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Higher Education's Changing Contours: The Policy Implications of an Emerging System

Abstract

American higher education is remarkably adaptive. A "system" only in the broadest sense of the term, it has been flexible enough to absorb and adapt to broad changes that, at the time, were outside the traditional purview of mainstream colleges and universities—for example, the land grant movement, the creation of community colleges, the passage of the GI Bill, and the need to serve increasing numbers of adult students. On the threshold of the twenty-first century, American higher education faces yet another new movement, one that has been described variously as "part-time," "postbaccalaureate," or "non-degree" education. But for public policy purposes, these characterizations are too narrow; the emerging, diverse aggregation of educational activities and interests beyond the boundaries of traditional higher education are too broad to be so described. "System of users" seems more appropriate—at least for preliminary policy analysis.

Disciplines

Adult and Continuing Education | Education | Educational Assessment, Evaluation, and Research | Higher Education | Higher Education Administration

CHAPTER

Higher Education's Changing Contours: The Policy Implications of an Emerging System

Patrick M. Callan and Joni E. Finney

American higher education is remarkably adaptive. A “system” only in the broadest sense of the term, it has been flexible enough to absorb and adapt to broad changes that, at the time, were outside the traditional purview of mainstream colleges and universities—for example, the land grant movement, the creation of community colleges, the passage of the GI Bill, and the need to serve increasing numbers of adult students. On the threshold of the twenty-first century, American higher education faces yet another new movement, one that has been described variously as “part-time,” “postbaccalaureate,” or “non-degree” education. But for public policy purposes, these characterizations are too narrow; the emerging, diverse aggregation of educational activities and interests beyond the boundaries of traditional higher education are too broad to be so described. “System of users” seems more appropriate—at least for preliminary policy analysis.

Although the emerging system of users is based on broader, more complex phenomena than those encompassed in the terms “part-time,” “post-baccalaureate,” and “non-degree” education, the trends in these areas point toward a system that will have far-reaching implications for higher education generally.

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People examine every new social phenomenon from different perspectives. The newly emerging system is no exception. Many employers see nontraditional educational venues—including employee training—as a cost of doing business, while state budget analysts hope that new delivery systems may help to control costs. Faculty at prestigious graduate schools do not see the emerging system at all, but their peers at other institutions often perceive it as a threat to their jobs. Entrepreneurs see it as a pot of gold. Continuing education specialists see it, of course, as comprising various forms of continuing education. Each of these interpretations is reasonable, but can they be aggregated to describe and help us understand the complexities of an emerging “system?” We believe the attempt should be made, since the congeries of nontraditional educational activities, accompanied by diverse interpretations and interests, are likely to have profound implications for higher education and for public policy generally.

Public policy analysts' perspective of these trends and changes is neither more nor less “correct” than that of employers, faculty, or any others. Yet it differs in that its primary concern rests with the public interest. We seek to identify and understand the varying interpretations and to bring order to the aggregation from a public policy perspective.

A NEW SYSTEM COMING INTO FOCUS

A new system of higher education is developing around us. It is elusive, its distinct dimensions only noticeable, we believe, when viewed from perspectives very different from those of traditional higher education. The conventional perspective encompasses a wide range of images: large public universities with noisy football stadiums, eastern liberal arts campuses with beautifully manicured lawns, even bustling urban institutions and the diversity that helps define them. The newly emerging system of higher education—still unrecognized by many but quickly taking shape before us—does not mesh easily with these traditional images or the perspectives they inform.

Blurred visibility and discomfort are to be expected. As yet, we know comparatively little about the emerging system that lies outside traditional higher education. Data are not regularly reported, and when they are, they are not completely reliable. Nevertheless, the emerging system appears to have the following five major characteristics:

- *The system is used by students (or customers) for practical purposes.* Many participants are adults returning to school because of the changing marketplace and the rapid pace of technological advances. The majority of the “customers” are part time, but some are full time. Most already have baccalaureate degrees, but some

do not. Some, though not the majority, are seeking advanced degrees. The system is large and is growing rapidly. Conservative estimates document approximately 30 million users, compared to approximately 14 million enrolled in traditional higher education.¹

