

CHAPTER

Fire, Ready, Aim!

University Decision-Making During an Era of Rapid Change

James J. Duderstadt

INTRODUCTION

“There is no more delicate matter to take in hand, nor more dangerous to conduct, nor more doubtful of success, than to step up as a leader in the introduction of change. For he who innovates will have for his enemies all those who are well off under the existing order of things, and only lukewarm support in those who might be better off under the new.”

Niccolo Machiavelli, *The Prince*

The contemporary university is one of the most complex social institutions of our times. The importance of this institution to our society, its myriad activities and stakeholders, and the changing nature of the society it serves, all suggest the importance of experienced, responsible, and enlightened university leadership, governance, and management. American universities have long embraced the concept of *shared governance* involving public oversight and trusteeship, collegial faculty governance, and experienced but generally short-term administrative and usually amateur leadership. While this system of shared governance engages a variety of stakeholders in the decisions concerning the university, it does so with an awkwardness that tends to inhibit change and responsiveness.

The politics swirling about governing boards, particularly in public universities, not only distracts them from their important responsibilities and stewardship, but also discourages many of our most experienced, talented, and ded-

icated citizens from serving on these bodies. The increasing intrusion of state and federal government in the affairs of the university, in the name of performance and public accountability, but all too frequently driven by political opportunism can trample on academic values and micromanage many institutions into mediocrity. Furthermore, while the public expects its institutions to be managed effectively and efficiently, it weaves a web of constraints through public laws that makes this difficult indeed. Sunshine laws demand that even the most sensitive business of the university must be conducted in the public arena, including the search for a president. State and federal laws entangle all aspects of the university in rules and regulations, from student admissions to financial accounting to environmental impact.

Efforts to include the faculty in shared governance also encounter obstacles. To be sure, faculty governance continues to be both effective and essential for academic matters such as faculty hiring and tenure evaluation. But it is increasingly difficult to achieve true faculty participation in broader university matters such as finance, capital facilities, or external relations. The faculty traditions of debate and consensus building, along with the highly compartmentalized organization of academic departments and disciplines, seem incompatible with the breadth and rapid pace required in today's high momentum university-wide decision environment. Most difficult and critical of all are those decisions that concern change in the university.

A rapidly evolving world has demanded profound and permanent change in most, if not all, social institutions. Corporations have undergone restructuring and reengineering. Governments and other public bodies are being overhauled, streamlined, and made more responsive. Individuals are increasingly facing a future of impermanence in their employment, in their homes, and even in their families. The nation-state itself has become less relevant and permanent in an ever more interconnected world.

Yet, while most colleges and universities have grappled with change at the pragmatic level, few have contemplated the more fundamental transformations in mission and character that may be required by our changing world. For the most part, our institutions still have not grappled with the extraordinary implications of an age of knowledge, a society of learning, which will likely be our future. Most institutions continue to approach change by reacting to the necessities and opportunities of the moment rather than adopting a more strategic approach to their future.

The glacial pace of university decision making and academic change simply may not be sufficiently responsive to allow the university to control its own destiny. There is a risk that the tidal wave of societal forces could sweep over the academy, both transforming higher education in unforeseen and unacceptable ways while creating new institutional forms to challenge both our experience and our concept of the university.

This time of great change, of shifting paradigms, provides the appropriate context within which to consider the decision process of the university. Like other social institutions, the university needs strong leadership, particularly during a time of great change, challenge, and opportunity. In this paper, we will explore the specific topic of decision making in the university—the issues, the players, the process, and the many challenges—within the broader context of university leadership, governance, and management.

THE ISSUES

There is a seemingly endless array of decisions bubbling up, swirling through and about the contemporary university. At the core are those *academic decisions* that affect most directly the academic process: Whom do we select as students (admissions)? Who should teach them (faculty hiring, promotion, and tenure)? What should they be taught (curriculum and degree requirements)? How should they be taught (pedagogy)? There is a long-standing tradition that the decisions most directly affecting the activities of teaching and scholarship are best left to the academy itself. Yet in many institutions, particularly those characterized by overly intrusive government controls or adversarial labor-management relationships between faculty and administration, this academic autonomy can be compromised.

Since most universities are large, complex organizations, enrolling tens of thousands of students, employing thousands of faculty and staff, and involving the expenditures of hundreds of millions or even billions of dollars, there is also an array of important *administrative decisions*. Where do we get the funds necessary to support our programs and how do we spend them (resource acquisition and allocation, budgets)? How do we build and maintain the campus environment necessary for quality teaching and research (capital facilities)? How do we honor our responsibilities and accountability to broader society (financial audits, compliance with state and federal regulations)? How do we manage our relationships with the multiple stakeholders of the university (public relations, government relations, and development)?

In addition to the ongoing academic and administrative decisions necessary to keep the university moving ahead, there are always an array of unforeseen events—challenges or opportunities—that require immediate attention and rapid decisions. For example, when student activism explodes on the campus, an athletic violation is uncovered, or the university is attacked by politicians or the media, *crisis management* becomes critical. While the handling of such matters requires the time and attention of many senior university administrators, from deans to executive officers and governing boards, all too frequently, crisis management becomes the responsibility of the university pres-

ident. At any meeting of university presidents, the frequent disruption of pagers, faxes, or phone calls provides evidence of just how tightly contemporary university leaders are coupled to the issues of the day. A carefully developed strategy is necessary for handling such crises, both to prevent universities from lapsing into a reactive mode, as well as to take advantage of the occasional possibility of transforming a crisis into an opportunity.

More generally, universities need to develop a more strategic context for decision making during a period of rapid change. Yet *strategic planning* in higher education has had mixed success, particularly in institutions of the size, breadth, and complexity of the research university. Planning exercises are all too frequently attacked by faculty and staff alike as bureaucratic. In fact, many universities have traditionally focused planning efforts on the gathering of data for supporting the routine decision process rather than providing a context for longer-term considerations. As a result, all too often universities tend to react to—or even resist—external pressures and opportunities rather than take strong, decisive actions to determine and pursue their own goals. They frequently become preoccupied with process rather than objectives, with “how” rather than “what.”

