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# The Changing Nature of Universities

Ernest A. Lynton

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*Excessive emphasis on research as the dominant measure of institutional as well as individual prestige and values has created a critical mismatch between the activities of American universities and societal expectations. This article traces the origins of the resulting crisis of purpose to the post–World War II surge in federal research support and articulates the urgent need for basic changes in university priorities at a time teaching and professional services have acquired both new importance and new complexity. It further describes current efforts toward a more balanced view of the components of university missions and a resulting shift in faculty roles and rewards.*

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## A Crisis of Purpose

Ten years ago, in a paper entitled “Reexamining the Role of the University,”<sup>1</sup> I spoke of “a crisis of purpose and a crisis of confidence” caused by “a mismatch between our activities and societal needs.”<sup>2</sup> Since then, the situation has, if anything, further deteriorated. The growing societal need for highly skilled individuals and for effective dissemination of knowledge has intensified the divergence between internal institutional values and priorities of our universities, on the one hand, and external demands, on the other. Yet for many years little was done to bring about much needed change. At first there were few incentives, because higher education funding remained adequate. Subsequent budget cuts have, understandably but regrettably, diverted attention from long-range questions of purpose to immediate issues of survival. It is only quite recently, with a growing realization that the new fiscal austerity constitutes a permanent condition and not a temporary setback, that American universities are beginning to reexamine their societal role in a systematic fashion.

To do so is important because there exist in this country not just the limited number of prestigious institutions everyone knows, but also about two hundred other uni-

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versities, enrolling in the aggregate about three million students and employing about two hundred thousand full-time as well as a large number of part-time faculty. All these universities have an important role to play, a role which indeed is becoming steadily more valuable. Employment in a knowledge-intensive society requires ever increasing levels of skill. Economic growth relies on rapid and effective dissemination and application of the growing stream of new ideas and information. Each of the large number of existing universities can be key providers of both. Why then the crisis of purpose? Because for all these universities there has existed, until recently, only the model of the research-intensive institution. As a result they have placed too little value on their teaching function to develop and maintain the effectiveness of skilled professionals. They have also tended to neglect their obligations to hasten the application of new knowledge by reaching out and working with their external constituencies. Instead, they have placed an excessive and imbalanced focus on the creation of new knowledge through research.

Two external factors have pulled American universities into opposite directions during the postwar and especially the post-Sputnik era. One was the political decision to expand access to higher education at all levels, including that of universities, as a laudable but unexamined instrument of social, not educational, policy. The GI Bill that started it all was designed to keep large numbers of veterans out of a labor market which could not absorb them quickly enough. Of course that important piece of legislation and all the subsequent steps to open access to higher education had profound educational implications. But on the whole, neither policymakers nor academic leadership examined these. They responded to growth and its consequences in merely quantitative ways by enlarging existing institutions and creating new ones that cloned what existed.

Instead of facing up to the pedagogic challenges implicit in the move toward mass higher education, universities reacted to a different external stimulus in a way which, far from placing greater priority on teaching, downgraded it. Society discovered the value of research. After the successful completion of the Manhattan Project, the famous Vannevar Bush report *Science: The Endless Frontier*<sup>3</sup> proclaimed that the nation's future depended on its continuing investment in basic research. A decade later, the beeps of Sputnik convinced a nation and a government already near paranoia that we were slipping behind the Soviet Union in scientific prowess and progress. The direct result was a dramatic rise in federal support for basic research in universities. The indirect result was that the model of the research-oriented university came to dominate the entire university system, with research becoming the principal criterion of quality for academic institutions as well as for individual faculty members.

Scholarship, according to the tenth edition of *Merriam-Webster's Collegiate Dictionary*, is synonymous with *learning*, a rich and inclusive concept with many dimensions. In universities it has, unfortunately, become more narrowly defined as synonymous with *research*. Research deals with *knowledge*, learning with *understanding*.