- *The system consists of a wide range of educational providers.* These providers include traditional colleges and universities (primarily continuing education divisions and graduate programs), employers, professional associations, training centers, and independent for-profit colleges and universities.
- *The system uses a greater variety of educational delivery modes than is found on most campuses.* In addition to traditional classroom instruction, modes most frequently identified through surveys include job-site education, Internet-based learning, and other means of technologically delivered instruction.
- *Market forces, as opposed to public policy, appear to be the major drivers of educational change in the emerging system.* This trend is evident in the range of organizations offering education (from corporations to professional associations) and in who pays for the education. In 1994, 86 percent of the courses taken by employed persons with bachelor's degrees were paid for by employers.²
- *The system has developed at the margins or in the interstices of formal higher education.* The emerging system is at the periphery rather than at the core of the enterprise, at least in terms of institutional and public policy. However, the dollars supporting the emerging system are far from peripheral. The total dollars in the system far exceed state spending for higher education. Early estimates put the amount in excess of \$55 billion annually, in contrast to the \$42 billion per year that states spend on higher education.

"System of users" is an appropriate name for the aggregation of these phenomena because the system's most distinctive feature is that it is best viewed as a system from the perspective of the user (i.e., the student or customer). There is little commonality in the missions of the providers. Nor do common curricular elements define the delivery of educational services, as they do in many other areas of education. The system lacks a common faculty and the set of collective professional experiences that defines a faculty. However, what this aggregation has in common is an emphasis on students—the users. Students may not think of the education they receive in terms of a "system," but each of them is contributing to its development. Many are employees, while others seek an education that can help them become employed. Some are graduate or even undergraduate students enrolled at traditional campuses. Professionals, such as CPAs and lawyers, make use of this system. At least at this early stage, the system's single most important charac-

teristic is that it is user-driven. Hence, it is a "system of users." The influence of the system of users is felt on the competitive edges of higher education—in professional programs, on the Internet, and in the more entrepreneurial academic enterprises.

THE CONTEXT FOR THE "SYSTEM OF USERS"

Like all higher education in the United States, the system of users will be shaped by its environment: by the economy, state and national; by changes in the growth and composition of the population; by technology; and by a wide variety of real though only dimly understood social and political forces. As the system of users has emerged over the past 10 years, the context in which higher education operates has changed significantly. It is not clear how ongoing changes will affect the system of users. Nevertheless, we can speculate about four major changes influencing all higher education and how they could specifically influence the system of users.

Erosion of Public Consensus on Paying for Higher Education

One of the most significant changes in the conditions affecting U.S. higher education is the slow but significant erosion of the 30-year consensus on how the costs of higher education should be shared by students, family, and government. The costs of higher education have shifted from government to students, a trend that was noticeable during the 1980s and that became more pronounced in the 1990s. In addition, government support appears to be shifting increasingly toward middle-class students and their families. The past decade has witnessed a dramatic shift in student financial aid, from grants to student loans, as students have had to borrow more to attend college. We cannot yet predict the effect of new, increased federal support through tax credits, but the impact will be significant.

For those students not at traditional campuses, the system of users has been supported primarily by employers and only secondarily by students. Corporations of a variety of sizes appear willing to invest in employee education that is perceived to have a clear payoff in terms of productivity and effectiveness. Continued erosion of government support for public higher education may strengthen the apparent trend toward corporate and individual financing in the system of users.

Competition Will Intensify

Financial support for traditional colleges and universities is likely to remain under pressure over the next decade. Projected student demand is growing in about half the states, but so are the demands of health care, the public schools, welfare services, and corrections. In just eight years, 39 states will face

“structural deficits,” that is, shortfalls in expected revenues needed to support projected spending.³ States that combine inelastic tax systems with rapid spending growth show the largest structural deficits. The range is from a 0.1 percent deficit in Oregon to a 18.3 percent deficit in Nevada. The national average is approximately -4 percent.⁴

In traditional public higher education, competition for state funds most likely will lead to competition for students. Private, nonprofit campuses will compete also, as evidenced by New York University’s recent plan to establish NYU On-Line, Inc. to compete with the University of Phoenix and other companies that sell training courses to working adults. Competition will increase the likelihood that public funds for the system of users will be scarce. After all, present data suggest that the system primarily benefits individuals and corporate employers and that it has grown largely without government support. But the system of users may well have experience from which the state could benefit—for example, serving geographically isolated professionals and technicians in whose continuing education the state and the public has an interest. Public investment would be justified where the public interest is clear.