The final class of decisions consists of those involving more fundamental or even radical transformations of the university. The major paradigm shifts that will likely characterize higher education in the years ahead will require a more strategic approach to *institutional transformation*, capable of staying the course until the desired changes have occurred. Many institutions already have embarked on transformation agendas similar to those characterizing the private sector (Gumport, P. J. & Pusser, B., 1998). Some even use similar language, as they refer to their efforts to “transform” “restructure” or even “reinvent” their institutions. But, herein lies one of the great challenges to universities, since our various missions and our diverse array of constituencies give us a complexity far beyond that encountered in business or government. For universities, the process of institutional transformation is necessarily more complex and possibly more hazardous. It must be approached strategically rather than reactively, with a deep understanding of the role and character of our institutions, their important traditions and values from the past, and a clear and compelling vision for their future.

THE PLAYERS

The decision process in a university interacts with a diverse array of internal and external constituencies that depend on the university in one way or another, just as our educational institutions depend upon each of them. Internally, the key players include students, faculty, staff, and governing boards.

Externally, the stakeholders include parents, the public and their elected leaders in government, business and labor, industry and foundations, the press and other media, and the full range of other public and private institutions in our society. The management of the complex roles and relationships between the university and these many constituencies is one of the most important challenges facing higher education, particularly when these relationships are rapidly changing.

The Internal Stakeholders: The contemporary university is much like a city, comprised of a sometimes bewildering array of neighborhoods and communities. To the faculty, it has almost a Balkan structure, divided up into highly specialized academic units, frequently with little interaction even with disciplinary neighbors, much less with the rest of the campus. To the student body, the university is an exciting, confusing, and sometimes frustrating complexity of challenges and opportunities, rules and regulations, drawing them together only in cosmic events such as football games or campus protests. To the staff, the university has a more subtle character, with the parts woven together by policies, procedures, and practices evolving over decades, all too frequently invisible to, or ignored by, the students and faculty. In some ways, the modern university is so complex, so multifaceted, that it seems that the closer one is to it, the more intimately one is involved with its activities, the harder it is to perceive and understand its entirety.

The Students: Of course, the key stakeholders in the university should be its students. These are our principal clients, customers, and increasingly, consumers of our educational services. Although students pressed in the 1960s for more direct involvement in university decisions ranging from student life to presidential selection, today's students seem more detached. Many students sometimes feel that they are only tourists visiting the university, traveling through the many adventures—or hurdles—of their university education, entering as raw material and being stamped and molded into graduates during their brief experience on campus. Their primary concerns appear to be the cost of their education and their employability following graduation, not in participating in the myriad decisions affecting their education and their university.

The Faculty: Probably the most important internal constituency of a university is its faculty, since the quality and achievements of this body, more than any other factor, determine the quality of the institution. From the perspective of the academy, any great university should be “run by the faculty for the faculty” (an objective that would be contested by students or elements of broader society, of course). The involvement of faculty in the governance of

the modern university in a meaningful and effective fashion is both an important goal and a major challenge. While the faculty plays the key role in the academic matters of most universities, its ability to become directly involved in the detailed management of the institution has long since disappeared as issues have become more complex and the time-scale of the decision process has shortened. Little wonder that the faculty frequently feels powerless, buffeted by forces only dimly understood, and thwarted by bureaucracy at every turn.

The Staff: Although frequently invisible to faculty and students, the operation of the university requires a large, professional, and dedicated staff. From accountants to receptionists, investment officers to janitors, computer programmers to nurses, the contemporary university would rapidly grind to a halt without the efforts of thousands of staff members who perform critical services in support of its academic mission. While many faculty members view their appointments at a particular institution as simply another step up the academic ladder, many staff members spend their entire career at the same university. As a result, they frequently exhibit not only a greater institutional loyalty than faculty or students, but they also sustain the continuity, the corporate memory, and the momentum of the university. Ironically, they also sometimes develop a far broader view of the university, its array of activities, and even its history than do the relative short-timers among the faculty and the students. Needless to say, their understanding and support is essential in university efforts to respond to change. Although staff members make many of the routine decisions affecting academic life, from admissions to counseling to financial aid, they frequently view themselves as only a small cog in a gigantic machine, working long and hard for an institution that sometimes does not even appear to recognize or appreciate their existence or loyalty.

Governing Boards: American higher education is unique in its use of lay boards to govern its colleges and universities. In the case of private institutions, governing boards are typically elected by alumni of the institution or self-perpetuated by the board itself. In public institutions, board members are generally either appointed by governors or elected in public elections, usually with highly political overtones. While the primary responsibility of such lay boards is at the policy level, they also frequently find themselves drawn into detailed management decisions. Boards are expected first and foremost to act as trustees, responsible for the welfare of their institution. But, in many public institutions, politically selected board members tend to view themselves more as governors or legislators rather than trustees, responsible to particular political constituencies rather than simply for the

welfare of their institution. Instead of buffering the university from various political forces, they sometimes bring their politics into the boardroom and focus it on the activities of the institution (National Commission on the Academic Presidency, 1996).

The External Constituencies: The contemporary university is accountable to many constituencies: students and parents, clients of university services such as patients of our hospitals and spectators at our athletic events; federal, state, and local governments; business and industry; the public and the media. The university is not only accountable to present stakeholders, but it also must accept a stewardship to the past and a responsibility for future stakeholders. In many ways, the increasing complexity and diversity of the modern university and its many missions reflect the character of American and global society. Yet this diversity—indeed, incompatibility—of the values, needs, and expectations of the various constituencies served by higher education poses a major challenge.

Government: Compared with higher education in other nations, American higher education has been relatively free from government interference. Yet, while we have never had a national ministry of education, the impact of the state and federal government on higher education in America has been profound. With federal support, however, has also come federal intrusion. Universities have been forced to build large administrative bureaucracies to manage their interactions with those in Washington. From occupational safety to control of hazardous substances to health-care regulations to accounting requirements to campus crime reporting, federal regulations reach into every part of the university. Furthermore, universities tend to be whipsawed by the unpredictable changes in Washington's policies with regard to regulation, taxation, and funding, shifting with the political winds each election cycle.

Despite this strong federal role, it has been left to the states and the private sector to provide the majority of the resources necessary to support and sustain the contemporary university. The relationship between public universities and state government is a particularly complex one, and it varies significantly from state to state. Some universities are structurally organized as components of state government, subject to the same hiring and business practices as other state agencies. Others possess a certain autonomy from state government through constitutional or legislative provision. All are influenced by the power of the public purse—by the strings attached to appropriations from state tax revenues.

