Preface
Maureen E. Devlin

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Maureen Devlin, Joel Meyerson, Editors
PREFACE

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Rapid technological change and intense competition not only define the cutting edge of commerce today but also characterize the current environment in which colleges and universities must function. Technological advances have the potential to deconstruct traditional forms of higher education, as they have allowed for-profit entities and others to provide higher and continuing education outside the conventional university setting and to capture a large share of the burgeoning demand beyond the conventional eighteen- to twenty-one-year-old residential population. Technology and the Internet also present exciting possibilities for advancements in pedagogy, which has remained largely unchanged for centuries.

In this dynamic and ever-changing atmosphere, educational leaders must ground themselves by reexamining the essential purposes of higher learning. To that end, the Forum for the Future of Higher Education convened its annual symposium in the fall of 1999. Forum participants considered the functions and goals of higher education, as well as issues related to strategy, finances, and the effects of technology. This book, Forum Futures, summarizes the symposium’s presentations and discussions in an effort to help today’s leaders address the challenges they face and to shape the future of higher education.
Winner-Take-All Markets

In Chapter One, Robert Frank describes higher education as the quintessential winner-take-all market, in which small differences in performance (or even small differences in the credentials used to predict performance) translate into extremely large differences in reward. The effect of such a market is dramatic, influencing many aspects of the academy.

Frank first described these markets in his 1995 book, *The Winner-Take-All Society*, coauthored with Philip Cook. The key characteristic of a winner-take-all environment is that success breeds success and failure breeds failure, all in an ever-strengthening spiral. In higher education, elite universities depend heavily on enrolling top students, who feel just as compelled to enroll in elite institutions. This codependence creates the spirals that amplify the rewards for successfully recruiting top students and faculty. Hierarchical rankings in higher education, which are becoming more visible and important than ever, exacerbate the situation.

Participants in winner-take-all markets face strong incentives to invest in performance enhancement, thereby increasing their chances of coming out on the winning side. Universities have found themselves in an extremely costly positional “arms race,” bidding for the various resources that facilitate the quest for high rankings. They are spending more and more on recruiting brochures and videos, nicer dormitories, better food, fancier athletics complexes, and so on. Yet when all schools increase such expenditures, their actions largely cancel one another’s out. The additional spending inflates costs but in the end has little impact on the ultimate distribution of students.

Under these circumstances, no institution dares to cut its own expenditures unilaterally. It may be possible, though, to control costs through positional “arms control agreements,” pacts in which contestants pledge mutual restraint. Such agreements are particularly important in winner-take-all markets, in which behavior that looks attractive to each individual often looks profoundly unattractive from the perspective of the group. Collusive agreements to restrain these behaviors can create gains for everyone. They should not be summarily judged as wrong based on the uncritical belief that unlimited competition always leads to the greatest good for all.

To move forward and effectively limit escalation in the cost of acquiring higher education, the nature of higher education’s winner-take-all market must be recognized, and institutions must be permitted to come together to defuse their positional arms race.

Just as institutions are competing to enroll them, top students are vying to gain entry into the nation’s elite colleges and universities. As applications increase, in-
stitutions can be more selective about whom they admit, and so the sorting among
colleges on the basis of aptitude increases. In Chapter Two, Caroline Hoxby in-
vestigates what appears to be a primary driver of the unprecedented numbers of
applications—namely, the monetary returns to attending a highly selective col-
lege. She reports that the return to education has been increasing since the early
1970s and has been increasing more for people of higher measured aptitude, who
today tend to be clustered at selective colleges.

Hoxby divided colleges into eight rank groups based on Barron’s Profiles of
American Colleges’ rating of their selectivity. Comparisons of earnings show that men
who graduate from more selective colleges tend to earn substantially more by
age thirty-two than men who graduate from less selective colleges. Projecting earn-
ings over a lifetime shows, for example, that a typical man who entered a rank 1
private college in 1982 can expect to earn $2.9 million over his career, while a man
who entered a rank 8 private college at the same time can expect to earn about
$1.75 million over his career. It is obvious that career income differences swamp
the differences in the total costs of attending more versus less selective colleges.

Hoxby analyzed earnings for students entering college in 1960, 1972, and
1982 and found that the income differences between rank groups have been grow-
ing over time for post-1972 entrants, particularly for more selective colleges. Ad-
ditionally, comparison of entrants with the same measured aptitude (upon leaving
high school) indicates that those who graduate from more selective colleges tend
to earn more over their careers.