Research is important. Research nourishes the pool of knowledge, which in turn can lead to understanding and to the validation of new ideas. Research can result in new discoveries and provide the foundation for the development of new applications, new products and processes, new approaches to complex problems. The country needs ongoing emphasis on research, including the kind of curiosity-driven explorations of the unknown that can yield, as so often in the past, quite unexpected riches

in terms of discoveries and insights. It is appropriate for much of this to be carried out in universities. Universities by their nature can and indeed should take a long-term view and engage in activities from which the potential payoff may come many years later. Furthermore, the understanding resulting from research furnishes a strong intellectual basis for the teaching and the outreach in which universities must also engage.

That last sentence suggests the crux of the problem. Instead of seeing research as only a part of their multidimensional mission that reinforces the other components, the lure of federal funds in the post-World War II decades made research the dominant measure of university purposes and prestige. This was true not only for the handful of universities that received the lion's share of the funds but also for the many others that received far less or nothing at all. In a country enamored of rankings, the universities' rank became determined by the quantity of research support not only in popular opinion, but also in the most widely used classification of academic institutions, the one issued by the Carnegie Foundation for the Advancement of Teaching in 1973, whose latest edition was published in 1987.<sup>4</sup> The intent of the foundation was to facilitate comparative studies by setting up distinct categories according to certain institutional characteristics, with no desire to make one category "better" than others. But the unintended consequence of classifying universities primarily by research dollars and the number of Ph.D. recipients into Research I and II, Doctoral I and II, and Comprehensive I and II was to create a clear hierarchy on the basis of those factors.

Instead of a balance of priorities within universities and across the range of these institutions, in which some would place strong emphasis on research while others would lean more toward teaching and outreach, all universities strove to be research institutions. Harvard and Michigan, Berkeley and MIT, became the model for the American university.

As level of research support and quantity of research publication became the measures of both individual and institutional prestige, and as scholarship became synonymous with research, faculty realized that their careers depended primarily on research accomplishments. As former president Derek Bok of Harvard stated, "Research has come to dominate over all other factors in choosing, recognizing, and rewarding faculty."<sup>5</sup>

Increasingly, involvement either in teaching or in professional outreach not only lost its importance, it actually placed at risk young faculty members hoping to be granted tenure. Their advancement within their institutions as well as their mobility across the system came to depend on their research productivity to the virtual exclusion of all other achievements.

Snide attacks on higher education notwithstanding, faculty in colleges and universities work hard. The emphasis on research resulted in a substantial surge of published papers and books, many of them produced against difficult odds and with inadequate resources. The current flood of publications staggers the imagination. The Harvard University libraries, for example, carry over 100,000 periodicals. Inevitably, quality did not keep pace with quantity. The former president of Stanford University, David Kennedy, warned his faculty that the overproduction of routine scholarship is one of the most egregious aspects of contemporary academic life; it tends to conceal really important work by its sheer volume, and it is a major contributor to the inflation of academic library costs.<sup>6</sup>

He blamed “the quantitative use of research output as a criterion for appointment and promotion,” calling this “a bankrupt idea.”

With so much time and effort concentrated on research, the other elements of university missions had to give. At most universities, teaching receded into a distant second place in the scale of values and the level of attention. Outreach and extension — activities that had always been considered as the defining characteristic which distinguishes American universities from their inward-oriented European counterparts — virtually faded from sight, usually relegated to extension and continuing education units at the periphery of the institution.

This trend would not have been so serious had it been limited to the relatively small number of universities which in the postwar years developed into major centers of outstanding research, attracting the lion’s share of federal research support and producing most of the Nobel laureates and most of the members of the National Academy of Sciences. But virtually all universities strove to attain the prestige and visibility of being a research institution. As a result the teaching and outreach functions of university-level higher education became weakened without a corresponding improvement in the overall quality of research. As Sandra Elman and I stated some years ago with regard to a large number of academic institutions, “By believing themselves to be what they are not, these institutions fall short of being what they could be.”<sup>7</sup>

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### **The Growing Importance of Teaching and Outreach**

Those lopsided priorities have created for American universities a crisis of purpose that has steadily intensified during the past forty years, triggering student protests in the late sixties. It became acute during the past decade as teaching and outreach came to be both more important and more challenging than in the past.

