts to make difficult choices and set bold, new

directions by consensus among the entire faculty, key staff persons, and the managers have been fruitless and time-squandering. However, there is almost equal disdain for corporate-like designs from the top by a strong-willed president, rector, chancellor, or governing board. Such designs have proven to be too idiosyncratic and difficult to implement. So contemporary strategy making and execution seems to demand more determined but skillful academic leaders who can solicit faculty contributions and win an acceptable degree of concurrence. Universities, like hospitals and high-technology firms, are entities in which the "workers" are highly talented, expert, and professional colleagues. Managing a university is largely a matter of managing intellectual talent and expertise.

This recognition has caused more institutions to change the requirements for their presidents. The appointment of politically connected, locally popular, or intellectually notable persons is yielding to a wider search for diplomatic change agents who are financially astute. For examples, America's Cornell University chose a British geologist as president, and Roanoke College in Virginia has selected a German-born woman with a Ph.D. in environmental economics from the University of Göttingen as its new president. In Great Britain, Cambridge University named a former provost at Yale to be its vice chancellor (the chief position); and Oxford University has selected a former engineer and businessman from New Zealand's Auckland University, where he engineered numerous structural changes in only four years as its vice chancellor.

In addition to improved central leadership, numerous universities are deciding that they need to engage in strategic planning, an activity that began in the early 1980s in countries such as the United States and Great Britain (Keller, 1983). Strategic policymaking was originally prompted by a multitude of developments that seemed to require decisions about future courses of action that were difficult to reach under the existing system of heavy faculty-led governance. Colleges and universities were facing increased financial strictures and new and increased competitive threats from the expanding number of other higher education institutions, many of which were scraping to climb in enrollment, quality, and prestige. Universities also needed to respond to the increased diversity of students, to demands by working adults for continuing higher education, to the rapid advance of computers and other technologies, to recent court decisions that were challenging some traditional campus procedures, and to new legislation—such as that of the United States forbidding automatic retirements at age 65. Government leaders Margaret Thatcher and Ronald Reagan pressed universities to become more productive in learning and research, less political, and more financially independent. Universities were expected to act and respond as institutions, not as separate collections of academic departments or schools, or as individual scholars.

What is strategic planning? It is a form of planning and priority action steps initiated to counteract threats (e.g., to a military force, a business firm, a university, a nation, etc.). The strategy positions an entity to protect itself or overcome those elements that are threatening. It is also a core or chain of strategic moves that allows a group or organization to seize new opportunities, to win a victory, gain market share, overcome discrimination, or achieve new stature. In recent years, many colleges and universities have either felt threatened or seen new opportunities for growth in the changes taking place in the higher education landscape. Or they were newly established and needed a

strategy to decide how to structure themselves, who to serve, what to teach, and how to finance their operations among the existing institutions.

Resistance and Experiments

However, colleges and universities have for centuries been largely faculty-driven collegial associations pursuing their own scholarly interests, unused to thinking about how their entire organization can and should respond to major societal shifts and needs, or how it might shrewdly maneuver the organization to a new and more prominent position in the constellation of higher education. So, stronger management and competitive strategies did not graft easily. Indeed, there is still considerable Luddite grumbling at numerous campuses about the departure from traditional norms. However, the notion of the 1970s that universities are, and are likely to always be "organized anarchies," and the cynical view that strong presidents and strategic actions are inevitably doomed to fail (Cohen & March, 1974, esp. pp. 203–206), is being superseded by other notions and views. The older ideas about academic governance and management are also being refuted by an increasing number of successful college and university transformations (Clark, 1998; Graham & Diamond, 1997; Keller, 2004b).

To introduce strategy formulations, colleges and universities had to devise new processes for joint governance and management so that both the old tradition of faculty direction setting and the introduction of stronger management could be combined. There were no models to emulate, so institutions have had to experiment and sense their way. Some institutions have leaned heavily on maximum faculty input and wide participatory involvement, which numerous proponents of continued faculty autonomy advised (Bensimon & Neumann, 1993; Birnbaum 1991; Duke, 2002).

Others installed stronger management teams to tug the professors into collective decision making about their university's future emphases, cheered on by advocates of stronger leadership and clearer purposes (Duderstadt, 2004; Fisher & Koch, 1996). Other scholars argued that the process of strategic design depends on the particular "culture" of the college or university, no two of which have similar histories and arrangements of decision making (Eckel & Kezar, 2003; Kuh & Whitt, 1988); thus, some universities have employed novel processes to select the future priorities that work best for their institutions.

Also, the process for a university's strategic planning is complicated by the faculty's nostalgia and reluctance to accept the resulting effects of their advocacy for more higher learning. As Oliver Fulton, one of the most astute observers of the professoriate, has noted that "English academics could almost be described as hankering after a long-lost collegial culture and style . . . British academics have now adopted the *principle* of mass higher education without faculty accepting or understanding the consequences that must surely follow" (Fulton, 1998, p. 193).