Monetary returns to attending highly selective colleges have become so great
that, surprisingly, most offers of “free rides”—full tuition, room and board, and
expenses—are not as good as they seem if one has the option of attending a more
selective school, even without financial aid. For example, the data indicate that a
graduate could earn back the extra costs of paying full expenses at a rank 1 school
within ten years as opposed to accepting a free ride to a rank 3 school. Rank 3 in-
cludes Barron’s “highly competitive” institutions, such as Carleton, Davidson,
Georgetown, and the University of Virginia. Clearly, the winner-take-all phe-
nomenon prevails in this realm as well, where slight differences in aptitude can ul-
timately lead to great differences in career earnings.

When institutions and students focus on status, recognition, and economic
gain as ends in themselves, they diminish additional and important goods derived
from the pursuit of education, including social, political, and moral benefits, as
well as the pursuit of knowledge for its own sake. In Chapter Three, James Engell
presents a model for growth and change in higher education that centers on the
entelechy of higher education.

Entelechy, stemming from Greek, means the striving for perfection in a series
of goals taken together as a whole. For higher education, an entelechy demands
we envision how to fulfill the potential of the whole by coordinating and giving proper relative weight to a set of varied goals and the goods these goals seek to achieve. Overemphasis in any particular arena skews the balance of the whole and breaks down fulfillment of its greater potential.

Engell maintains that today higher education’s economic good is overemphasized. To illustrate, he identifies three criteria that recently have determined whether an academic field will thrive or languish: (1) a promise of money—the field is linked to improved chances of above average lifetime earnings; (2) a knowledge of money—the field itself studies some aspect of money; and (3) a source of money—the field receives significant research contracts, grants, and so on. The rule of these criteria has been remarkably potent, uniform, and verifiable.

The humanities and several social sciences fail to meet all three criteria. And in the last thirty years, by every term of prestige and quality measured, the humanities have fallen further and further behind other fields. Thus the economic prosperity of the last generation coincides with an overall degradation of the humanities. Yet preservation of the humanities is essential to capturing the lessons of the past and applying them to the future, particularly as we absorb and interpret the effects of science, knowledge, and technology on our inner lives, values, and ideals.

Engell urges higher education leaders to move beyond the current mantra of competition, which begets forces such as the three criteria, to focus again on the essential purposes of higher learning, so that they may direct change from within their institutions rather than merely reacting to the forces of change that surround them.

Defining and Managing Costs

The winner-take-all mentality is no greater in any field than in athletics, where the costs of intercollegiate programs have grown tremendously in the pursuit of victory. Costly competition is also among the several factors that put upward pressure on tuition, whose rise has commanded national attention. Defining the actual costs of athletics programs and higher education in general has proven extremely problematic.

In Chapter Four, James Shulman and William Bowen examine the financial costs of low-profile sports at institutions competing across the range of National Collegiate Athletic Association (NCAA) divisions—from the so-called “big-time” Division I-A level, where in 1997–98 institutions spent an average of $38 million for their athletics programs, to the nonscholarship Division III level, where expenses that year ranged from $1.2 to $1.7 million.
Shulman and Bowen found that for low-profile sports, Division I-A schools spend nearly ten times as much per team as the Division III colleges, and the Ivies spend three times as much per team as the Division III schools. Thus even outside the arena of big-time football and men’s basketball, the level of play chosen by an institution has a significant financial impact.

Shulman and Bowen also compared the SAT scores of athletes with those of the rest of the student body. They found large gaps across all competitive levels between the student body and high-profile sport athletes (football, men’s basketball, and men’s ice hockey players); the largest gap (284 points) was in the Division I-A private universities. Smaller gaps were found between the student body and participants in low-profile sports, ranging from 25 points at the Division III level to about 120 points at the Division I-A private schools. Historical data show that these gaps have been growing over time.

Shulman and Bowen point to the competitive pressures of intercollegiate athletics, which relentlessly drive up costs in a race that never ends. The situation is exacerbated by the common misperception that athletics teams or programs are no-cost goods. While direct costs may be recognized, capital and administrative costs, as well as trade-offs in admissions decisions, are often overlooked. The authors urge collective action to slow the seemingly endless raising of the stakes in college sports, which in the end does not seem to achieve any optimal goal. This process must begin with a clear understanding of the financial facts and a strong sense of the missions of the institutions engaged in intercollegiate competition.