Economic Stratification in the Population

It is clear that traditional higher education opportunities are much more available to the rich than to the poor. Over the past 20 years, the share of disposable income required to pay for college increased modestly—from 7 to 9 percent—for the wealthiest Americans (those above the 75th income percentile). For the least wealthy, however (those below the 25th percentile), the increase was from 17 to 25 percent. Thus, a young person from a family whose annual income is greater than \$75,000 has an 86 percent chance of enrolling in college by age 18 to 24; those whose annual family income is less than \$10,000 have only a 28 percent chance of doing so.

Early trends in the system of users indicate increasing participation levels, but a substantial proportion of the increase appears to be attributable to corporate support for education for employees who already possess significant educational credentials. These trends only exacerbate a difficult situation. Historically, higher education has been a force for ameliorating the gap between those with opportunity and those without. It is therefore appropriate to ask what role the system of users can play in the American goal of providing education opportunities beyond high school to *all* citizens.

Technology’s Influence on the Educational Monopoly

Among the most important contextual changes affecting education has been the emergence of technology and its ability to influence how, when, and where instruction is delivered. For some time, technology has enhanced both the administrative and research capacities of colleges and universities. Only

recently, however, has technology made more than incremental changes in traditional teaching and learning. Although traditional faculties express concern about the effect of educational technology on quality, corporations and others in the system of users are less hesitant to make the necessary technological investments and to experiment in this arena.⁵ The majority of users in the emerging system tend to differ from those pursuing more traditional educational paths both in terms of their emphasis on learning (rather than a degree) and in their acceptance of technology as a means to that end. The use of technology in the system of users is likely to accelerate because it is favored by both providers and users.

PUBLIC POLICY AND THE ROLE OF GOVERNMENT

Traditionally, higher education has been a primary responsibility of the states, and each state has met this responsibility in its own fashion. In general, however, states have relied on the establishment and development of college and university campuses, "real" institutions in the sense of having distinct, readily identifiable geographic locations, faculties, and missions. Major federal policies have been more market sensitive, supporting students (e.g., through grants to veterans and Pell grants) rather than institutions. The system of users, meanwhile, has developed largely either outside of governmental higher education policy or, as in the case of continuing education, in the interstices of the academic enterprise.

As policy makers and others consider the role of public policy in this arena, it is crucial to consider—and question—the extent to which the educational services provided by the emerging system of users comprise a legitimate public as well as a private good. Although answers to that question will vary from state to state, several factors appear to have direct implications for public policy. For example, some states might find it in the public interest to address issues of equity regarding workforce access to ongoing education. That is, given the trend of corporations to pay for the education of their more highly educated employees, states may seek to enhance the education of other, less highly educated workers. Alternatively, states may find that there are specific public needs regarding the education and training of dislocated workers. Many states require continuing education in many professions; some may seek to enhance education and retraining in specific fields that are important to the state's economic and social fabric.

Yet another salient public need calls for policy makers to consider the role of government in relation to the emerging system—the system of users may be a glimpse into the future of American higher education generally. If it is, then state and federal policy makers face a substantial challenge. The present policy framework will require more than tinkering at the margins to shift the

institutional focus to policies that are sensitive to users and their needs in a market-driven environment. The extraordinarily complex relationships between institutions, public and private, and the states in which they are located are not the least part of the challenge. Legitimate vested interests—both academic and political—in traditional governance and finance policies and practices will stand in the way of change.

A possible federal role is as yet unclear, but state policy makers cannot ignore the changes taking place. They have two alternatives: They can encourage colleges and universities to respond, positively and constructively, to the emerging system of users; or states themselves can enter the rapidly changing higher education market directly on behalf of their citizens.

State Policy Encouraging Institutional Response

If states elect to encourage their higher education institutions to respond to the system of users, what should be encouraged? Arthur Levine has speculated on institutional responses to what he sees as the “unprecedented” level at which the private sector (the system of users) is competing with traditional colleges and universities. He believes that a constructive response is required if higher education is to continue to be a viable force in American society. He suggests three options: (1) higher education can team up with the private sector, joining the traditional higher education product with the wider distribution available in the private sector; (2) higher education can reject the private sector and continue to offer its product primarily through on-campus courses; or (3) higher education can ignore the private sector and develop its own technology to more broadly distribute its products.

Of the three options, Levine believes that the first—teaming up with private enterprise—is the only reasonable course. “Higher education is making the mistake of thinking it is in the campus business, when in reality it is in the very, very lucrative education business.”⁶ Higher education cannot continue to rely on traditional on-campus instruction because providers in the system of users will develop their own courses by hiring expertise away from traditional campuses. Nor is it likely that a college or university will be able to compete successfully in the system of users on its own because of costs, current governance mechanisms, and other constraints.