Local Communities: The relationship between a university and its surrounding community is usually a complex one, particularly in cities dominated by

major universities. On the plus side is the fact that the university provides the community with an extraordinary quality of life and economic stability. It stimulates strong primary and secondary schools, provides rich cultural opportunities, and generates an exciting and cosmopolitan community. But there are also drawbacks, since the presence of such large, nonprofit institutions takes a great amount of property off the tax rolls. The impact of these universities, whether it is through parking, crowds, or student behavior, can create inevitable tensions between town and gown.

The Public: The public's perception of higher education is ever changing. Public opinion surveys reveal that, at the most general level, the public strongly supports high-quality education in our colleges and universities (Immerwahr, J., 1998). But, when we probe public attitudes more deeply, we find many concerns, about cost, improper student behavior (alcohol, drugs, political activism), and intercollegiate athletics. Perhaps more significantly, there has been an erosion in the priority that the public places on higher education relative to other social needs. This is particularly true on the part of our elected officials, who generally rank health care, welfare, K-12 education, and even prison systems higher on the funding priority list than higher education. This parallels a growing spirit of cynicism toward higher education and its efforts to achieve excellence.

The Press: In today's world, where all societal institutions have come under attack by the media, universities prove to be no exception. Part of this is no doubt due to an increasingly adversarial approach taken by journalists toward all of society, embracing a certain distrust of everything and everyone as a necessary component of investigative journalism. Partly to blame is the arrogance of many members of the academy, university leaders among them, in assuming that the university is somehow less accountable to society than other social institutions. And it is in part due to the increasingly market-driven nature of contemporary journalism as it merges with, or is acquired by, the entertainment industry and trades off journalistic values and integrity for market share and quarterly earnings statements.

The issue of sunshine laws is a particular concern for public institutions. Although laws requiring open meetings and freedom of information were created to ensure the accountability of government, they have been extended and broadened through court decisions to apply to constrain the operation of all public institutions including public universities. They prevent governing boards from discussing sensitive policy matters. They allow the press to go on fishing expeditions through all manner of university documents. They have also been used to hamstring the searches for senior leadership, such as university presidents.

A Growing Tension: Higher education today faces greater pressure than ever to establish its relevance to its various stakeholders in our society. The diversity—indeed, incompatibility—of the values, needs, and expectations of the various constituencies served by higher education poses one of its most serious challenges. The future of our colleges and universities will be determined in many cases by their success in linking together the many concerns and values of these diverse groups, even while the relationships with these constituencies continue to change.

THE PROCESS

Throughout its long history, the American university has been granted special governance status because of the unique character of the academic process. The university has been able to sustain an understanding that its activities of teaching and scholarship could best be judged and guided by the academy itself, rather than by external bodies such as governments or the public opinion that govern other social institutions. Key in this effort was the evolution of a tradition of shared governance involving several major constituencies: a governing board of lay trustees or regents as both stewards for the institution and protectors of broader public interest, the faculty as those most knowledgeable about teaching and scholarship, and the university administration as leaders and managers of the institution.

Institutional Autonomy: The relationship between the university and the broader society it serves is a particularly delicate one, because the university has a role not only as a servant to society but as a critic as well. It serves not merely to create and disseminate knowledge, but to assume an independent questioning stance toward accepted judgments and values. To facilitate this role as critic, universities have been allowed a certain autonomy as a part of a social contract between the university and society. To this end, universities have enjoyed three important traditions: academic freedom, tenure, and institutional autonomy (Shapiro, H. T., 1987). Although there is a considerable degree of diversity in practice—as well as a good deal of myth—there is general agreement about the importance of these traditions. No matter how formal the autonomy of a public university, whether constitutional or statutory, many factors can lead to the erosion of its independence (MacTaggart, T. J., 1997). In practice, government, through its legislative, executive, and judicial activities, can easily intrude on university matters. The autonomy of the university, whether constitutional or statutory, depends both on the attitudes of the public and the degree to which it serves a civic purpose. If the public or its voices in the media lose confidence in the university, in its accountability, its costs, or its quality, it will ask “autonomy for

what purpose and for whom.” In the long run, institutional autonomy rests primarily on the amount of trust that exists between state government and institutions of higher education.

The Influence of Governments: The federal government plays a significant role in shaping the directions of higher education. For example, the federal land-grant acts of the nineteenth century created many of our great public universities. The GI Bill following World War II broadened educational opportunity and expanded the number and size of educational institutions. Federal funding for campus-based research in support of national security and health care shaped the contemporary research university. Federal programs for key professional programs such as medicine, public health, and engineering have shaped our curriculum. Federal financial aid programs involving grants, loans, and work-study have provided the opportunity of a college education to millions of students from lower- and middleclass families. And federal tax policies have not only provided colleges and universities with tax-exempt status, but they have also provided strong incentives for private giving.

State governments have historically been assigned the primary role for supporting and governing public higher education in the United States. At the most basic level, the principles embodied in the Constitution make matters of education an explicit state assignment. Public colleges and universities are largely creatures of the state. Through both constitution and statute, the states have distributed the responsibility and authority for the governance of public universities through a hierarchy of governing bodies: the legislature, state executive branch agencies or coordinating boards, institutional governing boards, and institutional executive administrations. In recent years there has been a trend toward expanding the role of state governments in shaping the course of higher education, thereby lessening the institutional autonomy of universities. Few outside of this hierarchy are brought into the formal decision process, although they may have strong interests at stake, for example, students, patients of university health clinics, corporate clients.

As state entities, public universities must usually comply with the rules and regulations governing other state agencies. These vary widely, from contracting to personnel requirements to purchasing to even limitations on out-of-state travel. Although regulation is probably the most ubiquitous of the policy tools employed by state government to influence institutional behavior, policies governing the allocation and use of state funds are probably ultimately the most powerful, and these decisions are generally controlled by governors and legislatures.

Governing Boards: The lay board has been the distinctive American device for “public” authority in connection with universities (Houle, C. O., 1989).

The function of the lay board in American higher education is simple, at least in theory. The governing board has final authority for key policy decisions and accepts both fiduciary and legal responsibility for the welfare of the institution. But because of its very limited expertise, it is expected to delegate the responsibility for policy development, academic programs, and administration to professionals with the necessary training and experience. For example, essentially all governing boards share their authority over academic matters with the faculty, generally awarding to the academy the control of academic programs. Furthermore, the day-to-day management of the university is delegated to the president and the administration of the university, since these provide the necessary experience in academic, financial, and legal matters.