As a result of the enormous expansion of higher education since World War II, our colleges and universities acquired a substantially more diverse student body: diverse in ethnic and socioeconomic background, in career aspirations, in pattern and timing of attendance. In addition, a growing number of older adults are either returning to college or getting a late start, increasing the average student age and bringing into our classrooms large numbers of working individuals with family obligations and a much different set of experiences and expectations from those of the more traditional student. All these changes have created a substantial pedagogic challenge. Teaching modern students is much more demanding than teaching the more homogeneous, better-prepared student body of an earlier age.

The importance of meeting this heightened pedagogic challenge has itself changed in recent years. In our postindustrial, knowledge-based society, there is much greater need, both quantitatively and qualitatively, for a highly skilled workforce, with a steady increase in the required educational level. There was a time when higher education had more of a screening than a developmental function, when the fact of having gone to college was more important than what had been learned. That is no longer the case. The content and impact of what our students learn has really become important, intensifying the pedagogic challenge created by diversification of the student body.

A knowledge-driven economy also requires effective dissemination and rapid application of new ideas, discoveries, and knowledge, especially in view of the accelerating rate of technological, political, and social change. We must take a different view of the role of universities from that of the insulated, inwardly oriented ivory tower. The needs of modern society call for universities to become engaged and interactive while remaining objective and disinterested. They must become actively involved in the flow of knowledge to, as well as from, the places where knowledge is applied.<sup>8</sup> They cannot limit their task to the creation of knowledge and its communication within the profession, leaving it to “trickle down” to society at large. Nor is the need for outreach met by a passive “delivery” of packaged knowledge. The societal issues requiring attention are complex and often ambiguous. Each situation has its unique elements and is likely to demand much professional expertise and creative scholarship to formulate and address the right questions and to recognize the new knowledge and insights that can be derived.

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### **Change Is in the Wind**

The divergence between these inadequately met needs in teaching and outreach and the excessive emphasis on research has created the current crisis of purpose. American universities must move rapidly and decisively to improve the balance among the individual as well as institutional emphasis on teaching, outreach, and research. At issue are not only the adequacy of response to societal needs, but to some extent the very survival of the university. Public discontent is rising as public confidence diminishes to a point at which, for example, the American Association for Higher Education found it necessary to devote its 1993 National Conference to the theme “Regaining the Public Trust.”

Fortunately, some trends in this direction are becoming visible and are likely, during the years to come, to bring about a profound change in the priorities and values of American universities.

Several factors are shaping and encouraging these changes. There is, in the first place, a growing realization within the academy that the situation has gotten out of hand, and that it is necessary to reexamine priorities, policies, and procedures. We must return to a better balance of attention and esteem among the traditional tasks of the university: teaching, professional service, and research. In the effort to bring this about, the few voices crying in the wilderness for many years have recently been joined by a growing chorus of others, including, as indicated by earlier citations, presidents of some of the country’s most prestigious institutions.

Not only are questions being asked about purposes and values in higher education, but there is as well a growing sense of having become trapped into a system that no one really wants. Extensive surveys by Robert Diamond and his colleagues at Syracuse, involving faculty, deans, and other midlevel administrators and central administration, yielded the startling result that each group wants change in the current system of values and rewards but sees the others as impeding it.<sup>9</sup> There may be a good deal of rationalization and self-deception in these views, but the stage does seem to be set for some searching reexamination and possible action.

Of course, institutional change rarely occurs spontaneously from within. The second major trigger of the current stirrings and incipient attempts at reexamination and adaptation is a set of external pressures.

Publicly funded higher education is, in a way, a victim of its own growth. It no longer has the luxury of fiscal irrelevance that existed when state and federal appropriations for higher education constituted minuscule portions of total public spending. The current size of the system of public colleges and universities has made it a visible and hence vulnerable portion of every state and federal budget. Inevitably that invites ever closer scrutiny of the purposes and achievements of higher education as it competes for increasingly scarce dollars with corrections, health, welfare, and other demands on the shrinking public purse. For private colleges and institutions, similar pressures are being exerted by those who pay an ever increasing tuition bill and ask what they are getting for their money. Thus accountability has become the slogan of the time — and the threat of being subjected to measures and standards generated externally helps wonderfully to sharpen our own minds in higher education and to put our own house in order lest it be done for us in ways we may not like.