Two recent developments, one in the southern states and the other in California, provide examples of the states encouraging a constructive response from higher education. Through the Southern Regional Educational Board, institutions in the South have been encouraged to cooperate in offering courses online and to rationalize tuition across state lines. The California Virtual University (CVU) is a similar effort.⁷ Both efforts are structured within the existing institutional framework of degree programs, student credits, transfer, and degrees awarded. In California, for example, the CVU online

catalog identifies courses offered electronically by participating, accredited, California colleges and universities. All the limitations of traditional higher education—particularly conditions for course transfer—are built into the new system. Although it is an extremely useful consumer tool for students, CVU is designed on institutional (albeit using technology) rather than user terms. Nevertheless, these efforts should not be disparaged, for they may be an important and necessary transitional step in adapting to what can best be described as market forces. At the very least, institutions in these states recognize the existence and importance of the market and are trying to respond to it, even if they seek to do so on their own terms.

Direct State Entry into the System of Users

Arthur Levine's analysis addresses institutional responses to the system of users, but how and whether states should enter the market directly are distinctly different questions. In contrast to the efforts in the South and in California, Western Governors University (WGU) is an example of states entering the market directly on behalf of their citizens. WGU has the potential to be more compatible with a system of users because it is designed around the needs of the potential users. Educational providers will vary, as will the range of educational offerings—from skill training and unrelated liberal arts courses to those leading to a degree. Learning, verified by assessment, will matter more than credits accumulated at a particular institution.

POLICY QUESTIONS AND OPTIONS FOR ADDRESSING THE SYSTEM OF USERS

Regardless of whether a state chooses to encourage higher education to respond to the system of users or enters that system directly, its action should be based on its higher education policy. Typically, such policy is more implicit in governing and finance practices than explicit as a framework for decision making. The emergence of the system of users is but one among several major changes in higher education's environment (e.g., projected enrollment growth and state revenue constraints) that provides compelling reasons to develop more explicit public policy. In the present context, each state's policy questions can be framed in a variety of ways: To what extent—and in what specific areas—are the educational services provided by the system of users a public as well as a private good? How can the market forces that are principally responsible for shaping the system of users be directed purposefully through policy? What is the most effective way to bring existing educational assets to bear on educational priorities or on unmet educational needs at the state level? However the questions are framed, they must relate the public purpose of higher education to a system of users that includes—at the least—existing

public and private institutions, proprietary ones, corporate training, and technological delivery systems.

In answering these kinds of questions, states have many policy tools at their disposal. In choosing among them, they must consider the effects that any new policies will have on the system of users as well as on traditional higher education. For example, will new public policy make the system of users more or less agile in responding to state residents' changing educational needs? Will public policy make the emerging system more or less likely to innovate in the creation of new areas of professional study? Will public policy ameliorate or exacerbate the gaps between the haves and the have nots? If state policy makers simply adopt traditional educational policies for use in relation to the emerging system of users (e.g., policies that provide for equity among providers rather than the funding of users, or those that focus on inputs rather than outputs), then one of the primary effects of these actions—intended or not—will be to make the system of users less, rather than more, responsive to emerging educational needs.

The policy tools outlined below involve questions and options relating to finance, governance, and quality assurance.

Finance: Questions and Options

In what ways, if any, should government budgeting be changed to be more responsive to users than to traditional, institutional concerns? What government subsidies, if any, should go directly to students in pursuit of their educational goals? Should the state directly subsidize specific types of education? What public policy goals would be advanced by the answers to these questions?

States expend large sums of money for the construction of new campuses and for the maintenance and operation of existing ones. The emergence of the system of users raises the question of whether this pattern of investment should be continued. This question is particularly salient considering other factors affecting higher education finance: the prospect of constrained state revenues, technological advances, and increased variation in student needs. This issue should be considered regardless of the design of a state's higher education system. For example, in the Midwest and in the West, state monies have supported the development of large campuses and public higher education systems; they have relied on independent campuses only secondarily. In the East, on the other hand, public monies have supported small to mid-size public higher education systems, and, primarily through student financial aid, they have relied substantially on private colleges and universities. In both instances, state policies have supported the goals of college opportunity and choice. But the emergence of the system of users—as well as other important trends—requires that the policies be reexamined.