The high visibility and enormous appeal of college sports lead many to believe that successful football and men’s basketball programs more than pay for themselves. Yet the most recent NCAA data report that in 1997 less than half of the Division I-A programs (43 percent) reported “profits,” and the average “deficit” at the remaining programs was $2.8 million.

Another common misperception is that successful intercollegiate programs stimulate alumni giving. Yet Shulman found no evidence that variations in the won-lost records of the Division I-A or the Ivy League institutions he studied had any effect on alumni giving.

Financial data about intercollegiate athletics can be extremely obscure, making its analysis quite difficult. For example, in the same year that Duke’s federal reporting form showed that athletics revenues exceeded expenditures by $2 million, institutional transfers to athletics were in the $4 to $5 million range.

Campus leaders must have access to clear and accurate financial information to make informed decisions about their institutions’ athletics programs. Armed with such data, they can effectively assess and implement priorities among various interests across campus competing for limited funds. Beyond campus, educational leaders must work together to forge the collective agreements essential to
containing the athletics “arms race” and the high costs of intercollegiate competition.

Similar to the pressures and outside scrutiny focused on highly visible intercollegiate athletics programs, tuition levels have become subject to intense, national-level discussion and debate. In Chapter Five, Ronald Ehrenberg assesses upward pressures on tuition, particularly at selective private colleges and universities, in research funded by the Andrew W. Mellon Foundation. His findings point toward several recommendations to help hold down costs.

Among the cost pressures on tuition, Ehrenberg notes first the winner-take-all higher education market, wherein selective institutions compete, at great expense, to be the very best in every aspect of their activities. In the same vein, highly visible rankings give institutions every incentive to improve their rank despite the costs associated with such efforts.

The shared governance system, too, between trustees, administrators, and faculty virtually guarantees that private institutions will be slow to react to pressure to reduce costs. Trustees should be encouraged to look beyond their special interests and play a strong role in backing the efforts of presidents and provosts to reduce costs.

Several federal government policies also contribute to cost pressures, among them the breakup of the collective agreement of several elite schools to target their financial aid to students with the greatest need, rather than offer merit aid, and the pressure on research institutions to lower their indirect costs rates.

Institutions’ budgetary organizational structures can also compromise their ability to control costs. The “tub” model, in which each college keeps the revenue it generates, including tuition, and is responsible for all costs it incurs, reduces central administration’s control over resources. While few private institutions are formally organized as tubs, Ehrenberg’s research indicates that nearly half operate as such in practice. Adjusting the institutional budgetary models to enhance control over costs could have a considerable effect on tuition increases.

Ehrenberg also encourages colleges and universities to cooperate with competitors via consortia, which promise significant savings. Finally, he exhorts institutions to grow and improve by substitution and by increasing efficiency, not by expansion.

Planning for the Future

Technology and the burgeoning demand for higher and continuing education promise fundamental change for the future of higher education. Managing and directing that change are critical issues that the Forum has engaged for many years.
The vast majority of higher education in this country is provided by nonprofit entities that receive substantial amounts of public funds supporting their efforts. Historically the primary deterrents to private sector entry into higher education have been the huge start-up costs and unprofitability of the traditional university. Today, however, advances in technology and increases in the demand for higher education facilitate focused, low-cost, and profitable private sector entry. In Chapter Six, David Collis considers these primary drivers of change in higher education and recommends strategic responses to them.

Technology can be used in many ways to expand or improve the educational experience. It offers an alternative to learners who cannot afford the time, expense, and relocation disturbance of the traditional four-year undergraduate residential college or university, and it does so at an affordable price. Technology breaks down the traditional rationales for the integration of higher education; by eliminating the need for dormitories and cafeterias, classroom space, and even libraries, technology reduces entry barriers enormously and opens the doors for credible competitors.

While technology is supplanting traditional entry barriers, increases in demand are providing the market opportunity for new entrants. The shift in the composition of demand for higher education from largely eighteen- to twenty-one-year-olds to students over age twenty-five foreshadows a fundamental change in the nature of the industry, inducing new private sector companies to serve the emerging markets. Given this entry path, new companies that build scale and reputation in the older student segment should be able to move into more traditional degree programs, as over time the entrants’ attractive price and features will begin to draw younger students as well. Pressure on prices, too, will intensify as it becomes increasingly more difficult to justify large tuition differences between traditional and technology-based degree programs, particularly when some of the less costly programs offer on-line courses taught by the same faculty as the higher priced options.