The substance of strategic planning and enactment is also undergoing renovation. The glacial shifts affecting society are prompting more universities to pay attention to conditions outside higher education such as demographics, technology, international developments, and cultural and political values. Strategists now engage in more reconnaissance and environmental scanning. A university's strategy formulation must increasingly

consider other institutions in its ecosystem: local and national governments, important business firms, the media, its graduates and supporters, powerful interest groups, and its student markets. With modern transportation, the student markets have broadened. There are currently an estimated two million students who study outside their home countries, and international competition for these students has sharpened.

Financial worries are enlarging, so attracting monetary support from corporations, foundations, and affluent citizens has become a major consideration for colleges, universities, and research institutes everywhere, compelling everyone—rectors, deans, chairpersons of a faculty or department, and individual scholars—to become mendicants. And full-time, lifetime positions are being reserved for only a minority of the finest professors. In the United States, where full-time, tenure-track faculty appointments have been the norm, only one-fourth of all new faculty hires in 2001 were full-time positions with an opportunity for tenure (Finkelstein, 2003). Strategies increasingly have to be highly cost-conscious and revenue-seeking.

Given the pace of change, strategic decision making and implementation have become swifter; and given the growing number of discontinuities in modern times, the strategies should be more flexible and open to alteration (Keller, 1997). Such rapidly derived new strategies or modifications of an existing strategic set of actions call for better justifications and communication with all the persons affected or curious; and they should be abundant and honest.

Another recent element in strategic thinking has been a greater awareness of what a noted business strategist calls "clustering" (Porter, 1990). That is, no company or university can move toward greater excellence alone. A first-rate academic institution requires good schools to prepare its students; nearby museums, art and computer supply stores; highly educated persons close by who can assist as part-time instructors in (for example) foreign languages, music, or statistical methods; musical events; banks; a travel agency; construction workers and other skilled tradespeople; used bookstores; cafes; decent housing; and other complementary stores, facilities, and institutions. Such a cluster of supporting elements stimulates interest in advanced learning and aids in productivity and competitive advantage. Strategic thinking therefore should concern itself with more than a university's own programs, campus facilities, and personnel. If it is not located in an area with such amenities, the university should plan to facilitate the development of such a network of facilities nearby that supports intellectual, cultural, and personal growth alongside its classroom explorations.

Finally, universities may need to look beyond strategic actions, which are primarily directed at competition against perceived rivals, and imagine and create structural changes in the way they conduct their operations. Technological innovations are forcing structural changes in pedagogy. The spread of mass instead of elite higher education is bringing a more engaged and practical kind of higher learning and creating new vestibules to college for immigrants or the inadequately prepared. Short institutes instead of traditional semesters are being introduced for certain areas of learning or for new adult constituencies of learners. I call this the "steam kettle effect," whereby numerous quantitative changes (or increasing heat) result in a structural shift in the quality and arrangements of a university (water turns to steam). But a lesson strategists have learned is to avoid too huge a change or structural modification at one time.

Incremental steps within the framework of a strategic program are usually easier to digest and carry out (Weick, 1984).

Digging Deeper

What is likely to be more successful in meeting the new challenges and devising strategies to cope with them is a deeper understanding of the historical moment. A university's members can easily mistake attempts at appropriate adaptive change as an overthrow of tradition, a power grab by administrators, an expanding disrespect of faculty voice, a foolish attempt to predict the future, a dangerous increase in bureaucracy, a pandering to student demands, or an attempt to lessen the hard-won freedom of academic inquiry. Misdirected blame and allegations of sinister reforms need to be replaced by a more profound analysis of the new centrality of knowledge and the universities that dispense knowledge and of the novel elements and glacial shifts of 21st century societies. Numerous universities and governments are struggling to discern the new currents and find better ways to deal with them, while clinging to what is essential for free and higher learning. The challenges are many and real. The strategies need to be knowing and shrewd.

References

Altbach, P. G. (ed.). (2002). *The decline of the guru: The academic profession in developing and middle-income countries.* Chestnut Hill, MA: Center for International Education.

Amaral, A., Meek, V. L., & Larsen, I. (Eds.). (2003). *The higher education managerial revolution?* Dordrecht, The Netherlands: Kluwer Academic Publishers.

Barker, E. (1930). *Church, state, and education.* London: Menthuen; reprint, Ann Arbor, MI: Ann Arbor Paperbacks, 1957.

Bates, A. W. (2000). *Managing technological change: Strategies for college and university leaders.* San Francisco: Jossey-Bass Publishers.

Bell, D. (1999). Foreword to the special anniversary edition of *The coming of post-industrial society* (1973). New York: Basic Books.

Bensimon, E., & Neumann, A. (1993). *Redesigning collegiate leadership.* Baltimore: Johns Hopkins University Press.

Birnbaum, R. (Ed.). (1991). *Sharing governance: The role of senates and joint committees in academic decision making*. San Francisco: Jossey-Bass.

Bok, D. (2003). *Universities in the marketplace: The commercialization of higher education.* Princeton, NJ: Princeton University Press.

Boyer, E. (1990). *Scholarship reconsidered: Priorities of the professoriate.* Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.

Bowen, H. (1977). *Investments in learning: The individual and social value of American higher education.* San Francisco: Jossey-Bass Publishers.