In many states (perhaps all), public funding has focused on issues of institutional equity rather than on public priorities. The perceived "fairness" of the resource distribution among institutions has been a high priority for states. Funding also is targeted overwhelmingly (in per student costs) to favor students of traditional college age. Budgetary procedures (formulas and less formal rules of thumb) perpetuate these institutionally based customs. State policy objectives may call for attention to changing student needs or to other unmet state needs.

Finally, state funding is driven largely by inputs, such as student/faculty ratios, rather than outputs, such as performance or learning outcomes. In contrast, the federal government invests in students (through financial aid) rather than in institutions. The federal government distributes monies for research on a competitive basis rather than through designated federal research universities or centers. These policies are more market sensitive than traditional state investment in institutions. As a result, federal investment mechanisms and structures can be adapted to a system of users more easily than those of the states. Adaptation would be required, for example, in determining the eligibility of providers and students, as well as programs or courses that are not degree oriented.

Governance: Questions and Options

Who should be responsible for decision making related to the system of users? Are traditional higher education governance structures able to respond to market forces?

By definition, state governing structures are oriented explicitly to individual institutions. Each state has its own unique arrangement of governing boards and state higher education agencies that relate state government to its public (and, to a lesser extent, private) colleges and universities. For the most part, state governance structures have balanced institutional priorities and goals with those of the public quite successfully. But a growing number of states are examining their governance arrangements to determine whether existing structures can meet present and future challenges. The relationship of these structures to the system of users must be explored.

Governing and, to a lesser extent, coordinating structures are the major players in state financing of higher education. Changes in financing policy in response to the system of users likely would have implications for governance. For example, a shift in state funding to students and away from institutions likely would strengthen market forces and also might require increased institutional flexibility, with more focus on institutional than systemwide governance structures. Funding institutional operations on a competitive basis to focus on public priorities, however, suggests the need for new or strengthened state capacity to judge performance. Deregulation also would be required to en-

hance institutional flexibility. In light of these transformations, many states may need to revise their governance structures to prompt institutions to become more sensitive to higher education markets.

Moreover, existing governing structures may obfuscate critical unmet educational needs, for example, effective higher education and K-12 relationships. Important participants in the system of users may not have a place in existing structures. For example, the National Center for Higher Education Management Systems argues that others outside of the formal "chain of command" or the provider-driven hierarchy perhaps should act directly on behalf of users. Structural change may allow states to facilitate user access to a wider range of educational providers than do existing structures. It also may offer ways to combine incentives for traditional higher education to be more sensitive to the system of users and, at the same time, to increase state capacity for new providers to address user needs.

Quality Assurance: Questions and Options

Should there be a system of quality control? If so, who should be responsible for it? The state and federal governments have, for the most part, deferred to institutions and institutionally controlled processes to verify institutional quality. State licensure and certification processes often set forth formal educational requirements for the professions. State policy can and does drive educational requirements beyond the baccalaureate degree for various professionals to stay current in their fields. Between 1981 and 1995, for example, 12 states implemented mandatory continuing education for certified public accountants (CPAs); every state but one now requires it. Similar trends exist for law, pharmacy, and real estate professionals.

The system of users may open up new and valuable avenues for exploring and assessing educational quality. Although the quality of higher education has not (yet) been subject to the public's harsh attacks, it has not been above criticism. Many have called attention to the inadequacy of the quantitative, institutionally based input measures used in budget negotiations and accreditation (e.g., proxies for quality such as the number of books in the library or student/faculty ratios). Likewise, the ranking of campuses by reputation as a measure of quality is increasingly criticized. State and educational leaders have been more vocal in calling for student learning outcomes and performance as true measures of quality. These trends toward more satisfactory assessment of quality may well be accelerated by the emerging system of users, most parts of which do not seem to be based on a single institution; whatever their adequacy, institutionally based criteria simply do not apply when students draw from various sources for their education.

Traditional institutions have been slow to address quality through the assessment of learning outcomes. In contrast, the system of users must rely

more heavily on assessing learning outcomes to certify or verify results. Indeed, assessing student learning, publishing the results, and demonstrating effectiveness with students and employers could increase the image and visibility of the system of users.

Perhaps the most educationally significant change that this developing system of users can contribute to higher education generally is to be found in a revised assessment of quality. Western Governors University provides an example, for it has a separate and independent assessment process to verify that the desired learning has occurred. As WGU and others in the system of users experiment with quality measures, their efforts may well prove useful—indeed, transformational—for the overall system of higher education.

