

# Future Challenges Facing American Higher Education

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he American system of higher education is very strong and much admired around the world, but it is confronting tremendous challenges as it moves into the next century, as are systems of higher education worldwide. Major global forces of change and social trends are transforming political, social, and educational institutions. Universities—traditionally among the most conservative of institutions in terms of institutional dynamics and change—must recognize these trends and be ready to respond constructively and creatively to these forces for change.

## GLOBAL TRENDS IN A CHANGING WORLD

Described below are some of the most powerful forces for change in the modern world.

1. Perhaps the most fundamental force for change in the twentieth century is the spread of democracy and the free market. This trend toward democratization cannot be reversed, and it has many consequences. In a democracy, everyone has a voice, and everyone and his or her constituency want a piece of the pie. Facing increasing competition from various societal needs for financial resources and the need to provide higher education to the masses, academic institutions are seeing the breakdown of the traditional elitist educational structures and a trend away from the university as we have known it for centuries.

As countries enter the free market system, they become more competitive and focused on short-term goals. Short-term goals and pressing issues usually win out over long-term investments, to the ultimate detriment of higher education, which must plan for and exist for long-term goals. In a highly competitive environment, it is difficult for investment in higher education to get the same attention as such immediate, pressing, short-term issues as social welfare, public health, crime prevention, traffic congestion, and environmental remediation. It will take great leadership and visionary force to reverse this trend and maintain a proper level of investment in higher education.

In a democratic environment, universities must be more accountable, not only to the trustees or regents, but also to the students, the faculty, the nonacademic staff, the relevant federal and local government agencies, the general public, and the alumni. Each of these constituencies is expecting to see a prudent use of resources in general, but an increasing share for its own. Maintaining accountability to these constituencies without sacrificing long-term goals is a formidable balancing act and a tremendous challenge.

- 2. Rapid advances in information technology and telecommunications are also revolutionizing our daily lives, making the concept of a global village a reality; this revolution is, in turn, beginning to transform the university. New technologies provide opportunities to expand the range of services and outreach of the institutions and to explore and create new ways of delivering the essential product—knowledge. Leaders in higher education will have to encourage an openness and experimentation with these new technologies or be paralyzed in the constricted boundaries of tradition. Likewise, the tremendous revolution in biotechnology and life sciences will increasingly turn the research and teaching agenda toward greater emphasis on biomedical, environmental, and other quality-of-life issues.
- 3. Our communities, workplaces, and social institutions are becoming more diverse. Economic and financial systems are rapidly globalizing and becoming closely interconnected throughout the world. Universities must increasingly reflect the cultural and ethnic diversity of the global village we inhabit—in the campus environment, student enrollment, faculty, staff, and leadership. Internationalism and multiculturalism will be essential for the health of society and to the success of its academic institutions.

## IMPACT ON AMERICAN HIGHER EDUCATION

All the following trends are having an effect on American schools as well.

- 1. We are seeing a tremendous expansion and diversification among colleges and universities in the United States, and this diversification is probably our greatest strength. Some people predict that in 10 or 20 years the number of universities in the U.S. will increase to 5,000 from the current number of about 3,000. We have large schools with more than 50,000 students on campus and small, equally famous and prestigious institutions like CalTech with only 1,800 students. We have public schools and private. We have specialized schools focused on engineering or science; we have small liberal arts colleges; we have religious schools and many new professional schools. The San Francisco Bay Area has at least 10 new, small universities, all serving different groups of students, such as the re-entry student. Overall, there is tremendous diversification and a spirit of experimentation not often found in other countries.
- 2. The steady decline in state and federal funding is a significant issue for institutions of higher education, whether public or private. Universities are competing for increasingly scarce public funds, competing even for the same students. Among established institutions, we are seeing an increasing bifurcation between the "haves" and the "have-nots," just as in society at large. The rich schools are becoming richer, the poor are becoming poorer. The best students are competing for admission to the same few top schools. An interesting example of this bifurcation is in the distribution of the National Science Foundation fellows among American research universities in the last few years. The NSF fellows as a group represent the best of the science and engineering college graduates going on to Ph.D. studies. Nearly 80 percent of the fellows are concentrated in four schools—Berkeley, Harvard, MIT, and Stanford.
- 3. Another outcome of the competition for resources is transformation of the "ivory tower" to a less autonomous or isolated enterprise. We see ever-increasing collaboration among universities, interdisciplinary programs within and between institutions, and close collaboration with private industry. These closer alliances between universities and industry can greatly benefit a university's research, but universities must be careful not to be unduly influenced by industry's wishes or sacrifice the university's autonomy in its scholarly pursuit. With budgets becoming tight, we need to look at effective ways of sharing academic resources, collaborating with other institutions, consolidating departments or even abolishing them, joint teaching, and shared teaching.