While most governing boards of private institutions do approach their roles in this spirit, governing boards of public institutions frequently fall victim to politics, focusing instead on narrow forms of accountability to the particular political constituencies represented by their various members. Political considerations are frequently a major factor in appointing or electing board members and often an important element in their actions and decisions (Ingram, R. T., 1998; Trow, M., 1997). Many public board members view themselves as “governors” rather than as “trustees” of their institutions and are more concerned with their personal agendas or accountability to a particular political constituency than with the welfare of their university. They are further constrained in meeting their responsibilities by sunshine laws in many states that require that their meetings, their deliberations, and their written materials all be open and available to the public, a situation that makes candid discussion and considered deliberation all but impossible.

Faculty Governance: There has long been an acceptance of the premise that faculty members should govern themselves in academic matters, making key decisions about what should be taught, whom should be hired, and other key academic issues. There are actually two levels of faculty governance in the contemporary university. The heart of the governance of the academic mission of the university is actually not at the level of the governing board or the administration, but rather at the level of the academic unit, typically at the department or school level. At the level of the individual academic unit, a department or school, the faculty generally has a very significant role in most of the key decisions concerning who gets hired, who gets promoted, what gets taught, how funds are allocated and spent, and so on. The mechanism for faculty governance at this level usually involves committee structures, for example, promotion committees, curriculum committees, and executive committees. Although the administrative leader, a department chair or dean, may have considerable authority, he or she is generally tolerated and sustained only with the support of the faculty leaders within the unit.

The second level of faculty governance occurs at the university level and usually involves an elected body of faculty representatives, such as an academic senate, that serves to debate institution-wide issues and advise the university administration. Faculties have long cherished and defended the tradition of being consulted in other institutional matters, of “sharing governance” with the governing board and university officers. In sharp contrast to faculty governance at the unit level that has considerable power and influence, the university-wide faculty governance bodies are generally advisory on most issues, without true power. Although they may be consulted on important university matters, they rarely have any executive role. Most key decisions are made by the university administration or governing board.

Beyond the fact that it is frequently difficult to get faculty commitment to—or even interest in—broad institutional goals that are not necessarily congruent with personal goals, there is an even more important characteristic that prevents true faculty governance at the institution level. Authority is always accompanied by responsibility and accountability. Deans and presidents can be fired. Trustees can be sued or forced off governing boards. Yet faculty members, through important academic traditions such as academic freedom and tenure, are largely insulated from the consequences of their debates and recommendations. It would be difficult if not impossible, either legally or operationally, to ascribe to faculty bodies the necessary level of accountability that would have to accompany executive authority.

Many universities follow the spirit of shared governance by selecting their senior leadership, their deans, directors, and executive officers, from the faculty ranks. These academic administrators can be held accountable for their decisions and their actions, although, of course, even if they should be removed from their administrative assignments their positions on the faculty are still protected. However, even for the most distinguished faculty members, the moment they are selected for administrative roles, they immediately become suspect to their faculty colleagues, contaminated by these new assignments.

The Academic Administration: Universities, like other institutions, depend increasingly on strong leadership and effective management if they are to face the challenges and opportunities posed by a changing world. Yet in many—if not most—universities, the concept of management is held in very low regard, particularly by the faculty. Of course, most among the faculty are offended by any suggestion that the university can be compared to other institutional forms such as corporations and governments. Pity the poor administrator who mistakenly refers to the university as a corporation, or to its students or the public at large as customers, or to its faculty as staff. The academy takes great pride in functioning as a creative anarchy. Indeed, the faculty generally looks

down upon those who get mired in the swamp of academic administration. Even their own colleagues tapped for leadership roles become somehow tainted, unfit, no longer a part of the true academy, no matter how distinguished their earlier academic accomplishments, once they succumb to the pressures of administration.

Yet all large, complex organizations require not only leadership at the helm, but also effective management at each level where important decisions occur. All presidents, provosts, and deans have heard the suggestion that any one on the faculty, chosen at random, could be an adequate administrator. After all, if you can be a strong teacher and scholar, these skills should be easily transferable to other areas such as administration. Yet, in reality, talent in management is probably as rare a human attribute as the ability to contribute original scholarship. And there is little reason to suspect that talent in one characteristic implies the presence of talent in the other.

One of the great myths concerning higher education in America, particularly appealing to faculty members and trustees alike, is that university administrations are bloated and excessive. To be sure, organizations in business, industry, and government are finding it important to flatten administrative structures by removing layers of management. Yet most universities have rather lean management organizations, inherited from earlier times when academic life was far simpler and institutions were far smaller, particularly when compared to the increasing complexity and accountability of these institutions.

The Presidential Role: The American university presidency is both distinctive and complex. In Europe and Asia, the role of institutional leadership—a rector, vice-chancellor, or president—is frequently a temporary assignment to a faculty member, sometimes elected, and generally without true executive authority, serving instead as a representative of collegial faculty views. In contrast, the American presidency has more of the character of a chief executive officer, with ultimate executive authority for all decisions made within the institution. Although today's university presidents are less visible and authoritative than in earlier times, they are clearly of great importance to higher education in America. Their leadership can be essential, particularly during times of change (Bowen, W. G. and Shapiro, H. T., 1998).

American university presidents are expected to develop, articulate, and implement visions for their institution that sustain and enhance its quality. This includes a broad array of intellectual, social, financial, human, and physical resources, and political issues that envelop the university. Through their roles as the chief executive officers of their institutions, they also have significant management responsibilities for a diverse collection of activities, ranging from education to health care to public entertainment (e.g., intercolle-

giate athletics). Since these generally require the expertise and experience of talented specialists, the president is the university's leading recruiter, identifying talented people, recruiting them into key university positions, and directing and supporting their activities. Furthermore, unlike most corporate CEOs, the president is expected to play an active role generating the resources needed by the university, whether by lobbying state and federal governments, seeking gifts and bequests from alumni and friends, or clever entrepreneurial efforts. There is an implicit expectation on most campuses that the president's job is to raise money for the provost and deans to spend, while the chief financial officer and administrative staff watch over their shoulders to make certain they all do it wisely.

The university president also has a broad range of important responsibilities that might best be termed symbolic leadership. In the role as head of the university, the president has a responsibility for the complex array of relationships with both internal and external constituencies. These include students, faculty, and staff on the campus. The myriad external constituencies include alumni and parents, local, state, and federal government, business and labor, foundations, the higher education community, the media, and the public at large. The president has become a defender of the university and its fundamental qualities of knowledge and wisdom, truth and freedom, academic excellence and public service against the forces of darkness that rage outside its ivy-covered walls. Needless to say, the diverse perspectives and often-conflicting needs and expectations of these various groups make the management of relationships an extremely complex and time-consuming task.