CONCLUSION: TWO OVERARCHING QUESTIONS

Much of this chapter is speculative, based only on data and events that have come to our attention. Such lack of precision and specificity always hinders accurate analysis of a new social phenomenon, particularly when a topic's nature and boundaries are as blurred as those of the system of users. But we urge early and serious attention to two questions that overarch the future of that system, the first pertaining to information and data and the second to the public purposes of education. Neither question is limited to the system of users, but consideration of that system highlights their importance for all of higher education.

Information and Data: How Do We Know What We Are Doing?

The states, the federal government, and many professional associations routinely collect data about higher education, but these data focus almost exclusively on traditional higher education. To the extent that information about users is collected, it almost always is from an institutional rather than from a user perspective. Reported information is rarely helpful to students as users or consumers, and sometimes it is not particularly useful for decision makers or policy analysts. As higher education enters more fully into the present era of changing demographic, economic, technological, and social conditions, every state will need more information about higher education than most have at present. NCHEMS describes information relevant to the system of users that, routinely collected, would be helpful to both students and policy leaders—the real costs of attendance, the likelihood of students with similar backgrounds and experience being successful in their educational choices, and the results of successful completion (e.g., job placement rates, expected income).⁸

There are many subsidiary questions: What information and data needs are most relevant for the system of users? Who should be responsible for collecting and reporting it? In what ways should the public be protected from educational

fraud through regular data collecting and reporting? Who should monitor the data for accuracy? As the system of users continues to emerge and affect the higher education enterprise, it is clear that educational and state policy makers need to address these questions explicitly. States must rigorously examine their higher education information and reporting practices, and, as they do so, they should have a clear understanding of why specific information is necessary.

The Public Purposes of Higher Education: Where Are We Going?

Even with ideal information about higher education's present capabilities, the selection of options to stimulate change will be random unless policy leaders know where they want to go, unless they know the public purposes of higher education in their states. These purposes usually are found in state constitutions and are implemented through legislation. Too often, however, they become relics of rhetorical good intent, not ignored deliberately, but obscured by time and habit. We have argued elsewhere that the public purposes of all higher education should be reexamined because of the dramatically changed conditions the next century will bring. The emergence of the system of users will be an integral part of these changes, and it presents an opportunity for those of us in higher education—as well as for policy leaders—to consider fundamental changes in how we view higher education in the United States.

How our society incorporates the system of users into the existing higher education enterprise and how we respond to and learn from these changes will have enormous implications. The system of users encourages questions about students as users and learners rather than about institutions and institutional well-being. It also allows (in a powerful way, and perhaps sooner than expected) an opportunity to raise old but important questions about the public purposes of higher education. It gives us the opportunity to order policy priorities for the new century.

NOTES

1. U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 1997*. NCES 98-015. Washington, DC: U.S. Department of Education, 1999. Of the nearly 30 million students, approximately 3 million are enrolled in graduate and professional degree programs.
2. U.S. Department of Education, *Digest of Education Statistics 1997*, Tables 353 and 369.
3. Harold Hovey, *State Spending for Higher Education in the Next Decade: The Battle to Sustain Current Support*. Washington, DC: The National Center for Public Policy and Higher Education, 1999.
4. *Ibid.*

5. According to Laurie J. Bassi, Scott Cheney, and Mark E. Van Buren, *Training Industry Trends 1997*. Alexandria, VA: American Society for Training and Development, 1997, p. 13, companies are using more technology-delivered training. Between 1996 and the year 2000, most companies are expecting technology-delivered training to grow. The main areas of growth include the use of CD-ROM, text-based CBT, multimedia, the Internet, and videoconferencing.
6. Arthur Levine, *The State of American Higher Education*. Columbia University Annual Report, 1997, p. 11.
7. The California Virtual University ceased operating in early 1999. Nevertheless, its brief existence serves as a useful example of the difficulties higher education will encounter as it ventures into the digital world.
8. National Center for Higher Education Management Systems, *The Challenges and Opportunities Facing Higher Education: An Agenda for Policy Research*. Dennis Jones, Peter Ewell, and Aims McGuinness. Washington, DC: The National Center for Public Policy and Higher Education, December 1998.