Brender, A. (2004). Asia's new high-tech tiger. *The Chronicle of Higher Education, 50*(July 23), A34–A35.

Clark, B. R. (1998). *Creating entrepreneurial universities: Organizational pathways of transformation.* Oxford: Pergamon.

Cohen, M., & March, J. (1974). *Leadership and ambiguity*. New York: McGraw-Hill.

Duderstadt, J. (2004). Governing in the 21st century: A view from the bridge. In W. Tierney (Ed.), *Competing conceptions of academic governance* (pp. 137–157). Baltimore: Johns Hopkins University Press.

Duke, C. (2002). *Managing the learning university*. Buckingham: The Society for Research into Higher Education & Open University Press.

Eckel, P., & Kezar, A. (2003). *Taking the reins: Institutional transformation in higher education.* Westport, CT: American Council on Education and Praeger.

Ehrenberg, R. (Ed.). 2004. *Governing academia.* Ithaca, NY: Cornell University Press.

Finkelstein, M. (2003). The morphing of the American academic profession. *Liberal Education, 89*(Fall), 6–14.

Fisher, J., & Koch, J. (1996*). Presidential leadership: Making a difference.* Phoenix: American Council on Education and Oryx Press.

Frank, R., & Cook, P. (1996). *The winner-take all society.* New York: Penguin Books.

Fulton, O. (1998). Unity or fragmentation, convergence or diversity: The academic profession in comparative perspective. In W. Bowen & H. Shapiro (Eds.), *Universities and their leadership.* Princeton: Princeton University Press.

Graham, H. D., & Diamond, N. (1997). *The rise of American research universities: Elites and challengers in the post war era* (pp. 173–196). Baltimore: Johns Hopkins University Press.

Grendler, P. (2002). *The universities of the Italian renaissance.* Baltimore: Johns Hopkins University Press.

Hirsch, W., & Weber, L. (2001). *Governance in higher education: The university in flux.* London: Economica.

Huntington, S. (2004). *Who are we? The challenge to America's national identity.* New York: Simon and Schuster.

Johnson, D. B. (1986*). Sharing the cost of higher education: Student financial assistance in the United Kingdom, the Federal Republic of Germany, France, Sweden, and the United States.* New York: The College Entrance Examination Board.

Keller, G. (1983). *Academic strategy*: *The management revolution in American higher education*. Baltimore: Johns Hopkins University Press.

Keller, G. (1997). Examining what works in strategic planning. In M. Peterson, D. Dill, & L. Mets (Eds.), *Planning and managing for a changing environment* (pp. 158–170). San Francisco: Jossey-Bass Publishers.

Keller, G. (2003). Review of *The uses of the university*, by Clark Kerr (5th edition). *Journal of Higher Education, 74*(March–April), 231–236.

Keller, G. (2004a). A growing quaintness: Traditional governance in the markedly new realm of U.S. higher education. In W. G. Tierney (ed.), *Competing conceptions of academic governance* (pp. 158–176). Baltimore: Johns Hopkins University Press.

Keller, G. (2004b). *Transforming a college*. Baltimore: Johns Hopkins University Press.

Kerr, C. (1964). *The uses of the university*. Cambridge: Harvard University Press.

Kuh, G., & Whitt, E. (1998). *The invisible tapestry: Culture in American colleges and universities.* Washington, DC: Association for the Study of Higher Education.

Marsden, G. (1984). *The soul of the American university*. New York: Oxford University Press.

Mazawi, A. (2004). Wars, geopolitics, and university governance in the Arab states. *International Higher Education, 36*(Summer), 7–9.

McPherson, M., & Schapiro, M. O. (1991). *Keeping college affordable: Government and educational opportunity.* Washington, DC: The Brookings Institution.

Pechar, H. (2003). In search of a new profession: Transformation of academic management in Austrian universities. In A. Amaral, V. L. Meek, & I. Larsen (Eds.), *The higher education managerial revolution?* (pp. 109–129). Dordrecht, The Netherlands: Kluwer Academic Publishers.

Porter, M. (1990). *The competitive advantage of nations*. New York: Free Press.

Powell, W., & Owen-Smith, J. (2002). The new world of knowledge production in the life sciences. In S. Brint (Ed.), *The future of intellect* (pp. 107–130). Stanford, CA: Stanford University Press.

Rashdall, H. (1936). *The universities of Europe in the middle ages*. Oxford: The Clarendon Press. (Edited by F. M. Powicke, & A. B. Emden in 3 vols. in 1987).

Schultz, T. (1981). *Investing in people: The economics of population quality*. Berkeley, CA: University of California Press.

Slaughter, S., & Rhoades, G. (2004). *Academic capitalism and the new economy.* Baltimore: Johns Hopkins University Press.
Sowell, T. (2004). *Affirmative action around the world: An empirical study.* New Haven, CT: Yale University Press.
St. John, E. (2003). *Refinancing the college dream.* Baltimore: Johns Hopkins University Press.
Weick, K. (1984). Small wins: Redefining the scale of social problems. *American Psychologist, 39*(1), 40–43.