Yet the presidency of a major university is an unusual leadership position from another interesting perspective. Although the responsibility for everything involving the university usually floats up to the president's desk, direct authority for university activities almost invariably rests elsewhere. There is a mismatch between responsibility and authority that is unparalleled in other social institutions. As a result, there are many, including many university presidents, who have become quite convinced that the contemporary public university is basically unmanageable and unleadable.

THE CHALLENGES

The Complexity of the University: The modern university is comprised of many activities, some nonprofit, some publicly regulated, and some operating in intensely competitive marketplaces. We teach students; we conduct research for various clients; we provide health care; we engage in economic development; we stimulate social change; and we provide mass entertainment (athletics). The organization of the contemporary university would compare in

both scale and complexity with many major global corporations. Yet at the same time, the intellectual demands of scholarship have focused faculty increasingly within their particular disciplines, with little opportunity for involvement in the far broader array of activities characterizing their university. While faculty members are—and should always remain—the cornerstone of the university's academic activities, they rarely have deep understanding or will accept the accountability necessary for the many other missions of the university in modern society.

Faculties have been quite influential and effective within the narrow domain of their academic programs. However, the very complexity of their institutions has made substantive involvement in the broader governance of the university problematic. The current disciplinary-driven governance structure makes it very difficult to deal with broader, strategic issues. Since universities are highly fragmented and decentralized, one frequently finds a chimney organization structure, with little coordination or even concern about university-wide needs or priorities. The broader concerns of the university are always someone else's problem.

Bureaucracy: The increased complexity, financial pressures, and accountability of universities demanded by government, the media, and the public at large has required far stronger management than in the past (Balderston, F. E., 1995). Recent furors over issues such as federal research policy, labor relations, financial aid and tuition agreements, and state funding models, all involve complex policy, financial, and political issues. While perhaps long ago universities were treated by our society—and its various government bodies—as largely well-intentioned and benign stewards of education and learning, today we find the university faces the same pressures, standards, and demands for accountability of any other billion-dollar corporation. Yet as universities have developed the administrative staffs, policies, and procedures to handle such issues, they have also created a thicket of paperwork, regulations, and bureaucracy that has eroded the authority and attractiveness of academic leadership.

More specifically, it is increasingly difficult to attract faculty members into key leadership positions such as department chairs, deans, and project directors. The traditional anarchy of faculty committee and consensus decision making have long made these jobs difficult, but today's additional demands for accountability imposed by university management structures have eroded the authority to manage, much less lead academic programs. Perhaps because of the critical nature of academic disciplines, universities suffer from an inability to allocate decisions to the most appropriate level of the organization and then to lodge trust in the individuals with this responsibility. The lack of career paths and adequate mechanisms for leadership development for junior

faculty and staff has also decimated much of the strength of mid-level management. Many of our most talented faculty leaders have concluded that becoming a chair, director, or dean is just not worth the effort and the frustration any longer.

Part of the challenge is to clear the administrative underbrush cluttering our institutions. Both decision-making and leadership is hampered by bureaucratic policies and procedures and practices, along with the anarchy of committee and consensus decision making. Our best people feel quite constrained by the university, constrained by their colleagues, constrained by the “administration”, and constrained by bureaucracy. Yet, leadership is important. If higher education is to keep pace with the extraordinary changes and challenges in our society, someone in academe must eventually be given the authority to make certain that the good ideas that rise up from the faculty and staff are actually put into practice. We need to devise a system that releases the creativity of faculty members while strengthening the authority of responsible leaders.

The Pace of Change: Both the pace and nature of the changes occurring in our world today have become so rapid and so profound that our present social institutions—in government, education, and the private sector—are having increasing difficulty in even sensing the changes (although they certainly feel the consequences), much less understanding them sufficiently to respond and adapt. It could well be that our present institutions, such as universities and government agencies, which have been the traditional structures for intellectual pursuits, may turn out to be as obsolete and irrelevant to our future as the American corporation in the 1950s. There is clearly a need to explore new social structures capable of sensing and understanding the change, as well as capable of engaging in the strategic processes necessary to adapt or control change. The glacial pace of academic change simply may not be sufficiently responsive to allow the university to control its own destiny.

As the time scale for decisions and actions compresses, during an era of ever more rapid change, authority tends to concentrate so that the institution can become more flexible and responsive. The academic tradition of extensive consultation, debate, and consensus building before any substantial decision is made or action taken will be one of our greatest challenges, since this process is simply incapable of keeping pace with the profound changes swirling about higher education. A quick look at the remarkable pace of change required in the private sector—usually measured in months, not years—suggests that universities must develop more capacity to move rapidly. This will require a willingness by leaders throughout the university to occasionally make difficult decisions and take strong action without the traditional consensus-building process.

The Resistance to Change: In business, management approaches change in a highly strategic fashion, launching a comprehensive process of planning and transformation. In political circles, sometimes a strong leader with a big idea can captivate the electorate, building a movement for change. The creative anarchy arising from a faculty culture that prizes individual freedom and consensual decision making poses quite a different challenge to the university. Most big ideas from top administrators are treated with either disdain (this too shall pass...) or ridicule. The same usually occurs for formal strategic planning efforts, unless, of course, they are attached to clearly perceived and immediately implementable budget consequences or faculty rewards. As Don Kennedy, former president of Stanford, noted, "The academic culture nurtures a set of policies and practices that favor the present state of affairs over any possible future. It is a portrait of conservatism, perhaps even of senescence." (Kennedy, D., 1993)

This same resistance to change characterizes the response of the academy to external forces. The American higher education establishment has tended to oppose most changes proposed or imposed from beyond the campus, including the GI Bill (the veterans will overrun our campuses), the Pell Grant program (it will open our gates to poor, unqualified students), and the direct lending program (we will be unable to handle all the paperwork). Yet in each case, higher education eventually changed its stance, adapted to, and even embraced the new programs.