At the same time, a further impetus for change has been the decrease in the amount of funds available from federal and other sources for basic research. Even the most prestigious universities are having difficulty maintaining their present levels of research activity. Persistent legislative pressure continues to be exerted on the major funding agencies to shift further from curiosity-driven to goal-oriented research. This is likely to increase support for interdisciplinary, issue-oriented activities that focus on complex societal problems and require close interplay between theory and practice. The application of ideas itself becomes the locus and trigger of new insights as well as the source of new questions, and terms like “action research” and “research in the practice context” are heard more and more. In essence this means that the distinction between research and outreach is fading, and, therefore, that the existence of such outreach and its quality should increasingly be recognized as essential to the advancement of knowledge.

In the long run, the strongest reason to reexamine current priorities and practices of universities is that academic institutions are facing increasing competition from other providers in all their activities. There are proliferating nonacademic sources of advanced instruction, even some with degree-granting authority, government and private-sector laboratories and institutes are a substantial source of both basic and applied research, and the number of consulting enterprises is legion. All these providers of various aspects of higher education exist because there is much demand out there for advanced instruction, pure and applied research, and technical assistance — and because many clients are convinced that they can obtain what they need more cost-effectively and in a manner more relevant to their needs by going to nonacademic sources. Competition as such has existed for a long time, but information highways and 500-channel cable television are likely to tilt the playing field more and more against traditional universities hanging on to outdated priorities.

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### **New Priorities for the University**

The tender and as yet fragile shoots of perceptible change fall into two broad categories. One consists of a number of initiatives to reexamine the basic mission and

priorities of universities. The second focuses on the complementary issues of faculty roles and rewards and the nature of scholarship.

Since the 1987 publication of Sandra Elman's and my *New Priorities for the University*,<sup>10</sup> there has been a good deal of pertinent conversation and some action both within and across universities. Initially, much of the "agonizing reappraisal" concentrated on the evident need for American universities, whatever their size, nature, and prestige, to pay substantially more attention to their teaching function. External discontent and calls for accountability concentrated on that issue more than on any others: the public at large as well as state and federal legislators were asking increasingly urgent questions about what they perceived as the inadequate quality of higher education, particularly at the undergraduate level. As the calls for better output measures increased, the higher education community, led in particular by the American Association for Higher Education (AAHE), began to pay attention to this issue, with particular emphasis on the development of educationally valid modes of assessment of student progress and achievement and of collective institutional performance. AAHE, which organizes annual meetings on these topics, has published a number of monographs and other material.<sup>11</sup> Administrators and faculty have begun to realize that if the higher education community does not develop modes of accountability itself, they will be imposed by outside agencies in ways that might not be appropriate.

Recent years have also seen a resurgence of the efforts to help faculty members in improving their teaching skills. A growing number of universities are incorporating some pedagogic training into their doctoral programs. Many have centers or offices for instructional improvement to which faculty members as well as teaching assistants can turn for advice and training. In this effort AAHE is also taking a leading role by means of national meetings as well as a number of useful publications.<sup>12</sup>

There has also been increasing attention, especially in universities, to the lagging emphasis on professional outreach. Initially, this concentrated on one particular and limited aspect of such outreach: the transfer of technology by means of science parks and incubation centers for small, innovative, high-tech companies on or near university campuses. For a while a large number of universities rushed into this as the key to regional economic development. But as the severe limitations of this mode of external interaction became evident, individuals both within and outside universities came to recognize that the kind of professional outreach needed to optimize a university's potential as an intellectual resource for its constituencies is complex and multifaceted. The partners in outreach can be in both the public and private sectors, include large and small business, new and established ones, low as well as high tech, government agencies, school systems, community groups, and, indeed, the public at large. Emphases and priorities can vary from university to university.

One example of this more inclusive approach to outreach has been the work initiated by David Scott when he was provost at Michigan State University to develop the concept as well as modes of implementation of multidimensional excellence. The resulting review of priorities, policies, and procedures is now spreading to other major state and private universities in the Midwest. Dr. Scott, who is now chancellor of the University of Massachusetts Amherst, has begun similar activities there. He also heads a universitywide task force on faculty roles and rewards.