Collis recommends that colleges and universities respond to the deconstruction of their industry by quickly forming strategic alliances with credible new entrants. Because the supply of good partners is limited, early movers will achieve sustainable advantages—particularly given the winner-take-all higher education market, where the penalty for complacency is high. The biggest mistake established institutions can make, Collis says, is to sit back and see how the market develops, rather than proactively determine the future of their institutions.

Technology promises not only enormous change in the broad structure of the higher education industry but also in the day-to-day conduct of teaching, learning, and research. In Chapter Seven, Michael McRobbie and Judith Palmer describe Indiana University’s (IU’s) Information Technology Strategic Plan, which
outlines its vision for the development, use, and application of information technology (IT) into the next millennium.

Recognizing that the creation of new knowledge and sharing of information are defining features of a university, the goal of IU’s strategic plan is to rise to a position of absolute leadership among public universities in the creative use and application of information technology.

The strategic plan recognizes the transformational power of IT and its inevitable and ubiquitous spread in higher education. It emphasizes the speed of technological change, as well as its unpredictability. Two major themes are woven throughout the plan’s key recommendations. The first is reliable access for students, faculty, and staff to computing and network services, both on and off the campuses. The second theme is life-cycle replacement funding to allow maintenance of the IT infrastructure at state-of-the-art levels.

McRobbie and Palmer outline strategies to meet the enormous fiscal challenges technology presents. They recommend that any IT strategic plan be accompanied by a business plan estimating expenditures and time horizons to accomplish major objectives. A fiscal analysis should reflect funding priorities for the plan, estimate the costs of each IT activity, and identify possible sources of revenue. In terms of revenue, it is important to consider new and nontraditional funding relationships. These may include partnerships or sponsorships with outside public and private organizations, including the corporate sector.

To address the serious human resource shortage in information technology, the authors suggest a twofold approach. In the short term, higher salaries and greater incentives that more closely parallel those available in the private sector will be necessary. In the long term, in-house training and production of qualified graduates to fill these jobs will help alleviate shortages, although retention likely will remain problematic.

Finally, the authors emphasize that IT strategic plans reflect institutional priorities. Each college and university should thoughtfully consider its IT needs in light of its strengths and mission. On that base, a reasonable and workable plan can be formulated to guide institutions and help them manage the vast transformations that technology brings.

The upheavals wrought on college and university campuses by technological change and the pressures stemming from the need to reduce costs and increase efficiency have come to bear on the workplace in a number of ways. Meanwhile, managers working to direct change and improve systems are faced with an overwhelming variety of strategies and dogmas. In Chapter Eight, Wendell Brase at the University of California, Irvine (UCI), outlines a model for effecting sustained improvement.
The empirically based UCI Model for Sustaining Administrative Improvement focuses on the tools that research has shown lead most efficiently and assuredly to improved enterprise performance. Brase’s research reveals very strong correlations between managerial behavior patterns and organizational effectiveness. Further statistical analysis suggests a straightforward, multistage causal model; key management behaviors lead to workplace respect, which enables workplace cooperation, which then yields organizational performance.

The data reveal that as few as twenty key management behaviors may provide a strong prediction of workplace respect, forming the base of the improvement model. Further the evidence suggests that these key behaviors are not inborn but can be learned. With the help of management consultants using employee survey results, supervisors were able to show significant improvement across all measured behaviors—including the ones that seem more like traits than acquired skills. These results indicate that important behaviors can be codified, measured, and learned.

The UCI model’s simplicity may lead to underestimation of its significance. It demonstrates that there is little a manager can do to influence directly workplace cooperation and outcomes; rather, the main role of the effective manager is to foster the behaviors that lead to workplace respect, the linchpin of organizational performance. Any model that fails to focus first on the underlying behaviors of an enterprise also will fail to stimulate long-term, sustainable change.

Conclusion

Traditional colleges and universities today must function in a rapidly changing world, where the rules and conventions that have served them well in the past no longer apply. Technology, a changing competitive environment, and the aging of higher education’s growing student body are inexorably shifting the parameters of higher education. Campus leaders can embrace these changes, and guide their institutions into a future that they actively help to shape and influence. Along the way, care should be taken to preserve the fundamental goods and purposes of higher education, so they are not lost in the tides of change sweeping the landscape.