Change occurs in the university through a more tenuous, sometimes tedious, process. Ideas are first floated as trial balloons, all the better if they can be perceived to have originated at the grassroots level. After what often seems like years of endless debate, challenging basic assumptions and hypotheses, decisions are made and the first small steps are taken. For change to affect the highly entrepreneurial culture of the faculty, it must address the core issues of incentives and rewards. Change does not happen because of presidential proclamations or committee reports, but instead it occurs at the grassroots level of faculty, students, and staff. Rarely is major change motivated by excitement, opportunity, and hope; it more frequently is in response to some perceived crisis. As one of my colleagues put it, if you believe change is needed, and you do not have a convenient wolf at the front door, then you had better invent one.

Of course, the efforts to achieve change following the time-honored traditions of collegiality and consensus can sometimes be self-defeating, since the process can lead all too frequently right back to the status quo. As one of my exasperated presidential colleagues once noted, the university faculty may be the last constituency on Earth that believes the status quo is still an option. To some degree, this strong resistance to change is both understandable and appropriate. After all, the university is one of the longest enduring social insti-

tutions of our civilization in part because its ancient traditions and values have been protected and sustained.

Cultural Issues: There are many factors that mitigate against faculty involvement in the decision process. The fragmentation of the faculty into academic disciplines and professional schools, coupled with the strong market pressures on faculty in many areas, has created an academic culture in which faculty loyalties are generally first to their scholarly discipline, then to their academic unit, and only last to their institution. Many faculty members move from institution to institution, swept along by market pressures and opportunities. The university reward structure—salary, promotion, and tenure—is clearly a meritocracy in which there are clear “haves” and “have-nots.” The former generally are too busy to become heavily involved in institutional issues. The latter are increasingly frustrated and vocal in their complaints. Yet they are also all too often the squeaky wheels that drown out others and capture attention. The increasing specialization of faculty, the pressure of the marketplace for their skills, and the degree to which the university has become simply a way station for faculty careers have destroyed institutional loyalty and stimulated more of a “what’s in it for me” attitude on the part of many faculty members.

In sharp contrast, many non-academic staff remain with a single university throughout their careers, developing not only a strong institutional loyalty but in many cases a somewhat broader view and understanding of the nature of the institution. Although faculty decry the increased influence of administrative staff, to some degree this is due to their own market- and discipline-driven academic culture, their abdication of institution loyalty, coupled with the complexity of the contemporary university, that has led to this situation.

There many signs of a widening gap between faculty and administration on many campuses. The rank-and-file faculty sees the world quite differently from campus administrators (Government-University-Industry Research Roundtable and National Science Board, 1997). There are significant differences in perceptions and understandings of the challenges and opportunities before higher education. It is clear that such a gap, and the corresponding absence of a spirit of trust and confidence by the faculty in their university leadership, could seriously undercut the ability of universities to make difficult yet important decisions and move ahead.

Politics: Most of America’s colleges and universities have more than once suffered the consequences of ill-informed efforts by politicians to influence everything from what subjects can be taught, to who is fit to teach, and whom should be allowed to study. As universities have grown in importance and influence, more political groups are tempted to use them to achieve some pur-

pose in broader society. To some degree, the changing political environment of the university reflects a more fundamental shift from issue-oriented to image-dominated politics at all levels—federal, state, and local. Public opinion drives political contributions, and vice-versa, and these determine successful candidates and eventually legislation. Policy is largely an aftermath exercise, since the agenda is really set by polling and political contributions. Issues, strategy, and “the vision thing” are largely left on the sidelines. And since higher education has never been particularly influential either in determining public opinion or in making campaign contributions, the university is frequently left with only the option of reacting as best it can to the agenda set by others.

The Particular Challenges faced by Public Universities: All colleges and universities, public and private alike, face today the challenge of change as they struggle to adapt and to serve a changing world. Yet there is a significant difference in the capacity that public and private institutions have to change. The term “independent” used to describe private universities has considerable significance in this regard. Private universities are generally more nimble, both because of their smaller size and the more limited number of constituencies that has to be consulted—and convinced—before change can occur. Whether driven by market pressures, resource constraints, or intellectual opportunity, private universities usually need to convince only trustees, campus communities (faculty, students, and staff) and perhaps alumni before moving ahead with a change agenda. Of course, this can be a formidable task, but it is a far cry from the broader political challenges facing public universities.

The public university must always function in an intensely political environment. Public university governing boards are generally political in nature, frequently viewing their primary responsibilities as being to various political constituencies rather than confined to the university itself. Changes that might threaten these constituencies are frequently resisted, even if they might enable the institution to serve broader society better. The public university also must operate within a complex array of government regulations and relationships at the local, state, and federal level, most of which tend to be highly reactive and supportive of the status quo. Furthermore, the press itself is generally far more intrusive in the affairs of public universities, viewing itself as the guardian of the public interest and using powerful tools such as sunshine laws to hold public universities accountable.

As a result, actions that would be straightforward for private universities, such as enrollment adjustments, tuition increases, program reductions or elimination, or campus modifications, can be formidable for public institutions. For example, the actions taken by many public universities to adjust to eroding state support through tuition increases or program restructuring have trig-

gered major political upheavals that threaten to constrain further efforts to balance activities with resources (Gumpert, P. J. & Pusser, B., 1997). Sometimes, the reactive nature of the political forces swirling about and within the institution is not apparent until an action is taken. Many a public university administration has been undermined by an about-face by their governing board, when political pressures force board members to switch from support to opposition on a controversial issue.

Little wonder that administrators sometimes conclude that the only way to get anything accomplished within the political environment of the public university is by heeding the old adage, "It is simpler to ask forgiveness than to seek permission." Yet even this hazardous approach may not be effective for the long term. It could well be that many public universities will simply not be able to respond adequately during periods of great change in our society.

SOME OBSERVATIONS

Fire, Ready, Aim! Traditional planning and decision-making processes are frequently found to be inadequate during times of rapid or even discontinuous change (Porter, M. E., 1998). Tactical efforts such as total quality management, process reengineering, and planning techniques such as preparing mission and vision statements, while important for refining status quo operations, may actually distract an institution from more substantive issues during more volatile periods. Furthermore, incremental change based on traditional, well-understood paradigms may be the most dangerous course of all, because those paradigms may simply not be adequate to adapt to a future of change. If the status quo is no longer an option, if the existing paradigms are no longer viable, then more radical transformation becomes the wisest course. Furthermore, during times of very rapid change and uncertainty, it is sometimes necessary to launch the actions associated with a preliminary strategy long before it is carefully thought through and completely developed.