Another promising development has been the recent establishment of the Coalition of Urban and Metropolitan Universities. These institutions define themselves not



only by their location in large metropolitan areas, but also by their emphasis on being strongly interactive with their metropolitan regions so as

to serve as intellectual and creative resources [to the regions] in order to contribute to their economic development, social health, and cultural vitality, through education, research, and professional outreach. We are committed to collaborate and cooperate with the many communities and clienteles in our metropolitan regions and to help bridge the socioeconomic, cultural, and political barriers between them.<sup>13</sup>

This conception of an outwardly oriented and strongly interactive institution responsive to regional needs is being promulgated as a deliberate and equivalent alternative to that of the traditional research university. Within a few months of its creation, the coalition has already attracted a substantial and growing number of universities, such as the University of Illinois at Chicago, both the St. Louis and the Kansas City campuses of the University of Missouri, several campuses of the California State University system, as well as the University of Maryland and the University of Houston systems. The University of Massachusetts Boston, among the coalition's charter members, is copublisher of the journal *Metropolitan Universities*, which, currently in its fourth year of quarterly publication, is sponsored by the coalition.

The impact of external forces, and the degree of acceptance of the need for a searching look at the mission of universities, is of course not uniform either across the collection of universities or within any one institution. There are obvious and understandable differences by fields: some disciplines have always been more oriented toward teaching than others, and some fields, especially certain professional areas, more oriented toward outreach and application. There are differences, as well, by type of institution and by the age of faculty. The lopsided scale of prestige that has shaped universities during the past few decades has had a particularly strong impact on a considerable number of institutions which, as a result of size and growth, magnitude of support, and other factors, believed themselves to be within hailing distance of that cherished goal of becoming "world class" in research. These universities — and we can all cite many examples — lack the record of solid achievement and resulting self-confidence that would allow them to reexamine their priorities without loss of self-esteem. They find it difficult even to contemplate a change of priorities. Among their faculty it is usually the younger cohort who are more inclined toward change than those older faculty who have been deeply engaged in strengthening the focus on and the support for research. Yet change is stirring in these institutions as well, partly as a result of resurgent attention to the nature of scholarship and the roles and rewards of faculty.

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### Scholarship Reconsidered

This attention, which constitutes the second category of incipient change, is closely related to the first. A review of institutional priorities cannot occur without a fresh look at the activities of those who carry out the mission of an academic enterprise: the members of its faculty. It requires a reconsideration of the nature of scholarship, which is the essence of the academic profession. Thanks in large measure to the 1991 publication of a report by Ernest Boyer, president of the Carnegie Foundation for the Advancement of Teaching, appropriately titled *Scholarship Reconsidered*,<sup>14</sup> much

pertinent activity has been started both nationally and on many campuses. In this effort, as in the push toward more emphasis on assessment and on teaching, AAHE has taken the lead. The association has undertaken a major project, the Forum on Faculty Roles and Rewards, intended to draw attention to the issues and to provide, as the name implies, a forum for discussion and exchange of ideas. The intensity of interest in the questions of faculty roles and the nature of scholarship is indicated by the fact that the first national conference organized by the forum in January 1993 was oversubscribed. In addition to such yearly conferences, AAHE is also planning to publish a number of pertinent monographs and is cosponsoring regional conferences. One of these, organized with the help of AAHE by the New England Resource Center for Higher Education at the University of Massachusetts Boston, was held on the campus of the University of New Hampshire in October 1993. It attracted teams from about fifty New England colleges and universities.

Many campuses have initiated a review of their systems of faculty rewards and incentives. The most widely publicized effort has been that of a systemwide task force at the University of California, chaired by Karl Pister, who was then the dean of engineering at Berkeley and is now chancellor of the Santa Cruz campus. The group generated a new set of policies for faculty promotion and tenure. The changes are not earth shaking, but the very fact that the University of California found it appropriate to review its promotion and tenure criteria is an indication of the emerging recognition of the need for change.