SELECTED BIBLIOGRAPHY

- Bassi, Laurie J., Cheney, Scott, and Van Buren, Mark E. *Training Industry Trends 1997*. Washington, DC: American Society for Training and Development <http://www.astd.org/virtual_community/comm_trends>.
- Bassi, Laurie J., and Van Buren, Mark E. *The 1998 ASTD State of the Industry Report*. Washington, DC: American Society for Training and Development <http://www.astd.org/virtual_community/comm_trends>.
- Callan, Patrick M., and Finney, Joni E., eds. *Public and Private Financing of Higher Education: Shaping Public Policy for the Future*. Phoenix: American Council on Education and Oryx Press, 1997.
- Cervero, Ronald M. *Effective Continuing Education for Professionals*. Madison, WI: Jossey-Bass, 1988.
- Conklin, Kristin D., and Finney, Joni E. "Access and Affordability: State Policy Responses to the Taxpayer Relief Act of 1997." In *Financing a College Degree: How It Works, How It's Changing*, edited by Jacqueline E. King. Phoenix: American Council on Education and Oryx Press, 1999.
- Davis, Stanley M., and Botkin, Jim. *The Monster under the Bed*. New York: Simon & Schuster, 1994.
- Galbraith, Michael W. *Confronting Controversies in Challenging Times: A Call for Action*. San Francisco: Jossey-Bass, 1992.
- Gehres, Edward D., ed. *Lifelong Learning Trends*. Washington, DC: University Continuing Education Association, 1998.
- Hovey, Harold. *State Spending for Higher Education in the Next Decade: The Battle to Sustain Current Support*. Washington, DC: The National Center for Public Policy and Higher Education, 1999.
- Levine, Arthur. *The State of American Higher Education*. Columbia University Annual Report, 1997.
- Mortenson Research Seminar. *Postsecondary Education OPPORTUNITY*. 1995-1998.
- National Center for Higher Education Management Systems, *The Challenges and Opportunities Facing Higher Education: An Agenda for Policy Research*. Dennis Jones, Peter

- Ewell, and Aims McGuinness. Washington, DC: The National Center for Public Policy and Higher Education, December 1998.
- Richardson, Richard C., Bracco, Kathy Reeves, Callan, Patrick M., and Finney, Joni E. *Designing State Higher Education Systems for a New Century*. Phoenix: American Council on Education and Oryx Press, 1999.
- State Policy Reports*. Hilton Head, SC. Volume 16, no. 14, July 1998.
- Stern, Milton R. *Power and Conflict in Continuing Professional Education*. Belmont, CA: Wadsworth, 1983.
- U.S. Department of Education. National Center for Education Statistics. *Digest of Education Statistics 1997*. NCES 98-015. By Thomas Snyder. Washington, DC: U.S. Department of Education, 1997 <<http://nces.ed.gov/>>.
- . *Distance Education in Higher Education Institutions*. NCES 98-062. By Laurie Lewis, Debbie Alexander, and Elizabeth Farris. Project Officer: Bernie Greene. Washington, DC: U.S. Department of Education, 1997 <<http://nces.ed.gov/>>.
- . *Pocket Projections. Projections of Education Statistics to 2008*. NCES 98-017. By William J. Hussar. Washington, DC: U.S. Department of Education, 1998 <<http://nces.ed.gov/>>.
- . *Student Financing of Graduate and First-Professional Education, 1995-96, with Profiles of Students in Selected Degree Programs*. NCES 98-083. By Susan P. Choy and Ron Moskovitz. Project Officer: Andrew G. Malizio. Washington, DC: U.S. Department of Education, 1998 <<http://nces.ed.gov/>>.
- . *Technology and its Ramifications for Data Systems: Report of the Policy Panel on Technology*. By G. Phillip Cartwright. Washington, DC: U.S. Department of Education, 1998 <<http://nces.ed.gov/>>.
- U.S. Department of Labor. Bureau of Labor Statistics. *1995 Survey of Employer Provided Training*. Washington, DC: U.S. Department of Labor, 1995 <<http://stats.bls.gov/epthome/htm>>.

Postbaccalaureate Futures

New Markets, Resources, Credentials

Edited by
Kay J. Kohl
and
Jules B. LaPidus



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The rare Arabian Oryx is believed to have inspired the myth of the unicorn. This desert antelope became virtually extinct in the early 1960s. At that time, several groups of international conservationists arranged to have nine animals sent to the Phoenix Zoo to be the nucleus of a captive breeding herd. Today, the Oryx population is over 1,000, and over 500 have been returned to the Middle East.

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