Here, a personal observation may be appropriate. As a scientist-engineer, it was not surprising that my own leadership style tended to be comfortable with strategic processes. Yet, it should also be acknowledged that my particular style of planning and decision-making was rather unorthodox, sometimes baffling both our formal university planning staff and my executive officer colleagues alike. Once, I overheard a colleague describe my style as "fire, ready, aim" as I would launch yet another salvo of agendas and initiatives.

This was not a consequence of impatience or lack of discipline. Rather, it grew from my increasing sense that traditional planning approaches were simply ineffective during times of great change. Far too many leaders, when confronted with uncertainty, tend to fall into a "ready, aim... ready, aim... ready,

aim..." mode and never make a decision. By the time they are finally forced to pull the trigger, the target has moved out of sight. Hence, there was logic to my "anticipatory, scattershot" approach to planning and decision-making (Downs, L. & Mui, C., 1998).

Note that this viewpoint suggests that one of the greatest challenges for universities is to learn to encourage more people to participate in the high-risk, unpredictable, but ultimately very productive confrontations of stagnant paradigms. We must jar as many people as possible out of their comfortable ruts of conventional wisdom, fostering experiments, recruiting restive faculty, turning people loose to "cause trouble" and simply making conventionality more trouble than unconventionality.

University Transformation: The most difficult decisions are those concerning institutional transformation. Experience suggests that major change in higher education is usually driven by forces from outside the academy. Certainly, earlier examples of change, such as the evolution of the land-grant university, the growth of higher education following World War II, and the evolution of the research university all represented responses to powerful external forces and major policies at the national level. The examples of major institutional transformation driven by strategic decisions and plans from within are relatively rare. Yet, the fact that reactive change has been far more common than strategic change in higher education should not lead us to conclude that the university is incapable of controlling its own destiny. Self-driven strategic transformation is possible and probably necessary to cope with the challenges of our times.

Universities need to consider a broad array of transformation areas that go far beyond simply restructuring finances in order to face a future of change (Dolence, M. G. & Norris, D. M., 1995). The transformation process must encompass every aspect of our institutions, including the mission of the university, financial restructuring, organization and governance, the general characteristics of the university (e.g., enrollment size and program breadth), relationships with external constituencies, intellectual transformation, and cultural change. While such a broad, almost scattershot approach is complex to design and challenging to lead, it has the advantage of engaging a large number of participants at the grassroots level.

The most important objective of any broad effort at institutional transformation is not so much to achieve a specific set of goals, but rather to build the capacity, the energy, the excitement, and the commitment to move toward bold visions of the university's future. The real aims include removing the constraints that prevent the institution from responding to the needs of a rapidly changing society; removing unnecessary processes and administrative structures; questioning existing premises and arrangements; and challenging,

exciting, and emboldening the members of the university community to view institutional transformation as a great adventure.

Structural Issues: The modern university functions as a loosely coupled adaptive system, evolving in a highly reactive fashion to its changing environment through the individual or small group efforts of faculty entrepreneurs. While this has allowed the university to adapt quite successfully to its changing environment, it has also created an institution of growing size and complexity. The ever growing, myriad activities of the university can sometimes distract from or even conflict with its core mission of learning.

While it is certainly impolitic to be so blunt, the simple fact of life is that the contemporary university is a *public corporation* that must be governed, led, and managed like other corporations to benefit its stakeholders. The interests of its many stakeholders can only be served by a governing board that is comprised and functions as a true board of directors. Like the boards of directors of publicly held corporations, the university's governing board should consist of members selected for their expertise and experience. They should govern the university in way that serves the interests of its various constituencies. This, of course, means that the board should function with a structure and a process that reflect the best practices of corporate boards.

Again, although it may be politically incorrect within the academy to say so, the leadership of the university must be provided with the authority commensurate with its responsibilities. The president and other executive officers should have the same degree of authority to take actions, to select leadership, to take risks and move with deliberate speed, that their counterparts in the corporate world enjoy. The challenges and pace of change faced by the modern university no longer allow the luxury of "consensus" leadership, at least to the degree that "building consensus" means seeking the approval of all concerned communities. Nor do our times allow the reactive nature of special interest politics to rigidly moor the university to an obsolete status quo, thwarting efforts to provide strategic leadership and direction.

Yet a third controversial observation: while academic administrations generally can be drawn as conventional hierarchical trees, in reality the connecting lines of authority are extremely weak. In fact, one of the reasons for cost escalation is the presence of a deeply ingrained academic culture in which leaders are expected to "purchase the cooperation" of subordinates, to provide them with positive incentives to carry out decisions. For example, deans expect the provost to offer additional resources in order to gain their cooperation on various institution-wide efforts. Needless to say, this "bribery culture" is quite incompatible with the trend toward increasing decentralization of resources. As the central administration relinquishes greater control of resource and cost accountability to the units, it will lose the pool of resources

that in the past was used to provide incentives to deans, directors, and other leaders to cooperate and support university-wide goals.

Hence, it is logical to expect that both the leadership and management of universities will need increasingly to rely on lines of real authority, just as their corporate counterparts. That is, presidents, executive officers, and deans will almost certainly have to become comfortable with issuing clear orders or directives, from time to time. So, too, throughout the organization, subordinates will need to recognize that failure to execute these directives will likely have significant consequences, including possible removal from their positions. While collegiality will continue to be valued and honored, the modern university simply must accept a more realistic balance between responsibility and authority.

The Need to Restructure University Governance: Many universities find that the most formidable forces controlling their destiny are political in nature—from governments, governing boards, or perhaps even public opinion. Unfortunately, these bodies are not only usually highly reactive in nature, but they frequently either constrain the institution or drive it away from strategic objectives that would better serve society as a whole. Many university presidents—particularly those associated with public universities—believe that the greatest barrier to change in their institutions lies in the manner in which their institutions are governed, both from within and from without. Universities have a style of governance that is more adept at protecting the past than preparing for the future.

The 1996 report of the National Commission on the Academic Presidency (1996) reinforced these concerns when it concluded that the governance structure at most colleges and universities is inadequate. “At a time when higher education should be alert and nimble, it is slow and cautious instead, hindered by traditions and mechanisms of governing that do not allow the responsiveness and decisiveness the times require.” The Commission went on to note its belief that university presidents were currently unable to lead their institutions effectively, since they were forced to operate from “one of the most anemic power bases of any of the major institutions in American society.”