As a result of the dominant research orientation in universities, faculty members identify strongly with their academic discipline or professional field. They tend to look to the "invisible college" made up of their fellow specialists throughout the system of higher education for a definition of role and for measures of prestige. It is, therefore, an encouraging sign that a number of national disciplinary and professional associations have begun their own reexamination of the meaning of scholarship as it pertains to their particular field. These efforts have been substantially furthered by Diamond and his colleagues at the Center for Instructional Development at Syracuse University by means of a series of conferences as well as support for work by the associations. Several disciplinary and professional associations have by now generated statements containing broad definitions of scholarship pertinent to their field.<sup>15</sup>

Many more encouraging instances can be cited to indicate the existence of what are likely to be the tremors and rumblings of a coming groundswell of change. Changing a university, it has been said, is as difficult as moving a cemetery. Indeed, many individuals within higher education who really should know more about the history of their own enterprise and who should "take more seriously the province of their own commitment"<sup>16</sup> believe that the prototypical university was founded in Bologna many centuries ago and that the model has not changed since then.

Fortunately that is not so: change does occur, albeit slowly, on a time scale of decades rather than years. The university of today is a result of social and political forces exerted during the past fifty years, and it differs substantially from its pre-World War II precursor. Similarly, there is every reason to believe that the university of the early twenty-first century will be substantially different from the currently prevalent model in its priorities and its values. It will recognize that its societal function is multidimensional and that institutional prestige and individual achievement are to be measured by the excellence of teaching and outreach as well as of

research, and not only by the last of these three. It will have an appropriate system of faculty rewards that provides equal recognition and incentives for every one of the several dimensions of institutional mission. Universities, and units within these universities, will differ in the way each apportions its efforts and resources. The balance of emphasis on each of the multiple dimensions will also vary among faculty members at any given time, and for any one faculty member over time. But these differences will no longer lead to a hierarchy of prestige and rewards. Instead, institutions and individuals will gain recognition on the basis of the excellence with which they carry out each dimension of their tasks. ❧

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## Notes

1. Ernest A. Lynton, "Reexamining the Role of the University: A Crisis of Purpose," *Change*, October 1983, 18–23, 53.
2. *Ibid.*, 19.
3. Vannevar Bush, *Science — The Endless Frontier* (Washington, D.C.: National Science Foundation, 1960).
4. *A Classification of Institutions of Higher Education, 1987 Edition* (Princeton: Carnegie Foundation for the Advancement of Teaching, 1987).
5. Derek Bok, "The Improvement of Teaching," ACLS Occasional Paper (New York: American Council of Learned Societies, 1991), 12.
6. Donald Kennedy, *The Improvement of Teaching: An Essay to the Stanford Community*, March 3, 1991, Stanford University.
7. Ernest A. Lynton and Sandra E. Elman, *New Priorities for the University: Meeting Society's Needs for Applied Knowledge and Competent Individuals* (San Francisco: Jossey-Bass, 1987), 13.
8. *Ibid.*, 21 ff.
9. P. J. Gray, R. C. Froh, and R. A. Diamond, *A National Study of Research Universities on the Balance between Research and Undergraduate Teaching* (Syracuse, N.Y.: Center for Instructional Development, Syracuse University, 1992).
10. Lynton and Elman, *New Priorities for the University*.
11. For further information, contact American Association for Higher Education, One Dupont Circle, Washington, D.C. 30036. Telephone: (202) 293-6440, fax.: (202) 293-0073. Cf. a series of articles on assessment in *Metropolitan Universities* 3, no. 4 (Spring 1993) and *Metropolitan Universities* 4, no. 1 (Summer 1993).
12. Further information may be obtained from American Association for Higher Education, One Dupont Circle, Washington, D.C. 20036. Telephone: (202) 293-6440, fax: (202) 293-0073.
13. "Metropolitan Universities: Who Are We?" *Metropolitan Universities* 4, no. 1 (Summer 1993): 125. Cf. Ernest A. Lynton, "What Is a Metropolitan University?" *The Maine Scholar* 6 (Autumn 1993): 93–103.
14. Ernest L. Boyer, *Scholarship Reconsidered* (Princeton: Carnegie Foundation for the Advancement of Teaching, 1990).
15. Bronwyn E. Adam and Robert M. Diamond, "Differences Among the Disciplines," in *Recognizing Faculty Work: Reward Systems for the Year 2000, New Directions for Higher Education*, no. 81, Spring 1993 (San Francisco, Jossey-Bass, 1993).
16. Burton R. Clark, *The Higher Education System* (Berkeley: University of California Press, 1983), 1.