4. A changing workforce is also having an impact on American higher education in the proliferation of new, emerging institutions such as the University of Phoenix, a for-profit university mainly for continuing education, which is now the largest and fastest-growing university in the U.S. As knowledge is expanding, so is the need for lifelong learning. Professional schools, university extension courses, online instruction, and correspondence courses are all providing necessary responses to this growing need. Lifelong learning may be the norm for future generations of students, and systems of higher education will need to expand their outreach and services in support of it.

#### IMPACT ON RESEARCH UNIVERSITIES

Described below are major implications for research universities.

1. Students applying today to research universities like U.C. Berkeley are more competitive, diverse, and pragmatic than ever before. Competition for admission is intense. Last fall, Berkeley admitted 8,400 out of 27,000 students who applied for first-year admission, and actually registered about 3,600 new students. Most of the 27,000 applicants were already ranked among the top one-eighth of their graduate class.

Berkeley's student body is often characterized by its diversity, wherein no one racial or ethnic group constitutes a majority. All age groups and economic, cultural, and geographic backgrounds are represented. This is a dynamic mix, producing the wide range of opinion and perspective essential to a great university. It has been said that by the year 2050, 60 to 70 percent of the workforce will be composed of people of color. If universities are not educating and preparing to educate a more diverse group of leaders and workers, they and society will face tremendous problems.

Students who in the past would have chosen to pursue an academic career are now tending toward business or other professional majors, especially American-born students. It is alarming that fewer of our top talents want to make their full career in the academic area, and this trend has significant implications for future faculty and leadership in American universities.

2. Our faculty members are also changing. Today's professors are mobile and unlikely to spend their entire careers in one institution or to be involved over the long term in leadership within their university community. They are entrepreneurs, establishing their individual careers and reputations, courting outside funding, consulting with industry, and

- collaborating with outside associations. Increasingly less is the "old fashioned" institutional loyalty and commitment.
- 3. In turn, academic departments, which constitute the most important and fundamental units in academia, are rapidly changing as well. The traditional departmental boundaries are weakening as more interdisciplinary programs and studies develop. Individual faculty members are becoming more externally active and connected and more internally assertive with self-interest. The department chairmanship is no longer a secure, powerful position required for strong, dynamic leadership.
- 4. Central administration has become increasingly complex as relationships between disciplines and institutions evolve, and we now see more professionals and fewer scholars serving in positions of university leadership. This trend may pose a great danger for the decision-making process in universities, where academic scholarship and learning should always remain as the highest goals.
- 5. At the same time, trustees or regents are becoming more assertive and politicized, sometimes asserting their right over traditional faculty prerogatives. Well-established administration—faculty shared governance relationships are often under attack.
- 6. The public and alumni are also actively engaging with universities and demanding a voice as well. While these engagements are generally essential and positive, they may also become unwelcome intrusions, especially in some university activities such as sports and industrial liaison.

#### **CONCERNS AND OPPORTUNITIES**

Described below are some major dangers and opportunities facing universities.

- 1. University administrators must retain a clear commitment to the academic mission, which is at the heart of every institution of higher education. At the same time, each institution must begin to define its own vision and selective focus. No one university can do everything it would like to do and maintain excellence at every level. Defining the university's vision is one of the most important issues facing higher education today. I see many universities flailing about, doing things without knowing exactly what they are doing or why. And administrators in general are not doing as good a job as they can. Reform is needed, based on long-term goals, purposes, and objectives.
- 2. We also have to look at the structure of university governance. U.C. Berkeley professors have always been number one in terms of faculty power in shared governance, although the regents have been challeng-

ing some of their powers. I believe that we need to review the entire system of relationships among faculty, students, university employees, and regents—all the structural issues. Heads of universities are accountable to many constituencies, and it is alarming that many top people don't want to seek university leadership any more, or burn out and rotate out of positions at an ever-increasing pace.

- 3. Financial management and control are issues of critical urgency. While American corporations have adjusted to meet the demands of the future by cutting costs and becoming more efficient, higher education has not caught up. We must begin to think in terms of portfolio management—taking the opportunity to enhance the university's resources rather than just reacting to declining and shifting resources.
- 4. Universities are not doing enough to embrace and to reap the benefits of the revolution in information technology (IT). I always believe in finding the opportunity in every crisis. The IT revolution will be a crisis only for those institutions that do not enthusiastically and creatively seize its possibilities for their own advantage.
- 5. Just as the workplace has changed radically, so will the classroom. We have to rethink the curriculum and the learning environment, looking at new ways to share knowledge, forge new alliances, and employ distance learning and shared teaching.

In summary, American educators need to face these concerns, initiate the required changes, and seize the opportunities presented or be left behind. Innovative long-term planning and visionary leadership are needed.