This view was also voiced in a study (Dionne, J. L. & Kean, T., 1997) performed by the RAND Corporation, which noted, “The main reason why institutions have not taken more effective action (to increase productivity) is their outmoded governance structure—i.e., the decision-making units, policies, and practices that control resource allocation have remained largely unchanged since the structure’s establishment in the 19th century. Designed for an era of growth, the current structure is cumbersome and even dysfunctional in an environment of scarce resources.”

It is simply unrealistic to expect that the governance mechanisms developed decades or, in some cases, even centuries ago can serve well either the contemporary university or the society it serves. It seems clear that the university of the twenty-first century will require new patterns of governance and leadership capable of responding to the changing needs and emerging challenges of our society and its educational institutions. The contemporary university has many activities, many responsibilities, many constituencies, and many overlapping lines of authority. From this perspective, shared governance models still have much to recommend them: a tradition of public oversight and trusteeship, shared collegial internal governance of academic matters, and, experienced administrative leadership.

Yet shared governance is, in reality, an ever-changing balance of forces involving faculty, trustees, staff, and administration. The increasing politicization of public governing boards, the ability of faculty councils to use their powers to promote special interests, delay action, and prevent reforms; and weak, ineffectual, and usually short-term administrative leadership all pose risks to the university. Clearly it is time to take a fresh look at the governance of our institutions.

Governing boards should focus on policy development rather than management issues. Their role is to provide the strategic, supportive, and critical stewardship for their institution. Faculty governance should become a true participant in the academic decision process rather than simply watchdogs of the administration or defenders of the status quo. Faculties also need to accept and acknowledge that strong leadership, whether from chairs, deans, or presidents, is important if their institution is to flourish during a time of significant change.

The contemporary American university presidency also merits a candid reappraisal and likely a thorough overhaul. The presidency of the university may indeed be one of the more anemic in our society, because of the imbalance between responsibility and authority. Yet, it is nevertheless a position of great importance. Governing boards, faculty, students, alumni, and the press tend to judge a university president on the issue of the day. Their true impact on the institution is usually not apparent for many years after their tenure. Decisions and actions must always be taken within the perspective of the long-standing history and traditions of the university and for the benefit of not only those currently served by the institution, but on behalf of future generations.

CONCLUSION

We have entered a period of significant change in higher education as our universities attempt to respond to the challenges, opportunities, and responsibilities before them (The Glion Declaration, 1998). This time of great change, of shifting paradigms, provides the context in which we must consider the changing nature of the university (Duderstadt, J. J., 2000).

From this perspective, it is important to understand that the most critical challenge facing most institutions will be to develop the capacity for change. As we noted earlier, universities must seek to remove the constraints that prevent them from responding to the needs of a rapidly changing society. They should strive to challenge, excite, and embolden all members of their academic communities to embark on what should be a great adventure for higher education. The successful adaptation of universities to the revolutionary challenges they face will depend a great deal on an institution's collective ability to learn and to continuously improve its decision making process. It is critical that higher education give thoughtful attention to the design of institutional processes for planning, management, and governance. Only a concerted effort to understand the important traditions of the past, the challenges of the present, and the possibilities for the future can enable institutions to thrive during a time of such change.

As the quote from Machiavelli at the beginning of this paper suggests, leading in the introduction of change can be both a challenging and a risky proposition. The resistance can be intense, and the political backlash threatening. To be sure, it is sometimes difficult to act for the future when the demands of the present can be so powerful and the traditions of the past so difficult to challenge. Yet, perhaps this is the most important role of university leadership and the greatest challenge for the university decision process in the years ahead.

REFERENCES

- Balderston, F. E. (1995). *Managing Today's University: Strategies for Viability, Change, and Excellence*, Jossey-Bass, San Francisco, p. 398.
- Bowen, W. G. & Shapiro, H. T. (1998). eds., *Universities and Their Leadership*, Princeton University Press, Princeton.
- Dionne, J. L. & Kean, T. (1997). *Breaking the Social Contract: The Fiscal Crisis in Higher Education*, report of the Commission on National Investment in Higher Education, Council for Aid to Education, New York.
- Dolence, M. G. & Norris, D. M. (1995). *Transforming Higher Education. A Vision for Learning in the 21st century*, Society for College and University Planning, Ann Arbor.

- Downs, L. & Mut, C. (1998). *Killer App*, Harvard Business School Press, Cambridge.
- Duderstadt, J. J. (2000). *A University for the 21st century*, University of Michigan Press, Ann Arbor.
- Government-University-Industry Research Roundtable and National Science Board (1997). "Convocation on Stresses on Research and Education at Colleges and Universities", <<http://www.2.nas.edu/guirrcon>>.
- Gumport, P. J. & Pusser, B. (1997). "Academic Restructuring: Contemporary Adaptation in Higher Education", in *Planning and Management for a Changing Environment: A Handbook on Redesigning Post-Secondary Institutions*, ed. M. Petersen, D. Dill, & L. Mets, Jossey-Bass, San Francisco.
- Gumport, P. J. & Pusser, B. (1998). *Academic Restructuring in Public Higher Education: A Framework and Research Agenda*, National Center for Postsecondary Improvement, Stanford, p. 111.
- Houle, C. O. (1989). *Governing Boards*, Jossey-Bass, San Francisco, p. 223.
- Immerwahr, J. (1998). *The Price of Admission: The Growing Importance of Higher Education*, National Center for Public Policy and Higher Education, Washington, D.C.
- Ingram, R. T. (1998). *Transforming Public Trusteeship*, Public Policy Paper Series, Association of Governing Boards, Washington, D.C.
- Kennedy, D. (1993). "Making Choices in the Research University" the American Research University, *Daedalus*, 122, n° 4, pp. 127-56.
- MacTaggart, T. J. (1997). ed., *Seeking Excellence through Independence*, Jossey-Bass, San Francisco.
- National Commission on the Academic Presidency (1996). *Renewing the Academic Presidency: Stronger Leadership for Tougher Times*, Association of Governing Boards of Universities and Colleges, Washington, D.C.
- Porter, M. E. (1998). *Competitive Strategy: Techniques for Analyzing Industries and Competitiveness*, Free Press, Boston.
- Shapiro, H. T. (1987). *Tradition and Change: Perspectives on Education and Public Policy*, University of Michigan Press, Ann Arbor.
- The Glion Declaration (1998). "The University at the Millennium", *The Presidency*, American Council on Education, Washington, D.C., pp. 27-31.
- Trow, M. (1997). "The Chiefs of Public Universities Should be Civil Servants, Not Political Actors" *Chronicle of Higher Education*.